



**Faculty of Management Studies (FMS)**

**MBA Student Manual  
Batch 2022 - 24**

## VISION

To advance and apply Management Education, Research and Entrepreneurial Spirit amongst the students.

## MISSION

**M1:** To offer relevant **management education** through innovative teaching-learning practices.

**M2:** To equip human capital with **skills** relevant for industry and society while fostering a **research** culture.

**M3:** To encourage **entrepreneurial mindset** for developing ethical and socially-responsible leaders.

## PROGRAM EDUCATIONAL OBJECTIVES

**PEO 1:** Communicate effectively and deliver under competitive and time bound project environment.

**PEO 2:** Function effectively as an independent or as a member of a team or a leader in diverse teams and work environment.

**PEO 3:** Select and apply appropriate techniques in order to organise, analyse and deriving meaningful insights from large and complex data

**PEO 4:** Apply domain knowledge in business - to articulate and understand various business problems.

**PEO 5:** Exhibit innovative and entrepreneurial mindset in understanding and providing mindful solutions to business problems

## PROGRAM OUTCOMES

**PO 1** - Apply knowledge of management theories and practices to solve business problems

**PO 2** - Develop analytical and critical thinking abilities for data-based decision making

**PO 3** - Understand, analyze and communicate global, economic, legal and ethical aspects of business

**PO 4** - Identify and apply trans-disciplinary tools and techniques for projects and solving problems

**PO 5** - Lead oneself and others in the achievement of organisational goals and contribute effectively to a team environment

**PO 6** - Inculcate entrepreneurial mind-set for sustainability

**PO 7** - Imbibe value-based leadership for Excellence

## PROGRAM SPECIFIC OUTCOMES

**PSO 1** - Demonstrate effective response to industry challenges by applying managerial tools and techniques for a sustainable society

**PSO 2** - Appraise the complex specificities of Indian Business to garner global reputation

**PSO 3** - Develop a holistic thinking solopreneur for a self-sufficient society

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# **MASTER OF BUSINESS ADMINISTRATION (MBA)**

## **REGULATIONS**

## **Introduction to MBA Programme**

The MBA programme of JAIN (Deemed-to-be University) will have the distinction of being of high quality, globally relevant and stimulating. The programme is designed to provide the students with a blend of theoretical knowledge, practical know how and understanding to enable their success in whichever industry they choose to jumpstart their career.

The Faculty of Management Studies (hereinafter referred to as FMS) offers the MBA Programme in Finance, Marketing, Human Resources, Banking & Finance, International Finance & Accounting, Logistics and Supply Chain Management, Systems and Operations Management, Business Analytics, Entrepreneurship and New Venture Creation, Aviation Management, Sports, Luxury & Fashion and Digital Business. These programmes help the student emerge into a well-rounded professional ready to take up challenges in the industry in diverse areas from the manufacturing to service sector. The combination of offerings is designed to instill a multidisciplinary approach in them and thus train them to take up the mantle in global businesses by also providing dual functional specializations.

The programme will equip the students to develop into top-notch professionals or entrepreneurs in their chosen area.

### **1. Scope and Content**

- 1.1 The Regulations documented here are applicable for the MBA programme offered by FMS.
- 1.2 The applicability of the Regulations must be understood in the context of the given scheme of study and syllabus of the programme.
- 1.3 The Regulations given here are in addition to the rules and regulations notified at the time of admission.
- 1.4 The authorities of the University may modify, add, delete, expand or substantiate any part of the Regulations and syllabi at any point of time.

### **2. Programmes offered**

The MBA programme at FMS offers the following specializations:

#### **Single Specialisation: -**

1. Finance
2. Marketing
3. Human Resources Management
4. Banking, Finance and Allied Services
5. International Finance and Accounting

6. Logistics and Supply Chain Management
7. Systems and Operations Management
8. Business Analytics
9. Entrepreneurship and New Venture Creation
10. Aviation Management
11. Sports Management
12. Luxury and Fashion Management
13. Digital Business

**Dual Specialisation: -**

1. Marketing and Finance
2. Marketing and Human Resource Management
3. Finance and Human Resource Management
4. Finance and Business Analytics
5. Marketing and Business Analytics
6. Human Resource Management and Business Analytics
7. Marketing and Logistics & Supply Chain Management
8. Marketing and Entrepreneurship & New Venture Creation
9. Finance and Entrepreneurship & New Venture Creation
10. HRM and Entrepreneurship & New Venture Creation
11. Aviation Management and Logistics & Supply Chain Management
12. Aviation Management and Marketing
13. Aviation Management and Human Resource Management

**\*Dual Specializations will be offered when the student strength is 25 or more for a specialisation.**

**3. Eligibility for admission**

- i. The minimum qualification required to be eligible for admission is 50% aggregate in the Graduate/Degree examination of a minimum 3 years' duration from a recognized University.
- ii. The method of selection for the programme shall normally be by means of a Group Discussion (GD) and Personal Interview (PI). The Institution may decide to conduct

additional tests to select candidates. The shortlist of candidates to be called for GD/PI shall be prepared based on the score obtained by them in a State/National Level Entrance Examination such as MAT/CAT/Karnataka PG CET/XAT and so on. Students can also opt for the Jain Entrance Test (JET) at the time of admission.



#### 4. Components of the programme and learning methodologies

The MBA programme shall be for duration of four semesters, spread over a period of two years covering various aspects related to business management



The learning life cycle of an MBA graduate starts with a well-designed orientation programme (familiarization) followed by bridge courses (adaptation). The core courses help the graduate to

acquire a general management orientation, followed by electives for functional expertise. FMS also offers industry relevant workshops and global certifications.

To increase the engagement of the learner and maximize learning, FMS uses a variety of pedagogical tools that are designed to enrich application based learning.

## 5. Attendance requirement

- i. The MBA programme at FMS is intensive and it requires students to put in 100% attendance. The minimum eligibility of attendance for the University examination is 75%.
- ii. Students failing to fulfill the minimum attendance criteria of the University will not be eligible to take up the University examination. Such students will be required to rejoin in the same semester in the following academic year.
- iii. Students are required to attend and participate in all scheduled class sessions, guest lectures, workshops, outbound learning programme as well as lab/forum activities of an academic and non-academic nature.

## 6. Assessment and Examination

### 6.1 Credits

- Credit points will be awarded for all the courses. One credit is equivalent to 15 contact Hours. Each subject of the programme is of **2 or 3 credits** for **Core Courses** and **3 credits** for **Specialization Courses**.
- Open Electives are **3 Credit** courses
- Project Centric Courses will carry **2 or 3 credits**
- Summer Internship Project (SIP) will carry **3 credits** & Master Thesis will carry **6 credits**.
- Academic Bank of Credit (ABC) courses will carry **3 Credits** each

For award of degree the student is required to secure 102 credits in the 4 semesters of study. A total of 102 credits are being offered presently as per AICTE guidelines. The distribution of courses shown below:

Type of courses	Number	Credits			Total
		2 Credits	3 Credits	6 Credits	
Course Courses	12	11	1		25
Discipline Hard Core	6		6		18
Discipline Specific Elective	10		10		30
Open Electives	2		2		6
Skill Enhancement	4	4			8
Projects Centric Learning	2		2		6
Summer Internship Project	1		1		3
Master Thesis Research	1			1	6
<b>Total</b>	<b>38</b>	<b>15</b>	<b>22</b>	<b>1</b>	<b>102</b>

The summer internship project is undertaken after the second semester and completed before the third semester for which 3 credits are accounted. Master Thesis will be part of 4<sup>th</sup> Semester carrying 6 credits.

Both 2 and 3 credit courses will have a 3 hours End Semester University Examination.

## 6.2 Mode of Delivery

On the program delivery mode, the MBA program will adopt the **TAP-R Model** which will be in the modular form focusing on outcome-based learning at FMS. In the modular approach, each semester will consist of 3 to 5 blocks. A block will offer 3 courses each including its Continuous Assessments (CA).

## 6.3 Pattern of Assessment for Core and Specialization courses

Assessment of student's performance in theory courses will be based on two components: Continuous Assessment - assessed during the semester classes and End Semester Examination, which is conducted at the end of the Semester.

Assessment of each course will comprise of Internal Assessment (50 marks) and End Semester University Examination (50 marks)

The breakup of Continuous Assessment marks		
Assessment	Marks	Remarks
<b>Class Participation</b>	10 Marks	75% and above based on Rubrics
<b>Internal Assessment</b> <ul style="list-style-type: none"> <li>• Assessment 1: Weightage 10</li> <li>• Assessment 2: Weightage 10</li> <li>• Assessment 3: Weightage 10</li> <li>• Block End Test: Weightage 10</li> </ul>	40 marks	Faculty will specify the assessment components in the session plan. 3 evaluations need to be assessed. <b>Some typical assessment components are:</b> Assignments, Presentations, Activities, Projects, Tests, Quizzes, etc.
<b>Total</b>	<b>50 marks</b>	

The following rubrics are will be used for awarding marks for the Class Participation component:

### Assessment Rubrics for Class Participation

Performance Indicator	Performance Level			
	1 Poor	2 Good	3 Very Good	4 Excellent
Attendance	Below 75%	75 - 80%	81 - 90%	> 90%
Punctuality	Late most of the time	Late many times	Seldom late	Always on time
Frequency and level of interaction	Does not interact	Rarely interacts	Seldom interacts	Frequently interacts
Contribution to the learning process	Hinders the process	Neither disrupts nor contributes	Moderately contributes	Contributes positively most of the time
<b>Marks to be awarded</b>	<b>1 to 4</b>	<b>5 to 6</b>	<b>7 to 8</b>	<b>9 to 10</b>

## 7. End Semester Examination (ESE)

Every course will have an End Semester Examination for a duration of 3 Hours to be administered at the end of the semester.

### 7.1 Eligibility for an End Semester Examination

A student will be eligible to appear for the End Semester Examination when he/she:

- i. Has minimum 75% of attendance. (Refer point 5 of the regulation)

Notes:

- The End Semester Examinations will be conducted as per the JU regulations.
- Supplementary Exams will be conducted as per JU regulations.

## 8. Eligibility for Pass

- i. A student shall be declared to have passed in a course if he/she secures a minimum grade "P" to pass a course collectively assessed through Continuous Assessment (CA) component and End Semester Examination. This corresponds to grade point 4 on a 10-point scale. A student is required to attend all the components of Continuous assessment and end-semester examination.
- ii. A student shall be declared to have passed in the Summer Internship and Research Project if he / she secures at least 40% marks in both the Report & Viva Voce and secures a minimum grade "P".

## 9. Make-up policy

- (a) A student, whose attendance is below 75%, will not be permitted to appear in the ESE and will be treated as Debarred or 'DE' in that paper and will be marked as Fail (F), with

- reason as DE in that course. There will also be students who were not debarred from taking examinations but failed due to poor performance or for being absent without valid reasons and prior permission. They will also be marked as Fail (F) grade with reasons as 'Failed or Absent' as applicable.
- (b) Student whose attendance is 75% or above but is unable to appear in ESE due to valid unavoidable reasons and with proper written permission from the Head of the School, will be awarded 'Incomplete or I' grade. This will not be a pass grade and will be treated as Fail till it is cleared.
  - (c) The students in (a) and (b) above i.e. those awarded Fail (F) grade (debarred due to shortage of attendance or those who failed in a course or were absent without valid reasons and those awarded Incomplete (I) grade, are required to **re-appear** in examinations of that course unit as per schedule of ESE of that paper whenever scheduled in future. These will normally be held either in summer term-1 and summer term-2 for odd and even semesters respectively or subsequently along with odd and even semester respectively of a subsequent batch of students, subject to completion of GSSC (Guided self-study course) and as per policy of the University announced and amended from time to time.
  - (d) The students having Fail (F) grades due to whatever reasons, will have to apply to the Head of the School for **reappearing** normally within the first week of the commencement (or as announced) of the summer term or semester at the end of which such re-examinations are scheduled, along with payment of **prescribed fee**. The Head of the School will assign, in consultation with HOD, **guided self-study courses** under the guidance of a faculty member for the concerned course (s) which will be duly assessed by the faculty.
  - (e) Students with Incomplete (I) grades can apply for re-examination as per schedule mentioned in (c) above along with payment of re-examination fee. **Undergoing a summer term or GSSC for such students is optional.**
  - (f) A student who has already passed in a course and is desirous of improving his/her performance may appear in examinations held at the end of a summer term or in regular ESE conducted for a subsequent batch of students on payment of prescribed re-examination fees. **However, this facility can be availed only once.**
  - (g) The final year students of any programme who got awarded Fail (F) or Incomplete (I) grades during last two semesters may register for summer terms and avail a chance to complete the backlog.
  - (h) A student will normally get maximum three chances, in addition to the main examination held by the University, for a course after which he will not be able to complete his degree. However, an additional chance may be granted by the Vice Chancellor under special circumstances and on payment of such fees as prescribed from time to time.

## 10. Promotion of Students from Year to Year

- For promotion from year to year, all those students who have not been debarred from taking examinations in any course during the year due to shortage of attendance or any other reason may be allowed to register for the next year considering that they have undergone the required courses and continuous assessment.
- A learner, debarred from taking the End Semester Examinations due to shortage of attendance will be required to make up the deficiency during the immediately following summer – 1 and summer – 2 terms by repeating the courses.
- A learner debarred from taking the End Semester Examinations due to shortage of attendance and could not attend summer terms or failed in summer term examinations, will still have the remedy of clearing the backlogs through Guided Self-study courses (GSSCs).

## 11. Academic Probation

Students who fail to get promoted to the next academic year due to non-fulfilment of criteria mentioned in clause 10 and are promoted to next Academic Year as per special consideration will be placed on **Academic Probation** for one year. They will be required to make up the deficiency in the immediately following summer terms, failing which, they will be required to repeat a year with a subsequent batch.

## 12. Academic Break

- (a) Academic Break, can be granted to the MBA students for one year, if approved by the Vice Chancellor, under the following circumstances:
  - (i) The student has been continuously ill
  - (ii) Career advancement
  - (iii) Justified personal reasons.
- (b) However, the total period to qualify the course will not exceed the prescribed N+2 years
- (c) The student who is granted **academic break** shall not be required to pay the academic fee for that year. However, he will be required to pay the fee as applicable to the batch he/ she joins. The fee already paid will be adjusted against the fee payable.
- (d) Students who **repeat** a course during summer terms or with a subsequent batch, will be required to pay the prescribed academic fee applicable to summer terms or the batch he/ she joins.

## 13. Classification of successful students

- i. The University is following a relative grading system. If the marks obtained by students of a class are close to perfectly normal distribution, the marks awarded to a student in a course unit shall be transformed into normal distribution curve by using statistical method to ensure the uniformity in spread of scores regardless of the nature of curricular areas.

- ii. On successful completion of the programme, the students will be classified as below:

Grade	O	A+	A	B+	B	C	P	R
Grade Point	10	9	8	7	6	5	4	0
Percentage of Marks	-	-	-	-	-	-	Lower limit of P is 40	<40
Qualitative Description	Out Standing	Excellent	Very Good	Good	Above Average	Average	Pass	Reappear

- iii. A student should earn a minimum grade “P” to Pass in a course. This grade corresponds to grade point 4 on a 10-point scale.

iv. **SGPA and CGPA**

- (a) The Semester performance of a student will be indicated as “**Semester Grade Point Average**” (**SGPA**) is the weighted average of all the grade points earned by a student in all the courses credited and describes his/her academic performance in a semester. SGPA is computed by dividing the sum of the products of the credits and grade points earned by the total number of credits registered in that semester.

$$SGPA = \frac{U_1G_1 + U_2G_2 + U_3G_3 + \dots}{U_1 + U_2 + U_3 + \dots}$$

Where, U<sub>1</sub>, U<sub>2</sub>, U<sub>3</sub> denotes credit associated with course taken by the student G<sub>1</sub>, G<sub>2</sub>, G<sub>3</sub> are the Grade Point of the letter grades (as in table above) awarded in the respective course.

- (b) The **Cumulative Grade Point Average (CGPA)** indicates the overall academic performance of a student in all the courses up to and including the latest completed semester. CGPA is computed as follows:

$$CGPA = \frac{\text{Cumulative Points secured in all pass courses in Semester I, II, .....}}{\text{Credit Units associated to courses in Semester I, II, .....}}$$

v. **Ranks**

Only students, who have passed each of the semester examinations at the first appearance, shall be eligible for award of Ranks. The first **five** ranks shall be notified.

## **14. Award of Degree**

Students will be awarded the MBA degree upon fulfillment of the following criteria:

- i. Students should pass in each semester separately by securing a minimum Semester Grade Point Average (SGPA) of 4.0 on a 10-point scale. For successful completion of a programme, the student should secure a minimum Cumulative Grade Point Average (CGPA) of 4.0 at the end of final year of the MBA Programme.

## **15. Maximum period for the completion of the Programme**

Maximum period for the completion of the programme shall be **FOUR** years from the date of joining the programme.

## **16. Summer Internship Program (SIP)**

Students after completing their Semester – II have to undertake a **Summer Internship Project (SIP)** for 8 to 10 weeks under the guidance of an assigned faculty mentor. The Student is expected to work in a company as an intern, undertake project (s), perform activities identified by the company and assist the organization in its functions during the same period. The student is expected to submit a report and face a viva after the Internship. It provides an opportunity for the students to apply classroom learning and practice in an industry environment.

## **17. Master Thesis**

The MBA program also mandates students to undertake a research project under the guidance of an assigned faculty mentor. The research project may begin during the Summer Internship and continue across the 3rd Semester. For the Research Project, students may explore a specific concept or element inside the industry and submit their findings in a published form by writing a Master Thesis. Through this process, students receive experience in research methodology, synthesis, assessment, and communication. The Master Thesis serves as a demonstration of these abilities to potential employers

## **18. Project Centric Learning**

With an intent to develop entrepreneurs and intrapreneurs in our students, who in turn will generate employment for others and contribute towards countries' GDP growth and self-reliance. Project-centric learning envisages that students undertake in each semester a multi and trans-disciplinary project which is centric to all the courses being offered in that semester or even elsewhere in the programme.

## **19. General Guidelines**

### **19.1 Academic Integrity and Ethics**

- i. A student who has committed an act of academic dishonesty will be deemed to have failed to meet a basic requirement of satisfactory academic performance. Thus, academic



dishonesty is not only a basis for disciplinary action but also is relevant to the evaluation of student's level of performance and progress.

- ii. Where there has been violation of the basic ethos and principles of academic integrity and ethics, the Director/Board of Examiners/Course coordinator may use their discretion during the semesters on the disciplinary action to be taken.
- iii. Academic dishonesty includes, but is not necessarily limited, to the following:
  - a) Cheating or knowingly assisting another student in committing an act of cheating;
  - b) Unauthorized possession of examination materials, destruction or hiding of relevant materials;
  - c) Act of plagiarism;
  - d) Unauthorized changing of marks or marking on examination records.

## **19.2 General**

- i. The students are expected to spend a considerable amount of time in research, reading and practice.
- ii. All students are expected to develop and maintain a positive professional attitude and approach throughout the programme and in conduct of all other activities.
- iii. Attendance alone is not sufficient. Students are expected to participate, to help the class learn and understand the topics under consideration.
- iv. Food and drinks are not permitted in the classroom/conference hall.
- v. All students are expected to dress as per stipulated dress code and wear their ID cards, whenever they are in the campus.
- vi. Cell phones are strictly prohibited in the campus.

**Change of Regulations:** Any regulation can be modified by the Academic Council of the University.

**Course Matrix**  
**MBA Batch 2022-24**

## MBA FINANCE (CF)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE208	Banking	Discipline Specific Elective	50	50	3
	22MBADSE209	Indian Financial System and Financial Markets				
7	22MBADSE210	Direct Taxes	Discipline Specific Elective	50	50	3
	22MBADSE211	Investment Analysis and Portfolio Management				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1 completes)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE309	Project Appraisal and Finance	Discipline Specific Elective	50	50	3
	22MBADSE310	Wealth Management				
5	22MBADSE311	International Finance	Discipline Specific Elective	50	50	3
	22MBADSE312	Insurance				
6	22MBADSE313	Analytics for Financial Decisions	Discipline Specific Elective	50	50	3
	22MBADSE314	Financial Research				
7	22MBADSE315	Audit and Assurance	Discipline Specific Elective	50	50	3
	22MBADSE316	Financial Derivatives and Risk Management				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE409	Indirect Tax	Discipline Specific Elective	50	50	3
	22MBADSE410	Financial Strategy				
4	22MBADSE411	Behavioural Finance	Discipline Specific Elective	50	50	3
	22MBADSE412	Strategic Cost Management				
5	22MBADSE413	Investment Banking	Discipline Specific Elective	50	50	3
	22MBADSE414	Fintech				
6	22MBADSE415	Financial Modelling	Discipline Specific Elective	50	50	3
	22MBADSE416	Equity Research				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA BANKING, FINANCE AND ALLIED SERVICES (BFAS)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE208	Banking	Discipline Specific Elective	50	50	3
	22MBADSE209	Indian Financial System and Financial Markets				
7	22MBADSE210	Direct Taxes	Discipline Specific Elective	50	50	3
	22MBADSE212	Digital Banking				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE318	Corporate Banking	Discipline Specific Elective	50	50	3
	22MBADSE309	Project Appraisal and Finance				
5	22MBADSE319	Retail Banking	Discipline Specific Elective	50	50	3
	22MBADSE310	Wealth Management				
6	22MBADSE311	International Finance	Discipline Specific Elective	50	50	3
	22MBADSE314	Financial Research				
7	22MBADSE317	Advanced Financial Reporting	Discipline Specific Elective	50	50	3
	22MBADSE313	Analytics for Financial Decisions				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC403	Master Thesis	Thesis	50	-	0
10		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE417	Credit Risk Management	Discipline Specific Elective	50	50	3
	22MBADSE410	Financial Strategy				
4	22MBADSE411	Behavioural Finance	Discipline Specific Elective	50	50	3
	22MBADSE412	Strategic Cost Management				
5	22MBADSE413	Investment Banking	Discipline Specific Elective	50	50	3
	22MBADSE414	Fintech				
6	22MBADSE415	Financial Modelling	Discipline Specific Elective	50	50	3
	22MBADSE416	Equity Research				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA INTERNATIONAL FINANCIAL ACCOUNTING (IFA)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE208	Banking	Discipline Specific Elective	50	50	3
	22MBADSE209	Indian Financial System and Financial Markets				
7	22MBADSE210	Direct Taxes	Discipline Specific Elective	50	50	3
	22MBADSE211	Investment Analysis and Portfolio Management				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE309	Project Appraisal and Finance	Discipline Specific Elective	50	50	3
	22MBADSE310	Wealth Management				
5	22MBADSE311	International Finance	Discipline Specific Elective	50	50	3
	22MBADSE317	Advanced Financial Reporting				
6	22MBADSE390	Accountant Skills	Discipline Specific Elective	50	50	3
	22MBADSE314	Financial Research				
7	22MBADSE315	Audit and Assurance	Discipline Specific Elective	50	50	3
	22MBADSE316	Financial Derivatives and Risk Management				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE409	Indirect Tax	Discipline Specific Elective	50	50	3
	22MBADSE410	Financial Strategy				
4	22MBADSE411	Behavioural Finance	Discipline Specific Elective	50	50	3
	22MBADSE412	Strategic Cost Management				
5	22MBADSE413	Investment Banking	Discipline Specific Elective	50	50	3
	22MBADSE414	Fintech				
6	22MBADSE415	Financial Modelling	Discipline Specific Elective	50	50	3
	22MBADSE416	Equity Research				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>



## MBA MARKETING (CM)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE204	Product Management	Discipline Specific Elective	50	50	3
	22MBADSE205	Pricing and Revenue Management				
7	22MBADSE206	Customer Relationship Management	Discipline Specific Elective	50	50	3
	22MBADSE207	Marketing of Technology Products and Services				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE301	Digital and Social Media Marketing	Discipline Specific Elective	50	50	3
	22MBADSE302	Analytics for Marketing Decisions				
5	22MBADSE303	Sales and Distribution Management	Discipline Specific Elective	50	50	3
	22MBADSE304	Retail Management				
6	22MBADSE305	Advertising and Public Relations	Discipline Specific Elective	50	50	3
	22MBADSE306	Sales Promotion Management				
7	22MBADSE307	Brand Management	Discipline Specific Elective	50	50	3
	22MBADSE308	Business to Business Marketing				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE401	Marketing of Services	Discipline Specific Elective	50	50	3
	22MBADSE402	Tourism Marketing				
4	22MBADSE403	Strategic Marketing	Discipline Specific Elective	50	50	3
	22MBADSE404	Global Marketing				
5	22MBADSE405	Marketing to the Bottom of the Pyramid	Discipline Specific Elective	50	50	3
	22MBADSE406	Luxury Marketing				
6	22MBADSE407	Marketing Research	Discipline Specific Elective	50	50	3
	22MBADSE408	Marketing Metrics				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA HUMAN RESOURCE MANAGEMENT (CHR)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE213	Talent Acquisition	Discipline Specific Elective	50	50	3
	22MBADSE214	Digital Human Resource Management				
7	22MBADSE215	Labour Economics	Discipline Specific Elective	50	50	3
	22MBADSE216	Human Resource Professional in Business				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE320	Employee Compensation and Benefits Management	Discipline Specific Elective	50	50	3
	22MBADSE321	Advanced Organizational Behaviour				
5	22MBADSE322	Performance Review System and Talent Retention	Discipline Specific Elective	50	50	3
	22MBADSE323	Human Resource Management Practices Across Sectors				
6	22MBADSE324	Human Resource Management Metrics and Analytics	Discipline Specific Elective	50	50	3
	22MBADSE325	Contemporary Leadership In Practice				
7	22MBADSE326	Labour Laws	Discipline Specific Elective	50	50	3
	22MBADSE327	Learning and Development				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE418	Positive Organizational Behaviour	Discipline Specific Elective	50	50	3
	22MBADSE419	Research Methodology in Human Resource Management Practices				
4	22MBADSE420	Professional Human Resource Competencies and Behaviour	Discipline Specific Elective	50	50	3
	22MBADSE421	Analytics for Human Capital Decisions				
5	22MBADSE422	Organizational Change and Development	Discipline Specific Elective	50	50	3
	22MBADSE423	Human Resource Management Functional Skills				
6	22MBADSE424	Employer - Employee Relations	Discipline Specific Elective	50	50	3
	22MBADSE425	International Human Resource Management				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA LOGISTICS AND SUPPLY CHAIN MANAGEMENT (LSCM)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE221	Total Quality Management	Discipline Specific Elective	50	50	3
	22MBADSE222	Distribution Management				
7	22MBADSE223	Warehouse Management	Discipline Specific Elective	50	50	3
	22MBADSE224	Logistics Management				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE336	International Logistics Management	Discipline Specific Elective	50	50	3
	22MBADSE337	Technology and Innovation Management				
5	22MBADSE338	Logistics Network Analytics	Discipline Specific Elective	50	50	3
	22MBADSE339	Purchasing and Inventory Management				
6	22MBADSE340	Port and Airport Management	Discipline Specific Elective	50	50	3
	22MBADSE341	Applied Geographic Information Systems and Spatial Data Analytics				
7	22MBADSE342	Materials Management	Discipline Specific Elective	50	50	3
	22MBADSE343	Operations Strategy				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE434	Supply Chain Modelling and Dynamics	Discipline Specific Elective	50	50	3
	22MBADSE435	Information Technology for Managers				
4	22MBADSE436	Rail, Road and Air Cargo Logistics	Discipline Specific Elective	50	50	3
	22MBADSE437	Lean Management				
5	22MBADSE438	Global Supply Chain Management	Discipline Specific Elective	50	50	3
	22MBADSE439	Business Intelligence and Data Mining				
6	22MBADSE440	Sustainable Supply Chain Management	Discipline Specific Elective	50	50	3
	22MBADSE441	Contemporary Issues in Logistics Management				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA SYSTEMS AND OPERATIONS MANAGEMENT (SOM)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE225	Plant Design and Layout	Discipline Specific Elective	50	50	3
	22MBADSE226	Six Sigma Operations				
7	22MBADSE227	Analytics for Logistics and Operations	Discipline Specific Elective	50	50	3
	22MBADSE228	Technology and Innovation Management				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE343	Operations Strategy	Discipline Specific Elective	50	50	3
	22MBADSE341	Applied Geographic Information Systems and Spatial Data Analytics				
5	22MBADSE345	Advanced Operations Research	Discipline Specific Elective	50	50	3
	22MBADSE346	Technology Strategy				
6	22MBADSE347	Service and Operations Management	Discipline Specific Elective	50	50	3
	22MBADSE348	Statistical Process control				
7	22MBADSE389	Enterprise Resource Planning Systems	Discipline Specific Elective	50	50	3
	22MBADSE349	Data Driven Decision Making				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester - 4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE434	Supply Chain Modelling and Dynamics	Discipline Specific Elective	50	50	3
	22MBADSE443	Distribution Management				
4	22MBADSE438	Global Supply Chain Management	Discipline Specific Elective	50	50	3
	22MBADSE440	Sustainable Supply Chain Management				
5	22MBADSE446	R and Python for Systems Management	Discipline Specific Elective	50	50	3
	22MBADSE447	Business Intelligence and Data Mining				
6	22MBADSE437	Lean Management	Discipline Specific Elective	50	50	3
	22MBADSE435	Information Technology for Managers				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>



## MBA BUSINESS ANALYTICS (BA)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE217	Data Analytics with Python	Discipline Specific Elective	50	50	3
	22MBADSE218	Programming for Analytics				
7	22MBADSE219	Data Analytics with R	Discipline Specific Elective	50	50	3
	22MBADSE220	Supply Chain Analytics				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE328	Strutured Query Language	Discipline Specific Elective	50	50	3
	22MBADSE333	Predictive Analytics				
5	22MBADSE330	Financial Analytics	Discipline Specific Elective	50	50	3
	22MBADSE334	Marketing Analytics				
6	22MBADSE332	Human Resource Analytics	Discipline Specific Elective	50	50	3
	22MBADSE331	Security Analysis and Portfolio Management				
7	22MBADSE329	Machine Learning for Business Application	Discipline Specific Elective	50	50	3
	22MBADSE335	Text and Image Data Analytics				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE426	Deep Learning and Trained Models	Discipline Specific Elective	50	50	3
	22MBADSE427	Econometrics				
4	22MBADSE428	Business Intelligence	Discipline Specific Elective	50	50	3
	22MBADSE429	Blockchain Technology				
5	22MBADSE430	Advanced Machine Learning	Discipline Specific Elective	50	50	3
	22MBADSE431	Framework for Business Analytics				
6	22MBADSE432	Business Process Re-engineering	Discipline Specific Elective	50	50	3
	22MBADSE433	Big Data and Web Analytics				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA ENTREPRENEURSHIP AND NEW VENTURE CREATION (ENVC)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE229	Entrepreneurship Theory and Practice	Discipline Specific Elective	50	50	3
	22MBADSE230	Launching and Managing an Enterprise				
7	22MBADSE231	Project Formulation and Feasibility Analysis	Discipline Specific Elective	50	50	3
	22MBADSE232	Green Innovation and Entrepreneurship				
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE350	Corporate Entrepreneurship	Discipline Specific Elective	50	50	3
	22MBADSE351	Opportunity Sensing and Preparing for Launch				
5	22MBADSE352	Design Thinking for Entrepreneurs	Discipline Specific Elective	50	50	3
	22MBADSE353	Entrepreneurship Finance				
6	22MBADSE354	Strategic Leadership in Family Business	Discipline Specific Elective	50	50	3
	22MBADSE355	Managing Innovation and Technology				
7	22MBADSE356	Entrepreneurship Development	Discipline Specific Elective	50	50	3
	22MBADSE357	Business Plan and Project Implementation				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE448	Family Business Management	Discipline Specific Elective	50	50	3
	22MBADSE449	Micro, Small and Medium Enterprises In India				
4	22MBADSE450	Analytics for Entrepreneurs	Discipline Specific Elective	50	50	3
	22MBADSE451	Managing Sickness and Turnaround Strategies for Entrepreneurs				
5	22MBADSE452	Social Venture Creation	Discipline Specific Elective	50	50	3
	22MBADSE453	Buying an Existing Business				
6	22MBADSE454	Technology Commercialisation and Entrepreneurial Innovation	Discipline Specific Elective	50	50	3
	22MBADSE455	Building Startup Communities				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA AVIATION MANAGEMENT (AM)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE233	Aviation and Aerospace Business Models	Discipline Specific Elective	50	50	3
	22MBADSE234	In-flight Services				
7	22MBADSE235	Aviation Law and Regulatory Framework	Discipline Specific Elective	50	50	3
	22MBADSE236	Aviation Project Management				
8		As per University Recommendations	Open Elective	50	50	3
		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning I	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE358	Management of Airline Operations	Discipline Specific Elective	50	50	3
	22MBADSE359	Flight Operations and Route Development				
5	22MBADSE360	Airport Management	Discipline Specific Elective	50	50	3
	22MBADSE361	Ground Handling Operations				
6	22MBADSE362	Aviation Safety and Security	Discipline Specific Elective	50	50	3
	22MBADSE363	Airline Accounting and Cost Management				
7	22MBADSE364	Disaster Management in Aviation	Discipline Specific Elective	50	50	3
	22MBADSE365	Human Factors in Aviation				
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE456	Aviation Marketing Management	Discipline Specific Elective	50	50	3
	22MBADSE457	Business Process Design				
4	22MBADSE458	Maintenance, Repair and Overhaul in Aviation	Discipline Specific Elective	50	50	3
	22MBADSE459	Customer Relationship Management in Aviation				
5	22MBADSE460	Air Traffic Management and Navigation	Discipline Specific Elective	50	50	3
	22MBADSE461	Air Cargo Management				
6	22MBADSE462	Aviation Revenue Management	Discipline Specific Elective	50	50	3
	22MBADSE463	Aviation Financial Management				
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA MARKETING AND FINANCE (MF)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL -1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE206	Customer Relationship Management	Discipline Specific Elective	50	50	3
7	22MBADSE209	Indian Financial System and Financial Markets	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE303	Sales and Distribution Management	Discipline Specific Elective	50	50	3
5	22MBADSE308	Business to Business Marketing	Discipline Specific Elective	50	50	3
6	22MBADSE309	Project Appraisal and Finance	Discipline Specific Elective	50	50	3
7	22MBADSE310	Wealth Management	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE401	Marketing of Services	Discipline Specific Elective	50	50	3
4	22MBADSE404	Global Marketing	Discipline Specific Elective	50	50	3
5	22MBADSE411	Behavioural Finance	Discipline Specific Elective	50	50	3
6	22MBADSE413	Investment Banking	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>



## MBA FINANCE AND BUSINESS ANALYTICS (FBA)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE209	Indian Financial System and Financial Markets	Discipline Specific Elective	50	50	3
7	22MBADSE217	Data Analytics with Python	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE309	Project Appraisal and Finance	Discipline Specific Elective	50	50	3
5	22MBADSE310	Wealth Management	Discipline Specific Elective	50	50	3
6	22MBADSE330	Financial Analytics	Discipline Specific Elective	50	50	3
7	22MBADSE328	Strutured Query Language	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE411	Behavioural Finance	Discipline Specific Elective	50	50	3
4	22MBADSE413	Investment Banking	Discipline Specific Elective	50	50	3
5	22MBADSE432	Business Process Re-engineering	Discipline Specific Elective	50	50	3
6	22MBADSE428	Business Intelligence	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA MARKETING AND HUMAN RESOURCE MANAGEMENT (MHR)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE206	Customer Relationship Management	Discipline Specific Elective	50	50	3
7	22MBADSE213	Talent Acquisition	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE303	Sales and Distribution Management	Discipline Specific Elective	50	50	3
5	22MBADSE308	Business to Business Marketing	Discipline Specific Elective	50	50	3
6	22MBADSE320	Employee Compensation and Benefits Management	Discipline Specific Elective	50	50	3
7	22MBADSE322	Performance Review System and Talent Retention	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE401	Marketing of Services	Discipline Specific Elective	50	50	3
4	22MBADSE404	Global Marketing	Discipline Specific Elective	50	50	3
5	22MBADSE423	Human Resource Management Functional Skills	Discipline Specific Elective	50	50	3
6	22MBADSE424	Employer - Employee Relations	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA FINANCE AND HUMAN RESOURCE MANAGEMENT (FHRM)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE209	Indian Financial System and Financial Markets	Discipline Specific Elective	50	50	3
7	22MBADSE213	Talent Acquisition	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE309	Project Appraisal and Finance	Discipline Specific Elective	50	50	3
5	22MBADSE310	Wealth Management	Discipline Specific Elective	50	50	3
6	22MBADSE320	Employee Compensation and Benefits Management	Discipline Specific Elective	50	50	3
7	22MBADSE322	Performance Review System and Talent Retention	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE411	Behavioural Finance	Discipline Specific Elective	50	50	3
4	22MBADSE413	Investment Banking	Discipline Specific Elective	50	50	3
5	22MBADSE423	Human Resource Management Functional Skills	Discipline Specific Elective	50	50	3
6	22MBADSE424	Employer - Employee Relations	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA MARKETING AND BUSINESS ANALYTICS (MKBA)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE209	Customer Relationship Management	Discipline Specific Elective	50	50	3
7	22MBADSE213	Data Analytics with Python	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE303	Sales and Distribution Management	Discipline Specific Elective	50	50	3
5	22MBADSE308	Business to Business Marketing	Discipline Specific Elective	50	50	3
6	22MBADSE334	Marketing Analytics	Discipline Specific Elective	50	50	3
7	22MBADSE328	Strutured Query Language	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE401	Marketing of Services	Discipline Specific Elective	50	50	3
4	22MBADSE404	Global Marketing	Discipline Specific Elective	50	50	3
5	22MBADSE432	Business Process Re-engineering	Discipline Specific Elective	50	50	3
6	22MBADSE428	Business Intelligence	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>



## MBA HUMAN RESOURCE MANAGEMENT AND BUSINESS ANALYTICS (HRBA)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE213	Talent Acquisition	Discipline Specific Elective	50	50	3
7	22MBADSE217	Data Analytics with Python	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE320	Employee Compensation and Benefits Management	Discipline Specific Elective	50	50	3
5	22MBADSE322	Performance Review System and Talent Retention	Discipline Specific Elective	50	50	3
6	22MBADSE332	Human Resource Analytics	Discipline Specific Elective	50	50	3
7	22MBADSE328	Strutured Query Language	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE423	Human Resource Management Functional Skills	Discipline Specific Elective	50	50	3
4	22MBADSE424	Employer - Employee Relations	Discipline Specific Elective	50	50	3
5	22MBADSE432	Business Process Re-engineering	Discipline Specific Elective	50	50	3
6	22MBADSE428	Business Intelligence	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA MARKETING AND LOGISTICS AND SUPPLY CHAIN MANAGEMENT (MKLSCM)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE206	Customer Relationship Management	Discipline Specific Elective	50	50	3
7	22MBADSE224	Logistics Management	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE303	Sales and Distribution Management	Discipline Specific Elective	50	50	3
5	22MBADSE308	Business to Business Marketing	Discipline Specific Elective	50	50	3
6	22MBADSE339	Purchasing and Inventory Management	Discipline Specific Elective	50	50	3
7	22MBADSE340	Port and Air Port Management	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE401	Marketing of Services	Discipline Specific Elective	50	50	3
4	22MBADSE404	Global Marketing	Discipline Specific Elective	50	50	3
5	22MBADSE440	Sustainable Supply Chain Management	Discipline Specific Elective	50	50	3
6	22MBADSE441	Contemporary Issues in Logistics Management	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA FINANCE AND ENTREPRENEURSHIP AND NEW VENTURE CREATION (FENVC)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE229	Entrepreneurship Theory and Practice	Discipline Specific Elective	50	50	3
7	22MBADSE209	Indian Financial System and Financial Markets	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE350	Corporate Entrepreneurship	Discipline Specific Elective	50	50	3
5	22MBADSE352	Design Thinking for Entrepreneurs	Discipline Specific Elective	50	50	3
6	22MBADSE309	Project Appraisal and Finance	Discipline Specific Elective	50	50	3
7	22MBADSE310	Wealth Management	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE450	Analytics for Entrepreneurs	Discipline Specific Elective	50	50	3
4	22MBADSE455	Building Startup Communities	Discipline Specific Elective	50	50	3
5	22MBADSE411	Behavioural Finance	Discipline Specific Elective	50	50	3
6	22MBADSE413	Investment Banking	Discipline Specific Elective	50	50	3
7	22MBASEC002	Spreadsheets for Business Decision Making	Skill Enhancement Course	50	50	2
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC403	Master Thesis	Final Thesis	-	50	6
10		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA MARKETING AND ENTREPRENEURSHIP AND NEW VENTURE CREATION (MENVC)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE206	Customer Relationship Management	Discipline Specific Elective	50	50	3
7	22MBADSE229	Entrepreneurship Theory and Practice	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE350	Corporate Entrepreneurship	Discipline Specific Elective	50	50	3
5	22MBADSE352	Design Thinking for Entrepreneurs	Discipline Specific Elective	50	50	3
6	22MBADSE303	Sales and Distribution Management	Discipline Specific Elective	50	50	3
7	22MBADSE308	Business to Business Marketing	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE450	Analytics for Entrepreneurs	Discipline Specific Elective	50	50	3
4	22MBADSE455	Building Startup Communities	Discipline Specific Elective	50	50	3
5	22MBADSE401	Marketing of Services	Discipline Specific Elective	50	50	3
6	22MBADSE404	Global Marketing	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>



## MBA HUMAN RESOURCE MANAGEMENT AND ENTREPRENEURSHIP AND NEW VENTURE CREATION (HRENVG)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE229	Entrepreneurship Theory and Practice	Discipline Specific Elective	50	50	3
7	22MBADSE213	Talent Acquisition	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE350	Corporate Entrepreneurship	Discipline Specific Elective	50	50	3
5	22MBADSE352	Design Thinking for Entrepreneurs	Discipline Specific Elective	50	50	3
6	22MBADSE320	Employee Compensation and Benefits Management	Discipline Specific Elective	50	50	3
7	22MBADSE322	Performance Review System and Talent Retention	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE450	Analytics for Entrepreneurs	Discipline Specific Elective	50	50	3
4	22MBADSE455	Building Startup Communities	Discipline Specific Elective	50	50	3
5	22MBADSE423	Human Resource Management Functional Skills	Discipline Specific Elective	50	50	3
6	22MBADSE424	Employer - Employee Relations	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

**MBA AVIATION MANAGEMENT AND LOGISTICS and SUPPLY CHAIN MANAGEMENT (AMLSCM)**  
**Semester-1**

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

**Semester-2**

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE233	Aviation and Aerospace Business Models	Discipline Specific Elective	50	50	3
7	22MBADSE224	Logistics Management	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE362	Aviation Safety and Security	Discipline Specific Elective	50	50	3
5	22MBADSE358	Management of Airline Operations	Discipline Specific Elective	50	50	3
6	22MBADSE339	Purchasing and Inventory Management	Discipline Specific Elective	50	50	3
7	22MBADSE340	Port and Air Port Management	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE458	Maintenance, Repair and Overhaul in Aviation	Discipline Specific Elective	50	50	3
4	22MBADSE462	Aviation Revenue Management	Discipline Specific Elective	50	50	3
5	22MBADSE440	Sustainable Supply Chain Management	Discipline Specific Elective	50	50	3
6	22MBADSE441	Contemporary Issues in Logistics Management	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA AVIATION MANAGEMENT AND MARKETING (AMMK)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE206	Customer Relationship Management	Discipline Specific Elective	50	50	3
7	22MBADSE233	Aviation and Aerospace Business Models	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE303	Sales and Distribution Management	Discipline Specific Elective	50	50	3
5	22MBADSE308	Business to Business Marketing	Discipline Specific Elective	50	50	3
6	22MBADSE362	Aviation Safety and Security	Discipline Specific Elective	50	50	3
7	22MBADSE358	Management of Airline Operations	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE401	Marketing of Services	Discipline Specific Elective	50	50	3
4	22MBADSE404	Global Marketing	Discipline Specific Elective	50	50	3
5	22MBADSE458	Maintenance, Repair and Overhaul in Aviation	Discipline Specific Elective	50	50	3
6	22MBADSE462	Aviation Revenue Management	Discipline Specific Elective	50	50	3
7		Courses listed in page number 486	Skill Enhancement Course	50	50	2
8	22MBACC403	Master Thesis	Final Thesis	-	50	6
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>

## MBA AVIATION MANAGEMENT AND HUMAN RESOURCE MANAGEMENT (AMHR)

### Semester-1

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC101	Business Communication	Core Course	50	50	2
2	22MBACC102	Business Economics	Core Course	50	50	2
3	22MBACC103	Statistics for Managers	Core Course	50	50	2
4	22MBACC104	Indian Ethos and Business Ethics	Core Course	50	50	2
5	22MBACC105	Business Law	Core Course	50	50	2
6	22MBADSE101	Financial Reporting Statement and Analysis	Discipline Hard Core	50	50	3
7	22MBADSE102	Marketing Management	Discipline Hard Core	50	50	3
8	22MBADSE103	Organizational Behaviour	Discipline Hard Core	50	50	3
9		As per University Recommendations	Open Elective	50	50	3
10	22MBASEC001	Report Writing and Presentation Skills	Skill Enhancement Course	50	50	2
11	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	50	-	-
<b>Total Credits</b>						<b>24</b>

### Semester-2

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC201	Indian Economic Policies and Reforms	Core Course	50	50	2
2	22MBACC202	Operations Research	Core Course	50	50	2
3	22MBADSE201	Finance for Managers	Discipline Hard Core	50	50	3
4	22MBADSE202	Consumer Behaviour and Insights	Discipline Hard Core	50	50	3
5	22MBADSE203	Human Resource Management	Discipline Hard Core	50	50	3
6	22MBADSE233	Aviation and Aerospace Business Models	Discipline Specific Elective	50	50	3
7	22MBADSE213	Talent Acquisition	Discipline Specific Elective	50	50	3
8		As per University Recommendations	Open Elective	50	50	3
9		Courses listed in page number 486	Skill Enhancement Course	50	50	2
10	22PCLP12	Entrepreneurship Eco System (PCL - 1)	Project Centric Learning 1	-	50	3
<b>Total Credits</b>						<b>27</b>

### Semester-3

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC301	Global Business Management	Core Course	50	50	2
2	22MBACC302	Operations Management	Core Course	50	50	3
3	22MBACC303	Business Research Methods	Core Course	50	50	2
4	22MBADSE362	Aviation Safety and Security	Discipline Specific Elective	50	50	3
5	22MBADSE358	Management of Airline Operations	Discipline Specific Elective	50	50	3
6	22MBADSE320	Employee Compensation and Benefits Management	Discipline Specific Elective	50	50	3
7	22MBADSE322	Performance Review System and Talent Retention	Discipline Specific Elective	50	50	3
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9	22MBACC305	Summer Internship Project	Project	-	100	3
10	22MBACC403	Master Thesis	Thesis	50	-	0
11		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	50	-	0
<b>Total Credits</b>						<b>24</b>

### Semester-4

Sl. No.	Course Code	Title of the Course	Category of the Course	CA (%)	UE (%)	Credit Units
1	22MBACC401	Strategic Management	Core Course	50	50	2
2	22MBACC402	Organization Design	Core Course	50	50	2
3	22MBADSE458	Maintenance, Repair and Overhaul in Aviation	Discipline Specific Elective	50	50	3
4	22MBADSE462	Aviation Revenue Management	Discipline Specific Elective	50	50	3
5	22MBADSE423	Human Resource Management Functional Skills	Discipline Specific Elective	50	50	3
6	22MBADSE424	Employer - Employee Relations	Discipline Specific Elective	50	50	3
7	22MBACC403	Master Thesis	Final Thesis	-	50	6
8		Courses listed in page number 486	Skill Enhancement Course	50	50	2
9		Entrepreneurship Project (PCL 2)	Project Centric Learning 2	-	50	3
<b>Total Credits</b>						<b>27</b>



# **MBA Curriculum Batch 2022 – 24**

## **SEMESTER - I**

# **CORE COURSES**

## **SEMESTER - I**

Course Name: **Business Communication**

Course Code: **22MBACC101**

Semester: **1**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Examine the importance of effective communication in business
- Formulate effective conflict management and negotiation skills
- Develop effective reading, writing, speaking and listening skills to communicate effectively using the LSRW (Listening, Speaking, Reading and Writing) framework of communication
- Assess the significance of managing crisis through effective communication
- Design effective social media communication

**Course Outcomes:**

At the end of the course, learners will be able to:

CO1	Demonstrate the components of communication, major verbal, nonverbal barriers to communication and examine the importance of effective communication in business
CO2	Instill skills of conflict management and negotiation
CO3	Prioritize effective reading, listening , writing and speaking skills using the LSRW framework
CO4	Examine the importance of crisis communication
CO5	Develop varied applications of social media platforms

**Course Contents**

**Module1: Foundations of Business Communication**

**5 hours**

**Skill sets:** Interpersonal Communication-verbal, Problem-solving and decision making

Communicating in Organizations, Components of communication, Directions of Communication, Process, Communication Barriers, \*Communication Media Choices, Social media communication, Client interfacing Skills, Ethical Communication, Audience Analysis.

**Module 2: Interpersonal Communication and Business Meetings**

**7 hours**

**Skill sets:** Interpersonal Communication-Oral, Non-Verbal, Business Etiquette, Reading Skills, Listening

**Skills and Speaking Skills**

a. **Reading Skills:** Through News Paper, Business news articles readings. Effective Reading Skills-

b. **Listening Skills:** Definition, Types of Listening, Barriers to listening, Causes and Effects of Poor Listening, Proactive Listening, building relationships through Communications using Media types\*

c. **Business Meetings:** Meeting- Business Meetings, Examine the requirements for conducting an effective Meeting, Techniques of making a powerful impact at meetings, Design the Meeting including Preparation of agenda and using technology to facilitate professional meetings

**Oral:** Conflict resolution & Barriers to verbal communication.

**Non- Verbal:** Body Movement, Physical Appearance, Voice Qualities, Time, Touch, Space and Territory.  
Barriers to nonverbal communication \* **Corporate Etiquette**

**Module 3: Media Relations, Research and social media** **9 hours**  
**Skill sets: Written Communication, Forward planning and strategic thinking, Commercial awareness**

Create an original press release. Compare and contrast the benefits and challenges inherent in using social media as a corporate communication vehicle. Recommend social media options when considering target audience.

**Module 4: Written Communication & Crisis Communication** **9 Hours**  
**Skill Sets: Reading Skills, Listening Skills, Speaking Skills, Problem solving and decision making Business Writing:**

The Process of Writing: An Overview of the Writing Process, Planning, Drafting, Revising, Proofreading, Writing Positive and Neutral Messages, Persuasive Messages, Bad-News Messages, Nuances of application and letter writing \* *Emails and Memos.*

**Negotiation skills: 4 Ps of Communication; Negotiation outcomes, Negotiation styles** Crisis Communication: Compare and Contrast the role of issues management and strategic planning. Demonstrate the difference between business interruption and crisis. Examine the crisis life cycle, Appraise the traits of a crisis spokesperson.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Ober, S., Newman, A. (2017). Communicating in Business. 8th Edition. Cengage Learning.

**Reference Books**

- Lesikar, V.R., Flatley, M. (2017). Business Communication- Making connections in the digital world. 11<sup>th</sup> Edition. Tata McGraw Hill Publications.
- Bovee, L.C., Thill, J. (2018). Business Communication Today. 14th Edition. Pearson Education.
- Dr. Sapna M.S. (2020). CORPORATE COMMUNICATION: Trends and Features. Notion press, Chennai, Tamil Nadu-600004
- Naik, D.S. (2015). Business Communication-A Practical Approach, 1<sup>st</sup> Edition. Biztantra Publishers.

**Other reading material**

- MYEnglishPages.Com. (2022). Learn English Online, [Learn English - Grammar, Vocabulary, Speaking, Exercises, Lessons. \(myenglishpages.com\)](http://myenglishpages.com), Accessed on 26 April 2022.
- Marcusevans Lingurama.(n/d). [marcusevans Linguarama](http://marcusevanslingurama.com), accessed on 26 April 2022
- Harward Business Review.(n/d). O’Hara, C. (2014). How to Improve Your Business Writing. <http://hbr.org/2014/11/how-to-improve-your-business-writing>, Accessed on 25 March 2022

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Business Economics**

Course Code: **22MBACC102**

Semester: **1**

Credits: **2**

Hours (LTP): **30 Hours**

### Course Objectives:

- Developing an understanding of the basic micro economic concepts for managerial decision making.
- Employing the micro economic theories of demand and supply in business management of a particular firm.
- Enabling the students to understand the relationship between inputs used in production and the resulting outputs & cost of production to realize the BEP.
- Selecting a suitable market structure and design pricing strategies for profit maximization.
- Examining the impact of various macro-economic variables on business decisions and future planning.

### Course Outcomes

At the end of the course, Learners will be able to

CO1	Explain the concepts and theories of demand, supply, production and cost
CO2	Differentiate competitive market structures for price-output determination
CO3	Use the theories of demand elasticity in business decision making
CO4	Assess performance of business firms through Break-even analysis
CO5	Examine macroeconomic concepts of National income, inflation, exchange rate and business cycle

### Course Contents

#### Module 1: Demand & Supply Analysis

**8 Hours**

Demand Analysis-determinants of demand, Law of demand, Elasticity of demand, types and degrees of elasticity of demand (problems), measurement of elasticity of demand; Demand forecasting. Supply analysis-determinants of supply, Law of supply; Market equilibrium. **\*Consumer and Producer surplus 10%**

#### Module 2: Theory of Production and Cost & Revenue Analysis

**8 Hours**

Production function, Law of variable proportions, Isoquant and Isocost, Laws of returns to scale; Cost analysis: Cost and revenue concepts, cost output and revenue function- Short Run & Long Run; Breakeven analysis- BEP (problems). **\*Economies & diseconomies of scale 10%**

#### Module 3: Market Structures

**8 Hours**

Types and features of markets: Perfect competition, Monopoly, Monopolistic competition and Oligopoly; Short run and Long run equilibrium of firms in different market structures; Collusive and Non-collusive oligopoly, Game theory; Nash equilibrium. **\*Duopoly 20%**

#### Module 4: Macro-Economic concepts

**6 Hours**

National Income concepts & methods of estimating N.I; Inflation-types & effects; Exchange Rate fluctuations-causes and effects. **\*Business cycle 25%**

*(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)*

### Basic Texts:

1. V.K. Xavier, Massand A., Begum S., Banu S.C. (2022). Economics for Business, Magi's publications.
2. Maheshwari, Y. (2013). Managerial Economics, Third edition, Prentice Hall India Learning Private Limited.

## References

1. Samuelson, W. F., & Marks, S. G. (2008). *Managerial economics*. John Wiley & Sons.
2. Samuelson, W. F., Marks, S. G., & Zagorsky, J. L. (2021). *Managerial economics*. John Wiley & Sons.
3. Mithani D. M, (2016). Managerial Economics, Himalaya Publishing House, Mumbai.
4. Salvatore, D., and Rastogi, S.K. (2020). Managerial Economics: Principles and Worldwide Applications. Ninth edition, Oxford University Press;
5. Joel Dean. (2016). Managerial Economics, Prentice Hall.
6. Pindick R.S. and Rubinfeld. (2016). Managerial Economics, Prentice hall, New Jersey.
- Samuelson and Nordhaus. (2018). Microeconomics, 19th Edition, MacGrawHill.
7. Pindick R.S. and Rubinfeld. (2016). Microeconomics, Prentice hall, New Jersey.
8. Carr, C. (2020). *Global oligopoly: A key idea for business and society*. Routledge.
9. Alam, G. M., Parvin, M., and Roslan, S. (2020). Growth of private university business following "oligopoly" and "SME" approaches: an impact on the concept of university and on society. *Society and Business Review*.
10. Krishna, T. V., Reddy, D. M., and Rajendar, M. (2020, July). A study on exclusion based measure of core inflation for India. In *AIP Conference Proceedings* (Vol. 2246, No. 1, p. 020093). AIP Publishing LLC.

## Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Statistics for Managers**

Course Code: **22MBACC103**

Semester: **1**

Credits: **2**

Hours (LTP): **30 Hours**

### **Course Objectives**

- To familiarise the students to apply the Data visualisation concepts in the real time situations.
- To train the students in applying the descriptive statistical techniques using software.
- To train the students to compare two systems and correlate them.
- To familiarise the students in creating the hypothesis and solving them.

### **Course Outcomes**

**At the end of the course, learners will be able to:**

CO1	Apply the data visualisation techniques in real time situations
CO2	Discriminate the various measures of central tendency
CO3	Assess the Business situation using Predictive Analytics
CO4	Construct the hypotheses enabling data driven decisions

### **Course Contents**

#### **Module 1: Data collection & visualization**

**7 Hours**

Need of statistics in Management and Research; Scope, characteristics, limitations and misuse of statistics, Primary and secondary data, sources of data, Questionnaire design and survey techniques, Bivariate frequency distribution, Tabulation, Graphical representation of data - stem & leaf display, line graphs, bar chart, Multiple bar chart, Subdivided chart, Sector graph.

#### **Module 2: Descriptive Statistics**

**8 Hours**

Arithmetic mean, Corrected mean, combined mean, missing frequency numericals and miscellaneous numericals, Averages of position: Median, Quartiles, Deciles, Percentiles, Mode, Absolute and relative measures of dispersion, Box and Whisker plots, Skewness, Kurtosis, Range, co-efficient of range, mean absolute deviation, Quartile deviation, co-efficient of quartile deviation, Standard deviation, co-efficient of variation, consistency and stability of a system using MS Excel

#### **Module 3: Measures of Association & Sampling techniques**

**7 Hours**

Scatter diagram, Karl Pearson's coefficient of correlation, Spearman's rank correlation (with and without repeated ranks), Business prediction models, simple linear regression. Concepts of multiple regression, Industrial practice of regression models, Population & sample, Sampling Techniques, Probability & Non-Probability Sampling, sample size determination.

#### **Module 4: Hypothesis Testing & Case analysis**

**8 Hour**

Parametric and non-parametric tests, null & alternate hypothesis, level of significance and confidence, type I and type II errors, General procedure of hypothesis testing, framing hypothesis, Z – test, student's t – distribution, Chi – square test, ANOVA, Statistical software packages – MS Excel, SPSS, Tableau, Case studies & real time business problems.

### Basic Texts

- Anderson, Sweeny & Williams (2018) Statistics for Business & Economics, Revised 13<sup>th</sup> edition, Cengage Learning
- Black Ken, Business Statistics for Contemporary Decision making, 9<sup>th</sup> edition, Wiley

### Reference Books

- Levin & Rubin (1998), Statistics for Management, 7<sup>th</sup> edition, Pearson
- Zikmund, W. G., Carr, J. C., & Griffin, M. (2013). Business Research Methods (Book Only). Cengage Learning.
- Bell, E., Bryman, A., & Harley, B. (2018). Business research methods. Oxford university press.

### Other reading material

- <https://www.linkedin.com/learning/data-visualization-best-practices/welcome?u=92695330>
- <https://www.linkedin.com/learning/learning-excel-data-analysis/the-power-of-data-analysis-using-excel?u=92695330>
- <https://www.linkedin.com/learning/business-analytics-multiple-comparisons-in-r-and-excel/pinpoint-group-mean-differences?u=92695330>
- <https://www.linkedin.com/learning/excel-economic-analysis-and-data-analytics/welcome?u=92695330>
- <https://www.worldometers.info> FOR REALTIME DATA

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Title: **Indian Ethos and Business Ethics**

Course Code: **22MBACC104**

Semester: **1**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- To study the cause-and-effect relationship of individual actions on a business
- To develop among students an understanding of the management practices in the context of Indian Management and the ethical dilemmas
- To provide understanding of contribution of Indian culture and ethos to service, leadership and management

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Explain how Indian culture contributes to leadership and management and explain the influence of ethos on Work Culture.
CO 2	Examine Ethical Dilemmas and ethical decision-making in organizations
CO 3	Assess a company's degree of social responsibility, its economic value, and its environmental impact
CO 4	Appraise Corporate Governance practices of organizations

**Course Contents:**

**Module 1: Indian Ethos, Work Ethos and Culture**

**7 hours**

**Skill Set: Critical thinking Logic and reasoning**

Foundational Concepts of Indian Ethos; Differences between Ethics and Ethos; management lessons from Mahabharata, and Kautilya's Arthashastra and its implications in Indian organisations; Work ethos and values for Indian managers; Differences between Indian culture, Western culture and Japanese culture; Management of Stress using methods rooted in Indian ethos; leadership changing scenario from Karta in a joint family to managers today, contemporary approaches to leadership.

**Module 2: Business Ethics in Management**

**8 Hours**

**Skill Set: Problem solving and decision making**

Theories of Ethics, Teleological approach, Deontological Approach, Kohlberg's 6 stages of moral development; Ethics in Finance, HR, Marketing & IT, Definition and nature of business ethics; need and benefit of business ethics; ethical principles in business; Ethical dilemma in organizations; ethical decision making, reasoning, and resolution process; ethical culture in organizations; Codes of ethics and conduct.

**Module 3: Corporate Social Responsibility**

**8 Hours**

**Skill Set: Forward planning and strategic thinking Commercial awareness**

Definition of CSR Globally, nature, scope, objectives, , models of CSR, Concept of Charity, Models of CSR; Objectives of Sustainability; Sustainable Development; Difference between CSR and Sustainability, best practices of CSR, challenges and implementation. Triple Bottom Line (TBL), ESG: Application, Sustainability indexes and reporting, **Best practices of CSR\***

**Module 4: Corporate Governance****7 Hours****Skill Set : Critical thinking Commercial awareness**

What is Corporate Governance? Principles and advantages of Corporate Governance; 4 Pillars of Corporate Governance; Board Structure and Functioning CSR-Legislation in India in depth analysis: Scope for CSR Activities under Schedule VII, Appointment of Independent Directors on the Board, Future **of governance**

**Basic Text:**

1. Cherunilam, F. (2021). *Business environment*. Himalaya Publishing House Pvt. Ltd.
2. Gopalaswamy, A.M. (2019). *Corporate Governance*. New Age International (P) Ltd.
3. Monks, R. A., & Minow, N. (2011). *Corporate governance*. John Wiley & Sons.
4. Baxi, C. V., & Prasad, A. (Eds.). (2005). *Corporate social responsibility: Concepts and cases: The Indian experience*. Excel Books India.

**Reference books:**

1. Aswathappa, K., & Reddy, G. S. (2009). *Organisational behaviour* (Vol. 20). Mumbai: Himalaya Publishing House.
2. Hartman, L. P., Desjardins, J., & MacDonald, C. (2010). *Business ethics*. McGraw-Hill Publishing.
3. Schwartz, M. S. (2011). *Corporate social responsibility: An ethical approach*. Broadview Press.
4. Srinivasan, T. N. (2011). *Growth, sustainability, and India's economic reforms*. Oxford University Press.
5. Visser, W., & Tolhurst, N. (Eds.). (2017). *The world guide to CSR: A country-by-country analysis of corporate sustainability and responsibility*. Routledge.
6. Balachandran, V. (2011). *Corporate Governance, Ethics and Social Responsibility*. PHI Learning Pvt. Ltd..
7. Baxi, C. V., & Ray, R. S. (2012). *Corporate social responsibility*. Vikas Publishing House.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Business Law**

Course Code: **22MBACC105**

Semester: **1**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Comprehend the legal framework and structure prevailing in the Indian business environment
- Relate the Mercantile Laws in the Indian context which is imperative for successful operations of companies in India
- Correlate the fundamentals of Company Law in company formation
- Examine the business environment of India and the impact of Globalization & Deregulation and Liberalization

**Course Outcome:**

CO1	Employ the knowledge of the Law of Contracts, Sale of Goods Act and Negotiable Instruments Act to Business transactions
CO2	Outline provisions of Company law to ensure compliance with the Companies Act
CO3	Examine the laws pertaining to Competition, Consumer and IPR in Business Operations
CO4	Assess Business strategies to ensure compliance with legal requirements of the Indian Business environment

**Module 1: Mercantile law**

**9 Hours**

Skill Set: Problem solving and decision making Commercial awareness

Origins of law, Object of law, Sources of Law, Law of Contract: Types of Contract, Remedies for Breach of Contract, Sale of Goods Act: Sale and Agreement to Sell, Rights of Buyer and seller; Negotiable Instruments Act,1881.

**Module 2: Company Law**

**7 Hours**

Skill Set: Forward planning and strategic thinking

Companies Act, 2013, Process of company formation, Types of Companies, Directors- appointment, Types of Directors, functions/duties, disqualifications, Share capital, Loan capital, Auditors – powers and duties, Mergers, Amalgamations, Winding up

**Module 3: Economic legislations and contemporary Issues**

**8 Hours**

Skill Set: Commercial awareness ,Problem solving and decision making

The Competition Act, Intellectual Property Rights Acts, Foreign Exchange Management Act, Consumer Protection Act, Information Technology Act. (25% change )- Partnership has been reallocated to module-4

**Module 4: The Business Environment in India**

**6 Hours**

The economics aspect of the syllabus has been removed and the law of partnership has been included in module 4.

Skill Set: Forward planning and strategic thinking, Problem solving and decision making

Laws of agency: Agency, Contract of Agency; Partnership including LLP-Definition, nature kinds, Rights, duties, liabilities and interrelations between the partners, Registration of partnership, Limited liability partnership, Dissolution of partnership

**Basic Texts**

- Kapoor, N. D. (2020). *Elements of Mercantile Law, ND Kapoor, 38th e, 2020.* Sultan Chand & Sons.

- Pathak, A. (2018). *Legal Aspects of Business*, Tata McGraw-Hill Education.

### Reference Books

- Law, U. I. C. Ba5104 *Legal Aspects of Business* Ltpc.
- Agarwal, A. K. (2018). *Business law for managers: Kaleidoscopic tales*.
- Kuchhal, M. C., & Kuchhal, V. (2010). *Business Legislation for Management*. Vikas Publishing House.
- Narayanan, P. (2011). *Intellectual Property law*, Eastern Law House

### Other reading material

- India Business Law Journal @IBL\_Insights
- Share and Loan Capital, <http://www.mca.gov.in>
- Role of an Auditor, <http://www.mca.gov.in>
- Company Meetings, <http://www.mca.gov.in>

This course leads to **Placement & Entrepreneurship**

Change in syllabus is 7%

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**DISCIPLINE HARD CORE COURSES**  
**SEMESTER - I**

Course Title: **Financial Reporting, Statements and Analysis**

Course Code: **22MBADSE101**

Semester: **1**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Introducing the learners to understand accounting concepts and conventions
- Equip the learners to comprehend accounting process
- Enabling the learners to construct the accounting statements
- Endowing the learners to Interpret Profit and loss statement and Balance Sheet of Companies
- Enabling the learners to compare the financial position of a company using common size and comparative approaches

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Discuss the conceptual framework of accounting
CO 2	Demonstrate the Accounting cycle and process
CO 3	Prepare the financial statements as per regulations
CO 4	Appraise the financial statements using ratios
CO 5	Compare and test the financial position of companies using common size and comparative approaches

**Course Contents:**

**Module 1: Introduction to Accounting:**

**8 Hours**

Conceptual framework of Financial Accounting, concept, objectives, advantages and limitations. Users of accounting statements, terminology, **accounting concepts\***, assumptions and conventions, Accounting equations (Simple Problems). Introduction to Indian GAAP, Ind AS and IFRS.

**Module 2: Accounting Cycle:**

**10 Hours**

Accounting process: Account, Types, Rules, Books of Accounts, Journal, Ledger, **Bank reconciliation statement\*** - preparation of trial balance.

**Module 3: Financial Statements:**

**11 Hours**

Corporate Accounting, Financial Statements: Preparation of Statement of Profit and Loss and Balance sheet, Treatment of Adjustments: Outstanding expenses, Treatment of closing stock, prepaid expense, tax provision, dividend and reserves, finding EPS, **Reading real company annual reports\*** - Schedule III of Companies Act, 2013.

**Model 4: Ratio analysis:**

**9 Hours**

Introduction to ratios: concept, advantages, limitations. Types of ratios: liquidity, solvency, activity, profitability and market test ratios. Simple problems with analysis.

**Module 5: Financial Statement analysis:**

**7 Hours**

Analysis of Statement of P&L and Balance sheet through common size, trend and comparative statements.

**Understanding published Annual reports\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Narayanaswamy, R. (2018). Financial Accounting: A Managerial Perspective, PHI Learning Pvt. Ltd.
- Anthony, Robert. (2019), Accounting text and cases. (13th ed.). New Delhi: Tata McGraw-Hill Publications.

#### Reference Books

- Robert Libby, Patricia Libby, Frank Hodge. (2019), Financial Accounting. (13th ed.). New Delhi: McGraw- Hill India.
- Arora.R.K. (2018), Financial Accounting: Fundamentals, Analysis and Reporting. (1st ed.). New Delhi: Wiley India Pvt Ltd.
- Carl Warren, James M. Reeve, Jonathan Duchac.(2018), Accounting. (5th ed.). New Delhi: Cengage Learning India Pvt. Ltd.
- Bhattacharya, A.B. (2016). Financial accounting for business managers. (4th ed.). New Delhi: Prentice Hall of India.
- Kakani Ramchandran. (2017), How to Analyze Financial Statements. (2nd ed.). Delhi: Tata McGraw-Hill Publications.
- Horngren, Charles.T. (2012), Introduction to Financial Accounting. (9th ed.). India: Pearson's Education
- Maheshwari, S.N, Suneel K Maheshwari, Sharad K Maheshwari. (2018), Financial Accounting. (6th ed.). New Delhi: Vikas Publishing House.
- Krishna G. Palepu , Paul M. Healy (2015), Business Analysis and Valuation: Using Financial Statements, (5th ed.), Cengage Publications.
- Bagavathi, P. R. (2016). Management Accounting (4th ed.).New Delhi: S. Chand Publishing.
- Weugandt, Kimmel, Kieso (2016), Accounting Principles. (12th ed.). New Delhi: Wiley Publishers.

#### Other reading material

- William .J.Bruns (2004), Introduction to Accounting Records, Harvard Business School Publications, pp. 1- 8.
- V.G. Narayanan & Suraj Srinivasan (2018), Financial Analysis Simulation- Data Detective by from Harvard Business Publishing.
- B.R.Rao(2016), Strategic Analysis – A Case Study on Indian Telecom Industry, Management Accountant, pp.31-36
- Rohit Bansal (2015), A Comparative Analysis of the Financial performances of selected Indian IT Companies, IUP Journal of Accounting Research, Vol.14, No.4, pp.43-60.

#### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Marketing Management**

Course Code: **22MBADSE102**

Semester: **1**

Credits: **3**

Hours (LTP): **45 hours**

### **Course Objectives**

- To enable the students to understand the concepts of marketing
- To help the students to relate the segmentation, targeting and positioning strategies
- To equip the students to appraise the product and pricing strategies
- To equip the students, apprise the promotion and distribution strategy
- To assist the students to Explain the Concepts of Long term customer loyalty management

### **Course Outcomes**

#### **At the end of the course, learners will be able to:**

CO1	To describe the concepts of Marketing
CO2	To relate segmentation , targeting and positioning strategies
CO3	To appraise the product and pricing strategies
CO4	To apprise the promotion and distribution strategy
CO5	To Explain the Concepts of Long term customer loyalty management

### **Course Contents**

#### **Module 1: Understanding Marketing Management**

**10 Hours**

Importance and Scope of Marketing. Defining Marketing for the new realities. Core concepts of marketing (Concepts of Needs, Wants, Demand, Value Proposition, Segmentation, Targeting, Positioning, Brand, Marketing Environment, Marketing Channels). Effective Marketing Process. Marketing Mix Elements. Factors influencing consumer behavior, buying decision process – consumer and business markets.

#### **Module 2: Choosing Value - Segmentation, Targeting and Positioning**

**10 Hours**

Identifying Market Segments and Targets – bases for segmenting consumer markets, – Effective Segmentation Criteria, Targeting strategies. Crafting the positioning, developing a brand positioning, Competitive strategies for market leader, follower, challenger and nicher.

#### **Module -3: Designing Value – product and pricing decisions**

**9 Hours**

Setting product strategy - product and service characteristics, classification, differentiation, Service quality. New product development process. Product life cycle strategies.

Understanding pricing – selecting the pricing approach (3Cs of pricing strategy), setting the price – pricing of innovative and imitative products, adapting the price.

#### **Module- 4: Delivering and Communicating Value – distribution and communication decisions**

**9 Hours**

Designing and managing integrated marketing channels - Channel management decisions, retailing, E -tailing, wholesaling

Role of Marketing Communications, developing effective communications. Integrating Promotional Mix elements - advertising, sales promotion, personal selling, direct marketing, events, experiences and public relations. Managing Digital Communications.



## Module -4: Long-term loyalty management

9 Hours

Building customer value, satisfaction and loyalty, Kano's model of customer delight, Concept of Customer Lifetime Value, Customer Management - Acquisition, Retention, and developing value, Measuring CRM Success – Net Promoter Score, Customer Satisfaction Score, Customer Effort Score, Share of Wallet,

### Basic Texts

- Kotler, P., Keller, K. L., Koshy, A. & Jha, M. (2014). Marketing Management – South Asian Perspective. New Delhi, India: Pearson's Education.
- Kotler, P., Keller, K. L. (2016). Marketing Management. 15<sup>th</sup> edition. New Delhi, India: Pearson's Education.
- Buttle, F. (2009). Customer relationship management: Concepts and technology. Sydney: A Butterworth-Heinemann Title, 72.

### Reference Books

- Trout, J., & Ries, A. (2017). Positioning: The Battle for Your Mind. New York, USA: McGraw- Hill
- Kotler, P., Kartajaya, H., & Setiawan, I. (2017). Marketing 4.0: Moving from traditional to Digital. New Jersey, USA: Wiley & Sons

### Other references

- Goi, C. L. (2009). A review of marketing mix: 4Ps or more. International Journal of Marketing Studies. Vol 1, No. 1
- Gronroos, C. (1994). From marketing mix to relationship marketing: Towards paradigm shift in marketing. Management decision
- Keller, K. L. (2001). Building customer-based brand equity: A blueprint for creating strong brands (pp. 3-27). Cambridge, MA: Marketing Science Institute.
- Ionescu-Somers, A., Steger, U., & Amann, W. (2006). Hindustan Lever (A): Leaping a Millennium. IMD Case Study.
- Hinterhuber, A., & Liozu, S. (2012). Is it time to rethink your pricing strategy. MIT Sloan management review, 53(4), 69-77.
- Takeuchi, H., & Nonaka, I. (1986). The new new product development game. Harvard business review, 64(1), 137-146.
- Finne, Å., & Grönroos, C. (2009). Rethinking marketing communication: From integrated marketing communication to relationship communication. Journal of marketing Communications, 15(2-3), 179-195.
- The rise of the creative consumer. (2005). The future of innovation. *The Economist*, 374(8417), 75.
- Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010). Consumer cocreation in new product development. Journal of service research, 13(3), 283-296.

### Evaluation Pattern:

Continuous Evaluation	End Semester Examination	Total
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Class Participation : 10 Marks			
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Organizational Behavior**

Course Code: **22MBADSE103**

Semester: **1**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Demonstrate the importance of organizational behavior concepts in the workplace
- Develop an understanding of various personality types and their influence on value systems
- Describe the perceptual process and learning and its implication for organizations
- Explain the different types of work-related attitudes and behaviors
- Employ motivation theories in the workplace

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Identify the application of organizational behavior concepts in the context of organizations
CO2	Develop the ability to assess the personalities of different individuals in an organization.
CO3	Outline the factors influencing individual perception and learning in the organizational setting
CO4	Summarize the relationship between attitudes and behaviors
CO5	Appraise the implications of motivational theories in the modern context

**Course Contents:**

**Module 1: Introduction**

**6 Hours**

Introduction to Organizational Behavior, Meaning and Importance of OB, Historical developments, the importance of Interpersonal skills, Contributing Disciplines to OB, OB model, Challenges and Opportunities for OB, Workforce Diversity, Dynamics of diversity\*, Institutional and Resource based diversity theory. Application of OB in organizations. OB in Global Context

**Module 2: Personality and Values**

**12 Hours**

Personality – Meaning, contributing factors to personality, Theories of personality, Individual differences arising out of Personality traits that influence Work Behavior\*, - Personality assessment MBTI, BIG FIVE Model, person – job and organization fit. Values- meaning, importance. Types of Values

**Module 3: Perception and Learning**

**9 Hours**

Perception- Meaning, factors affecting perception, Perceptual Process, Importance of perception to organization, Kelly's Attribution theory, Common shortcuts in judging others, Impression management. Practical application of individual behaviour concepts at workplace. Learning – Meaning, importance, Principles of Learning

**Module 4: Attitudes and Job Satisfaction**

**9 Hours**

Attitudes- Meaning, components, Factors affecting attitude formation, Ways to change employee attitude\*, Types of job- related attitudes. Job Satisfaction-Meaning, measurement, causes of job satisfaction, application at workplace\*.

**Module 5: Motivation****9 Hours**

Definition and importance, Theories of motivation - Content Theories - Need Hierarchy Theory, Hygiene Motivation Theory, Existence Relatedness Growth (ERG) Theory\*, Theory X-Y, Three needs theory. Process Theories-Equity Theory, Expectancy Theory, Application of motivation concepts at workplace settings – Discussion

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Robbins,S.P.,Judge. T & Vohra, N (2019). Organizational Behavior, 16th edition, Pearson Education
- Nelson A & Quick K, (2020). Organizational Behaviour, India Edition, Cengage learning.

**Reference Books**

- Greenberg,J and Baron,R (2019) Behavior in Organisations New Delhi, India : PHI Learning Private Limited.
- Luthans, F (2018) Organizational Behavior, New Delhi: McGraw-Hill Professional
- Hellriegel, D and Slocum, J (2018) Organizational Behavior, South Western, CENGAGE Learning

**Other reading material**

- Manage Your Emotional Culture.<https://hbsp.harvard.edu/product/R1601C-PDF-ENG?Ntt=manage+your+emotional&itemFindingMethod=Search#questions-section>
- <https://hbsp.harvard.edu/product/4310-PDF-ENG?Ntt=martha+&itemFindingMethod=Search>
- Marie Jackson. M: Revitalizing Renfield Farms. <https://hbsp.harvard.edu/product/915555-PDF-ENG?itemFindingMethod=Other>
- Muczyk, J. P. (2004). A systems approach to organizational effectiveness: The alignment of critical organizational dimensions with selected business/competitive strategies. Journal of Comparative International Management, 7(1).
- <https://hbsp.harvard.edu/product/513051-PDF-ENG?itemFindingMethod=Other>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

# **SEMESTER - II**

# **CORE COURSES**

## **SEMESTER - II**

Course Title: **Indian Economic Policies and Reforms**

Course Code: **22MBACC201**

Semester: **2**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Discuss the current reforms and policy framework of the Indian economy.
- Examine the importance, causes and impact of growth and development and the policies to achieve inclusive growth.
- Understand the economic planning system of India and the role of NITI Aayog for the planning.
- Comprehend the integration of economies and crises and changing foreign policy of Indian economy.
- Relate role of Monetary and Fiscal policy with the present macroeconomic indicators of Indian economy.

**Course Outcomes:**

At the end of the course, learners will be able to:

CO 1	Distinguish parameters for measuring growth and development with respect to Indian economy.
CO 2	Appraise the economic policies and reforms in India.
CO 3	Critique the impact of Monetary and Fiscal policy on Indian economy.
CO 4	Explain the economic planning and economic planning systems in India.
CO 5	Examine the role of India's foreign policy in the era of globalization.

**Course Contents:**

**Module 1: Indian Economic Growth and Development**

**6 Hours**

Introduction to Indian economy, colonialism and development of the Indian economy; Economic Transformation from underdeveloped to developed, Socio-economic problems-poverty and inequality; unemployment, Economic Growth vs Economic Development, Measurement of Development- Human Development Index (HDI), ***other measurements for economic development.*** \*

**Module 2: Current Economic Policies and Reforms in India**

**10 Hours**

Economic Policies- New Economic Policy (LPG); Monetary policy, Fiscal policy; Industrial Policy. Economic reforms- contemporary economic reforms (SAP-Structural Adjustment Programs), Globalization, Financial Sector Reforms, FDI, Privatization, Disinvestment, *New Education Policy*, Atmanirbhar bharat ***\*Demonetization, GST, Make in India etc.\****

**Module 3: Economic Planning in India**

**6 Hours**

Finance commission of India, Planning commission, NITI Aayog, Sectoral development in India, ***\*Five year planning system.*** \*

**Module 4: Indian and Global Economy**

**8 Hours**

Recent trends and patterns of India's external sector- Balance of Trade, Balance of Payment, and Foreign Exchange Reserves, Economic crisis, Foreign Trade Policy. ***-Role of IMF, World Bank, World Trade Organization\****

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

1. V.K.Xavier et al. (2022). Indian Economics-Issues and Policy, Magi’s Publications
2. Kapila U. (2020). *Indian Economy: Performance and policies*, Academic Foundation; 18th Revised edition.

**References**

- 1) Datt R. & Sundharam (2019). 72nd edition, Indian Economy, S. Chand & co.
- 2) Agrawal, A. N., & Agrawal, M. K. (2019). Indian Economy, New Age International Publishers.
- 3) Sarkar J. (2019). The Indian Economy: Policies, Practices and Heresies, Pearson Education India.
- 4) Krueger, A. O. (Ed.). (2002). Economic policy reforms and the Indian economy. University of Chicago Press.

**Other reading material**

- Ahluwalia, I. J., & Little, I. M. D. (2012). *India's economic reforms and development: Essays for Manmohan Singh*. Oxford University Press. Retrieved from <https://EconPapers.repec.org/RePEc:oxp:obooks:9780198082231>.
- Srinivasan, T. N. (2003). Indian economic reforms: a stocktaking. *Stanford Centre for International Development, Working Paper, 190*. Retrieved from [scid.stanford.edu/sites/default/files/publications/190wp.pdf](http://scid.stanford.edu/sites/default/files/publications/190wp.pdf)
- Massand, A. B., & Gopalakrishna, B. V. (2017). Determinants of Bank Foreign Direct Investment Inflow in India: A Dynamic Panel Data Approach. *IIM Kozhikode Society & Management Review, 6*(1), 13-22. Retrieved from <http://journals.sagepub.com/doi/full/10.1177/2277975216674049>
- Massand, A., Lodi, M. K., & Ambreen, L. (2020). Atmanirbhar Bharat: Economic, Legal, and Social Aspects. *International Journal of Management (IJM), 11*(6).
- Eichenbaum, M. S., Rebelo, S., & Trabandt, M. (2020). *The macroeconomics of epidemics* (No. w26882). National Bureau of Economic Research.

**Websites:**

<https://aatmanirbharbharat.mygov.in/>  
<https://www.rbi.org.in/>  
<http://niti.gov.in/>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Title: **Operations Research**

Course Code: **22MBACC202**

Semester: **2**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- To make the students to understand the Operations research concepts, tools and techniques.
- To train the students to do various quantitative analysis and making accurate and the best suitable decisions in business.
- To nurture, among the students, the quantitative and operations research thinking ability while making any decisions.
- To make the students to apply their operations and research knowledge and skills for making optimum allocation of resources in personal and job life.
- To encourage students to create new software and apps in various fields of their jobs and their specializations.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Explain the role of operations research in making the managerial decisions and solve the product mix problems using the LPP model.
CO 2	Demonstrate the transportation and assignment model in business
CO 3	Construct game theory and waiting line model in business
CO 4	Examine and interpret the replacement and simulation techniques
CO 5	Assess project networks and estimate the project duration time.

**Course Contents:**

**Module 1: Linear Programming Problem**

**9 Hours**

Introduction to operations research: Nature and significance of OR, definitions, models of operations research, advantages of OR, scope of operations research. **Linear programming Problem:** Formulation of LPP, Graphical solution of LPP, Concepts of duality.

**Module 2: Transportation and Assignment techniques**

**9 Hours**

Transportation mode: Definition, Mathematical Models , operations research and optimization models ,balanced and unbalanced Transportation model , Initial basic feasible solutions by NWC,LCM and VOGELS approximation methods , optimum solution- MODI method(only for non-degeneracy). **The Assignment model:** Solution of the assignment model, Hungarian method to solve assignment problems, application as a travelling salesman problem.

**Module 3: Games and Waiting line theory**

**9 Hours**

Game Theory: Definition, Pure Strategy problems, Saddle point, Max-Min and Min-Max criteria, Principle of Dominance, Solution of games with Saddle point. Mixed Strategy problems. Solution of 2X2 games by Arithmetic method, Solution of 2Xn m and mX2 games by graphical method. **Waiting line theory:** Input source, queuing process, queue discipline, service process, queue size, queue length, various notations M/M/1 for infinite population and numerical.

**Module 4: Replacement policy and Simulation****9 Hours**

**Replacement models:** Replacement of items whose maintenance and repair costs increase with time, ignoring changes in the value of money, including changes in value of money, replacement of items that fail suddenly. **Simulation:** Types of simulation, advantage and limitation of simulation, Monte Carlo simulation, and simple problems for business decisions and numerical.

**Module 5: Network analysis****9 Hours**

**Network analysis:** Introduction, Construction of networks, Fulkerson’s rule for numbering the nodes, AON and AOA diagrams; Critical path method to find the expected completion time of a project, determination of floats in networks, PERT networks, determining the probability of completing a project, predicting the completion time of project.

**Basic Texts**

- Sharma J.K, ( 2013). Operations research, Macmillan, New Delhi, India.
- Frederick S. Hillier & Gerald J. Lieberman (2017), Introduction to Operations Research. McGraw-Hill , New Delhi ,India.

**Reference Books**

- Hamdy A Taha,(2014). Operations Research: An Introduction, Prentice Hall, New Delhi India.
- Ronald L. Rardin (2018), Optimization in Operations Research. Prentice Hall New Delhi,India.
- Richard Bronson &GovindasamiNaadimuthu, Schaum's (1997), Outline of Operations Research, McGraw-Hill New Delhi,India.

**Other reading material**

- Quantitative Techniques for Management by Dr. Manharlala N. Patel, Gujarat University, Ahamedabad, SWAYAM MOOC.
- <https://www.coursera.org/courses?query=operations%20research> 3
- file:///E:/9-Operations-Research-An-Introduction-10th-Ed.-Hamdy-A-Taha.pdf
- <https://notendur.hi.is/kth93/3.20.pdf>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**DISCIPLINE HARD CORE COURSES**  
**SEMESTER - II**

## Course Title: **Finance for Managers**

Course Code: **22MBADSE201**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Discuss the theories and practices of corporate finance
- Utilize relevant tools for financial decision making
- Explain the factors determining financing decision
- Identify the appropriate long-term investment decision
- Develop working capital management strategies

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Examine the theories and practices of contemporary corporate finance
CO 2	Apply Time value concepts in financial decision making
CO 3	Appraise the tools and analytical techniques of long-term investment decision
CO 4	Evaluate the financing decisions based in cost of capital
CO 5	Estimate working capital management requirements and dividend decisions

### **Course Contents:**

#### **Module 1: Introduction to Corporate Finance**

**7 Hours**

Financial decisions in a firm, objectives of financial management- profit maximization and wealth maximization, Finance functions, Role of CFO, Treasurer & Controller\*, Simple illustrations on identification of financing, investment and dividend decisions.

#### **Module 2: Time Value of Money**

**7 Hours**

Introduction to time value of money, future and present value of a single sum, future and present value of an annuity, present value of a perpetuity, Intra-year compounding and discounting, deferred Annuity, growing annuity, perpetuity, growing perpetuity. Simple Problems. Application problems using Microsoft Excel\*.

#### **Module 3: Long Term Investment Decisions:**

**11 Hours**

Capital Budgeting – importance and process – Techniques of evaluating projects-Traditional and modern methods, Payback period and discounted payback period, Accounting rate of return. Net present value, Internal rate of return, Profitability Index. Qualitative considerations\*. Application problems using Microsoft Excel.

#### **Model 4: Financing Decisions:**

**11 Hours**

Financing alternatives – Equity, preferences, Debentures. Capital Structure-Theories of Capital structure\*, Cost of capital, Specific cost of capital-Cost of equity, Debt and preference shares, Weighted average cost of capital. Leverages-Operating, Financial and Combined leverage. Problems on Specific costs of capital, WACC and Leverages

## Module 5: Working Capital Management and dividend decisions:

9 Hours

Overview of working capital management, factors influencing working capital management, Working capital estimation, operating cycle and cash cycle. Emerging trends in working capital management across industries. \* Dividend decisions, Factors influencing dividend decisions, types of dividends. (Only theory)

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Chandra, P. (2020). Fundamentals of financial management | (7th ed.). McGraw-Hill Education.
- Damodaran. (2007). Corporate finance theory and practice, 2nd ed. John Wiley & Sons.
- I.M., P. (2015). Financial management (11th ed.). Vikas Publishing House.

### Reference Books

- Brealey, R. A., Myers, S. C., & Allen, F. (2019). Principles of corporate finance.
- Chandra, P. (2019). Financial management: Theory and practice, 10e. McGraw-Hill Education.
- Khan, M. Y., & Jain, P. K. (2018). Financial management: Text, problems and cases, 8e. McGraw-Hill Education.
- Kishore, R. M. (2009). Financial management - Problems & solutions 2Nd/ ed.
- Pandey, I. M., & Bhatt, R. (2020). A casebook in financial management | (4th ed.). McGraw-Hill Education.

### Other reading material

- Capital structure: Meaning, concept, importance and factors | Accounting. (2015, October 26). Your Article Library. <https://www.yourarticlelibrary.com/financial-management/capital-structure/capital-structure-meaning- concept-importance-and-factors-accounting/65150>
- Capital structure: Meaning, concept, importance and factors | Accounting. (2015, October 26). Your Article Library. <https://www.yourarticlelibrary.com/financial-management/capital-structure/capital-structure-meaning- concept-importance-and-factors-accounting/65150>
- Capital structure: Meaning, factors, types, importance. (2020, March 30). BYJUS. <https://byjus.com/commerce/capital-structure/>
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- Corporate finance. (n.d.). Investopedia. <https://www.investopedia.com/corporate-finance-4689819>
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- Financial intelligence test. (2020, June 11). Finance training balance sheet income & cash flow statements. <https://www.business-literacy.com/bli-products-services/financial-intelligence-assessments/>
- Financial management quiz: Objectives and functions! (2020, December 16). ProProfs. <https://www.proprofs.com/quiz-school/story.php?title=introduction-to-financial-management>
- Time value of money – An overview for MBA students in corporate finance 1o1. (n.d.). Live Online Private Tutoring for MBAs, CPAs & CFAs: Graduate Tutor.

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**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Consumer Behaviour and Insights**

Course Code: **22MBADSE202**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Explain and apply the key terms, definitions, and concepts used in the study of consumer behaviour.
- Identify the major Internal and external influences in consumer behaviour
- Apply consumer behaviour concepts to real world marketing problems and develop effective marketing programs.
- Identify various sources of information for Database marketing
- Understand the qualitative aspects of marketing research; to learn different research methods, and its applications.

**Course Outcomes (CO):**

At the end of the course, learners will be able to:

CO 1	Analyse the internal factors and its influence on consumer preferences and insight.
CO 2	Understand the external factors which influence consumer preferences
CO 3	Appraise the influence of market research and consumer insight on acquisition and retention of consumers.
CO 4	Apply Database marketing in building customer care and designing advertising campaign
CO 5	Develop consumer insight through market research

**Course Contents:**

**Module 1: Understanding the consumer: Need, Motivation, Emotion**

**9 Hours**

Definition and meaning of Consumer Behaviour, Concept of obtaining, Consuming and Disposing, Need recognition, motivation leading to purchase decision-types of motivation, self and self-image, emotion, **Communication and Consumer Behaviour-persuading consumers through advertising, reference group, and WOM\*.**

**Module2: Understanding the consumer: perception, learning and memory, attitude and personality**

**9 Hours**

Personality traits and CB, product and brand personification, Consumer Perception, Role of Theories of Learning in designing marketing strategies, **\*Consumer Attitude Formation and Change.**

**Module 3: Understanding the consumer: external Influencer**

**9 Hours**

Reference Groups and role of referents –types of reference groups and Households, Family: family decision-making and consumption related roles, family life cycle and its influence, The Influence of Culture, Social Class, WOM and Opinion leadership-characteristics of opinion leaders. **\*strategic application of WOM, and Consumers and social media.**

**Module 4: Database marketing activities****9 Hours**

Channels for managing consumers, database marketing, planning of database marketing, Application of consumer database, Types of information on database, Application Database marketing in customer care and designing advertising campaign. **\*Using a Database in Practice.**

**Module 5: Managing Consumer insight and Market Research****9 Hours**

Segment using market research, Research Techniques, in-Depth interviews, Projective Techniques, Telephone questionnaires, Observation, Focus groups, case study research, Ethnographic research, Record keeping used in gaining consumer insight, Applying market research tools in customer base analysis. **\* Applying Market Research to Customer Base Analysis**

(\*Self learning topics)

**Basic Texts**

- Schiffman, L.G., Wisenblit, J., & Kumar, R. S. (2015). Consumer Behavior. New Delhi, India: Pearson Education.
- Merlin (2012) Consumer Insight, Kogan Page Limited, United Kingdom
- David Barr and Robin J Birn (2004) Market Research in Practice, Kogan Page Limited, United Kingdom

**Reference Books**

- Loudon, D. L., & Bitta, D. A. J. (2007). Consumer Behavior: Concepts and Applications. New Delhi, India: Tata McGraw-Hill.
- Engel, J.F., Blackwell, R.D. & Miniard, P.W. (2006). Consumer Behavior, Chicago, USA: Dryden Press.
- Merlin Stone, Bryan Foss, Alison Bond (2004) Consumer Insight: How to Use Data and Market Research to Get Closer to Your Customer (Market Research in Practice), Kogan Page Ltd, United Kingdom.

**Other reading material**

- Liao, S. L., & Ma, Y. Y. (2009). Conceptualizing consumer need for product authenticity. International Journal of Business and Information, 4(1), 89-114.
- Locke, E. A., & Latham, G. P. (2004). What should we do about motivation theory? Six recommendations for the twenty-first century. Academy of management review, 29(3), 388-403.
- Junaid, M., Hou, F., Hussain, K., & Kirmani, A. A. (2019). Brand love: the emotional bridge between experience and engagement, Generation-M perspective. Journal of Product & Brand Management.
- Florin, D., Callen, B., Pratzel, M., & Kropp, J. (2007). Harnessing the power of consumer insight. Journal of Product & Brand Management.
- Madsen, L. V., & Gram-Hanssen, K. (2017). Understanding comfort and senses in social practice theory: Insights from a Danish field study. Energy Research & Social Science, 29, 86-94.
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- Burnasheva, R., & Suh, Y. G. (2020). The influence of social media usage, self-image congruity and self-esteem on conspicuous online consumption among millennials. Asia Pacific Journal of Marketing and Logistics.
- Bailey 2nd, J. A. (2003). Self-image, self-concept, and self-identity revisited. Journal of the National Medical Association, 95(5), 383.



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- Huang, H. H., & Mitchell, V. W. (2014). The role of imagination and brand personification in brand relationships. *Psychology & Marketing*, 31(1), 38-47.
- Chen, S., Wright, M. J., Gao, H., Liu, H., & Mather, D. (2020). The effects of brand origin and country-of-manufacture on consumers' institutional perceptions and purchase decision-making. *International Marketing Review*.
- Braga Junior, S., Martínez, M. P., Correa, C. M., Moura-Leite, R. C., & Da Silva, D. (2019). Greenwashing effect, attitudes, and beliefs in green consumption. *RAUSP Management Journal*, 54(2), 226-241.
- Pasternak, T., & Greenlee, M. W. (2005). Working memory in primate sensory systems. *Nature Reviews Neuroscience*, 6(2), 97-107.
- Liu, W. M., & Iwamoto, D. K. (2007). Conformity to masculine norms, Asian values, coping strategies, peer group influences and substance use among Asian American men. *Psychology of Men & Masculinity*, 8(1), 25.
- Hsu, C. K., & McDonald, D. (2002). An examination on multiple celebrity endorsers in advertising. *Journal of Product & Brand Management*.
- Su, C., Zhou, K. Z., Zhou, N., & Li, J. J. (2008). Harmonizing conflict in husband–wife purchase decision making: Perceived fairness and spousal influence dynamics. *Journal of the Academy of Marketing Science*, 36(3), 378- 394.
- Petrison, L. A., Blattberg, R. C., & Wang, P. (1997). Database marketing: Past, present, and future. *Journal of Direct Marketing*, 11(4), 109-125.
- Jenkinson, A. (2007). Evolutionary implications for touchpoint planning as a result of neuroscience: A practical fusion of database marketing and advertising. *Journal of Database Marketing & Customer Strategy Management*, 14(3), 164-185.
- Shifan, Y., Outwater, M. L., & Zhou, Y. (2008). Transit market research using structural equation modelling and attitudinal market segmentation. *Transport Policy*, 15(3), 186-195.
- Rupini, R. V., & Nandagopal, R. (2015). A Study on the Influence of Senses and the Effectiveness of Sensory Branding. *Journal of Psychiatry*, 18(2), 236.
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- Maity, M., & Dass, M. (2014). Consumer decision-making across modern and traditional channels: E-commerce, m-commerce, in-store. *Decision Support Systems*, 61, 34-46.
- Zwick, D., & Dholakia, N. (2004). Whose identity is it anyway? Consumer representation in the age of database marketing. *Journal of Macro marketing*, 24(1), 31-43.
- Lo, V. S. (2002). The true lift model: a novel data mining approach to response modeling in database marketing. *ACM SIGKDD Explorations Newsletter*, 4(2), 78-86.
- McKim, B. (2002). The differences between CRM and database marketing. *Journal of Database Marketing & Customer Strategy Management*, 9(4), 371-375.
- Seller, M., & Gray, P. (1999). A survey of database marketing.
- Bhatt, G. D., & Grover, V. (2005). Types of information technology capabilities and their role in competitive advantage: An empirical study. *Journal of management information systems*, 22(2), 253-277.

- Schoenbachler, D. D., & Gordon, G. L. (2002). Trust and customer willingness to provide information in database- driven relationship marketing. *Journal of interactive marketing*, 16(3), 2-16.
- Clow, K. E. (2004). *Integrated advertising, promotion, and marketing communications*. Pearson Education India.
- Levy, J. (2010). *Facebook marketing: Designing your next marketing campaign*. Pearson Education.
- Lau, K. N., Chow, H., & Liu, C. (2004). A database approach to cross selling in the banking industry: Practices, strategies and challenges. *Journal of Database Marketing & Customer Strategy Management*, 11(3), 216-234.
- Muther, A. (2012). *Customer relationship management: Electronic customer care in the new economy*. Springer.
- Boztuğ, Y., & Reutterer, T. (2008). A combined approach for segment-specific market basket analysis. *European Journal of Operational Research*, 187(1), 294-312.
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- Metcalf, L., Hess, J. S., Danes, J. E., & Singh, J. (2012). A mixed-methods approach for designing market-driven packaging. *Qualitative Market Research: An International Journal*.
- Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. *Journal of consumer research*, 21(3), 491-503.
- Clifton, K. J., & Handy, S. L. (2001). *Qualitative methods in travel behaviour research*. Davis, California: Institute of Transportation Studies, University of California, Davis.
- Schmittlein, D. C., & Peterson, R. A. (1994). Customer base analysis: An industrial purchase process application. *Marketing Science*, 13(1), 41-67.
- Ngai, E. W., Xiu, L., & Chau, D. C. (2009). Application of data mining techniques in customer relationship management: A literature review and classification. *Expert systems with applications*, 36(2), 2592-2602.
- Berkhin, P. (2006). A survey of clustering data mining techniques. In *Grouping multidimensional data* (pp. 25-71). Springer, Berlin, Heidelberg.
- Bala, P. K. (2009). Data mining for retail inventory management. In *Advances in electrical engineering and computational science* (pp. 587-598). Springer, Dordrecht.
- Bala, P. K. (2008). Consumer insight mining for retail multi-item inventory modelling. In *Proceedings of the World Congress on Engineering* (Vol. 2).
- Hamilton, R. (2016). *Consumer-based strategy: Using multiple methods to generate consumer insights that inform strategy*.
- Corciolani, M., & Dalli, D. (2014). Gift-giving, sharing and commodity exchange at Book crossing. com: New insights from a qualitative analysis. *Management Decision*.
- Saha, S., & Waheed, S. (2017). Credit risk of bank customers can be predicted from customer's attribute using neural network. *International Journal of Computer Applications*, 161(3), 39-43.
- Babin, B. J., & Darden, W. R. (1996). Good and bad shopping vibes: spending and patronage satisfaction. *Journal of business research*, 35(3), 201-206.
- Kamakura, W. A. (2008). Cross-selling: Offering the right product to the right customer at the right time. *Journal of Relationship Marketing*, 6(3-4), 41-58

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks Assessment 1 : 10 Marks Assessment 2 : 10 Marks Assessment 3 : 10 Marks Block End Test : 10 Marks	50 Marks	50 Marks	100 Marks

## Course Title: **Human Resource Management**

Course Code: **22MBADSE203**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Describe the foundational concepts of human resource management functions.
- Summarize the mechanism of recruitment and selection process.
- Demonstrate the role of training methods in talent management.
- Infer the components of employee rewards.
- Study the importance of changing scenario of industrial relations in modern context.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	List the various human resource management functions at workplace.
CO2	Identify the different steps involved in the process of recruitment and selection of employees.
CO3	Examine the suitable ways to train employees for enhanced talent management.
CO4	Propose an appropriate employee reward system in organizations.
CO5	Describe the concepts of industrial relations for a particular industry.

### **Course Contents**

#### **Module-1–Introduction to HRM**

**9 Hours**

Introduction to Human Resource Management, Evolution of HRM, Importance, HRM functions, Forces changing HRM, Human Resource Planning - Meaning, Process, **HRP Models\***, Human Resource Forecasting methods, Challenges and relationship with other Human resource functions, Job analysis, Job Description, Job evaluation.

#### **Module 2 – Recruitment and Selection**

**10 Hours**

Recruitment - meaning and process, Purpose of Recruitment, Types of Recruitment - Internal - Job posting, Virtual Job Fairs, Executive Search Firms, Recruitment advertising. Factors affecting Recruitment, Selection-meaning, selection procedure, **Types of tests used in Selection\***, Consequences of selection decisions, Interview and Types of interviews.

#### **Module 3 – Talent Management**

**9 Hours**

Training- meaning, need and importance of training, Distinction between training and development, methods of training – On the Job & Off the Job, process of training, recent developments in training, Succession Planning, Strategies for Accelerating Development for succession, Performance appraisal, meaning, importance, **various performance appraisal methods\***, Drawbacks of Performance Management System.

#### **Module – 4 – Employee Rewards**

**9 Hours**

Employee Rewards -meaning, concepts and definitions, Objectives of giving compensation to employees, Components of remuneration, **types of employee benefits\***, financial and non-financial benefits, factors affecting wage and salary, salary components, employee welfare, safety issues in organizations.

**Module 5 – Basics of Industrial Relation****8 Hours**

Basics of Industrial Relations – meaning and importance, trade unions, workers participation in management, **Collective Bargaining\***

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts:**

- Dessler, G. and Varkhey, B. (2016) Human Resource Management, India: Pearson India,

**Reference Texts:**

- Sanghi, S. (2017) Human Resource Management, Vikas Publishing
- Baker, M. (2010) Cross Cultural Behavior, The Workbook
- Armstrong, M. (2014) Handbook of Human Resource Management New Delhi, India: Kogan Page.

**Other Reading Material:**

- Camen, M. Croucher, R & Leigh, S (2015) Human Resource Management – A Case Study Approach New Delhi, India: Jaico Publishing House.
- Pattanayak, B (2016) Human Resource Management New Delhi, India: Printice Hall Learning.
- Sparkman ,R (2010). Strategic Workforce Planning: Developing Optimized Talent Strategies for Future Growth

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**FINANCE**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – II**

Course Title: **Banking**

Course Code: **22MBADSE208**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Creating an understanding of the evolution, growth and present status of banking sector
- Facilitating learners to critically analyse and internalize the banking requirements and regulations
- Enabling the learners to Appraise the Asset Liability Management
- Equipping the learners to Assess the various risks in Banking
- Facilitating the learners to Outline the payment and settlement systems in India and the scope of technology and reforms in Banking

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Describe the evolution, growth and scope of banking sector
CO2	Examine the banking requirements and regulations
CO3	Appraise the asset liability management
CO4	Assess various risks in the banking business
CO5	Discuss the payment and settlement systems in India and the scope of technology and reforms in Banking

**Course Contents:**

**Module 1: Evolution and Growth of Banking sector**

**6 Hours**

Banking structure in India, expanded products, services, offerings across geographic markets and the impact on banking industry.

**Module 2: Banking requirements and regulations**

**6 Hours**

Reserve requirements - CRR, SLR, and CRAR, Income Recognition Norms. RBI reforms in the debt market, Provision for NPAs, Prompt Corrective Action (PCA) framework for banks, Strategic Debt Restructuring, Sustainable Structuring of Stressed Assets (S4A). Insolvency and Bankruptcy Code, 2016\*.

**Module 3: Management of Banking Organization**

**9 Hours**

Management of Loan, Investment, Profit and growth management, Asset Liability Management using traditional Gap and modern techniques. Compliance – AML (Anti money laundering) and KYC (Know your customer)\*, Cash and liquidity management - Domestic Treasury, Global treasury operations, Interbank dealing.

**Module 4: Risk Management in Banks:**

**9 Hours**

Measuring and managing Risks- Liquidity risk, Operational risk, Interest rate risk, Credit risk, Market risk, sensitivity analysis.

## Module 5: Banking services, Payment and Settlement systems, Innovations and Banking sector reforms

15 Hours

Corporate, retail, NRI banking. Payment and Settlement systems – Electronic payment and settlement systems in India. Payment and Settlement System Act 2007, Participants, Policy Guidelines on Issuance and Operation of Pre-paid Payment Instruments in India\*.

Digital and Mobile Banking, Cloud computing - Big Data, block chain technology, artificial intelligence (AI), Internet of things (IoT), Crypto currencies, Digital cheques, Banking architectural simplification\*. Indradhanush framework for PSU Banks, Financial inclusion – PMJDY, Consolidation of public sector banks, New bank licensing policy and other recent reforms\*.

(\*These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Text:

- IIBF. (2021). Principles and practices of banking: (5th ed.). Macmillan.
- IIBF. (2021). Legal and regulatory aspects of Banking:(4th Ed). Macmillan.
- Koch W, Timothy, and S. Scott.(2009). Bank Management. Thomson, New Delhi.

### Reference Books:

- Sinha V.C.,(2020). Indian Banking System, SPBD Publishing House, Agra.
- Kaul, V. (2020). Bad money: Inside the NPA mess and how it threatens the Indian banking system. HarperCollins.
- IIBF. (2010). Rural banking.
- Koch, T. W., & MacDonald, S. S. (2009). Bank management. Cengage Learning.

### Other Reading Materials:

- 4.10. Banking system liquidity. (n.d.). <https://doi.org/10.1787/650421565362>
- Acharya, V. V., & Kulkarni, N. (2011). What saved the Indian banking system: State ownership or state guarantees?
- The World Economy, 35(1), 19-31. <https://doi.org/10.1111/j.1467-9701.2011.01382.x>
- Anbalagan, D. (2017). New technological changes in Indian banking sector. International Journal of Scientific Research and Management. <https://doi.org/10.18535/ijprm/v5i9.11>
- B., N. (2020). Changing environment in Indian banking sector. International Journal of Psychosocial Rehabilitation, 24(5), 3304-3310. <https://doi.org/10.37200/ijpr/v24i5/pr202038>
- Goyal, A., & Chowhan, S. S. (2011). Indian banking industry- Customer satisfaction. Indian Journal of Applied Research, 3(1), 95-98. <https://doi.org/10.15373/2249555x/jan2013/38>
- The Indian banking sector. (n.d.). Banking Sector Liberalization in India, 17-49. [https://doi.org/10.1007/978-3-7908-1982-3\\_2](https://doi.org/10.1007/978-3-7908-1982-3_2)
- LALITHA.B.S, L. (2012). Shift from anywhere banking to Anybank banking-the next growth of Indian retail banks.
- International Journal of Scientific Research, 3(2), 259-260. <https://doi.org/10.15373/22778179/feb2014/83>
- Raj, M. (2012). Indian banking system and the challenges way ahead. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.2175427>
- Ransariya, S. N., & Ransariya, S. N. (2011). Financial banking is the science of managing money: Indian financial system. Indian Journal of Applied Research, 1(7), 98-100. <https://doi.org/10.15373/2249555x/apr2012/30>



- Singh, A., & Singh, A. (2021). Complaints and their Redressal: A study on the Indian banking system. Indian Journal of Finance, 15(3), 23. <https://doi.org/10.17010/ijf/2021/v15i3/158127>
- Singh, B. (2017). Financial analysis of SBI: A study with special reference to Indian banking industry. International Journal of Contemporary Research and Review. <https://doi.org/10.15520/ijcrr/2017/8/07/281>
- Sophia, S. (2013). Credit risk management in Indian banking system. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.2253119>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Indian Financial System & Financial Markets**

Course Code: **22MBADSE209**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Creating an understanding to recognise the initiatives in strengthening the financial infrastructure by regulators
- Enabling students to differentiate between role and functions of Banks and Financial Institutions
- Equipping students with tools and techniques to Demonstrates by embodying the skills and knowledge of Financial Markets and Services
- Enabling students to make financial decisions for managing portfolios
- Introducing students to cutting-edge frameworks, concepts and tools being used to make successful financial decisions

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Understand the role of financial service and assess the impact of financial services
CO2	Examine several processes involved in NSE / BSE markets
CO3	Comparing the role of financial markets in the process of economic development.
CO4	Assessing the structure and growth of Indian Financial system
CO5	Examine the role of Regulatory and Promotional Institutions

### Course Contents:

#### Module 1: Over view of the Indian Financial System

**7 Hours**

Over view of the Financial System, Financial Institutions, Financial Markets, Financial Instruments and Services, Financial Intermediation Process: Role of Intermediaries- Source of Funds, Application of Funds. Financial sector reforms, Financial Regulatory and Promotional Institutions- RBI, SEBI, IRDA, PFRDA, Board of Financial Supervision, \*Financial Stability- Assessment, Ethics and Principles in Financial Markets.

#### Module 2: Financial Markets-I

**8 Hours**

Monetary Policy Committee-formation\*Monetary Policy-Tools, Goals and Targets, **Theories of interest rates**\*structure of interest rates – Nominal and real interest rate, inflation relationship and computation. Money Market- instruments, utility, eligibility: Call, Notice & Term Money Market, Commercial Bills, Commercial Paper- cost computation, Certificate of Deposits, T-Bills issue & yield-computation, Competitive bidding, Non-Competitive bidding, Repo, market for financial Guarantees, Discount market, Government (Gilt-edged) Securities Market & design, Commercial Banks, Cooperative banks, Insurance companies.

#### Module 3: Financial Markets-II

**8 Hours**

Equities Market-Primary Markets –SEBI norms (ICDR regulations), Angel / VC investing stages, growth of companies, next stage of funding (expansion & flourishing stage thru PE investing), exit routes, intro for public issues, types of issues, appointing Merchant Bankers & other intermediaries, their role & responsibilities, Filing DRHP & types of prospectus, book building mechanism, types of investors, ASBA.

-Secondary Markets- Purpose & procedures for listing (post-IPO); SEBI framework; role of stock exchanges- NSE, BSE\*, role of secondary market intermediaries, Depositories. Overview of Bond market and recent developments.

#### **Module 4: Financial Services**

**7 Hours**

Small Savings, Provident Funds, Pension Funds, Insurance Companies, Mutual Funds and NBFC Non-Bank Financial intermediaries -Leasing, Hire purchase, Credit rating, Factoring, Forfeiting Non-Bank Statutory Financial Organisations\*

(\* These topics are categorized as 'Self-learning' topics \*)

#### **Basic Texts**

- LM Bhole, Jitendra Mahakud, (2015). Financial Institutions and Markets- Structure, growth and Innovations. McGraw Hill Education.
- Balaji Rao D G (2016), 'Financial Markets and Investment Instruments', Skyward Publishing Co., Bangalore, ISBN: 978-93-84494-66-7

#### **Reference Books**

- M.Y.Khan, (2015). Financial services. McGraw Hill Education.
- DAS, S. (2015). The financial system in India: Markets, instruments, institutions, services and regulations. PHI Learning Pvt.
- GOEL, S. (2018). Financial markets institutions and services. PHI Learning Pvt.
- Singh, P. (2012). Dynamics of the Indian financial system: Markets, institutions and services. Global Professional Pub.
- G, B. R. (2015). Investing in financial markets is not a rocket science: Investing knowledge simplified. Partridge Publishing.
- GOEL, S. (2018). Financial markets institutions and services. PHI Learning Pvt.
- Bharti, P. (2018). Indian financial system, 5/E. Pearson Education India.

#### **Other reading material**

- Bhavani, T., & Bhanumurthy, N. (2012). Indian financial sector Indian financial sector an international comparison. Financial Access in Post-Reform India, 118-133. <https://doi.org/10.1093/acprof:oso/9780198076650.003.0007>
- Financial instability and strains on the financial system. (2015). An Introduction to Financial Markets and Institutions, 525-548. <https://doi.org/10.4324/9781315706405-32>
- Financial instability and strains on the financial system. (2015). An Introduction to Financial Markets and Institutions, 525-548. <https://doi.org/10.4324/9781315706405-32>
- Gangaiah, G. (2018). Indian financial system and capital market an overview. International Journal of Management and Economics Invention, 04(4). <https://doi.org/10.31142/ijmei/v4i4.01>
- The Indian monetary system and the role of financial institutions. (n.d.). Keynes, 3-14. <https://doi.org/10.2307/j.ctv5rdwmm.5>
- The international financial system. (2015). An Introduction to Financial Markets and Institutions, 633-654. <https://doi.org/10.4324/9781315706405-37>

- Jadhav, A. D. (2018). Impact of digitalization on the Indian financial system. International Journal of Trend in Scientific Research and Development, Special Issue (Special Issue-ICDEBI2018), 23-28. <https://doi.org/10.31142/ijtsrd18663>
- Ransariya, S. N., & Ransariya, S. N. (2011). Financial banking is the science of managing money: Indian financial system. Indian Journal of Applied Research, 1(7), 98-100. <https://doi.org/10.15373/2249555x/apr2012/30>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Direct Taxes**

Course Code: **22MBADSE210**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Introducing the learners to the basic concepts, residential status and tax rates
- Understanding the computation of income tax liability
- Facilitating the learners to solve the income from various heads of income
- Enabling the learners to comprehend the TDS, TCS, Advance Tax, total income deductions, set off and carry forward of losses and computing total income
- Endowing the learners with the framework of Tax Management, procedures, compliance and e-filing returns of income and role of Digitisation and Technology

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Acquaint with basic principles underlying the provisions of direct tax laws and to develop a broad understanding of the tax laws and accepted tax practices.
CO2	Determination of residential status and income tax computation
CO3	Computation of income under various heads of income applying the relevant tax laws
CO4	Assessment of income and income tax liability
CO5	Develop the framework for tax compliance, procedures and tax planning and management

**Course Contents:**

**Module 1: Basics Concepts of Income Tax**

**6 Hours**

Introduction to Tax framework, Basic Concepts and Charge of Tax, Residential Status of Individuals, Income Tax Slabs and Rates of Tax, Comparing New versus Existing Tax Regime Surcharge and Marginal Relief

**Module 2: Heads of Income: Part 1**

**15 Hours**

Heads of Income, Basics of Income from Salary, New Tax Regime Impact on Salary Income, Income from House property (Excluding multiple SOPs) and Income from Capital Gains, Exemption u/s 54 only – Simple problems.

**Module 3: Heads of Income: Part 2**

**12 Hours**

Provisions relating to Profits and Gains of Business, Expenses allowed and disallowed in the computation of income from business and Income from other Sources.

**Module 4: Total income deductions and Set-off and Carry forward of losses**

**6 Hours**

Total income deductions: Sections 80C, 80CCC, 80CCD(1B), 80E, 80, 80G, 80TTA, Set-off and Carry forward of losses, Impact of New Tax Regime.

**Module 5: Assessment, Compliances and Tax Planning**

**6 Hours**

Assessment, types of assessment, TDS, Advance tax payments, Refunds, Filing the Returns, relevant forms and procedures, Tax Planning, + Role of Technology and Emerging Trends in Tax Reforms

### Basic Texts

- V.K Singhania (2021). Direct Taxes. Delhi, Taxmann Publications
- T.N Manoharan (2021). Direct Tax Laws. Snow White Publications

### Reference Books

- Dr. Girish Ahuja & Dr. Ravi Gupta (2019), Direct Taxes Ready Reckoner, 2019, Wolters Kluwer India Pvt. Ltd.; Twentieth edition
- Dr. BRR (2021) Faculty Study Guide

### Other reading material

- Batani Raghavendra Rao (2020). New versus Existing Income Tax Regime: A Tactical Call, CMS Business School Case Centre.
- Nidhi Jain (2021). Key Provisions of Personal and Corporate taxation in Finance Bill, 2021, The Chartered Accountant, March, Volume 69, No. 9, 51-56.
- Aparna Chauhan (2021). Significant Direct Tax Proposals in The Finance Bill, 2021 - Towards Greater Transparency, Efficiency and Tax Certainty, The Chartered Accountant, March, Volume 69, No. 9, 57-64.
- Parkash, O., & Sidhu, A. S. (2011). Direct Tax Reforms in India: A Comparative Study of Preand Post-Liberalization Periods. IUP Journal of Public Finance, 9(1), 54–76.
- Das, D. (2018). Causality between Tax Revenue and Economic Growth in India (1992-2017). International Journal of Business Insights & Transformation, 12(1), 42–47.
- Uppal, R. (2009). Structure and Reform of Capital Gains Taxation in India. ICFAI Journal of Applied Finance, 15(4), 69–77.
- Avinash Rawani (2021). Amendments in TDS/TCS Provisions, The Chartered Accountant, March, Volume 69, No. 9, 65-69.
- Sandeep K. Kamath (2020). India Gears up for Digital Taxation, The Chartered Accountant, Dec, Volume 69, No. 6, 60-62.
- Editorial CMA (2021). Budget Highlights 2021-22. The Management Accountant, Volume 56, No. 02, Feb, 74-75.
- Cleartax (2021). Presumptive Taxation for Business and Profession, <https://cleartax.in/s/freelance-professional-business-income#presumptive>
- ET (2021). New Tax Regime and Other tax Changes w.e.f. 1.4.2020 <https://economictimes.indiatimes.com/wealth/tax/new-tax-regime-and-other-tax-changes-that-will-come-into-effect-from-april-1/printarticle/74906145.cms>
- Balwant Jain (2021). 5 key changes in income tax rules you should know, Livemint, 4.4.2021 <https://www.livemint.com/money/personal-finance/5-key-changes-in-income-tax-rules-you-should-know-11617509489886.html>
- Tax Summaries (2021). <https://www.pwc.com/gx/en/services/tax/worldwide-tax-summaries.html>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Investment Analysis and Portfolio Management**

Course Code: **22MBADSE211**

Semester: **2**

Credits: **3**

Hours (LTP): **45Hours**

### **Course Objectives:**

- Discuss the fundamentals of investments
- Explain valuation of companies using fundamental analysis
- Discuss key aspects of technical analysis
- Outline the theories associated to portfolio construction
- Compare the strategies followed by successful investors

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Describe different investment methods of successful investors
CO2	Discuss the role of Index in investment planning
CO3	Differentiate between risky investment option and less risky option among the investment opportunities in the financial market
CO4	Recommend investments using the knowledge of the dynamics of investment and underlying tools & techniques of investment decision making.
CO5	Construction of portfolio and Apply the knowledge in construction and management of portfolios

### **Course Contents:**

#### **Module 1: Overview of Investments**

**10 Hours**

Meaning of investment and securities, investment attributes, understanding concepts and application of risk, return, Beta, Systematic risk and Non-Systematic Risk for investment alternatives, Overview of Indian and world equity markets. Interest rates Real and Nominal. simple and compounding. Market Indices: Security market indexes - Foreign Market Indices \*

#### **Module 2: Fundamental Analysis – Valuation of Companies**

**12 Hours**

Use of Ratios to Understanding performance of Companies. Valuation methods Economic Value Add, Free Cash flow method and Dividend Discounting Techniques. Comparing companies using ROE, PE, EPS and CAPM.

#### **Module 3: Introduction to Technical Analysis**

**8 Hour**

Introduction to Technical analysis of stocks, Dow Theory, charting techniques, trend reversals, chart patterns, Eliot wave theory SMA, EMA, ROC, RSI analysis, Japanese Candlesticks, William %R (Brief)

#### **Module 4: Portfolio Theory & Management**

**10 Hours**

Capital Market Theory-Portfolio theory, risk and return of portfolio, Markowitz mean-variance model and Efficiency Frontier, CML, SML, Characteristic Line, Alpha and beta, EMH, Construction of portfolios, execution, and revision and performance evaluation, Treynor, Sharpe and Jensen measures, Fama model, strategic asset allocation.

**Module 5: Legendary Equity and Commodity Investors' Approaches****5 Hours**

Approaches and portfolio of legendary investors like Warren Buffet, Templeton, Peter Lynch, George Soros, Jim Rogers and Benjamin Graham\*

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Text**

- Chandra, P. (2017). Investment analysis and portfolio management. McGraw-Hill Education

**Reference Books**

- Reilly, F. K., & Brown, K. C. (2006). Investment analysis and portfolio management. South-Western Pub.
- Barney, J. B. (2007). Gaining and sustaining competitive advantage. Prentice Hall.
- Block, S. B., Hirt, G. A., & Short, J. D. (2009). Foundations of financial management, 8th Cdn edition.
- Gibson, C. H. (2012). Financial reporting and analysis. Cengage Learning.
- Jordan, B. M., Miller, T., & Dolvin, S. (2019). ISE fundamentals of investments: Valuation and management.
- Kevin, S. (2006). Porfolio management. PHI Learning Pvt.
- Robert C. Higgins, P. (2018). Loose-leaf for analysis for financial management. McGraw-Hill Education.
- 

**Other Reading Material**

- A simple free cash valuation model
- Basic ratio analysis and equity valuation
- Basic valuation and cost of capital
- Economic Value Added (EVA)- A Theoretical Perspective
- These will be shared with students

**Websites:**

- [www.nseindia.com](http://www.nseindia.com)
- [www.bseindia.com](http://www.bseindia.com)
- [www.moneycontrol.com](http://www.moneycontrol.com)
- [www.icharts.com](http://www.icharts.com)
- [www.smctradeonline.com](http://www.smctradeonline.com)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



**BANKING, FINANCE AND ALLIED SERVICES (BFAS)**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – II**

## Course Title: **Digital Banking**

Course Code: **22MBADSE212**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives**

- Introducing the learners to the basic concepts of the Digital Banking system
- Facilitating the learners to focus on the rationale and benefits of digitalization of banking products and services
- Familiarise the learners about the payment system and digitalised banking environment
- Acquaint the learners with mobile and internet banking and the integration with e-commerce
- Understand the challenges in technology-oriented bank management and related information security issues.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Describe the fundamentals of Digital banking and its applications
CO2	Examine Information and Communication Technology in Digital banking
CO3	Assess the operations & usage of mobile and internet banking in India
CO4	Appraise infrastructure related to Digital banking
CO5	Evaluate the latest developments in Digital banking Technology

### **Course Contents**

#### **Module 1: Basics Concepts of Digital Banking**

**10 Hours**

Introduction to Digital Banking, Need for digitalization, Development of technology in Banks, Dimensions of Digital Banking (Customer dimension, Technology dimension, Regulatory dimension), Opportunities to the Banks, Customer expectations and preferences\*

#### **Module 2: Information and Communication Technology in Digital Banking**

**6 Hours**

Cashless payments, benefits of cash-less payment, methods of cashless payments, various types of cards, Banking Apps, BHIM, UPI, etc. Digital banking products for financial inclusion, **Safety in Digital Banking\***

#### **Module 3: Mobile and Internet Banking**

**8 Hours**

Mobile Banking, Mechanism of Mobile Banking, Features, IMPS, Information security, Corporate and Individual Internet Banking, Mechanism of Internet Banking, Features, **Integration with e-commerce merchant sites\***, Frauds and Risk Management.

#### **Module 4: Digital Banking Infrastructure**

**15 Hours**

Point of sales (POS) terminals, Types, Key benefits to Merchants and Customers, Cash withdrawal at POS, On-boarding merchant on POS, Approval process. Global and Domestic payment system, Cheque Truncation

System (CTS), National Financial Switch (NFS), Real-Time Gross Settlement System (RTGS), National Electronic Funds Transfer (NEFT), National Electronic Toll Collection (NETC), Bharat QR and Aadhaar based payment, Cloud Computing, E-KYC, Branchless banking.

### **Module 5: Challenges in Technology-oriented Banking**

**6 Hours**

Emerging rivals: Fintech, Blockchain, Cryptocurrencies, Peer-to-peer financing, Virtualisation; Technology related challenges: AI/ Machine learning applications, IOT, Cyber security.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

#### **Basic Texts**

- Digital Banking (2019), Indian Institute of Banking & Finance, Taxmann Publications (P) Ltd.
- Sarika R Lohana (2020). Digital Banking and Cyber Security. New Century Publications

#### **Reference Books**

- James Robert Lay (2020) Banking on Digital Growth: The Strategic Marketing Manifesto to Transform Financial Brands, Lioncrest Publishing
- Luigi Wewege. (2017). The Digital Banking Revolution. Ed.2. Lulu.com.
- Chris Skinner (2014). Digital Bank: Strategies to Launch or Become a Digital Bank (1st ed., Vol. 1). MC Publications.
- Pradip Kumar Ray (2020). Digital Banking Ready Reference for Customer. Notion Press
- Henderson, J. (2018). Retail and Digital Banking: Principles and Practice (Chartered Banker Series) (1st ed.). Kogan Page.
- Blokdyk, G. (2021). Digital Banking Transformation: The Ultimate Step-By-Step Guide. 5STARCOOKS.

#### **Other reading material**

- Financial newspapers and periodicals
- Malar, D. A., Arvidsson, V., & Holmstrom, J. (2019). Digital Transformation in Banking: Exploring Value Co-Creation in Online Banking Services in India. *Journal of Global Information Technology Management*, 22(1), 7–24. <https://doi.org/10.1080/1097198X.2019.1567216>
- Singh, R., & Malik, G. (2019). Impact of Digitalization on Indian Rural Banking Customer: With Reference to Payment Systems. *Emerging Economy Studies*, 5(1), 31–41. <https://doi.org/10.1177/2394901519825912>
- Ramrakhyani, J., & Gupta. (2021). STUDY ON DIGITALIZATION OF BANKING IN RURAL INDIA: ISSUES AND CHALLENGES. *International Journal of Advanced Research in Commerce, Management & Social Science*, 4(1), 93–96.
- Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. *Journal of Financial Services Marketing*, 26(2), 107–121. <https://doi.org/10.1057/s41264-020-00082-w>
- Guerra-Leal, E. M., Arredondo-Traperero, F. G., & Vázquez-Parra, J. C. (2021). Financial inclusion and digital banking on an emergent economy. *Review of Behavioral Finance*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/rbf-08-2021-0150>
- Bansal, N., & Jain, M. (2018). Progress in Digital Banking After Demonetization: Some Evidence. *IUP Journal of Bank Management*, 17(2), 50–59.

- Neog, N. (2019). Usage of digital banking services by rural population: A study in sivasagar district of assam. International Journal of Scientific and Technology Research, 8(12), 3301–3304.
- Mohapatra, M. R., Moirangthem, N. S., & Vishwakarma, P. (2020). Mobile Banking Adoption Among Rural Consumers: Evidence from India. American Business Review, 23(2), 300–315. <https://doi.org/10.37625/abr.23.2.300-315>.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks Assessment 1 : 10 Marks Assessment 2 : 10 Marks Assessment 3 : 10 Marks Block End Test : 10 Marks	50 Marks	50 Marks	100 Marks

**MARKETING**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – II**

## Course Title: Product Management

Course Code: **22MBADSE204**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- To sensitize students to customer insights and addressing various issues associated with the product - thus working towards improving user experience.
- To make students recognize the different categories of products and the appropriate marketing strategies linked
- To familiarize students with the various product related strategies - with respect to the stage of the product's life cycle, the buying behavior associated with the product
- To equip students with some of the established tools for developing and managing the risks involved with new product development.
- To create an understanding among students that Product Management creates customer value and is deeply interlinked with Pricing strategies.

### Course Outcomes:

At the end of the course, students will be able to:

CO1	Contrast between different types of products
CO2	Appraise the strategies for each product classification
CO3	Develop Marketing strategies basis stage of Product Life Cycle
CO4	Formulate appropriate strategies for developing new products
CO5	Explain the product systems and product mix

### Detailed Syllabus

#### Module 1: Product Characteristics and Classification

**7 Hours**

Elements of product as a part of the marketing mix - *Product Variety, Quality, Design, Features, Brand Image, Packaging, Sizes, Services, Warranties, Returns* ; **Product Characteristics\***; Classifications of products; Creation of differentiation through products

#### Module 2: Product Lifecycle Marketing Strategies

**11Hours**

Product Lifecycle; Alternative lifecycles; Marketing strategies at each stage of PLC; Evidence of the PLC concept; Identifying the stage of lifecycle of a product; **Critique of the PLC concept\***.

#### Module 3: Product Systems and Mix

**10 Hours**

The Product Hierarchy; Product Systems and mixes; product line analysis; product line and length; Product mix pricing; Factors influencing the product mix decisions; **Packaging, labeling, warranties and guarantees\***; Product recalls.

**Module 4: New Product Development Strategies****10 Hours**

New product options – invention oriented v/s customer needs based; Types of New products – from new to the world products to new variant launch; Challenges in NPD; **Organizational arrangements for NPD\***; Consumer adaptation of Innovation; Innovation and Diffusion strategies; Frugal Innovation (*Jugaad*)

**Module 5: Managing the New Product Development Process****7 Hours**

**Risks in NPD\***; Managing Idea generation; Moving from Concept development to strategy; Managing Development to Commercialization of product.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts:**

Majumdar, R. (2007). *Product management in India*. PHI Learning Pvt. Ltd..

Kotler, P. (2009). *Marketing management: A South Asian perspective*. Pearson Education India.

**Reference Books:**

Eppinger, S., & Ulrich, K. (2015). *Product design and development*. McGraw-Hill Higher Education.

**Other reading material:**

- Levitt, T. (1980). *Marketing success through differentiation-of anything* (pp. 83-91). Graduate School of Business Administration, Harvard University.
- Carol Matlack, "How Danone Turns Bacteria into Bucks," *Business Week*, November 15, 2007, pp. 76-77.
- Govindarajan, V., & Trimble, C. (2010). Stop the innovation wars. *Harvard Business Review*, 88(7/8), 76-83.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Pricing and Revenue Management

Course Code: **22MBADSE205**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Enabling students to assess and evaluate customer's willingness to pay and therefore the demand for a product.
- Introducing students to understand the various cost components, which influence pricing decisions.
- Equipping students with theories and framework to help create pricing models for various types of products and services.
- Enabling students to appreciate the importance of aligning prices to the pricing policy.
- Equipping students with key tools required for making decisions for managing revenues

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Assess the customer's willingness to pay and demand for a product through different methods.
CO 2	Explain impact of different cost components on cost and price.
CO 3	Develop pricing structures for products and services
CO 4	Integrate pricing mechanism with organizational pricing policies.
CO 5	Examine different tools to manage revenue for a firm

### Course Contents:

#### Module1: Introduction to Pricing

**9 Hours**

The role of value in pricing; Economic value estimation; Price setting process; Macroeconomist's view of consumer purchasing decisions; Assessing willingness to pay; Pricing analytics process; Prospect theory; Price Response Function (Linear, Constant Elasticity, Power and Log it); Measures of price sensitivity (Computing price elasticity's for product categories and brands- Gabor Granger model); Price optimization.

#### Module 2: Costs and Financial Analysis

**6 Hours**

Role of costs in pricing; Determining and estimating relevant costs (Fixed and variable cost); Activity based costing; Percent contribution margin; Break-even sales analysis and computing break-even with changes in variable cost and incremental fixed costs, Break even sales curves; Pricing and the learning curve.

#### Module 3: Pricing of Products and Services

**12 Hours**

Pricing strategies and business objectives; Pricing approaches: BCG 3C Model – Cost (mark-up), Competition (going rate and auction based) and Customer (Van Westendorp model, EDLP and HiLo); Pricing strategies- skimming, penetration, prestige pricing, pricing a new/radically new product, product-line pricing, nine grid pricing, captive and by-product pricing, product-bundle pricing, subscription pricing; periodic sales pricing; Price adjustments – price promotions and estimating price promotion effects (discount/allowance pricing), segment pricing, geographical pricing, stealth price increases; value in use pricing; Brand price tradeoff. Impact of channel intermediaries and customer lifetime value on pricing. Pricing in distribution channels; E-commerce pricing models\*.



## **Module 4: Price Management**

**11 Hours**

Yield management; Price mark-downs and pricing slow-moving items; Mark-down optimization; Competitive bidding using Monte-Carlo simulation, Price optimization for customized pricing; Customer behavior aspects of pricing- psychological pricing, reference pricing, perceived fairness in pricing; Pricing metrics to monetize value.

Competition - Understanding the pricing game, competitive advantage in pricing, reacting to competitive moves. Legal and ethical pitfalls of market-based pricing.

Economics of revenue management- Perfect Competition, Monopoly Pricing, Price and capacity competition in an oligopoly.

## **Module 5: The Art of Managing Revenues**

**7 Hours**

Importance of revenue management; Capacity control- Newsvendor Model, overbooking; Segmentation, Forecasting and budgeting. Dynamic pricing– Deterministic and Stochastic Models; Auction types and revenue implications; revenue management in hospitality, airlines and e-commerce; Resolution of possible customer conflicts.

### **Text Book(s)**

- Bodea, T., & Ferguson, M. (2014). Segmentation, revenue management and pricing analytics. Routledge.
- Nagle, T. T., & Müller, G. (2017). The strategy and tactics of pricing: A guide to growing more profitably. Routledge.
- Phillips, R. L. (2005). Pricing and revenue optimization. Stanford University Press.

### **Reference Book(s)**

- Raju, J., & Zhang, Z. (2010). Smart Pricing: How Google, Priceline, and Leading Businesses Use Pricing Innovation for Profitability (paperback). Pearson Prentice Hall.
- Talluri, K. T., & Van Ryzin, G. J. (2006). The theory and practice of revenue management (Vol. 68). Springer Science & Business Media.

### **Other references**

- Cressman Jr, G. E., & Nagle, T. T. (2002). How to manage an aggressive competitor? Business Horizons, 45(2), 23- 30.
- Dhar, S. K., Morrison, D. G., & Raju, J. S. (1996). The effect of package coupons on brand choice: An epilogue on profits. Marketing Science, 15(2), 192-203.
- Economies of Scale: <https://www.youtube.com/watch?v=2E1pAqZ8qCg>
- Everaert, P., Loosveld, S., Van Acker, T., Schollier, M., & Sarens, G. (2006). Characteristics of target costing: theoretical and field study perspectives. Qualitative Research in Accounting & Management.
- Menezes, F. M., Pitchford, R., & Wait, A. (2003). Tendering and bidding for access: A regulator's guide to auctions. Australian Journal of Management, 28(3), 345-370.
- Pechtl, H. (2004). Profiling intrinsic deal proneness for HILO and EDLP price promotion strategies. Journal of Retailing and Consumer Services, 11(4), 223-233.
- Raju, J. S. (1992). The effect of price promotions on variability in product category sales. Marketing Science, 11(3), 207-220.

- Short run cost and long run costs: [https://www.youtube.com/watch?v=z6\\_ZOcxRU6M](https://www.youtube.com/watch?v=z6_ZOcxRU6M)
- Spann, M., Fischer, M., & Tellis, G. J. (2015). Skimming or penetration? Strategic dynamic pricing for new products. *Marketing Science*, 34(2), 235-249.
- Boyd, E. A., & Bilegan, I. C. (2003). Revenue management and e-commerce. *Management science*, 49(10), 1363- 1386.
- Wirtz, J., Kimes, S. E., Theng, J. H. P., & Patterson, P. (2003). Revenue management: resolving potential customer conflicts. *Journal of Revenue and Pricing Management*, 2(3), 216-226.
- Weatherford, L. R., & Kimes, S. E. (2003). A comparison of forecasting methods for hotel revenue management. *International journal of forecasting*, 19(3), 401-415.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Customer Relationship Management**

Course Code: **22MBADSE206**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Instilling in a student the understanding of the basics of Customer Relationship Marketing
- Developing a comprehensive understanding of process involved in CRM.
- Creating awareness of various aspects of customer service, experience and relationship.
- Enabling students to calculate lifetime value.
- Enabling students to design and develop appropriate CRM related strategies.

### Course Outcomes:

At the end of the course, learners will be able to:

CO 1	Compare various models and frameworks involved in customer relationship management
CO 2	Distinguish between customer satisfaction, customer service and customer experience
CO 3	Compute customer lifetime value for given customer related data
CO 4	Build effective customer retention and customer management strategies
CO 5	Examine activities involved in implementing customer relationship management plans

### Course Contents:

#### Module 1: CRM, its Fundamentals and Customer Relationship

**11 Hours**

Definition of customer, CRM definition, Types of CRM, **Misunderstandings about CRM\***, CRM Constituencies, CRM models– IDIC, QCi, CRM Value Chain, Payne’s five-process CRM Model, Gartner Competency Model, Essentials of Relationship; Dwyer’s Relationship Evolution Model, Why companies want / may not want relationships with customers, Why customers want / may not want relationship with companies, Customer Loyalty and Emotional Bonding, **Loyalty types\***, Customer satisfaction, loyalty and business performance, Customer Lifetime Value – Concept and its computation.

#### Module 2: Managing the customer lifecycle

**11 Hours**

Managing Customer Lifecycle – Acquisition, retention and developing customer value Customer Acquisition: New customer – what Is it?, Portfolio purchasing, Strategic Switching, Customer value estimates – The conversion model, **Prospecting – B2B lead sources, B2C acquisition efforts\***, KPIs of customer acquisition programs. Customer Retention: Customer retention and economics of it, Volume and Value retention, Strategies of customer retention – Positive and negative strategies, KPIs of customer retention programs, Role of research in reducing churn, Strategies for customer value development, Strategies for termination of customer relationships.

Developing customer value: Various sources of customer value.

#### Module 3: Strategic CRM:

**9 Hours**

**Customer Portfolio Management:** CPM and basic principles of CPM, CPM in B2B context, Customer portfolio models, **strategically significant customers\***, Core customer management strategies.

**Delivering and Managing Customer-experienced value:** Understanding value, Modeling customer-perceived value, Sources of customer value, Value through marketing mix, Customer experience, managing customer experience, Distinguishing between CRM and Customer experience management, Influence of CRM applications on Customer experience management.

**Module 4: Operational, Analytical, Collaborative CRM**

**9 Hours**

**Operational CRM:** Sales Force Automation, Marketing Automation – **Benefits and software applications in marketing\***, Service Automation – Customer service, Service modeling.

**Analytical CRM:** Developing and managing customer related data – developing data base, data integration, data mining, data mart, data warehousing, using customer related data - Analytics for CRM strategy, tactics, Analytics throughout customer lifecycle, Generating customer analytical insights.

**Collaborative CRM:** Managing networks for CRM performance, **SCOPE Mode\***, supplier and partner relationship management.

**Module 5: Implementing CRM**

**5 Hours**

CRM planning and implementing process – develop CRM strategy, build CRM project foundations, Needs specification and partner selection, project implementation, **Performance evaluation\***.

**Basic Texts**

- Buttle, F., & Maklan, S. (2015). Customer Relationship Management, Concepts and Technologies. New York, USA: Routledge.

**Reference Books:**

- Rai, A.K. (2013). Customer Relationship Management, Concepts and Cases. New Delhi, India: PHI Learning Pvt. Ltd.
- Baran, J. R., Strunk, P. D., & Galka, R. J. (2008). Principles of Customer Relationship Management. Mason, USA: Thomson South-Western.
- Kumar, A., Sinha, C., & Sharma, R. (2007). Customer Relationship Management, Concepts and Applications. New Delhi, India: Bizmantra.

**Other reading material**

- Lemon, L. N., and Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer journey. Journal of Marketing. 80:6, 69-96
- Morey, T., Forbath, T., and Schoop, A. (2015). Customer Data: Designing for Transparency and Trust. Harvard Business Review, 97-105.
- Smilansky, O. (2017). Tips for Maximizing CRM Investments. Retrieved from [www.destinationcrm.com](http://www.destinationcrm.com).
- Rowe, S. D. (2016). New Marketing Automation Hits the Mark. Retrieved from [www.destinationcrm.com](http://www.destinationcrm.com).
- Shaklett, M. (2017). Great Customer Service Takes Empathy. Retrieved from [www.destinationcrm.com](http://www.destinationcrm.com).
- Oracle Corporation. (2006, August). Ten Critical Success Factors for CRM: Lessons Learned from Successful Implementations. Retrieved from [www.oracle.com/us/products/applications/siebel/051291.pdf](http://www.oracle.com/us/products/applications/siebel/051291.pdf).

**Evaluation Pattern:**

<b>Continuous Evaluation</b>		<b>End Semester Examination</b>	<b>Total</b>
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Marketing of Technology Products & Services**

Course Code: **22MBADSE207**

Semester: **2** Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Facilitate the understanding of the nuances of marketing of technology products in current business environment
- Enabling students to analyse the dynamics of the high-technology markets for better decision making
- Enabling students to develop effective marketing mix strategies for effective and efficient marketing activities
- Creating awareness of consumer behaviour models relevant to technology markets
- Preparing students to work effectively and efficiently in high technology marketing environment

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Describe the nature and scope of marketing the technology products, consumer behavior, segmentation, targeting and positioning.
CO 2	Develop marketing strategies and marketing mix for technology products.
CO 3	Demonstrate the knowledge of value co-creation through productive operations and customer experiences.
CO 4	Demonstrate the capability to work effectively and efficiently within the technology marketing environment through a better understanding of the consumers.
CO 5	Assess the market with market research tools, techniques and behavioral models to understand the dynamics of technology product markets.

**Course Contents:**

**Module 1: Introduction to High-Technology Marketing**

**11 Hours**

Defining High Technology – Government Based Classifications, Common Characteristics of High-Tech Environments, Types of Innovation. The Contingency Model for High-Tech Marketing - Framework for High-Technology Marketing Decisions.

Market Orientation - The Effect of Market Orientation on Company Performance, Dimensions of a Market Orientation, Becoming Market Oriented: Facilitating Conditions

Customer Relationship Marketing - Identifying High-Potential Customers, developing a Customer Acquisition Strategy, Developing the Customer Portfolio Management Strategy, **Customer Relationship Management Software\***.

**Module 2: Market Research for Understanding High Tech Markets**

**8 Hours**

Gathering Information: High-Tech Marketing Research Tools, Concept Testing, Conjoint Analysis, Customer Visit Programs, Empathic Design, Lead Users, Quality Function Deployment, Prototype Testing, **Beta Version Testing\***. Customer-Driven Innovation, Biomimicry - The Biomimicry Process, Biomimicry Benefits, Forecasting in High-Tech Markets, Forecasting Methods, Other Considerations in Forecasting.

### **Module 3: Understanding High-Tech Customers**

**9 Hours**

Customer Purchase Decisions- Problem Recognition, Information Search, Evaluate Alternatives, Purchase Decision, Post purchase Evaluation.

Adoption and Diffusion of Innovations - Factors Affecting Adoption of Innovation, Categories of Adopters, Crossing the Chasm, **Early-Market Strategies: Marketing to the Visionaries\***.

The Chasm - Crossing the Chasm: A Beachhead and a Whole Product Solution, Inside the Tornado. Segmentation, Targeting and Positioning – Dividing Possible Customers into Groups, Profiling the Customers in Each Segment, Evaluating and Selecting a Target Market, Positioning the Product within the Segment.

Customer Strategies to Avoid Obsolescence: Implications for Upgrades and Migration Paths - Customer Migration Decisions, Marketers' Migration Options, Marketing Implications of Consumers' Paradoxical Relationship with Technology.

### **Module 4: Product, Price and Distribution Management**

**12 Hours**

Technology and Product Management - Technology Mapping. The “What-to-Sell” Decision - Possible Options, What Decision Makes Sense? Technology Transfer Considerations. Product Architecture: Modularity, Platforms, and Derivatives – Modularity, Platforms and Derivatives, Customizing Complex Products. Developing Services as Part of the High- Technology Product Strategy, Unique Characteristics of Services: Implications for High-Tech Marketing.

The High-Tech Pricing Environment: The 3C's of Pricing – Costs, Competition, Customers, Consolidating the 3 C's into a Successful Strategy. Customer-Oriented Pricing - Steps in Customer-Oriented Pricing, Implications of Customer-Oriented Pricing. Pricing of After-Sales Service. The Technology Paradox - Solutions to the Technology (Pricing) Paradox. Additional Pricing Considerations - Outright Sale of Know-How versus Licensing Agreements, Usage Restrictions, Price Promotion.

Distribution Channels Management in High-Tech Markets: Issues in Distribution Channel Design and Management - Channel Structure, Channel Management, Channel Performance. Managing Hybrid Channels: Effective Multi-Channel Marketing - Gather Market Data, Work toward Harmonization Following Contingency Theory, Additional Considerations: Channel Relationship Quality, CRM, Compensation, and Communication. Emerging Considerations in Distribution Channels

Distribution for “Digital” Goods: The Long Tail, Understanding Gray Markets, Black Markets, Piracy\*, and Restricted Exports, Unique Distribution Requirements for Developing (BOP) Markets

### **Module 5: Marketing Models and Marketing Communication**

**5 Hours**

Basic Models in High-Tech Marketing - The Gompertz curve, The Basic Rogers 1983 model of innovation, The Pattern of Innovation: primarily a phased structure, Populating the Gompertz-Rogers model, Innovators, Early adopters, Early maturity, Mature maturity, Obsolescent maturity (laggards), Visionaries and pragmatists, Product value drifts into added services Marketing Communication Tools for High-Tech Markets: Integrated Marketing Communications - Media Advertising, Public Relations/Publicity, Direct Mail, Trade Shows, Seminars, and Training, Catalogs, Literature and Manuals, Telemarketing, Personal Selling. Internet Advertising and Promotion - Display Ads, Search Ads, Viral Marketing, Mobile Advertising, Marketing in Virtual Reality Environments, Dealing with Disruption, **The Website's Part in Advertising and Promotion Strategy\***.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Sengupta, S., Mohr, J. J., Slater, S. (2013). Marketing of High-Technology Products and Innovations. (n.p.): Pearson Education.

### Reference Books

- Dulieu, M., Corsi, P. (2013). The Marketing of Technology Intensive Products and Services: Driving Innovations for Non-Marketers. Germany: Wiley.
- Fotiadis, T. (2018). Strategic Marketing for High Technology Products: An Integrated Approach. United Kingdom: Taylor & Francis.

### Other reading material

- Turban, E., Lai, L., Strauss, J. (2015). Social Commerce: Marketing, Technology and Management. Germany: Springer International Publishing.
- Moore, G. A. (2014). Crossing the Chasm, 3rd Edition: Marketing and Selling Disruptive Products to Mainstream Customers. United States: HarperCollins.
- Sandberg, B. (2008). Managing and Marketing Radical Innovations: Marketing New Technology. (n.p.): Taylor & Francis.

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



**HUMAN RESOURCE MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – II**

## Course Title: Talent Acquisition

Course Code: **22MBADSE213**

Semester: **2** Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Define the functions of manpower planning, job analysis and ability to draft job description and specification.
- Describe the hiring functions of human resource management and the changing pattern of hiring and HR preferences.
- Demonstrate the knowledge and skills related to selection process.
- Examine the process of conducting interviews and understand the possible biases.
- Develop the ability to use modern technique in the latest developments of talent acquisition.

### Course Outcomes (COs):

At the end of the course, the learners will be able to:

CO1	Describe the manpower planning process and to draft job description and job specification.
CO2	Discuss the recent trends and contemporary issues in Indian hiring scenario.
CO3	Contrast various types of interviews used in selection process
CO4	Formulate various job offer letters upon giving conditions and contexts.
CO5	Appraise the latest trends in talent acquisition domain.

### Course Contents:

#### Module 1: Manpower Planning

**9 Hours**

Overview of Indian labor market scenario, Job conditions in key industries, Job opportunities for HR professional. Meaning and importance of manpower planning, Concepts of manpower planning – Long / short range planning, cost of planning or not doing so, Process of manpower planning challenges faced, Linking manpower planning to other human resources functions. Demand and Forecasting techniques, Markov analysis. Meaning and process of job analysis, importance of job analysis\*, various techniques of job analysis, writing of job descriptions and specifications.

#### Module 2: Recruitment

**6 Hours**

Recruitment process, Factors affecting recruitment, challenges in recruitment, internal and external sources of recruitment\*, recent trends in recruitment. Realistic job previews- meaning and importance. Employee Referral Programs, Campus Recruitment trends. Building organization brand and creating a recruiting pull, learning to hire experience hires\*.

#### Module 3: Selection

**12 Hours**

Selection process – detailed step by step selection process. Reliability and Validity of tests, Types of interviews-structured and unstructured interviews, panel and group interviews, stress interviews, competency-based interviews, Behavioural Event Interviews, Insights of a campus recruitment from the recruiter's end what he wants, Importance of referral hiring in a company and how and why it is increasing. Medical tests\*, reference and background verification\*, recent trends in selection. Techniques of selection,

impact of selection decision on organization. Selection decisions- Various techniques and relative importance. Virtual interviews, Video interviews – AI in interview

**Module 4: Job Offer, Induction and Placement**

**9 Hours**

Contents of job offer, offer and acceptance of job, placement of the candidate on job, various types of induction, importance of induction, Virtual Induction, Challenges involved in placement and induction, Induction activities done by the corporate, Offer Letter Evaluation, Selecting the Right offer\*, Self-assessment before accepting any offer.

**Module 5: Contemporary issues in Hiring**

**9 Hours**

How to consolidate future manpower projections – sales / Revenue / manpower, Detailed manpower planning – skills / requirements by levels / cities etc., Integrating training with hiring plans to plan supply against demands Contemporary issues in recruitment. Introduction to Social media role in recruitment and online recruitment, Leadership recruiting, Salary benchmarking., contemporary online recruitment tools, Social Media Index\*.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Bhattacharya, D. (2019) Human Resource Planning, Kolkata, India: Excel Publishing.
- Roberts, G. (2019) Recruitment and Selection, Mumbai, India: Jaico Publishing Company.

**Reference Books**

- Edinborough,R.(2018). Assessment methods in Recruitment, Selection and Performance. New Delhi, India:Kogan Page Limited
- Armstrong, M (2019). Handbook of Human Resource Management Practice New Delhi, India: Kogan Page Limited.

**Other reading material**

- <https://www.peoplesmatters.in/article/employee-relations/induction-to-integrate-employees-and-systems-with-organisation->
- <https://www.entrepreneur.com/article/76182>
- <http://business.time.com/2012/08/15/the-power-within-why-internal-recruiting-hiring-are-on-the-rise/>
- <http://work.chron.com/importance-personal-interviews-selection-process-2864.html>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Digital Human Resource Management**

Course Code: **22MBADSE214**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Discuss the influence of AI (Artificial Intelligence) on the future workforce.
- Describe the alignment of HR strategy to the Organizations' strategy.
- Identify the steps in the development of Design thinking in HR.
- Describe the digital HR transformation framework.
- Illustrate the influence of Digitization on the employee experience.

### **Course Outcomes (COs):**

At the end of the course, the learner will be able to:

CO1	Justify the usage of AI at the work place
CO2	Identify the HR Technology which can support the HR digital strategy
CO3	Devise solutions to Organizational challenges using Design Thinking
CO4	Devise a plan to develop digital mindset among employees
CO5	Design interventions to improve employee experience

### **Course Contents**

#### **Module 1 - The Future of Work and Introduction to AI in HR.**

**9 Hours**

Define AI. Impact of AI on HR. Benefits of implementing AI, new technologies in HR. Future of Work, Implementing AI tools within HR, **\*Aligning technology and HR processes to generate profit for the business.**

#### **Module 2 - Digital HR Strategy**

**8 Hours**

Business Case & Support, Components of HR strategies, alignment of digital HR strategy to the organization's strategies, **\*Selecting HR Technology & Implementing HR Technology**

#### **Module 3 - Design Thinking in HR**

**10 Hours**

Design thinking principles. Design thinking techniques, macro factors that affect an organization, Impact on the workforce. Digital mindset, employees' personal experience and overall digital experience, assess employee experience, identify workplace issues and initial analysis of the phases of design thinking (Understand, Empathize, and Synthesize), Developing and testing possible solutions to workplace issues, **\*solution and identification phases of design thinking (Ideate, Prototype, and Iterate)**

#### **Module 4 - Digital HR Transformation**

**10 Hours**

Introduction to Digital HR transformation, Digital HR foundation. Digital Culture and Digital Mindset in a digital era, HR Digital Toolkit, **\* Digital HR Transformation Framework.**

#### **Module 5 - Employee experience**

**8 Hours**

Employee-centered, Basics of Employee Experience (EX), Employee engagement.

Origins and evolution of EX, Definitions and the key components of EX, Challenges associated to EX and solutions to unlock business value with the **\*EX-processes & interventions to improve employee expectations**

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Varshney, D. (2020). Digital Transformation and Creation of an Agile Workforce: Exploring Company Initiatives and Employee Attitudes. In Contemporary Global Issues in Human Resource Management. Emerald Publishing Limited.

**Reference books**

- Waters, S. D., Streets, V. N., McFarlane, L. A., & Johnson-Murray, R. (2018). The practical guide to HR analytics: Using data to inform, transform, and empower HR decisions. Society for Human Resource Management.

**Other reading material**

- DiRomualdo, A., El-Khoury, D., & Girimonte, F. (2018). HR in the digital age: How digital technology will change HR’s organization structure, processes and roles. Strategic HR Review.
- Harney, B., & Collings, D. G. (2021). Navigating the shifting landscapes of HRM. Human Resource Management Review, 100824.
- Larkin, J. (2017). HR digital disruption: the biggest wave of transformation in decades. Strategic HR review.
- Manuti, A., & De Palma, P. D. (2018). Digital HR. London: Palgrave Macmillan, doi, 10, 978-3.
- Minbaeva, D. (2020). Disrupted HR?. Human Resource Management Review, 100820.
- Parry, E., & Strohmeier, S. (2014). HRM in the digital age—digital changes and challenges of the HR profession. Employee Relations.
- Sen, S. (2020). Digital HR Strategy: Achieving Sustainable Transformation in the Digital Age. Kogan Page Publishers.
- Ulrich, D., & Yeung, A. (2019). Agility: The new response to dynamic change. Strategic HR Review.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Labour Economics

Course Code: **22MBADSE215**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Discuss the characteristics of the Indian Labor Market.
- Explain the employment patterns in different sectors.
- Describe the wage determination theories.
- Recognize the components of labor welfare and social security.
- Identify the factors which influence labor management.

### Course Outcomes (COs):

At the end of the course, the learner will be able to:

CO1	Illustrate the forces affecting the Indian Labor Market
CO2	Appraise the employment rates in different sectors
CO3	Contrast the Wage determination process in different sectors
CO4	Interpret the labor welfare policies in India
CO5	Design methods to improve labor management at the workplace

### Course Contents

#### Module 1 - Labor Market

**9 Hours**

Nature and characteristics of labour markets in developing countries like India; Paradigms of labour market analysis — Classical, neo-classical and dualistic economy; Demand for labour in relation to size and pattern of investment; Choice of technologies and labour policies; Supply of labour in relation to growth of labour force; Labour market policies; Mobility and productivity of labour; Rationalization; Methods of recruitment and placement; Employment service organization in India, Gig Economy, and labor market outcome, latest research\*

#### Module 2 – Employment

**9 Hours**

Employment and development relationship — Poverty and unemployment in developing countries; Unemployment — Concept, Types, and Measurement, particularly in India; Impact of rationalization, technological change and modernization on employment in organized private industry, Public sector and employment in agricultural sector; Analysis of educated unemployment; Employment policy in Five Year Plans and its evaluation, Digital Platform, Gig Workers informal work and employment, latest research\*

#### Module 3 – Market Structure and Wage Determination

**9 Hours**

Human Capital Theory, Classical, neo-classical and bargaining theories of wage determination; Concepts of minimum wage, living wage and fair wage in theory and practice; Discrimination in labour markets; Wage determination in various sectors — rural, urban, organized, unorganized and in informal sectors. Wage Inequality, and Wage differ across and within occupations Analysis of rigidity in labour markets; Asymmetric

information and efficiency of labour markets in wage determination; National wage policy in India, latest research\*.

**Module – 4 – State and Labour**

**9 Hours**

State and social security of labour — Concept of social security and its evolution; Social assistance and social insurance; Review and appraisal of states policies with respect to social security and labour welfare in India; Special problems of labour: Child labour, female labour, Discrimination and gender bias in treatment of labour - Labour market reforms; Second National Commission on Labour; Globalization and labour markets, latest research\*.

**Module 5 – Labour Management**

**9 Hours**

Meaning definitions and importance of labour management, Labor Intensive, Labor Piracy, Labor Pirate, Labor Relations labour - labour cost variance, labour flexibility, labour theory of value, labour turnover, informal-formal linkages, Social contracts and Trade unions, latest research\*

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Ehrenberg, R. G., & Smith, R. S. (2016). Modern labor economics: Theory and public policy. Routledge.
- Ashenfelter, O., & Card, D. (Eds.). (2010). Handbook of labor economics. Elsevier.
- Borjas, George J. Labor economic, 7. ed., international ed.: New York: cop. 2016.

**Reference Books**

- Datt, G. (1996), Bargaining Power, Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.
- DeSilva, A. (1992). Earnings of immigrants: A comparative analysis. Economic.
- Angrist, J. D., & Krueger, A. B. (1999). Empirical strategies in labor economics. In Handbook of labor economics (Vol. 3, pp. 1277-1366). Elsevier
- Five Year Plans of India -- 3 Volume Set: First Five Year Plan (1951-52 to 1955-56) to Twelfth Five Year Plan (2012- 13 to 2016-17) Hardcover – 31 August 2013

**Other reading material**

- Hajela, P.D. (1998), Labour Restructuring in India: A Critique of the New Economic Policies, Commonwealth Publishers, New Delhi.
- Jhabvala, R. and R.K. Subrahmanya (Eds.) (2000), The Unorganised Sector: Work Security and Social Protection, Sage Publications, New Delhi.
- Peter E. Hart (ed.) (1986) Unemployment and Labour Market Policies
- Richard W. Blundell and Ian Walker (eds) (1986) Unemployment, Search and Labour Supply.
- McConnell, C. R., & Brue, S. L. (2013). Contemporary labor economics.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Name: Human Resource Professional in Business

Course Code: **22MBADSE216**

Semester: **2** Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Explain the HR roles for HR professionals.
- Illustrate the various skillsets important for an HR Administrative Expert.
- Classify the competencies critical for the different HR roles.
- Examine the role of HR as a change agent.
- Evaluate the Strategic HR role using appropriate frameworks.

### Course Outcomes:

CO1	Summarise the importance of four Human Resource manager roles.
CO2	Identify the skill sets required to become an HR administrative expert.
CO3	Discover the competencies required for an Employee Champion role.
CO4	Demonstrate the capabilities inherent in a change agent role.
CO5	Critically assess the role of HR as a strategic partner in organizations.

### Course Contents

#### Module 1: Introduction

**9 Hours**

Introduction - History of HR works in waves, Competitive challenges of future of HR – Globalization, the value chain for business competitiveness and HR services, Profitability through cost and growth, capability focus, change and some more change, technology, turnaround is not transformation. Multiple role models for Human resource management – Management of strategic human resources, firm infrastructure, employee contribution, transformation, and change. Module-based Case Studies

#### Module 2: HR Administrative Expert

**9 Hours**

Becoming an Administrative Expert- actions needed, phases in reengineering HR processes. Essential skill sets- Becoming a shared service organization- key success factors- customer needs, customer interface, process, shared services, defining measures of success. Potential Pitfalls. Module-based Case Studies.

#### Module 3: HR as an Employee Champion

**9 Hours**

The Employee Champion Role – Natural employee champions- benefits of employee champions- potential skills-challenge of nurturing employee contribution- framework- Demand/resource challenge- Turn demands into resources. Module-based Case Studies.

#### Module 4: HR as a Change Agent

**9 Hours**

Challenges to successful change- building capacity for change- Culture change- changing the mindset- steps to manifest change- HR professionals as change agents- catalyst, champion, sponsor, facilitator, designer, demonstrator. Module-based Case Studies.



**Module 5: HR as a Strategic Partner****9 Hours**

HR Strategic Partner - Definition, Becoming a strategic business partner. Essential Competencies- Challenges – Avoid SPOTS, creating a balance scorecard, aligning HR to business plan, watch out for quick fixes, and create a competency focus within the firm. Conquering Challenges. Framework for organizational diagnosis – Define an organizational architecture, create an assessment process, provide leadership for the improvement process and set priorities. Strategic HR Partner Strategy. Module based Case Studies.

**Basic Texts**

- Ulrich, D. (1997). Human resource champions: The next agenda for adding value and delivering results. Boston: Harvard Business School Press.
- Templeman, G. (2021). The HR Business Partner Handbook: A Practical Guide to Being Your Organization’s Strategic People Expert. United Kingdom: Kogan Page.

**Reference Books**

- Ulrich, D., & Brockbank, W. (2005). The HR value proposition. Boston, Mass: Harvard Business School Press.

**Other reading material**

- Harvard Business Review: A New Mandate for Human Resources <https://hbr.org/1998/01/a-new-mandate-for-human-resources>
- Society for Industrial and Organizational Psychology: Work in the 21st Century — The Changing Role of Human Resources <https://www.siop.org/Research-Publications/TIP/backissues/tipjan98/may>
- Organization Change Management (OCM), HCL Technologies Website

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**BUSINESS ANALYTICS**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – II**

## Course Title: Data Analytics with Python

Course Code: **22MBADSE217**

Semester: **2**

Credits: **3**

Hours (LTP): **45**

### Hours

### Course Objectives:

- Appreciate data handling using Python
- Apply different data structure for problem solving
- Analyze different data
- Create statistical model for decision making
- Visualize data for easy understanding of Business Scenario

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Demonstrate data handling using Python
CO2	Illustrate different data structure for problem solving
CO3	Illustrate different data using Python library
CO4	Assess statistical model for decision making
CO5	Design models of business scenario

### Course Contents:

#### Module 1: Introduction to Python

**10 Hours**

Features of Python; Installation of Python; Getting Started; Variables in Python; Input and Output in Python; Importing modules and library; Basic Programming in Python ; Logical expression using if..else\*

#### Module 2: Data Structures

**10 Hours**

Lists: Creating a List; Accessing List Elements; Functions for List; Tuples: Creating a Tuple; Accessing Tuple Elements; Functions for Tuple; Dictionary: Creating a Dictionary; Accessing Dictionary Elements; Functions for Dictionary; Using for loop and while loop\*

#### Module 3: Core Libraries in Python

**9 Hours**

The numpy library: Single Dimensional Array; Multi Dimensional Array; pandas library: Basics of Data Frame; Relational and Logical Operators for Filtering data; Handling Missing Values; Matplotlib Library : using plot(); Pie Chart; Scatter Plot; Histogram ; Bar Chart; Seaborn Library: Box Plot; Violin Plot; Point Plot; Line Plot; Count Plot; Bar Plot; Scatter Plot; Regression Plot; Heat Map; Pair Plot; Pair Grid; slicing operations in Python and it's uses in different situation\*

#### Module 4: Modules in Python

**6 Hours**

In-built modules: Math; random; statistics; string; re and user defined module; from import; renaming the imported module\*

**Module 5: Statistics in Python**

**10 Hours**

Descriptive Statistics; Rank; Normality; NormalDist objects; Solving classic probability problems\* Correlation; Chi-Square test; Parametric Techniques for comparing means: One sample t-test; Independent sample t- test; Dependent t-test; One Way ANOVA; Univariate and Multivariate regression; Logistic regression; RMSE; Confusion matrix; accuracy

**Basic Texts**

- Motwani; B. (2020). Data Analytics using Python. Wiley.
- Beazley; D. M.; & Jones; B. K. (n.d.). Python Cookbook: Recipes for Mastering Python 3. O'Reilly.
- McKinney; W. (2018). Python for Data Analysis: Data Wrangling with Pandas; NumPy; and IPython. O'Reilley

**Other References**

- Brown; M.; & Brown; M. C. (2018). Python: The Complete Reference. McGraw Hill Education.
- Brownley; C. W. (2016). Foundations for Analytics with Python. O'Reilly Media; Inc.
- McKinney; W. (2017). Python for Data Analysis. O'Reilly.
- Rao; D. R. (2016). Core Python Programming. Dreamtech Press.
- Sebastian, R., & Vahid, M. (2019). Python Machine Learning. Packt.
- Severance, C. R. (2016). Python for Everybody: Exploring Data Using Python 3. Autoedición

**Other reading material**

- <https://www.python.org/>
- <https://pandas.pydata.org/>
- <https://numpy.org/devdocs/user/quickstart.html>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Programming for Analytics**

Course Code: **22MBADSE218**

Semester: **2**

Credits:**3**

Hours (LTP): **45 hours**

### **Course Objectives:**

- Understanding the basics of algorithms for analytics
- Understanding concepts of function in Python
- Understanding concepts of object oriented programming
- Apply sorting and searching technique
- Execute programming technique in optimal reliability

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Demonstrate the importance of algorithm for analytics
CO2	Demonstrate the Python flow control and functions
CO3	Interpret the concepts of Object-Oriented Programming
CO4	Illustrate computational solution to well-known problems like searching and sorting
CO5	Design algorithm using appropriate design strategies for problem solving

### **Course Contents:**

#### **Module 1: Algorithms and Analytics**

**10 Hours**

Introduction: Algorithms; Fundamentals of the Analysis of Algorithmic Efficiency; Asymptotic Notations and their Properties; **Analysis Framework; Empirical analysis; Mathematical Analysis for Recursive and Non-Recursive Algorithms; Visualization\***

#### **Module 2: Functions in Programming Language**

**10 Hours**

Writing Functions in Python; Returning a Result from a Function; Calling Functions; Passing Functions; Formal Arguments; Positional Arguments; Default Arguments; **Logic and Bit Operations in Python; Lists; Collections of Data; Sorting Simple Lists; The Bubble Sort Algorithm; Lists in Advanced Applications\***

#### **Module 3: Object Oriented Programming**

**10 Hours**

Concepts of Object Programming; Classes and Objects; Classes and Functions; Classes and Methods; Inheritance; **Modules; Packages; String and List Methods and Exceptions; Procedural to Object Approach; Working with Real Files\***

#### **Module 4: Sorting and Searching Algorithms**

**8 Hours**

Sorting Algorithms; Bubble Sort; Insertion Sort; Selection Sort; Quick Sort; Merge Sort; Comparison of Sorting Algorithm; Linear Search; Binary Search; **Advanced Sorting and Searching Algorithms\***.

#### **Module 5: Greedy Methods**

**7 Hours**

Greedy Methods with Examples; Optimal Reliability Allocation; Knapsack; Minimum Spanning Trees; **Brute Force Computing; String Matching; Closest-Pair and Convex-Hull Problems; Exhaustive Search; Travelling Salesman Problem\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Severance, C. R. (2016). Python for Everybody: Exploring Data Using Python 3. Autoedición
- Levitin, A. (2009). Introduction to the Design and Analysis of Algorithms. Pearson.

### Reference Books

- Downey, A. B. (2015). Think Python: How to Think Like a Computer Scientist. Green Tea Press.
- Ellis Horowitz, S. S. (2014). Computer Algorithms/C++. Universities Press.
- Larose, D. (2016). Data Mining and Predictive Analytics, Wiley.
- Janarthnam, S. (2017). Hands-On Chatbots and Conversational UI Development. Packt.
- Frank, M., Roehrig, P., & Pring, B. (2017). What to do when Machines do everything. Wiley.

### Other reading material

- Cormen, T. H., Leiserson, C. E., Rivest, R. L., & Stein, C. (2009). Introduction to Algorithms. PHI.
- Berthold, M., & Hand, D. J. (2007). Intelligent Data Analysis. Springer.
- Maheshwari, A. (2017). Data Analytics, McGraw Hill Education.
- Sebastian, R., & Vahid, M. (2019). Python Machine learning .Packt.
- [www.kaggle.com](http://www.kaggle.com)
- [www.towardsdatascience.com](http://www.towardsdatascience.com)
- [www.tensorflow.org](http://www.tensorflow.org)

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Data Analytics with R**

Course Code: **22MBADSE219**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Developing among students an understanding of the basics of R programming.
- Creating a foundation for building complex business analytics models in R.
- Introducing students to latest packages, concepts and functions being used to build successful models.
- Enabling students to understand the data types in R to create models that can create relationships between variables.
- Enabling students to make understand data with R.
- Equipping students with tools and techniques to conduct data analysis in R.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Illustrate R basics and programming.
CO2	Appraise different data structures in R.
CO3	Design models using the statistical techniques in R.
CO4	Demonstrate Data Exploration and its visualization using various libraries.
CO5	Design Models for analyzing and interpretation of regression and classification algorithm in R.

### Course Contents:

#### Module 1: Overview & Essentials of R Programming

**10 Hours**

Overview of R programming; Working with R-Studio; Using in-built functions in R (for string, numbers, date, etc.); Import and Export of Data; **Basic Data Analysis Using In-built Functions in R\***

#### Module 2: Data Management

**10 Hours**

Data Structure: Vector, List, Matrices Data Frame, Factor; Data Exploration and Data Manipulation; **Conversion of One Data Structure to Another\***

#### Module 3: Data Visualization

**10 Hours**

Pie Charts; Line Charts; Histogram; Bar Chart; Kernel Density Plot; Quantile-Quantile (Q-Q) Plot; Box Plot; Violin Plot; Dot Chart; Bubble Plot; Image Plot; Mosaic Plot; Scatter Plot Matrices; Scatter Plot Chart; Corrgrams; Tree Map; Heat Map Chart; Using GGPlot2 for Advanced Charts; **Modifying the Created Chart in R\***

#### Module 4: Statistics using R

**7 Hours**

Descriptive Statistics; Correlation and Covariance; Z-test; T-test; Chi-squared test; ANOVA Non-Parametric Techniques; Time-series Analysis; **Usage of Functions and Packages to Analyse Real-time Data and Interpret the Results\***

#### Module 5: Regression & Classification

**8 Hours**

Univariate and Multivariate regression; Logistic Regression; RMSE; Confusion Matrix; Accuracy; **Creation of Regression and Classification Models on Different Datasets\***

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Gillespie, C.& Lovelace, R. (2016). Efficient R Programming: A Practical Guide to Smarter Programming. O’Reilly Media, Inc.
- Gardener M. (2012) Beginning R: The Statistical Programming Language. Wrox

**Reference Books**

- Wickham, H. & Grolemond, G. (2017) R for Data Science.O’Reilly
- Grolemond, G. (2014). Hands-On Programming with R. O’Reilly
- Dalgaard, P. (2008). Introductory Statistics with R. 2nd edition. California: Springer.
- Wickham, H. (2017). R for data science: Import. Tidy. Transform. Visualize. And Model Data. O’REILLY.
- Tilman, M. D. (2016). The Book of R: A First Course in Programming and Statistics. No Starch Press. 1st edition

**Other reading material**

- Bhatt, N. & Ganatra, A. (2019). Programming Language and Big Data Applications. Handbook of IoT and Big Data. <https://doi.org/10.1201/9780429053290-6>.
- Irfan, E. (2019). Data Types. Scala Programming for Big Data Analytics. [https://doi.org/10.1007/978-1-4842-4810-2\\_5](https://doi.org/10.1007/978-1-4842-4810-2_5).
- Koitz, R. & Wolfgang S. (2014). “Empirical Comparison of Visual to Hybrid Formula Manipulation in Educational Programming Languages for Teenagers.” Proceedings of the 5th Workshop on Evaluation and Usability of Programming Languages and Tools. <https://doi.org/10.1145/2688204.2688209>.
- Peng, R. (2012). R Programming for Data Science. Lulu.com.
- Ventocilla, E. (2019). Big Data Programming with Apache Spark. Studies in Big Data. [https://doi.org/10.1007/978-3-319-97556-6\\_10](https://doi.org/10.1007/978-3-319-97556-6_10).

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



## Course Title: Supply Chain Analytics

Course Code: **22MBADSE220**

Semester: 2

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives

- Develop proficiency in creating supply chain and logistics management model.
- Develop forecasting models for managing supply chains
- Develop qualitative and quantitative models for managing critical and emerging issues in supply chains.
- Develop analytical models and tools for inventory planning and management.
- Implement different supply chain network models to real-life scenarios.

### Course Outcomes

At the end of the course, learners will be able to:

CO1	Demonstrate the basics of supply chain and logistics management
CO2	Demonstrate various types of inventory planning and management model
CO3	Examine different types of mathematical modeling techniques in supply chain management
CO4	Appraise the use of advanced mathematical models for supply and logistics management
CO5	Develop analytical tools for network planning and inventory management in different types of supply chains

### Course Contents:

#### Module 1: Introduction to Supply Chain Management

**6 Hours**

Fundamentals of SCM; Overview of Supply Models and Modeling Systems; Innovations in Information Technology and Supply Chain Management; **Evolution of Supply Chain Management\***

#### Module 2: Mathematical Models for Supply Chain

**7 Hours**

Linear Programming in SCM; Examples of LPP; Properties of LPP; Interpreting an Optimal Linear Programming Problem; Goal Programming; Multi Criteria Decision Making (MCDM) Techniques; Problem solving; **Basics of Probability and Operation Research\***

#### Module 3: Advanced Models for Supply Chain

**10 Hours**

Demand Forecasting; Simulation Models; Game Theoretic Models and Case Discussions; **Basics of Simulation and Forecasting Methods: Time Series Analysis, Causal Methods and Market-Research Methods\***

#### Module 4: Inventory Planning and Coordination

**10 Hours**

Classical Inventory Models; Spare Parts Inventory Management; Beer Game and Managing Inventory in Supply Chain; **Risk Pooling; Distribution Strategies; Supplier Integration\***

**Module 5: Network Planning****12 Hours**

Network Design; Inventory Positioning and Logistics Coordination; **Facility Location and Planning; Resource Allocation; Risk Management\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Simchi Levi. D., Keminsky. P., Simchi-Levi. E., Shankar. R. (2018). Designing and Managing the Supply Chain. McGraw Hill.
- Robertson. W. P. (2020). Supply Chain Analytics: Using Data to Optimise Supply Chain. Routledge.

**Reference Books**

- Chase, B. R., & Shankar. R. (2018). Operations & Supply Chain Management. McGraw Hill India.
- Shah, J. (2016), Supply Chain Management: Text and Cases. Pearson.
- Krajewski. J. L., Malhotra. K. M., Ritzman.P. L. (2019). Operations Management: Processes and Value Chains. Prentice Hall.
- Russell. S. R., Taylor. W. B. (2018). Operations Management along Supply Chain. Wiley.
- Chopra. S., Meindl. P. (2019). Supply Chain Management: Strategic Planning and Operation. Pearson.
- Sanders, N. (2014). Big Data Driven Supply Chain Management. Pearson.
- Bowers, R. M., Petrie. A., Holcomb. C. M. (2017). Unleashing the Potential of Supply Chain Analytics, Product. Harvard Business Review.

**Other reading material**

- <https://www.informs.org/>
- <https://www.poms.org/>
- <https://decisionsciences.org/>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**LOGISTICS & SUPPLY CHAIN MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – II**

## Course Title: **Total Quality Management**

Course Code: **22MBADSE221**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Identify and describe the key components and challenges of total quality management
- Understand the importance of team work requirement for effective quality management
- Examine the TQM principles and concepts of continuous improvement
- Apply and analyse the TQM tools and techniques for quality improvement.
- Familiarise with the trends in TQM and the quality awards.

### **Course Outcomes:**

At the end of the course, learners will be able to:

CO1	Familiarize with management of operation using TQM
CO2	Examine the application of quality tools in service business
CO3	Identify methods like sig sigma, kaizen, JIT of Continuous Process Improvement.
CO4	Examine different tools of Quality control
CO5	Discuss the knowledge of possibilities of efficient optimization

### **Course Contents:**

#### **Module 1: Total Quality Management**

**10 Hours**

Total Quality Management Evolution – Definition of Quality – Dimensions – QC- QA – QP Concepts –Quality Management – Cost of Quality Failure Cost – Reducing Costs – Juran’s model – Analysis of COQ for Improvement- Definition of TQM – Elements – Deming’s 14 points – TQM tools and techniques – Planning phase of TQM – \*Barriers to TQM implementations.

#### **Module 2: Service quality and employee involvement**

**9 Hours**

Service quality – Features- customers delight – Kano model – Perceived Quality – Employee Involvement – Employee Motivation –Team work – Effective Communication – Training and Motivation -\*Performance Appraisal.

#### **Module 3: Continuous Process Improvement**

**9 Hours**

Continuous process improvement – Juran’s Trilogy – Kaizen – BPR and TQM – supplier importance Selections. Standards – Quality audit –supplier rating systems – \*Balanced score card.

#### **Module 4: Tools of Total Quality Management**

**8 Hours**

Process Control –Flow Charts – Scatter Diagram –Pareto Chart – Control Chart – Central Limit Theorem –Six Sigma, Definitions, Origin, \*Process Models

#### **Module 5: Trends in Total Quality Management**

**9 Hours**

Benchmarking – Type, Process – QFD – Taguchi’s Loss Function – Total Productive Maintenance- Quality systems – ISO 900 QMS – Management responsibility –\* Environmental management systems 14001 –Quality awards – Deming price European and Indian quality awards.

(\*Self-learning topics are subjected to testing)

**Basic Texts**

- Total Quality Management - Dale H. Besterfield, Carol Besterfield, Glen Besterfield and Mary Besterfield Pearson Education (30 October 2018)
- TQM: Introduction to and Overview of Total Quality Management Kindle Edition (ASQ Quality press) 3. Shridhara Bhat K, Total Quality Management – Text and Cases, Himalaya Publishing House, 2010.

**Reference Books:**

- Total Quality Management: An Integrated Approach by Dr. Kiran, Bsp, 2016
- Total Quality Management, Feigenbaum.A.V. —; 4 edition (August 1,2010, McGraw-Hill
- Total Quality Management, Oakland.J.S.4th Edition, 2014, Routledge, Taylor & Francis Group.

**Other reading material**

- D.I. Prajogo, A.S. Sohal, TQM and innovation: a literature review and research framework Technovation, 21 (2001), pp. 539-558
- J.P. Ortiz, J. Benito, J. Galende, The intervening effect of business innovation capability on the relationship between Total Quality Management and technological innovation, International Journal of Production Research, 47 (18) (2009), pp. 5087-5107.
- J. Feng, D.I. Prajogo, A.S. Sohal, The impact of TQM practices on performance a comparative study between Australian and Singaporean organizations, European Journal of Innovation Management, 9 (3) (2006), pp. 269-278
- K.N. Dervitsiotis, The challenge of adaptation through innovation based on the quality of the innovation process, Total Quality Management & Business Excellence, 22 (5) (2011), pp. 553-566

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Distribution Management**

Course Code: **22MBADSE222**

Semester: **2**

Credits: **3**

Hours (LTP): **45 hours**

### **Course Objective:**

- Understand the nature, types and functions of channels in marketing
- Illustrate various methods/measures involved in picking prospective channel members
- Differentiate between various product and pricing strategies according to the nature of channel
- Assess fit of promotional methods with suitable channels
- Develop framework model to evaluate performance of channels

### **Course outcome:**

At the end of the course, learners will be able to:

CO 1	Recognize the importance of structure, types and functions of channels in marketing domain
CO 2	Choose appropriate measures in selection process of prospective channel member
CO 3	Distinguish the product and pricing strategies pertaining to channel structure
CO 4	Select suitable promotional measures to bring the best fit with various channel systems
CO 5	Design a model of performance evaluation framework to measure channel efficiency and effectiveness

### **Course Contents:**

#### **Module 1: Distribution Management**

**9 Hours**

Marketing Channel Concepts: Growing importance of Marketing Channels, The Marketing Channel Defined, Use of the term Channel Manager, The Marketing Channel and Marketing Management Strategy, Channel Strategy versus Logistic management, Flows in Marketing Channels, Distribution Structure system-- Marketing Channel System-An Overview of the Channel participants, Producers and Manufacturers, Intermediaries, Facilitating Agencies. Electronic marketing channels, Franchise marketing channels. -Behavioural Processes in Marketing Channels: The Marketing Channels as a Social System, Conflict in the marketing Channel, Power in the Marketing Channel, Role in the marketing Channel, and \*Communication Processes in the Marketing Channel.

#### **Module 2: Designing the Marketing Channel**

**9 Hours**

What is Channel Design, Who Engages in Channel Design, A Paradigm of the Channel Design Decision, the Phases of Channel Design-Channel Member Selection and Channel Design, The Selection Process- finding prospective channel members,\* Applying Selection criteria, securing the Channel members.

#### **Module 3: Product and Pricing Issues in Channel Management**

**9 Hours**

New Product Planning and Channel Management, the Product Life Cycle and Channel Management, Strategic Product Management and Channel Management-. Anatomy of Channel of Channel Pricing Structure, Guidelines for Developing Effective Channel Pricing Strategies, \*Other Issues in Channel Pricing.

#### **Module 4: Promotion in Channel Management**

**9 Hours**

Promotional Strategies and Channel Member Cooperation, Basic Push Promotional Strategies in Marketing channels, "Kinder and Gentler" Push Promotion Strategies in Marketing. Finding out the needs and Problems of Channel Members, Offering Support to Channel Members, \*Providing Leadership to Motivate Channel Members.

**Module 5: Evaluating Channel Member Performance****9 Hours**

Factors Affecting scope and frequency of Evaluations- Performance Evaluation versus Day-to-Day Monitoring,  
 \*Channel Member Performance Audit.

(\*Self-learning topics are subject to testing.)

**Basic Texts**

- Palmatier W.R, Sivadas E, Stern W. L., Adel I., & Ansary El.,(2020). Marketing channels 9th Ed. Routledge
- Palmatier W.R, Stern W. L., Adel I., & Ansary El.,(2015). Marketing channels 8th Ed. Pearson

**Reference Books**

- Coughlan, Anderson, Stern & Ansary El., (2014). Marketing channels 7th Ed. Pearson
- Still R R, Cuntiff W E, Govoni A P N & Sandeep Puri (2017). Sales and Distribution Management, Pearson India

**Other reading Material:**

- Kenneth Rolnicki (1998). Managing Channel of Distribution, Amacom
- Kotler, P. and Keller, K. (2014) Marketing Management. 15th Edition, Prentice Hall, Saddle River
- Dent Julian (2008). Distribution channels, Kogan Page
- Distribution Channel Planning and Management: Why are they so Important? (Coursera)
- Sales channel management (LinkedIn)
- Logistic Foundation (LinkedIn)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Warehouse Management**

Course Code: **22MBADSE223**

Semester: **2**

Credits:**3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Understand the concepts of fundamentals of warehouse management.
- Realize the role design, layout & strategies in warehouse.
- Gain the insights of process of order picking and replenishment.
- Develop the knowledge of importance automation and cross docking.
- Apply various suitable KPIs and other measures in efficient measuring of warehouse performance.

### Course Outcomes:

At the end of the course, learners will be able to:

CO 1	Examine role of Warehousing in Supply Chain
CO 2	Identify the importance of role of design, layout & strategies in warehouse
CO 3	Develop insights to order picking and replenishment concepts
CO 4	Design the models of automation and cross docking
CO 5	Analyze the metrics & tools of warehouse performance

### Course Contents:

#### Module 1: Warehouse Management

**9 Hours**

Warehouse: Scope and importance in concurrent scenario, Types of warehouse, the fluid model of product flow, Units of handling, Storage: Dedicated versus shared, the warehouse as a queuing system, Warehouse operations (Receiving, put away, order picking, checking and packing, shipping), Modern functions & service benefits of warehouses, WMS- Warehouse management system, Role of warehouse manager & challenges, **\*storage and handling equipment (Pallet storage, Bin shelving or static rack, gravity flow rack)**

#### Module 2: Design, Layout& Strategies and Material Handling

**9 Hours**

Warehouse design & layout strategies, factors involved in building contemporary warehouses, Layout of a unit load area, Space (Rack or stack, lane depth), Labor (Reducing labor by dual cycle operation, reducing labor by careful product placement, Location of receiving and shipping, Aisle configuration), Layout of a carton pick from pallet area, Layout of a piece pick from carton area. Material handling: principles, storage and handling equipment and tools\***Detailed Slotting**

#### Module 3: Order Picking & Replenishment

**9 Hours**

Routing to reduce travel, the problem of pick path optimization, Heuristic methods of generating short pick paths, Pick path optimization. Work Flow and balance, organizing a team of order pickers, picking tools/machineries and automation in picking, Replenishment and smoothing stock management\* **Bucket brigades in the warehouse.**



#### **Module 4: Automation and Cross-Docking**

**9 Hours**

Role of automation in warehouses, factors & feasibility for automation, types of automation, Carousels, A frames, AS/RS and their relatives, Freight Flow-Congestion, Design-Size and Geometry, Cross Docking: Scope & Operations, types of cross docking and importance of strategic location, **\*Trailer management**

#### **Module 5: Measuring Warehouse Performance**

**9 Hours**

Warehouse activity profiling (ABC ANALYSIS, Statistical analysis, doing it, Visualization), Performance measurement – traditional, modern & new, integrated performance models and metrics, Benchmarking (Ratio based benchmarking, Aggregate benchmarking), **\*Are smaller warehouses more efficient?** (\*Self-learning topics are subject to testing)

#### **Basic Texts**

- John J. BARTHOLDI, III 1 Steven T. HACKMAN (2019), Warehouse and Distribution Science Release 0.98.1, Web Edition.
- Gwynne Richards (2014), Warehouse Management, Kogan Page, New Delhi.  
\*Bowersox, Closs, Cooper(2019), Supply Chain Logistics Management, McGraw Hill, New Delhi

#### **Reference books:**

- Sunil Chopra, Peter Meindl (2016), Supply Chain Management, Pearson Education, New Delhi.
- Bowersox, Closs, Cooper(2019), Supply Chain Logistics Management, McGraw Hill, New Delhi.
- Burt, Dobbler, Starling(2002), World Class Supply Management, TMH Edition, New Delhi.
- Donald Waters (2002), Logistics, Palgrave McMillan Edition, New York.
- Douglas, James, Lisa (1996), Fundamentals of Logistics Management, Irwin Mc Graw Hill edition, New York.
- Martin Christopher (2016), Logistics and Supply Chain Management, Pearson Education, New Delhi.

#### **Other reference materials:**

- <http://www.nwccindia.com/>
- <https://www.netsuite.com/portal/resource/articles/inventory-management/what-are-inventory-management-controls.shtml>
- <https://blog.lpcinternational.co.uk/core-functions-of-a-warehouse-management-system>
- <https://blog.fhysics.net/scm-books/the-logistics-and-supply-chain-toolkit-over-100-tools-for-transport-warehousing-and-inventory-management>
- [https://blog.feedspot.com/warehouse\\_blogs](https://blog.feedspot.com/warehouse_blogs)
- LinkedIn: Basic warehousing terminology
- LinkedIn: Learn about warehouse management systems (WMSs)
- LinkedIn: How warehouse balance costs
- LinkedIn: Inventory management foundations

#### **Other Reading Materials**

- <https://www.offshore-energy.biz/worldmaritimenews/>
- <http://www.cargobusinessnews.com/>
- <https://www.palgrave.com/in/journal/41278>
- <https://www.logisticsmgmt.com/>
- LinkedIn: Defining logistics

- LinkedIn: Logistics, procurement, and operations
- LinkedIn: Lean logistics
- LinkedIn: Choosing the right transportation method
- LinkedIn: Workplace logistics and communication
- LinkedIn: Planning onsite logistics

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Logistics Management**

Course Code: **22MBADSE224**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Understand the fundamental concepts of logistics management.
- Develop understanding the demand and supply relationship.
- Construct the importance of modes, decisions and measures of transportation.
- Analyze the cost & performance relationship in logistics
- Develop understanding of cross functional drivers in effective logistics management

### **Course Outcomes:**

At the end of the course, learners will be able to:

CO 1	Develop the knowledge on fundamental concepts of logistics management
CO 2	Appraise the demand and supply relationship with network concepts
CO 3	Analyze the modes, decisions and measures of transportation.
CO 4	Develop insights into cost & performance relationship in logistics
CO 5	Examine role of cross functional drivers in effective logistics management

### **Course Contents:**

#### **Module 1: Logistics Management- Key activities**

**9 Hours**

Introduction to logistics, relationship with SCM, types- inbound, outbound & reverse logistics, drivers & barriers, creating & delivering value to customers, demand forecasting & planning, Facility location & analysis, product and process design, inventory management, material handling, picking, packaging, warehousing, transportation & IT functions.

#### **Module 2: Planning demand & supply and network**

**9 Hours**

Demand forecasting- methods, errors & adaptive forecasting models, aggregate planning – strategies and measures, managing supply. Network design & decisions, factors influencing network planning, framework for network design decisions, facility & capacity allocation, optimization models, role of network in E-business distributions, current trends.

#### **Module 3: Transportation**

**9 Hours**

Modes & intermodal transportation and performance characteristics, transport network design, transportation decisions, factors influencing transportation cost & pricing, trade-off and responsiveness, tailored transportation, trends in transport integration, risks & challenges.

#### **Module 4: Logistic cost & Measuring performance**

**9 Hours**

Different types of costs involved in logistics, logistic cost analysis, TCA – total cost analysis, ABC- activity based costing, profit analysis & ROI. Measuring logistic performance, factors & indicators, measurement & analysis, SCOR- supply chain operations reference model, improving performance to efficiency.

**Learning Outcome:** Analyze & measure the efficiency of logistics through appropriate performance metric system.

**Module 5: Cross-Functional drivers in logistics****9 Hours**

Sourcing – definition, types, drivers and advantage of sourcing, supplier selection and management processes, credentialing and collaboration, trending practices in sourcing. Pricing, factors involved in logistic pricing. Role of IT in logistics – VMI, SRM, ISCM & CRM technologies & role of IT in integration of logistics and supply chain.

**Learning Outcome:** Understand the importance of cross functional drivers and their influence in logistics and SCM.

**\*Self-learning topics are subject testing**

**Basic Texts**

1. Sunil Chopra, Peter Meindl, Supply Chain Management, Pearson Education, India.

**Reference Books**

1. Coyley, Langley, Novack and Gibson (nd). *Managing Supply Chains - A Logistics Approach*. Cengage Learning
2. Burt, Dobbler, Starling, *World Class Supply Management*, TMH.
3. Donald J Bowersox, David J Closs, *Logistical Management*, TMH 4.
4. Pierre David, "International Logistics", Biztantra.

**Other Reading Materials**

Website: [https://blog.feedspot.com/warehouse\\_blogs](https://blog.feedspot.com/warehouse_blogs)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**SYSTEMS AND OPERATIONS MANAGEMENT  
DISCIPLINE SPECIFIC ELECTIVES  
SEMESTER – II**

## Course Title: **Plant Design and Layout**

Course Code: **22MBADSE225**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Get the basics of process layout & product layout.
- Get the idea about the material handling systems.
- Learn about the different type's material handling methods, paths equipment's and functions
- To understand significance of transportation in logistics management.
- To know road ways method and future of road ways.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Able to get the basics of process layout & product layout
CO 2	Able to get the idea about the material handling systems
CO 3	Able to know about the different types of material handling methods, paths, equipment and functions
CO 4	Summarize the knowledge of materials handling techniques and use of these concepts for today's business decision making
CO 5	Examine the different Materials handling equipment's maintenance methods

### **Course Contents:**

#### **Module-1 Introduction**

**10 Hours**

Introduction- Classification of Layout, Advantages and Limitations of different layouts, Layout design procedures, Overview of the plant layout. Process layout & Product layout: Selection, specification, Implementation and follow up, comparison of product and process layout.

#### **Module 2 Plant layout.**

**8 Hours**

Heuristics for Plant layout – ALDEP, CORELAP, CRAFT, Group Layout, Fixed position layout- Quadratic assignment model. Branch and bound method.

#### **Module-3 materials handling system**

**10 Hours**

Introduction, Material Handling systems, Material Handling principles, Classification of Material Handling Equipment, Relationship of material handling to plant layout..

#### **Module-4 materials handling Methods**

**7 Hours**

Basic Material Handling systems: Selection, Material Handling method- path, Equipment, function oriented systems.

#### **Module-5 Maintenance of materials handling**

**10 Hours**

Methods to minimize cost of material handling- Maintenance of Material Handling Equipment's, Safety in handling Ergonomics of Material Handling equipment. Design, Miscellaneous equipment's

**REFERENCES:**

- Dr. K.C. Arora, Vikas V. Shinde.(2015),Aspects of Materials Handling. Published by USP /Laxmi Publications (P) Ltd., New. Delhi.
- Ray , Siddhartha ,2010,Introduction to material handling // New age
- James AppJames Apple, "Plant Layout & Material Handling", The Ronalt Press Co., New Delhi, 1998
- Production and oprations management / R Panneerselvam /PHI 2018
- R.L. and White (1994)Facility layout and location Frangoise, , J. A McGraw Hill 2nd edition 1994
- Francis, McGinnis and White, (2011)"Facilities Layout & Location -an analytical Approach" Prentice Hall of India Pvt Ltd., New Delhi,
- PB Mahapatra 2010,Operations management //PHI -
- James M. Apple (1991)Plant layout and material handling 3nd edition John, Wiley and sons.
- Richards Muther,(1981) "Practical Plant Layout", McGraw Hill Book Co., New York,
- Ronald H Ballou, 2004 "Business Logistics", Pearson Education, Inc. New Delhi,.
- Tompkins J A & J A White, "Facilities Planning", John Wiley & Sons, Inc. New York, 1984
- le, 1998."Plant Layout & Material Handling", The Ronalt Press Co., New Delhi

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Six Sigma Operations**

Course Code: **22MBADSE226**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Find the importance of Six Sigma
- Describe various Business Projects and Processes.
- Choose the DMAIC Tools of Six Sigma to measure current performance of an existing process.
- Choose the DMADV Tools of Six Sigma to measure customer specifications and need for a new Process.
- Assess the Applications of Six Sigma.

### Course Outcomes (COs):

At the end of the course, learners will be able to

CO1	Defining the jargon of Six Sigma that gives the importance of Six Sigma.
CO2	Identifying the Quality in the Projects and Processes where Six Sigma can be applicable.
CO3	Using DMAIC Model to Measure the current performance of a process.
CO4	Using DMADV Model to Measure the customer specifications and need.
CO5	Prioritizing Knowledge of Six Sigma to Industry.

### Course Contents:

#### Module 1: Introduction to Six Sigma

**11 Hours**

Importance to Quality in Management; Quality in Production / Service Process; Becoming a Customer and Market-Driven Enterprise; **Customer Expectations and Needs\***; History of Six Sigma; Basic Concepts of Six Sigma; Six Sigma in Industry Applications.

#### Module 2: Business Projects and Processes

**7 Hours**

Understanding the Business Projects and Operational Processes; Quality in Production and Service Processes; **Attributes of Good Metrics\***. Role of Six Sigma Team in Projects and Processes.

#### Module 3: DMAIC

**8 Hours**

Measuring current performance of an existing process; Phases of Six Sigma - Define Phase; Measure Phase; Analysis Phase; Improve Phase and Control Phase.

#### Module 4: DMADV

**9 Hours**

Measuring customer specifications and need for a new Process; Phases of Six Sigma - Define Phase; Measure Phase; Analysis Phase; Design Phase and Verify Phase.

#### Module 5: Six Sigma in Business Applications

**10 Hours**

Applications of Six Sigma; **Applications of Six Sigma in Manufacturing Sector\***; Service Sector – Customer-Facing and Non-Customer Facing Sectors.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)



**Basic Texts**

- NA Siddiqui and Abhishek Dwivedi (2016). Introduction to Six Sigma. New Age International Publications.
- Thomas Pyzdek and Paul Keller (2015). Six Sigma Handbook. 4th Edition. McGraw Hill.

**Reference Books:**

- Mohit Sharma (2017). 8 Steps to Problem Solving - Six SIGMA. Amazon.
- Pyzdek (2017). SIX SIGMA HANDBOOK. 4th Edition. Amazon.
- Thomas Pyzdek (2017). The Six Sigma Project Planner: A Step-By-Step Guide to Leading a Six Sigma Project Through DMAIC

**Other reading material**

- E-Book: <https://www.sixsigmacouncil.org/wp-content/uploads/2018/08/Six-Sigma-A-Complete-Step-by-Step-Guide.pdf>
- IA-2: Case-1: Jirasukprasert, P. , Garza-Reyes, J. A. , Kumar, V. and Lim, M. K. (2014) A Six Sigma and DMAIC application for the reduction of defects in a rubber gloves manufacturing process. International Journal of Lean Six Sigma, volume 5 (1): pp.2-21 (Source: <https://core.ac.uk/download/pdf/228145346.pdf>)
- IA-3: Case-2: Kumar Dhiraj1& Kaushish Deepak. (2014). A REVIEW OF SIX SIGMA APPROACH: METHODOLOGY, OBSTACLES AND BENEFITS. G.J. E.D.T.,Vol.3(4). pp.1-5. <https://www.longdom.org/articles/a-review-of-six-sigma-approach-methodology-obstacles-and-benefits.pdf>
- IA-4: (Optional) Case-4: ADMIN (2018). Case Study: Six Sigma for Small Business in a North American manufacturer of plumbing products (SME).Six Sigma Daily. <https://www.sixsigmadaily.com/case-study-six-sigma-small-business/>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Analytics for Logistics and Operations**

Course Code: **22MBADSE227**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objective:**

- Classify optimization and networking models in supply chains.
- Demonstrate the use of Transportation Models and Network Models.
- Demonstrate use of scheduling algorithms in supply chain.
- Demonstrate the use of Inventory Models in supply chain
- Discuss dependent and independent variables in supply chain and validating of models.

**Course Outcomes (COs):**

At the end of the course, learner will be able to:

<b>CO 1</b>	Formulation of operations problem
<b>CO 2</b>	Solve complex supply chain problems -using tool
<b>CO 3</b>	Demonstrate proper utilization of resources scientifically
<b>CO 4</b>	Demonstrate robust decision making capability in operations
<b>CO 5</b>	Apply simulation techniques to Predict demand, supply etc. in Supply Chain

**Course Contents:**

**Module 1: Analytical Models**

**9 Hours**

Supply Chain Analytics and its importance- Classification of analytical models- Mathematical functions. -product mix -using solver

**Module 2: Transportation Models**

**9 Hours**

Transportation Network Models, Minimal Spanning Tree, Shortest Path Algorithms-Maximal Flow Problems (only concepts) - Multimodal transport solution design and optimization- Transshipment in industry - Multistage Transshipment and Transportation Problems -using solver \*Simple examples

**Module 3: Network problem solving**

**9 Hours**

Decision analysis in supply chain- Assignment Model and its use -Traveling Salesman problems using excel solver- Advanced Vehicle Routing Problem.

**Module 4- Building predictive models and scheduling**

**9 Hours**

Simple, linear and multiple regression using excel -scheduling problems concepts and simple problems- using solver

**Module 5: simulation and modeling**

**9 Hours**

Building descriptive models, Simulation models in supply chain, Monte Carlo Simulation, Markov analysis in supply chain, Characterizing the Queuing system- \*Trends  
(\*Self-learning topics are subject to testing)

### Basic Texts

- Hillier and Lieberman (2021), Introduction to Operations Research, 11<sup>th</sup> Edition, McGraw Hill, India.
- Albright, Winston, Zappe (2010) Data Analysis and Decision Making, Cengage Learning, India.

### Reference Books

- Sharma J.K, (2013). Operations research, Macmillan, New Delhi, India.
- Hamdy A Taha, (2014). Operations Research: An Introduction, Prentice Hall, New Delhi India.
- Frederick S. Hillier & Gerald J. Lieberman (2017), Introduction to Operations Research. McGraw-Hill, New Delhi, India.
- Sharma J K (2014), Business Statistics, 4th Edition, Vikas Publishing Pvt Ltd.
- Chopra Sunil (2019), Supply Chain Management: Strategy, Planning, and Operation, 7th Edition, Pearson, India.
- Robertson Peter (2020), Supply Chain Analytics: Using Data to Optimize Supply Processes, Routledge Processes, India.

#### Other reading material

- <https://www.edx.org/course/supply-chain-analytics>
- MIT Center for transportation and Logistics
- Wayne Winston on Analytics (linkedin.com)
- Gabor Belvardi et al (2012) Monte Carlo Simulation Based Performance Analysis of Supply Chains International Journal of Managing Value and Supply Chains (IJMVSC) Vol. 3, No. 2
- <https://www.linkedin.com/learning/inventory-management-foundations/what-is-inventory-management>

#### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Technology and Innovation Management**

Course Code: **22MBADSE228**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Find the importance of Technology Management in Businesses.
- Describe enterprise effectiveness using technology and innovation.
- Choose technology processes and tools.
- Examine fundamental framework for Industrial Automation in an organization.
- Assess automation systems solutions related applications.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Inferring organizational efficiency and technology forecasting methods.
CO2	Interpreting the technology life cycle and financial assessment of business models.
CO3	Using technology processes and tools.
CO4	Examining industrial automation processes and automation tools in business.
CO5	Prioritizing the role of CAD/CAM integration in manufacturing processes.

**Course Contents:**

**Module 1: Technology**

**11 Hours**

Five Best New Technologies for Business; Role of Technology in Competitive Environment; Types of Technology-Product, Process, Tool, Automation; Industry 5.0; Technology forecasting; Disruptive Technologies; Feasibility study; Opportunities for Introduction of Technology; Innovation building with teams; Technology audit; **Technology diffusion and Deployment (\*)**.

**Module 2: Business Model**

**7 Hours**

Technology life cycle; Technology-based Start-ups; Business models innovations; Trends in Agile Business Models.

**Module 3: Technology Transfer and Technology Funding**

**8 Hours**

Technology acquisition; Issues in intellectual property rights. VC funding; Risk in technology management.

**Module 4: Industrial Automation**

**9 Hours**

Role of automation in industries; Benefits of automation, Introduction to automation tools.

**Module 5: Computer Integrated Manufacturing**

**10 Hours**

An introduction to computer-integrated design and manufacturing; Manufacturing process engineering; Computer-aided process planning; CAD/CAM integration. Applications for Industrial Automation and latest trends in technology Management, **Automation for different industries (\*)**.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Melissa Schilling and Ravi Shankar (2019). Strategic Management of Technological Innovation. Sixth Edition. McGraw Hill India. 6 Edition. (TB-1)
- E-Book: <https://pdfroom.com/books/strategic-management-of-technological-innovation-fourth-edition/3Jr2E10E2yv>
- David Ford, Michael Saren, Mike Saren (2001). Managing and Marketing Technology (1st ed.). Thomson Learning.

**Reference Books**

- Scott Shane (2009). The Handbook of Technology and Innovation Management. Wiley-Blackwell.
- E-Book: [https://maryannfeldman.web.unc.edu/wp-content/uploads/sites/1774/2011/11/Contribution-of-Public-Entities\\_2008.pdf](https://maryannfeldman.web.unc.edu/wp-content/uploads/sites/1774/2011/11/Contribution-of-Public-Entities_2008.pdf)
- Fredrik, Betz (2011). Managing Technological Innovation: Competitive Advantage from Change, 3rd Edition, Wiley.
- Haag, Baitzan Phillips (2009). Business driven technology (2nd ed.). Publisher Tata Mcgraw Hill.

**Other reading material**

- **Case-1:**  
[https://www.researchgate.net/publication/311979348\\_Financial\\_Feasibility\\_Analysis\\_of\\_Natura\\_Rab\\_Busines\\_s\\_Case\\_Study](https://www.researchgate.net/publication/311979348_Financial_Feasibility_Analysis_of_Natura_Rab_Busines_s_Case_Study)
- **Case-2:**  
[https://www.researchgate.net/publication/309563391\\_BUSINESS\\_MODEL\\_INNOVATION\\_-\\_A\\_CASE\\_STUDY\\_IN\\_A\\_VALUE\\_NETWORK\\_OPERATOR](https://www.researchgate.net/publication/309563391_BUSINESS_MODEL_INNOVATION_-_A_CASE_STUDY_IN_A_VALUE_NETWORK_OPERATOR)
- **Case-3:**  
[https://www.researchgate.net/publication/282996813\\_A\\_Case\\_Study\\_of\\_a\\_Technology\\_Acquisition\\_and\\_Assimilation\\_Methodology\\_of\\_a\\_Broadcast\\_Company\\_in\\_the\\_Philippines](https://www.researchgate.net/publication/282996813_A_Case_Study_of_a_Technology_Acquisition_and_Assimilation_Methodology_of_a_Broadcast_Company_in_the_Philippines)
- **LinkedIn Learning:**  
<https://www.linkedin.com/learning/lean-technology-strategy-managing-the-innovation-portfolio/the-life-cycle-of-innovation?u=92695330>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**ENTREPRENEURSHIP AND NEW VENTURE CREATION  
(ENVC)  
DISCIPLINE SPECIFIC ELECTIVES  
SEMESTER – II**

Course Name: **Entrepreneurship Theory and Practice**

**Course Code: 22MBADSE229**

**Semester: 2**

**Credits: 3**

**Hours (LTP): 45Hours**

**Course Objectives:**

- Comprehend the theoretical frameworks of entrepreneurship
- Recognize the stages related to the entrepreneurial process
- Explain business model innovation and small business management
- Identify the strategies to improve performance of new business ventures
- compare the successes, opportunities and risks of entrepreneurship

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Gain an insight into the basics of entrepreneurship
CO 2	Discuss the steps and stages in problem identification and market gaps
CO 3	Explain the process of idea selection for new venture creation
CO 4	Illustrate the stages involved on environmental analysis of an entrepreneurship venture
CO 5	Summarize the stages involved in financial planning of an entrepreneurship venture

**Course Contents:**

**Module 1: Entrepreneur and the process**

**8 Hours**

Entrepreneurship: entrepreneur, why entrepreneurs? who is an entrepreneur? theoretical frameworks, Sources of entrepreneurship, resources, financing, innovation, finding, creating, and evaluating early-stage opportunities for value creation, startups, **early-stage enterprises\***, **nascent stage enterprises\***.

**Module 2: Problem Identification**

**10 Hours**

Problems and opportunities, identify problems, test hypotheses, build a unique solution to address the opportunity, recognize an opportunity, **identify gaps in the market\***, market opportunity and business plan.

**Module 3: Ideation Process**

**10 Hours**

Process-Entrepreneurial Orientation (EO), elements, significance, ideas generation, brainstorming, secondary research, idea selection, idea versus opportunity, **prototyping and testing ideas\***, scenarios and business planning, from idea to marketplace, creativity and innovation

**Module 4: Environmental Analysis**

**10 Hours**

Identify the target market, identify a unique selling proposition, **conduct an analysis of the competitive environment\***, build a SWOT analysis, **use Porter's 5 forces model to identify competitive market threats\***, align idea to a gap in the market.

**Module 5: Financial Planning**

**7 Hours**

Building financial statements-cash flow-BEP analysis, balance sheet, profit and loss statement, business incubation and start-ups, aligning activities and illustrating potential trade-offs, **incubation and funding\***, business angels, venture capital, private equity and non-equity based financing-bootstrapping-crowdfunding.

(\* Self-learning topics and are subject to testing)

### Basic Texts

- Roy R. (2011) Entrepreneurship Management, Second edition, Oxford University Press, India.
- Hisrich R., Peters M., & Shepherd, D. (2017), Tenth edition, McGraw-Hill India.

### Reference Books:

- Burns P. (2016). New Venture Creation, Second edition, Macmillan International.
- Sahay A. & Sharma V. (2012). Entrepreneurship and New Venture Creation, Second edition, Excel Books, India.

### Other reading material

- Greene, F. J. (2020). *Entrepreneurship theory and practice*. Red Globe Press.
- Rauch, A. (2020). Opportunities and threats in reviewing entrepreneurship theory and practice.

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course name: **Launching and Managing an Enterprise**

Course code: **22MBADSE230**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Enumerate the steps involved in launching a new venture.
- Examine the legal and financial aspects of launching a new venture.
- Inspect business plans to start a venture.
- Determine the growth drivers in a new venture.
- Outline the strategies to sustain a new venture.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Enumerate the steps involved of launching a new venture.
CO 2	Examine the legal and financial aspects of launching a new venture.
CO 3	Evaluate business plans to start a venture.
CO 4	Determine the growth drivers in a new venture.
CO 5	Outline the strategies to sustain a new venture

**Course Contents:**

**Module 1: Evaluation of opportunities**

**6 Hours**

Evaluation of entrepreneurial opportunities – challenges of new-venture start-ups, pitfalls in selecting new ventures, critical factors in new-venture development\*, why do new ventures fail? Evaluation process.

**Module 2: Pre-requisites of Launch**

**10 Hours**

Entrepreneurship Resources, Identification of legal structures – sole proprietorships, partnerships, corporations, franchising; Legal issues – patents, copyrights, trademarks, bankruptcy, legal regulatory & statutory body in India; Sources of capital – debt vs. equity, venture capital – myths about venture capitalists, objectives of venture capitalists, criteria for evaluating new venture proposals, evaluating venture capitalists; angel financing; bootstrapping\*.

**Module 3: Launch of a New Venture**

**10 Hours**

Business models – types, designing a business model, interpreting and improvising the business model; business plan, steps in setting up business in India, professional advisors, clearance, approvals and NOC, incubation facilities and clusters, pitching – context, importance, types, audience for the pitch, preparation for pitch\*, follow-up\*

**Module 4: Managing a Growing New Enterprise**

**9 Hours**

Stages of growth, culture and organizational climate, approaches to management, entrepreneurial management for the new era\*; Entrepreneurship and Firm Dynamics, evolution of a start-up – evolution modelling, dimensions of maturity, management of small business, questions and issues impacting growth.

**Module 5: Sustaining a new enterprise****10 Hours**

Collaboration in entrepreneurship – types of collaboration, collaboration tenets, approaches to collaboration, downside to collaboration; Networking – myths, sources, stages, good networking practices; Innovation – challenges, innovation ecosystem, managing the innovation process, planning, benefits; Strategic growth routes\*.

**Basic Texts:**

- Shankar, R. (2012). Entrepreneurship Theory and Practice, Second edition, Tata McGraw Hill.
- Timmons, J. A. (1999). New Venture Creation: Entrepreneurship for 21st Century, Fifth edition, Irwin McGraw Hill Education.

**Reference Books:**

- Brad Feld(2012), Startup Communities: Building an Entrepreneurial Ecosystem in Your City
- Rashmi Bansal, “I Have a Dream: The Inspiring Stories of 20 Social Entrepreneurs Who Found New Ways to Solve Old Problems”.
- Collins, J. C., Lazier, W. C. (1992). Beyond Entrepreneurship – Turning your business into an enduring great company, Prentice Hall Publication.
- Davidson, H. (2003). The Committed Enterprise, Butterworth-Heinemann Publication, Elsevier Science.
- Barringer, R.B., & Ireland, D, R. (2016). Entrepreneurship- Successfully launching new ventures. Essex, England: Pearson Education Limited

**Other reading material**

- <https://www.forbes.com/sites/tendayiviki/2017/11/07/how-creating-an-entrepreneurship-function-can-help-sustain-corporate-innovation/#3ce9db7012a6>;
- [https://www.iicie.com/uploads/White-Paper/1463661660SEAANZ\\_WP\\_01\\_2014\\_Mazzarol.pdf](https://www.iicie.com/uploads/White-Paper/1463661660SEAANZ_WP_01_2014_Mazzarol.pdf);

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course name: **Project Formulation and Feasibility Analysis**

Course Code: **22MBADSE231**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Discuss the steps involved in the project formulation for a new business.
- Assess the methods of economic analysis for a new project venture.
- Examine methods of environmental assessment and audit of a new business.
- Demonstrate a project feasibility analysis for a new venture
- Write project reports that present key parameters and terms of reference of a project.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Examine the need and scope of project formulation for a new business venture
CO 2	Demonstrate the economic feasibility of a new venture
CO 3	Describe methods of economic analysis in venture creation
CO 4	Apprise the environmental impact and assessment of an entrepreneurial venture
CO 5	Propose a feasibility analysis for a new venture

**Course Contents:**

**Module 1: Project Formulation**

**6 Hours**

Project – meaning, importance, characteristics, forms of project organization, project life-cycle, idea generation and screening, **project failure\***.

**Module 2: Economic Analysis**

**10 Hours**

Economic analysis, cash flow diagrams, time value of money, development of cash flow diagrams, methods of economic valuation-equivalent uniform-annual cost method- present worth of cost method- equivalent uniform annual net return method, **net present value method\***, benefit cost ratio method, rate of return method.

**Module 3: Environmental Audit**

**10 Hours**

Environmental impact assessment-methods-objectives-environmental impact-safety and capacity impacts, **environmental impact statement\***, environment audit.

**Module 4: Feasibility Analysis**

**10 Hours**

Product/service feasibility analysis-desirability and demand, industry/target market feasibility analysis, organizational feasibility analysis, resource sufficiency, financial feasibility analysis– total start-up cash needed, financial performance of similar businesses, **financial feasibility analysis template\***.

**Module 5: Project Report Preparation**

**9 Hours**

Preparation of preliminary project Report (PPR)-goals and objectives-activities involved-outputs of the project-outcome of the project-total financial outlay-clearances-**\*qualitative and quantitative target indicators**, preparation of a detailed project report (DPR)-guidelines- overview-vision-objectives-goal-project initiator-project implementation agency-project implementation location-project duration- total project cost- timelines.

**Basic Texts:**

- Chandra, P (2014). Project Planning: Analysis, Selection, Implementation and Review, 8th edition, McGraw Hill.
- Gatti, S (2017). Project Finance in Theory and Practice, Academic Press, Elsevier, USA.
- Gray, Larson, Desai (2010). Project Management – the managerial process, 4th Edition, Tata McGraw Hill India Private Ltd.

**Reference Books:**

- James P Lewis (2005). Project Planning, Scheduling& Control (3rd Edition), Tata McGraw Hill India Pvt Ltd.
- Narendra Singh (2015). Project Management and Control (6th edition), Himalaya Publishing House.

**Other reading material:**

- [www.pmi.org](http://www.pmi.org)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Green Innovation & Entrepreneurship**

Course Code: **22MBADSE232**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Gain a topical overview of scholarly and policy discussions about sustainability entrepreneurship.
- Distinguish sustainability entrepreneurship from commercial entrepreneurship.
- Critically analyze the social and ecological sustainability of current business practices.
- Identify practical challenges and opportunities in developing a sustainable business idea.
- Applying the critical thinking approach for solving sustainable business issues.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Understand the key elements of sustainable & green entrepreneurship
CO 2	Discuss the various sustainable green models and its implication in generating business ideas
CO 3	Understand the environmental problems and suggesting alternative solutions.
CO 4	Understand the sources of capital and discuss the capital generation methods for green entrepreneurial ideas.
CO 5	Discuss the adaption strategies and understand its real life implications.

### Course Contents:

#### Module 1: Foundations of Green Entrepreneurship

**8 Hours**

Defining Sustainable & green entrepreneurship, key elements, Overview to key Concepts and Practices, Concepts of green economy.

#### Module 2: Green Entrepreneurial Strategy and Business Models

**9 Hours**

Overview of models, policy and programmes, entrepreneurial strategies for startups to discuss the various sustainable models and its implication in generating business ideas.

#### Module 3: Global Environmental Change and Marginal Livelihood

**10 Hours**

Natural Resource Management; Common Pool Resources and Rural Livelihoods; Climate Change and Livelihoods – Agriculture, Fisheries and Forests. Climate Change and Health.

#### Module 4: Livelihood Assets

**9 Hours**

Natural, Physical, Human, Financial, Social and Cultural Capital; Access to Resources; Structures and Processes in deciding access to resources – State, Market and the Civil Society.

#### Module 5: Livelihood Adaptation Strategies

**9 Hours**

Resource Valuation, iterations and Livelihood Strategies; Mobility, Storage, Communal Pooling, Livelihood Diversification, Market Exchange; Planned and Autonomous Adaptation Strategies; Role of State and NGOs. Local Knowledge Systems in Livelihood Adaptation. Vulnerability Mapping.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**References:**

- Jones, G. (2021). Renewing the Relevance of IB: Can Some History Help?. In The Multiple Dimensions of Institutional Complexity in International Business Research. Emerald Publishing Limited.
- Dey,A.K.(2021).SustainableEntrepreneurship:InnovationandTransformation.Bloomsbury Publishing.References:
- Savitz, A. (2013). The triple bottom line: how today's best-run companies are achieving economic, social and environmental success-and how you can too. John Wiley & Sons.
- Esty, D. C., & Winston, A. (2009). Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage. John Wiley & Sons.
- Hawken, P., Lovins, A. B., & Lovins, L. H. (2013). Natural capitalism: The next industrial revolution. Routledge.
- Henderson, H., & Sethi, S. (2006). Ethical markets: Growing the green economy. Chelsea Green Publishing.
- Brown, L. R. (2003). Plan B: Rescuing a planet under stress and a civilization in trouble. WW Norton & Company.
- McBride, E. (2010). The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems.
- Ratten, V., Jones, P., Braga, V., & Marques, C. S. (2019). Sustainable entrepreneurship: The role of collaboration in the global economy. In Sustainable Entrepreneurship (pp. 1-7). Springer, Cham.

**Other reading material:**

- <https://www.linkedin.com/learning/entrepreneurship-finding-and-testing-your-business-idea/what-you-should-know-before-watching-this-course?u=92695330>
- <https://www.linkedin.com/learning/leading-effectively/welcome?u=92695330>
- <https://wundef.com/what-is-sustainable-entrepreneurship/>
- <https://smallbiztrends.com/2016/10/50-green-business-ideas-startup-entrepreneurs.html>
- <https://ideamensch.com/26-green-entrepreneurs/>
- <https://www.oecd.org/innovation/inno/49537036.pdf>
- <https://www.ignfa.gov.in/document/biodiversity-cell-ntfp-related-issues7.pdf>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**AVIATION MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – II**

Course Title: **Aviation & Aerospace Business Models**

Course Code: **22MBADSE233**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Recognise the fundamental concepts of business model design
- Adapt business models to achieve profitability and sustainability
- Recognise the pitfalls in business models and adapt to new trends
- Appraise the effectiveness of the Business Model canvas
- Design new business model for airlines and airports

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Use the fundamental concepts of business models for profitand sustainability
CO 2	Design new business model development and adoption
CO 3	Test and analyse new business models that are transformingentire industries
CO 4	Evaluate effectiveness and use of the Business Model Canvas
CO 5	Synthesize knowledge to create a new Business Model

**Course Contents:**

**Module 1: What is a Business Model?**

**9 Hours**

The purpose of a business model; Examine various elements of business model design; Exploring the new business model development and adoption; Construct key components of business model archetypes and the associated logic; to make money with the airline using generic and most common set of business models available.

**Module 2: Profit models and unit economics**

**9 Hours**

Platform-based business models; The various components of sharing-economy models; Methods of business model transformation; Operational models; To discuss the various new business models that are transforming entire industries such as retail and transportation; Unit economics look at the direct revenues and cost associated with the basic element of a company's business model. Pitfalls of South West Airline model adopted by Deccan and other low cost Airlines; Technology Models (IT-Infra, standards, e.g. Server farms, security model) Pitfalls of Airport Models.

**Module 3: Beyond-Profit Business Models**

**9 Hours**

Third-Party Funded Models (Oxfam etc.); Triple Bottom Line Business Models (Social and Environmental cost and benefits); Free as a Business Model (Red-Hat, Skype.); Open Business Models (R & D)



**Module 4: The Business Model Canvas****9 Hours**

A shared language for describing and changing business models; - The 9 building blocks: - Customer Segment, Value proposition, Channels, Customer Relationships, Revenue Streams, Key resources, Key activities, Key Partnerships and cost structure; The business Model Canvas Template; Digital Business Models

**Module 5: Use of The Business Model Canvas Template – Aviation****9 Hours**

Alexander Osterwalder’s Business Model Ontology; Nine segments which form the building blocks for the business model in a nice one-page canvas.

**Basic Texts**

- Osterwalder, Alexander and Pigneur Yves, Business Model Generation, 2013, John Wiley & Sons Inc, Hoboken, New Jersey.
- Writz, Bernd, W., (2011). Business Model Management

**Reference Books:**

- Writz, Bernd, W., (2019). Digital Business Models
- Bock, Adam., (2017). The Business Model Book- Design, Build and Adapt Business ideas that thrive

**Other reading material**

- Kelshikar, Arthi., (2018). How India works- Making sense of a complex corporate culture

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Inflight Services**

Course Code: **22MBADSE234**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives**

- Examine and develop key skills of special handling of passengers.
- Facilitate an in-depth understanding of inflight services of airlines
- Analyze the role of in-flight services on customer satisfaction
- Evaluate the safety and emergency protocols handled on-board an aircraft

**Course Outcomes (COs):**

At the end of the course, the learner will be able:

CO 1	Manage efficiently the inflight cabin infrastructure and design
CO 2	Deploy the cabin crew and examine their job responsibilities
CO 3	Manage the numerous processes involved in inflight catering and services
CO 4	Manage the procedures followed in inflight safety and inflight emergencies
CO 5	Handle unruly passengers on board an aircraft

**Course Contents:**

**Module 1: Inflight Cabin infrastructure and design**

**7 Hours**

Types of Aircraft, different types of cabin, above wing and below wing operations, passenger cabin layout, communication among crew

**Module 2: Cabin Crew and Job Responsibilities**

**9 Hours**

Cabin crew- responsibilities of cabin crew, minimum requirement of cabin crew, senior cabin crew, Job responsibilities, line check cabin crew, procedure to be followed while cabin crew at base for duty, crew, cabin crew competency card, responsibilities of cabin crew safety training manager, CRM training method, safety and emergency procedures.

**Module 3: Inflight Catering and Services**

**10 Hours**

Airline Catering, Food Service in the Airline Industry, Caterers, Galleys & Equipment Familiarization, The Galley, Pre-Flight Galley Check, Delivery and Loading of Catering Services, Security Procedures, Types and Codes for Special Meals • Service Types, Types of Meal Service, Food and Service Hygiene, On-board merchandise sales and importance of ancillary revenue to the airline.

**Module 4: Inflight Safety and Emergency procedures**

**12 Hours**

Accidents & Survivability, Routine Preparations, Evacuation & Emergency Procedure, Unplanned or Planned Evacuations, Emergency Landings, Turbulence, Emergency Equipment, Types of Emergency Equipment, Types of Evacuation Equipment & Use, Firefighting Equipment, Emergency Equipment or Ditching, responding to Fires,

Classifications of Fire, Decompression, The Effect of Decompression on the Flight Crew: TUC or Time of Useful Consciousness

**Module 5: Inflight Customer Service**

**7 Hours**

Special passenger handling, special requests on-board, handling unruly passengers, on-board customer service, Medical Emergencies, Business/ First Class service

**Learning Outcome:** To demonstrate the special handling of passengers on board an aircraft

**Basic Texts**

- IATA., (2017). Cabin Operations Safety- Best practices guide, 3rd Edition.

**Reference Books:**

- Law, Collin., (2018). Introduction to Airline Inflight service
- Cook, Gerald., (2017). Airline Operations and Management

**Other reading material**

Law, Collin., (2019). A flight attendant’s essential guide

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Aviation Law and Regulatory Framework**

Course Code: **22MBADSE235**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Recognise the various Indian civil aviation laws in India
- Appreciate the importance of International laws and its impact on civil aviation in India
- Recognise the various annexures laid down by ICAO
- Appraise the various consumer protection laws in India
- Recognise and appreciate the various act pertaining to civil aviation in India

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Identify the various laws pertaining to Indian Air Laws
CO 2	Discern the importance of International Laws in Aviation
CO 3	Appraise the role of ICAO in framing regulations in Civil Aviation
CO 4	Conversant with the conventions of different countries and the liability towards passengers
CO 5	Reflect upon suitable consumer laws in aviation scenarios

### **Course Contents:**

#### **Module1: Indian Air Laws and International Conventions in Aviation/Relevant Legislations in Indian Context** **9 Hours**

Indian Air Laws - Aircraft Act 1934 & Rules; Air Corporation Act, 1956; Carriage by Air Act, 1972; Anti Hijacking and other Security Acts; AAI Act 1995, Various Conventions - Geneva Convention, Hague Convention, Chicago Convention, etc; Anti Hijacking Conventions, Intellectual Property Rights in the context of aviation; Liability towards passengers/cargo-airlines, airport operator; International Conventions in Aviation

#### **Module 2: Consumer Laws in Aviation, Introduction to Regulatory Framework** **9 Hours**

Compensation process; Customer Protection; Consumer Courts, Introduction to ICAO and its functions and CAO Annexures; Functions of DGCA and BCAS India; Airport Economic Regulatory Authority India

#### **Module3: Annexures pertaining to Licensing, Rules of Air and Meteorological Services, Annexures pertaining to Safety** **9 Hours**

Annex 01: Personnel Licensing; Annex 02: Rules of the Air; Annex 03: Meteorological services. Annex 06: Operation of Aircraft, manuals, flight crew responsibilities, duty time; Annex 08: Certificate of airworthiness, aircraft design standards, performance standards for Machine / equipment; Annex 10: Aeronautical telecommunication services, communication, navigation and surveillance; Annex 11: Air traffic services, separation standards, expediting traffic, providing advisory and Alert services Air Traffic Services; Annex 14: Aerodrome standards, Airspace structure, surfaces, markings, power supplies.

**Module 4: Annexures pertaining to Units of Measurement and aircraft nationality****9 Hours**

Annex 05: Measurement units used in aviation; Annex 07: Registration of aircraft procedures, jurisdiction Annex 04: Various types of aeronautical maps, scales and purposes; Annex 12: Search and rescue operations, procedures, and jurisdiction; Annex 13: Air accident and incident investigation, procedures, jurisdiction, follow-up; Annex 15: Aeronautical information system, AIP, NOTAM, AIRAC

**Module 5: Annexures pertaining to charts, search, investigation, information service, Charts, search investigation, information service. Security, Dangerous Air Cargo, Safety culture****9 Hours**

Annex 09: Facilitation focus, technology use; Annex 16: Effects of flights on environment, balancing; flight safety and environment protection. Annex 17: Aviation security, threats, and responsibilities of the States; Annex 18: Dangerous air cargo ICAO, classifications, and precautions in air carriage; Annex 19: Holistic safety view, State responsibilities, safety culture

**Basic Texts**

- Speciale, Raymond., (2011). Fundamentals of Aviation Law

**Reference Books:**

- Milde Micheal, International Air Law and ICAO, 2008
- Havel and Sanchez, The Principles and Practices of International Air Law, 2014

**Other reading material**

- ICAO Annexures

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Aviation Project Management**

Course Code: **22MBADSE236**

Semester: **2**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives**

- Recognize the several project management activities in the aviation sector
- Understand the various tools and techniques in aviation project management
- Recognize the need and benefits project management in Aviation
- Analyze the project implications in the aviation and aerospace sector

### **Course Outcomes (COs):**

At the end of the course, the learner will be able to:

CO 1	Understand the need for project management and planning in aviation
CO 2	Analyze project cost estimation
CO 3	Evaluate Project organization and the Work Breakdown Structure
CO 4	Evaluate the tools for Aviation Project scheduling
CO 5	Apply the concept of Scheduling for Project Resources

### **Course Contents:**

#### **Module 1: Introduction and Defining the Project Task**

**9 Hours**

Types of Projects, Project Life Cycles and life histories; Factors for assessing Project success or failure; Primary Objectives and their relationship, Project success or failure beyond the Primary Objectives, Benefits realization; Projects which are impossible to define accurately; Checklists, Defining the Project scope, Contractor's strategy; Specifications for Internally Funded development Projects; Project specification and Version Control.

#### **Module 2: Estimating the Project Costs**

**12 Hours**

Cost elements; Accuracy of Cost estimates, Standard estimating tables; Compiling the Task list; Documenting the Cost estimates, Departmental estimates, Accuracy of estimates; Estimates for material & equipment costs, below-the-line costs; Foreign currencies; Reviewing the Cost estimates

#### **Module 3: Organizing the Project and Compiling the Work Breakdown Structure**

**6 Hours**

Matrix organizations, Project team organizations, Team or Matrix: which organization is best? Hybrid organizations; Contract Matrix organizations, Joint venture projects; Project manager, Project support groups; The Work Breakdown Structure (WBS) - concept with examples; Coding systems for WBS; Benefits of a logical coding system; Choosing a coding system

#### **Module 4: Planning the Aviation Project Timescale and Scheduling Project Resources**

**9 Hours**

Introduction to Project planning, Bar charts, Critical Path Networks; Different Network notation systems; Critical Path networks using Arrow diagrams, Precedence diagrams; Planning Aircraft component project by Critical Path network; Level of detail in Network diagrams; Milestones, Predicted timescales, Resource constraints

Introduction to Resource scheduling, Project terminology; Conventions and priority rules for scheduling Project resources; Data errors; Scheduling cash flows; Scheduling the resources for all Projects in an organization; Practical hints on Resource scheduling

**Module 5: Implementing the Plan and Managing Costs**

**9 Hours**

Project authorization and preliminary activities; Physical preparations, organization, and Getting work started; Detailed plans and work instructions; Managing progress - Progress monitoring, schedule updating, Progress meetings and Project progress reports; Principles of Cost control, Controlling Variable and Fixed (overhead) costs; Cost management - Checklist of factors, Additional Cost control factors and Total cost approach; Setting and resetting Cost budgets, Cost collection methods; Audits and fraud prevention measures

**Basic Texts**

- Aviation Project Management by Triant Flouris and Dennis Lock Ashgate Publishing Limited

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

# **SEMESTER - III**



**CORE COURSE**  
**SEMESTER III**

Course Title: **Global Business Management**

Course Code: **22MBACC301**

Semester: **3**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

1. Comprehend the global economic, political, cultural, and social context in which businesses operate.
2. Evaluate functions of an international firm for their unique roles.
3. Examine the strategies and organisational frameworks of international business.
4. Learn how to create and carry out plans, strategies, and tactics for international business operations.
5. Wide and fundamental knowledge of the management, strategies, and global business environment.

**Course Outcomes**

CO 1	Understand the international business terms and concepts
CO 2	Analyse the role of international integrations in a dynamic business operation
CO 3	Examine the impact of international trade in global economic growth
CO 4	Evaluate the recent trends in global business

**Course Contents:**

**Module 1: Globalization**

**9 Hours**

**Skill Set: Analytical, Decision making, competitive and ambitious**

Globalization: Meaning - Features, Stages of Internationalization, Modes of entry into International, Globalization -Advantages and Disadvantages; Methods and Essential Conditions for Globalization. Definitions - Distinction between Indian Companies -MNC -Global Companies and TNC; Merits and Demerits of MNCs to host and home countries, **\*International Business Environment.**

**Module 2: International Integrations**

**7 hours**

**Skill Set: Analytical & Compliance with company policies**

Regional integration and trade blocs –Economic integration –European union – regional groupings – integration of developing countries – ASEAN, SAARC, SAPTA, International Economic institutions – International Monetary Funds (IMF) – World Bank, Asian Development Bank; Global Trade Institutions-World Trade Organization (WTO)-**\*International Labour Organization (ILO).**

**Module 3: International Trade Operations**

**7 Hours**

**Skill Set: International Trade Compliance and**

Export & Import and Countertrade; Special Economic Zones (SEZs), Export Promotion Zones (EPZs) ; Intraport, Global Production, **\*Outsourcing and Logistics**

**Module 4: Trends in Global Business**

**7 Hours**

Latest trends in FDI investment in the Global scenario, Reverse globalization, Cross-border mergers, shifts in production and labor markets, **\*rapid advances in technology, and climate change.**

**Basic Texts:**

1. Joshi, R. M. (2012), International Business, Oxford Publications, India
2. K. Aswathappa (2020) International Business, Tata McGraw Hill
3. Cherunilam, F. (2020); International Business-Text and Cases, Prentice Hall of India

**Reference Books:**

1. Hill, C., Cronk, T., & Wickramasekera, R. (2011). Global Business Today: An Asia Pacific Perspective. 2nd Edition. McGraw-Hill
2. Cavusgil, S. T., Knight, G., Riesenberger, J. R., Rammal, H. G., & Rose, E. L. (2014). *International business*. Pearson Australia.
3. Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2013). *International business: Environments and operations*. Pearson.
4. HILL Charles W.L. (2018), International business: Competing in the global market place. *Strategic Direction*.

**Other Reading material**

1. Szkudlarek, B., Osland, J. S., Nardon, L., & Zander, L. (2020). Communication and culture in international business—Moving the field forward. *Journal of World Business*, 55(6), 101126.
2. Massand, A. (2021). Bank foreign direct investment in indian economy: A theoretical review. *Indian Journal of Economics and Development*, 17(1), 182-188.
3. Ghauri, P., Strange, R., & Cooke, F. L. (2021). Research on international business: The new realities. *International Business Review*, 30(2), 101794.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Operations Management**

Course Code: **22MBACC302**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Describe concepts of operations management.
- Identify the processes and techniques in capacity management and layout planning.
- Analyze the role of the concepts of production planning and materials and inventory in operations
- Describe the phases of the process of project management.
- Examine role of risk analysis and project control in project management.

### Course Outcomes:

At the end of the course, learners will be able to:

CO 1	Understand the concepts and tools of operations management.
CO 2	Choose appropriate models in forecasting based upon demand and supply of organization.
CO 3	Develop models and frameworks in capacity planning, production planning and facility management
CO 4	Explain the steps and process involved in project management.
CO 5	Develop insights in risk analysis and control processes of projects.

### Course Contents:

#### **Module 1 : Introduction to Operations Management**

**8 Hours**

Operations Management: definition-nature and context of operations management, introduction to Operations strategy, productivity & performance measurement in operations, decision making-Tradeoffs and gaining competitive edge in Operations management- Operations as a key functional area in an organization, prioritization, updating the techniques used by competitors, training- Concept of Operations Globally- **Trends in Operations Management\***

#### **Module2: Facility, Capacity and Quality Management**

**10 Hours**

Forecasting and types, its use in Operations Management-Process, Different types- Manufacturing Process and Service Process, Product & Process matrix, Introduction to Facility & Capacity planning- Facility location and Facility layout: Designing product and process layouts & types. Capacity Management in Operations, Capacity Planning Concepts, Planning Service Capacity Aggregate Sales and Operations Planning: Overview Of Sales And Operations Planning Activities, The Aggregate Operations Plan-. Concepts of Quality Management-TQM and Six Sigma-**\*Trends in Quality Management**

#### **Module 3: Production Planning& Control& Material Management**

**9 Hours**

Production Planning Functions –Routing, Scheduling- Production, Control Functions & Benefits of Production Planning and Control-Material Management-Inventory Control-Models of inventory Management-Material requirement Planning-

## Integration of materials and other resources with operations strategy\*

(\*These topics are categorized as 'Self-learning' topics are subjected to testing).

### Module 4: Introduction to Project Management

9 Hours

Introduction to Project Management-Project life cycle understanding-Forms of project organization, project planning, project control, human aspects of project management, prerequisites for successful project implementation- **Generation of ideas\***, monitoring the environment, corporate appraisal, tools for identifying investment opportunities, scouting for project ideas, preliminary screening, project rating index, sources of positive NPV

### Module 5: Implementation of Project

9 Hours

Financing of Projects, Implementation and Budgetary Control -Estimation of risk and its sensitivity analysis, Scenario analysis, Break even analysis, - managing risk, project selection under risk. **Constraints In Project Management** \*- Methods of ranking. Quality definition, Stakeholder identification, analysis and communication planning- Project closure, Project Control

## Self-learning topics are subjected to testing

### Basic Texts

- F. Robert Jacobs; Richard B. Chase (2015) Operations and Supply Chain Management,15<sup>th</sup> Edition: McGraw-HillEducation
- Ravi Shankar, F. Robert Jacobs (2018).Operations and Supply Chain Management,15<sup>th</sup> Edition :McGraw-Hill Education
- [Krajewski/Srivastava \(2015\) .Operations Management,11th Edition: Pearson](#)
- Mahadevan B(2015) Operations Management for Competitive Advantage, 3<sup>RD</sup> edition, Pearson India
- N. Chary. (2013). Production & Operations Management,5th edition: Mc Graw Hill India Private Limited.
  
- Jay, H., & Barry, R. (2011). Operations management. New Delhi: Pearson Education Publications.
- Bell, Daniel (1973). [The coming of the post-industrial society: a venture in social forecasting](#). New York: BasicBooks. [ISBN 978-0465012817](#).
- L. V. Kantorovich, Mathematical Methods of Organizing and Planning Production, Management Science 1960[English translation from 1939]
- Love, John F. (1986). [McDonald's: Behind the Arches](#). New York: Bantam. [ISBN 0-553-34759-4](#).
- Birla, Madan (2007). FedEx Delivers. New York: Wiley.
- Fishman, Charles (2006). Wal-Mart Effect. New York: Penquin Boo

**Other References:**

- <https://managementhelp.org/quality/index.htm>
- Goldratt Eliyahu M.(2004). The goal: a process of ongoing improvement.
- Goldratt Eliyahu M.(1999), Theory of Constraints.
- Journal of Operations Management (Elsevier)(for general reading of applications).
- LinkedIn: Forecasting demand
- LinkedIn: Site and facility design
- LinkedIn: Location and site design
- LinkedIn: Inventory management
- LinkedIn: Controlling Inventory
- LinkedIn: Stay Lean with Kanban

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks Assessment 1 : 10 Marks Assessment 2 : 10 Marks Assessment 3 : 10 Marks Block End Test : 10 Marks	50 Marks	50 Marks	100 Marks

## Course Title: Business Research Methods

Course Code: **22MBACC303**

Semester: **3**

Credits: **2**

Hours (LTP): **30 Hours**

### Course Objectives

- Familiarise the students in understanding the need of Research.
- Train the students in formulating the research plan.
- Train the students in creating the questionnaire for different situations.
- Familiarise the students in applying the hypothesis and solving them.

### Course Outcomes

**At the end of the course, learners will be able to:**

CO1	Demonstrate the ability of Research Design process
CO2	Discriminate the various qualitative research methods
CO3	Assess the Business situation using quantitative research
CO4	Construct the hypotheses enabling data driven decisions

### Course Contents

#### Module 1: Research design and process

**4 Hours**

An Introduction and need for Business Research, Research Process, Research Design (Exploratory, Descriptive, and Causal); Types: Qualitative and Quantitative

#### Module 2: Qualitative research methods

**6 Hours**

Need for Qualitative Research, Qualitative Research Tools: Focus Group Discussions, In-Depth Interviews, Categorical Data, Scaling Techniques, (Levels and Types), Scale Evaluation – Measurement accuracy, Reliability and Validity in measurement, Review of Sampling Methods – Non-Random Sampling Methods (Convenience, Judgement, Quota and Snowball sampling. Sampling and non-sampling errors)

#### Module 3: Quantitative research methods

**8 Hours**

Need for Quantitative Research, Primary and Secondary Data, Quantitative Research Tools-Questionnaire Design, Secondary Data Sources, Review of Sampling Methods - Random Sampling Methods (SRS, Stratified, Systematic & Cluster sampling)

#### Module 4: Hypothesis Testing & Case analysis

**12 Hours**

Review of Data Presentation – Graphs, Charts and Tables, Testing of Hypothesis-Z Test; Testing of Hypothesis: t-test (Independent and Paired samples), F-Test: One-way and Two-way ANOVA, Chi-Square Test: Non - Parametric tests - Categorical Data (Independence of Attributes), Quantitative Data (Goodness of Fit), Technology usage for Data Analysis and Hypothesis Testing, Review of report writing.

### Basic Texts

- Zikmund, W. G., Carr, J. C., & Griffin, M. (2013). Business Research Methods, Cengage Learning.
- Bell, E., Bryman, A., & Harley, B. (2018). Business research methods. Oxford university press.
- Naval Bajpai, Business Research Methods, Pearson Education (2017)

## Reference Books

- Levin & Rubin (1998), Statistics for Management, 7<sup>th</sup> edition, Pearson
- Anderson, Sweeny & Williams (2018) Statistics for Business & Economics, Revised 13<sup>th</sup> edition, Cengage Learning
- Black Ken, Business Statistics for Contemporary Decision making, 9<sup>th</sup> edition, Wiley
- David Levine, David Stephan, Kathryn Szabat, “Statistics for Managers Using Microsoft Excel”, PHI learning Private Ltd. (2016)

## Other reading material

- <https://1lib.in/book/5533517/99d76a>
- <https://www.linkedin.com/learning/excel-economic-analysis-and-data-analytics/welcome?u=92695330>
- Case Radio Mirchi Link:  
<https://www.emerald.com/insight/content/doi/10.1108/CASE.IIMA.2020.000095/full/pdf?title=radio-mirchi-marketing-strategy-for-the-bangalore-market>
- Article Link: <https://pharmaceutical-journal.com/article/ld/how-to-write-a-research-article-to-submit-for-publication>
- Convenient Sampling Link: [https://www.researchgate.net/publication/340935263\\_Non-Probability\\_Sampling\\_Survey\\_Methods](https://www.researchgate.net/publication/340935263_Non-Probability_Sampling_Survey_Methods)
- Pilot Study Link:  
<https://pilotfeasibilitystudies.biomedcentral.com/articles/10.1186/s40814-019-0411-z>
- Case Link:  
[https://www.researchgate.net/publication/256108428\\_Writing\\_for\\_publication\\_Case\\_studies](https://www.researchgate.net/publication/256108428_Writing_for_publication_Case_studies)
- Project Link:  
[https://www.researchgate.net/publication/349573214\\_Format\\_Content\\_of\\_Academic\\_Research\\_Project\\_Report](https://www.researchgate.net/publication/349573214_Format_Content_of_Academic_Research_Project_Report)
- <https://www.worldometers.info> FOR REALTIME DATA

## Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



**FINANCE**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**

## Course Title: **Project Appraisal and Finance**

Course Code: **22MBADSE309**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Discussing the basics of project finance and associated risks
- Introducing students to assessing of various sources of project finance
- Explaining the components determining the overall feasibility of a project
- Equipping the students to forecast the financial statements
- Equipping the students to assess projects using various tools

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Recognise the risks associated with projects
CO 2	Evaluate the sources of project finance
CO 3	Schedule a framework for ensuring the overall feasibility of the project
CO 4	Distinguish the projects using financial statement forecasting
CO 5	Assess the project using risk management tools

### **Course Contents:**

#### **Module 1: Introduction and Overview**

**5 Hours**

Evolution of project finance – Project types - Need for Project finance - Drivers deciding quantum of project finance, Facets of Project Analysis, Identifying Project Risks- Construction risk, operational risk, supply risk, off-take risk, repayment risk, political risk, currency risk; Project Rating Index

#### **Module 2: Financing of Projects**

**10 Hours**

Funding Sources – Long and short-term sources, mezzanine finance, equity, quasi-equity, debts - Local financing, Working Capital advances, Private equity funds, External commercial borrowings- Export Credit Agencies and Development Banks - Multilateral development finance institutions, Viability Gap funding. Appraisal by Financial Institutions. Financing Infrastructure Projects-Project Parties-Contracts, Power, Telecommunications, PPP model, Concession Arrangements- Recommendations of the Committee.

#### **Module 3: Financial Projections**

**10 Hours**

Projected profit and loss, Balance sheet and Cash flows, Loan servicing Capability – Interest coverage ratio, Debt Service Coverage ratio- Estimating cost of project.

#### **Module 4: Project cash flow analysis**

**10 Hours**

Project Cash flows- basic principle, cash flows for a replacement project and other perspectives Financial Institutions - computation of cash flows, Cost of Capital-Cost of Equity, WACC, Project rate of return from a project's perspective, Financial Institutions-computation of cost of capital.

#### **Module 5: Project Risk Analysis**

**10 Hours**

Sources, measures and perspectives on risk- Net Present Value, IRR, Sensitivity analysis, Scenario Analysis. Decision tree analysis, Project selection under Risk. Risk Analysis by Financial Institutions.

## Basic Texts

- Chandra, P. (2014). *Projects – Planning, Selection, Financing, Implementation, and Review*, Ninth Edition (2019), Tata McGraw Hill
- Gatti, S. (2018). *Project finance in theory and practice: Designing, structuring, and financing private and public projects*. Academic Press.

## Reference Books

- Chandra, P. (2020). *Fundamentals of financial management | (7th ed.)*. McGraw-Hill Education.
- Brealey, R. A., Myers, S. C., Allen, F., & Mohanty, P. (2012). *Principles of corporate finance*. Tata McGraw-Hill Education
- Desai, V. (2020). *Project management and entrepreneurship, Second Revised Edition, (2017)*, Himalaya Publishing House
- Brigham, Eugene F, Ehrhardt, Michael C (2020). *Financial Management: Text and Cases*. South-Western Cengage Learning.
- Kishore, R. M. (2011). *Strategic financial management: Comprehensive text book with case studies*.
- Pandey, I. M., & Bhatt, R. (2020). *A casebook in financial management | (4th ed.)*. McGraw-Hill Education.

## Other reading material

- Borad, S. B. (2018, September 27). *Project finance*. E-Finance Management <https://efinancemanagement.com/sources-of-finance/project-finance>
- (n.d.). *Case Studies|Business|Management|Economics|Strategy|Finance|Marketing|Case Study*. <https://www.icmrindia.org>
- (2019, November 14). *Project Management Associates: Indian member of IPMA*. <https://www.pma-india.org/>
- *Project management jobs, employment*. (n.d.). *Hire Freelancers & Find Freelance Jobs Online | Freelancer*. <https://www.freelancer.com/jobs/Project-Management/>
- *Project management skills:*. (n.d.). *Management Training and Leadership Training - Online*. [https://www.mindtools.com/pages/main/newMN\\_PPM.htm](https://www.mindtools.com/pages/main/newMN_PPM.htm)
- (n.d.). *COL*. <https://www.col.org/SiteCollectionDocuments/SuccessProjMgt.pdf>
- (n.d.). *Project Smart*. <https://www.projectsmart.co.uk/>
- *Public private partnerships: Contemporary ways for financing infrastructure*. (2019, September 29). YouTube. <https://youtu.be/PvdqrCOTI5E>
- *What is project management?* (2013, November 18). MPUG - Microsoft Project User Group. <https://www.mpug.com/Pages/WhatisProjectManagement.aspx>
- *Who is the project manager?* (n.d.). *Project Smart*. <https://www.projectsmart.co.uk/who-is-the-project-manager.html>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Wealth Management**

Course Code: **22MBADSC310**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Introducing learners to the differing nature, attitude and financial needs of customers.
- Enabling learners to discern among the attributes of various asset classes
- Aiding learners to form a market view that can judge risk and return of investment decisions
- Equipping learners with portfolio creation and wealth management strategies
- Enabling learners to make effective client management decisions aligned to client's profile

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Interpret the nature, attitude and financial needs of customers
CO2	Examine the various asset classes
CO3	Appraise the impact of risk and return from asset classes through a market view
CO4	Construct alternative wealth management portfolios based on varied risk profiling
CO5	Design effective client management strategies aligned to a client's profile

### Course Contents:

#### Module 1: Financial Planning

**8 Hours**

Introduction to Wealth Management: Meaning of WM, Scope of WM, Components of WM, Process of WM, WM Needs and Expectations of Clients, Code of Ethics for Wealth Manager. Financial planning process, role, **Life cycle analysis, financial literacy, \* client education**, client profiling, goal-setting, Financial Blood Test Report (FBR)

#### Module 2: Wealth Management Asset classes

**8 Hours**

Personal Financial Statement Analysis: Financial Literacy, Financial Goals and Planning, Cash Flow Analysis, Building Financial Plans, Life Cycle Management., **Economic Cycles--Indicators, Interest rate views\***, Financial Planning v/s Wealth Management, PMS vs Wealth Management

#### Module3: Investment & Risk Management – Equity, Debt & Mutual Funds

**13 Hours**

Equity, Debt, Financial Mathematics: Calculation of Returns (CAGR, Post-tax Returns, etc.), Total Assets, Net Worth Calculations, Financial Ratios. **Insurance, Mutual Funds, Insurance for wealth Management\***, Portfolio construction – Stocks, debt, Mutual Funds

#### Module 4: Investment & Risk Management - Alternate Asset Class

**8 Hours**

Asset classes--Gold, Real Estate, Private Equity, Venture Capital, Derivatives, Hedge funds, Structured Products

#### Module 5: Client Management - Strategies

**8 Hours**

Role of a financial planner, Risk Profiling and Asset allocation form on Client's perspectives, Active & Passive strategy, Niche customers, HNI services, Case studies - Recommending Financial plans to the Clients, Retirement planning, employee benefit. **Dos and Don'ts in Wealth Management - Benjamin Graham, Warren Buffet - Investment philosophies. \***

(\*These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Dun & Bradstreet (2020). *McGraw Hill Professional: Finance Essential Series - Wealth Management*. McGraw-Hill Education.
- Butler, J. (2014). *The Financial Times Guide to Wealth Management: How to plan, invest and protect your financial assets*. Pearson UK.

**Reference Books**

- Gannon, N. J. (2019). *Tailored Wealth Management: Exploring the Cause and Effect of Financial Success*. Springer.
- Fevurly, K. R. (2018). Elements of personal financial planning and the wealth-management process. *Plan Your Financial Future*, 31-45. [https://doi.org/10.1007/978-1-4842-3637-6\\_3](https://doi.org/10.1007/978-1-4842-3637-6_3)
- Billingsley, R., Gitman, L. J., & Joehnk, M. D. (2016). *Personal financial planning*. Cengage Learning.
- The tools of wealth planning. (2016). *The Destructive Power of Family Wealth*, 163-193. <https://doi.org/10.1002/9781119329046.ch6>
- Hallman, G. V., & Rosenbloom, J. (2015). *Private wealth management: The complete reference for the personal financial planner (9th ed.)*. McGraw-Hill Education.
- Integrating the family business into wealth management strategy. (2013). *Family Wealth Management*, 119-132. <https://doi.org/10.1002/9781118637807.ch8>
- Pulling it all together: The successful management and transfer of wealth across generations. (2013). *Family Wealth Management*, 393-402. <https://doi.org/10.1002/9781118637807.ch26>
- Rethinking modern portfolio theory, considering goals-based wealth management. (2013). *Family Wealth Management*, 133-148. <https://doi.org/10.1002/9781118637807.ch9>
- Setting out a new approach to family wealth management. (2013). *Family Wealth Management*, 1-22. <https://doi.org/10.1002/9781118637807.ch1>
- About the Raffles family wealth trust. (2013). *Family Wealth Management*, 415-418. <https://doi.org/10.1002/9781118637807.oth03>

**Other reading material**

- Firfiray, S., & Gomez-Mejia, L. R. (2021). Can family firms nurture socioemotional wealth in the aftermath of Covid-19? Implications for research and practice. *BRQ Business Research Quarterly*, 23409444211008907.
- Top Trends in Wealth Management 2020. Capgemini Report Brochure Potrait ([capgemini.com](http://capgemini.com))
- Das, S. R., Ostrov, D. N., Radhakrishnan, A., & Srivastav, D. (2018). A new approach to goals-based wealth management. *Available at SSRN 3117765*
- Van Rooij, M. C., Lusardi, A., & Alessie, R. J. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560), 449-478.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **International Finance**

Course Code: **22MBADSE311**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Introducing the learners to the international finance ecosystem
- Understanding the forex market and the theories of economics
- Facilitating the learners to classify the exposures and to employ the forex risk mitigation process
- Enabling the learners to comprehend the world financial market and institutions
- Endowing the learners with the framework for making international capital budgeting and working capital management decisions

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Outline the international finance ecosystem
CO2	Analyse the forex market with the theories of economics
CO3	Evaluate the forex risk management in terms of exposures
CO4	Assess the world financial market and institutions
CO5	Formulate international capital budgeting and working capital management decisions

**Course Contents:**

**Module 1: Foundations of International Finance**

**5 Hours**

Global and the Multinational Firm, International Monetary System\*, Economic and Monetary Union, International trade theories, Balance of Payments, Indian and World scenario, Corporate Governance around the world.

**Module2: Forex Exchange Market, Exchange Rate Determination & Currency Derivatives**

**10 Hours**

Introduction, The Market for Foreign Exchange, Types of Transactions & Settlement Dates, Exchange Rate Quotations & Arbitrage, Forward Quotations, International Parity Relationships and Forecasting Foreign Exchange Rates, Futures and Options on Foreign Exchange.

**Module 3: Foreign Exchange Risk Management:**

**10 Hours**

Management of Transaction Exposure – Forward Market Hedge, Money Market Hedge, Option Market Hedge, Swap Market Hedge, Hedging Foreign Currency Payables / Receivables. Management of Economic Exposure, Operating Exposure, Management of Translation Exposure – Current / Non-current Method, Monetary / Non-monetary Method, Temporal Method, Current Rate Method.

**Module 4: World Financial Market and Institutions**

**8 Hours**

International Banking and Money Market, International Bond Market, International Equity Market, Interest Rate and Currency Swaps, International Portfolio Investment

**Module 5: Financial Management in Multinational Firms**

**12 Hours**

Foreign Direct Investment and Cross Border Acquisitions, International Capital Structure & Cost of Capital, International Capital Budgeting, Multinational Cash Management, International Trade Finance, International Tax Environment\*

(\*These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Jeff Madura and Roland Fox International Financial Management, Thomson Publication, 9th Edition, Indian 2020, ISBN 13: 978-0-324-56820-2
- Cheol S Eun & Bruce G Resnick, International Financial Management, McGraw Hill Education, 7th Edition, NY, USA 2017, ISBN 978-0-07-786160-5

### Reference Books

- Imad A Moosa, International Finance, 3rd Edition, Tata McGraw Hill Edition, 2017, ISBN-10: 0071333711, ISBN-13: 978- 0071333719
- Ephraim Clark, International Finance, 2nd Edition, Thomson Learning, 2002, ISBN-10: 9781861529718, ISBN-13: 978- 1861529718
- Alan C Shapiro, Peter Moles , et al Multinational Financial Management, 10th Edition, Wiley, New Delhi 2016, ISBN 978- 1-118-57238-2
- P.G Apte, , International Financial Management, 7th Edition, McGraw Hill Education, 2017. ISBN-10: 9339205367, ISBN- 13: 978-9339205362

### Other reading material

- Barredo-Zuriarrain, J., & Cerezal-Callizo, M. (2019). Lessons from the SUCRE and TARGET2 systems for a sound international monetary system in a financialized economy. *Journal of Post Keynesian Economics*, 42(1), 39–58. <https://doi.org/10.1080/01603477.2018.1520045>
- KPMG (2018). SEBI Decision regarding Kotak Committee Recommendations on Corporate Governance.
- Ellsworth, P. T. (1940). A Comparison of International Trade Theories. *American Economic Review*, 30(2), 285.
- Bortz, P. G., Michelena, G., & Toledo, F. (2020). A Gathering of Storms: The Impact of COVID-19 Pandemic on the Balance of Payments of Emerging Markets and Developing Economies (EMDEs). *International Journal of Political Economy*, 49(4), 318–335. <https://doi.org/10.1080/08911916.2020.1857586>
- Fisher, E. O. (2001). Purchasing Power Parity and Interest Parity in the Laboratory. *Australian Economic Papers*, 40(4), 586. <https://doi.org/10.1111/1467-8454.00144>
- Galeshchuk, S., & Mukherjee, S. (2017). Deep networks for predicting direction of change in foreign exchange rates. *Intelligent Systems in Accounting, Finance & Management*, 24(4), 100–110. <https://doi.org/10.1002/isaf.1404>
- Gradojevic, N. (2021). Brexit and foreign exchange market expectations: Could it have been predicted? *Annals of Operations Research*, 297(1/2), 167–189. <https://doi.org/10.1007/s10479-020-03582-z>



- Deloitte(2021).GlobalRiskManagementSurvey,1-56  
[https://www2.deloitte.com/content/dam/Deloitte/rs/Documents/risk/rs\\_Global-risk-management-survey-12th- edition.pdf](https://www2.deloitte.com/content/dam/Deloitte/rs/Documents/risk/rs_Global-risk-management-survey-12th- edition.pdf)
- PwC (2020). Assessing the impact of COVID-19 on global market risk management. 1-7
- KPMG (2020). Top 10 Business Risks in 2020/2021. April 2020, 1-51
- Butler, K. C., O'Brien, T. J., & Utete, G. (2013). A Fresh Look at Cross-Border Valuation and FX Hedging Decisions. *Journal of Applied Finance*, 23(2), 84–94.
- NSEIndia(2021).CurrencyDerivativesinIndia  
[https://www1.nseindia.com/live\\_market/dynaContent/live\\_watch/curr\\_der\\_stock\\_watch.htm](https://www1.nseindia.com/live_market/dynaContent/live_watch/curr_der_stock_watch.htm)
- K.J.Udeshi (2004). Development of Forex Markets in India: Review and Prospects, RBI Bulletin, Sept 15 2004
- RBI (2020). Managing Exchange Rate Volatility in the Time of COVID-19. RBI Bulletin, Dec 24, 2020
- B. P. Kanungo (2019). India’s growing significance in global arena. Is it Sustainable? Are We Ready for it? RBI Bulletin, May 11, 2019
- Financier (2018). AI in corporate foreign exchange hedging, March 2018  
<https://www.financierworldwide.com/ai-in-corporate-foreign-exchange-hedging#.YMcl-OkzbmQ>
- Warden, J. B. (1972). International Banking in the Seventies. *Columbia Journal of World Business*, 7(4), 67.
- Yuko Otani, & Junichi Imai. (2018). An Empirical Analysis of the Dependence Structure of International Equity and Bond Markets Using Regime-switching Copula Model. *International Journal of Applied Mathematics*, 48(2), 191–205
- Zhang, Y., Gao, J., & Fu, Z. (2019). Valuing currency swap contracts in uncertain financial market. *Fuzzy Optimization & Decision Making*, 18(1), 15–35. <https://doi.org/10.1007/s10700-018-9284-5>
- CNBC (2021). World Markets  
<https://www.cnbc.com/world-markets/> [FOMC: Federal Open Market Meeting]
- IBEF (2021). Foreign Direct Investment, India Brand Equity Foundation, IBEF.  
<https://www.ibef.org/economy/foreign-direct-investment.aspx>
- Financier (2021). International tax: trends and developments in 2020 and beyond  
<https://www.financierworldwide.com/international-tax-trends-and-developments-in-2020-and-beyond#.YlOKdukzbmQ>
- PwC (2019). Digital Treasury – It takes two to tango, Global Treasury Benchmarking Survey
- **Harvard Cases:**  
Strategy Reading: Competing Globally  
Nashton Partners and its Search Fund Process  
Nextel Peru: Emerging Market Cost of Capital

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Insurance**

Course Code: **22MBADSE312**

Semester: **3** Credits: **3**

Hours (LTP): **45 hours**

### Course Objectives:

- Introducing learner to evolution, growth and scope of insurance
- Appraise the role of intermediaries in insurance industry and insurance pricing
- Equipping the students to combine different products to meet individual life and asset risks.
- Enabling learners to plan the life, medical and Motor Insurance for Business.
- Enabling the learner to understand scope of Agri and non-life Insurance

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Explain various types of risks
CO2	Appraise nature and principles of Insurance
CO3	Construct Life Insurance portfolio to meet the requirement and different stage of life
CO4	Employing General Insurance for business development
CO5	Summarize regulatory framework of Insurance in India

### Course Contents:

#### Module 1: Introduction to Insurance:

**8 Hours**

The Evolution and Growth of Insurance – Basic Principles of Insurance – Life and non-life Insurance Organizations in India, IRDA, Competition and Regulation of Life Insurance. Underwriting, functions of insurer, reinsurance, types of reinsurance treaties, functions of reinsurance, brief note on risk.

#### Module 2: Life Insurance:

**13 Hours**

Term Life Insurance – Whole Life insurance – Endowment Life Insurance – Unit Linked Policies with or without Profit Policies – Customer Evaluation – Policy Evaluation – Cost and Benefit – Group and Pension Insurance Policies – Special features of Group Insurance / Superannuation Schemes – Group Gratuity Schemes – Superannuation schemes.

#### Module 3: General Insurance:

**8 Hours**

Standard policies – Fire Insurance coverage – Consequential loss fire) Insurance policies – Declaration policies, Motor Insurance: Types of policies – Third party Insurance – Comprehensive coverage – Conditions and Exclusions – premium.

#### Module 4: Non-life miscellaneous insurances:

**8 Hours**

Personal Accident Insurance, Health Insurance and Mediclaim policies, Liability Insurance, Burglary Insurance and other Miscellaneous Insurances. Organizations transacting agricultural insurance - Crop insurance underwriting and settlement of claims- Hail insurance - Problems of crop insurance- Farmers Package policy

**Module 5: Insurance Industry and Insurance Pricing:****8 Hours**

Overview of Agents and Brokers, Underwriting, Micro insurance. Objectives of rate making, basic definitions in rate making, rate making in property and liability insurance, rate making in life insurance, reserves in property and liability insurance, life insurance policy reserves.

**Basic Texts**

- Rejda, G., McNamara, M., & Rabel, W. (2021). Principles of Risk Management and Insurance. Pearson Education.
- Insurance Institute of India (2017). *Corporate AGENTS - IC 38, Mumba:*.

**Reference Books**

- Vaughan, E. J., & Vaughan, T. M. (2013). Fundamentals of Risk and Insurance (11th ed.). Wiley.
- Dorfman, C. (2021). Introduction to Risk Management and Insurance (Tenth Edition). PEARSON INDIA.
- Krishnaswamy, G. (2012). A Textbook on Principles & Practice of Life Insurance (First ed.). Excel Books.

**Websites**

- [www.insuranceinstituteofindia.com](http://www.insuranceinstituteofindia.com) ( Complete Link)
- [https://www.irdai.gov.in/ADMINCMS/cms/NormalData\\_Layout.aspx?page=PageNo4&mid=2](https://www.irdai.gov.in/ADMINCMS/cms/NormalData_Layout.aspx?page=PageNo4&mid=2)
- <https://www.policyholder.gov.in/Report.aspx>
- [https://www.policyholder.gov.in/How\\_To\\_Make\\_a\\_Claim\\_Motor.aspx](https://www.policyholder.gov.in/How_To_Make_a_Claim_Motor.aspx)
- [https://www.policyholder.gov.in/Why\\_Buy\\_Life\\_Insurance.aspx](https://www.policyholder.gov.in/Why_Buy_Life_Insurance.aspx)
- <https://licindia.in/Products/Insurance-Plan>
- [www.insurancepandit.com](http://www.insurancepandit.com)
- [ww.insurancebrokerindia.com](http://ww.insurancebrokerindia.com)
- [www.insuranceinstituteofindia.com](http://www.insuranceinstituteofindia.com)
- [www.insureatclick.com](http://www.insureatclick.com)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Analytics for Financial Decisions**

Course Code: **22MBADSE313**

Semester: **3**

Credits:

Hours (LTP): **45 Hours**

### Course Objectives:

- Developing among students an understanding of the basics of Financial Analytics
- Creating a foundation for building complex Financial Analytics Models in Excel
- Introducing students to latest packages, concepts and functions being used to build successful models
- Enabling students to understand the Financial concepts
- Enabling students to make understand financial data with Excel
- Equipping students with financial tools and techniques to draw inferences out of financial data

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Explain basics of financial analytics and time value of money concepts using excel
CO2	Recommend long-term financial decision making models
CO3	Design automated and creative Financial data models
CO4	Demonstrate financial analytics using python
CO5	Compare risk and return relationship for financial markets

### Course Contents:

#### **Module 1: Basics of Financial Analytics and Time Value of Money**

**10 hours**

Advanced Excel for Finance, Data calculations, and Modelling, the Basic meaning of Finance and Financial Analytics, Time Value of Money – Present Value, Future Value, Annuity, and Perpetuity calculations using Excel, Financial Data Validation, Formatting, and Reconciliation with huge data sets, **Excel add-in for financial calculations \***

#### **Module 2: Modelling the Long-term Financial Decision making**

**10 Hours**

Financial Decision-making using Excel, Capital Budgeting Decisions– Pay Back Period, NPV, IRR, and ARR – calculations in MS Excel, Optimization using Solver, Financial Optimization, solving complex problems using Data Table, Goal Seek and Solver in MS Excel. Interest Calculation Models with the formula, function, and using the Table function, Loan Amortization Models – Logical calculations and Template, Excel Models.

**Usage of templates in Excel for Financial models\***

#### **Module 3: Financial Data Accuracy and Automation.**

**9 Hours**

Ensuring Financial Data Accuracy, Pivot Table, Timeliness, and Completeness in Excel, Automation of Repetitive Financial data entry tasks in Excel through macro, Comparative, Common-size, and Trend Analysis of Financial Data. Dynamic Charts and MIS Dash Boards for Financial Analytics. **Automating the huge financial data sets with macro and Dashboards\***

**Module 4: Financial Analytics Models****9 Hours**

Break even Analysis, Working Capital Management Models, Capital Structure, Financial Models in Python, and TVM calculations in Python, Forecasting in Finance - Regression models in Python. **Realistic and practical financial model creations\***

**Module 5: Financial Markets, Financial Planning and Analytics Models****7 Hours**

Financial Market data cleaning, Capital Asset Pricing Model – An analytics approach, daily returns, beta and annualized market return, usage of Regression to create the Stock Pricing Models. Financial planning and asset allocation. Forecasting and Company Model Building. **Key factors determine financial model building\***

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Timothy R. Mayes Todd M. Shank (2014), Financial Analysis with Microsoft Excel-Cengage Learning
- Jonathan Swan (2005), Practical Financial Modelling a guide to current practice, 2nd edition, CIMA publishing Publication.

**Reference Books**

- MarekRutkowski (2005), Models in Financial Modelling. 2nd Edition, Springer.
- Benninga (2008), S. Financial Modelling, 3rd edition, Massachusetts: MIT Press.
- Pandey IM (2015), Financial Management, Vikas Publishing
- V.K. Bhalla (2014), Financial Management, S Chand
- Prasanna Chandra (2020), Fundamentals of Financial Management, McGraw Hill

**Other reading material**

- Shashi.K.Gupta(2017) , Financial Management, KALYANI PUBLISHER
- Van Horne JC (2002) , Financial Management and Policy, Prentice Hall
- Khan and Jain (2019), Fundamentals of Financial Management, Tata McGraw Hill
- Bhalla V.K.(2014) , Working Capital Management, Ahmed Publishing
- Khan M.Y.(2013), Indian Financial System,Tata McGraw Hill

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Financial Research**

Course Code: **22MBADSE314**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

- Equip students with statistical tools and techniques using Microsoft Excel/Eviews/Python/R to undertake quantitative research in Finance.
- Understand the risk return analysis using portfolio theories
- Apply efficient market hypothesis for optimum portfolio construction
- Provide students with basics of ordinary least squares regression
- Panel data analysis using econometrics and applying Contemporary research in finance.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Explain various assumptions, concepts, principles, and methodologies underlying time series models for financial data
CO2	Learn basic statistical properties of stock returns, and apply efficient market hypothesis in portfolio theories to generate higher returns
CO3	Apply efficient market hypothesis and portfolio theories to generate higher returns for investors
CO4	Equip the students with a basic understanding of Regression analysis.
CO5	Conduct panel data analysis using different models

**Course Contents**

**Module 1: Time series data -introduction and analytical tools 10 Hours**

The nature and sources of data, data types, data sources, data cleaning, transformation of data, Univariate, Bivariate and Multivariate Time series models - Benefits and drawbacks of longitudinal data- Assumptions, concepts, principles, and methodologies underlying time series models for financial data; Trend, Intercept, Trend and intercept Unit-root and Stationarity. Testing of endogeneity and exogeneity of data.

Introduction to statistical packages used for time series data-MS Excel-Eviews-R-Stata, Python. Data analysis using eviews

**Module 2: Risk-return analysis 10 Hours**

Different sources of risk - The process of Risk Return Trade Off - Computing mean historical returns-Expected rate of returns- Variance and standard deviation – Covariance of return – Correlation – Standard deviation of portfolio – Efficient portfolio - Attitude towards Risk- Security Market Line (SML) - Movements along SML and changes in the slope of SML Capital Market Line, beta, measures of portfolio performance – Sharpe’s Ratio, Treynor’s Ratio & Jensen’s ratio.

**Module 3: Efficient market? 8 Hours**

Efficient Market Hypothesis - Weak form, Semi strong form and Strong form- its tests and results - Efficient Markets and Technical analysis - Efficient Markets and Fundamental analysis - Efficient Markets and Portfolio Management.

**Module 4: Basics of ordinary least squares regression****10 Hours**

Estimation of the linear regression model, Variances and standard errors of OLS estimators, a measure of goodness of fit of the estimated regression, Regression diagnostics -Multicollinearity, heteroskedasticity, autocorrelation, and model specification errors, Univariate data analysis-Autoregressive Integrated Moving Average (ARIMA) Process.

**Module 5: Panel Data analysis and Contemporary research****7 Hours**

Introduction to Panel Data - Types of panels- Balanced and Unbalanced Panel Data-Benefits and drawbacks of longitudinal data. Basic Models-Pooled OLS-Fixed Effects-Random Effects Model-Estimation and testing-Fixed vs Random Effects Model -Hausman specification test. Event study, Empirical Accounting Research, Audit Research.

**Basic Texts**

- Gujarati, D. (2014). *Econometrics by example*. Palgrave.
- Reilly, F. K., Brown, K. C., & Leeds, S. J. (2018). *Investment analysis and portfolio management*. South-Western College.
- Campbell, J. Y., Lo, A. W., & MacKinlay, A. C. (2012). *The econometrics of financial markets*. Princeton University Press

**Reference Books**

- Damodar Gujarati and Dawn C Porter (2010). *Basic Econometrics*. 5th Edition, Tata McGraw-Hill Education Publishers Ltd.
- *Introductory Econometrics for Finance, SECOND EDITION*, Chris Brooks, The ICMA Centre, University of Reading
- *Market Models: A Guide to Financial Data Analysis*, By C. Alexander, NY: JohnWiley, 2003.
- *Asset Pricing*, by J.H. Cochrane (JC), Princeton, NJ: Princeton University Press, 2001.
- *Econometric Analysis*, by William H. Greene, Prentice Hall. (Almost any edition should be fine.)
- *Time Series Analysis*, by J. D. Hamilton, Princeton University Press, 1994.
- B. H. Baltagi, *Econometric Analysis of Panel Data*, 4th ed., John Wiley, New York, 2008.
- Kerry Patterson, *An Introduction to Applied Econometrics: A Time Series Approach*. Palgrave Macmillan, 2000

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Audit and Assurance**

Course Code: **22MBADSE315**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Acquainting the learners with the framework of audit and assurance engagements
- Enabling the learners understand the planning and risk assessment mechanism
- Aiding the learners review the internal control systems
- Familiarizing the learners with the audit evidence, documentation and communication
- Equipping the learners analyse the audit review and reporting system

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Describe the framework of audit and assurance engagements
CO2	Discuss the planning and risk assessment mechanism
CO3	Examine the internal control systems
CO4	Appraise the environment for audit evidence, documentation and communication
CO5	Assess the audit review and reporting system

**Course Contents:**

**Module 1: Audit framework and regulation**

**9 Hours**

Concept of audit and other assurance engagements, External audits, Corporate governance, Professional ethics and ACCA's Code of Ethics and Conduct, Internal audit and governance and the differences between external audit and internal audit, scope of the internal audit function, outsourcing and internal audit assignments, Brief discussion on Standards on Auditing (SAs)

**Module 2: Planning and risk assessment**

**9 Hours**

Obtaining, accepting and continuing audit engagements, Objective and general principles, assessing audit risks, understanding the entity and its environment, Fraud, laws and regulations, Audit planning and documentation, SA 230: Audit Documentation, SA 315: Identifying & Assessing the Risks of Material Misstatement through Understanding the Entity & its Environment, \*SA 330: The Auditor's Responses to Assessed Risks

**Module 3: Internal control**

**9 Hours**

Internal control systems, use and evaluation of internal control systems by auditors, tests of control, Communication on internal control, SA 265: Communicating Deficiencies in Internal Control to Those Charged with Governance & Management

**Module 4: Audit evidence**

**9 Hours**

Financial statement assertions and audit evidence, audit procedures, audit sampling and other means of testing, audit of specific items, computer-assisted audit techniques, work of others, \*Not-for-profit organisations, SA 500: Audit Evidence, SA 501: Audit Evidence - \*Specific Considerations for Selected It



## **Module 5: Review and reporting**

**9 Hours**

Subsequent events, \*Going concern, Written representations, Audit finalisation and the final review, Independent Auditor's Report, SA 700: Forming an Opinion & Reporting on Financial Statements, SA 701: Communicating Key Audit Matters in the Independent Auditor's Report, SA 705: Modifications to the Opinion in the Independent Auditor's Report, SA 706: Emphasis of Matter Paragraphs & Other Matter Paragraphs in the Independent Auditor's Report.

(\*Self learning topics)

### **Basic Texts**

- Gupta, S. (2020). Auditing by Sanjay Gupta: SBPD publications. SBPD Publications.
- Jindal, T. (2011). Notes on auditing & assurance - An easy approach.
- Gupta. (2004). Contemporary auditing. Tata McGraw-Hill Education.
- Kumar, A., & Sharma, R. (2001). Auditing: Theory and practice. Atlantic Publishers & Dist.

### **Reference Books**

- Arens, A. A., Elder, R. J., Beasley, M. S., & Hogan, C. E. (2019). Auditing and assurance services.
- Arens, A. A., Elder, R. J., & Beasley, M. S. (2013). Auditing and assurance services: An integrated approach. Prentice Hall.
- Collings, S. (2011). Interpretation and application of international standards on auditing. John Wiley & Sons.
- Collings, S. (2017). Accounts and audit of limited liability partnerships. Bloomsbury Publishing.
- Collings, S. (2018). A practical guide to UK accounting and auditing standards. Bloomsbury Professional.
- Elder, R. J., Beasley, M. S., & Arens, A. A. (2011). Auditing and assurance services. Pearson Higher Ed.
- Jha, A. (2009). Auditing and assurance.
- Jindal, T. (2011). Notes on auditing & assurance - An easy approach.
- Montgomery, R. H. (2019). Auditing theory and practice. Wentworth Press.
- Oswal, C. V. (2019). Comprehensive approach to advanced auditing and professional ethics (CA final), 16E (New Syl). Wolters kluwer india Pvt.
- Oswal, C. V. (2019). Comprehensive approach to advanced auditing and professional ethics (Ca final), 16E (New Syl). Wolters kluwer india Pvt.
- Pitt, S. (2014). Internal audit quality: Developing a quality assurance and improvement program. John Wiley & Sons.
- Sawyer's internal auditing: Enhancing and protecting organizational value. (2019).
- Spicer, E. E., & Pegler, E. C. (2018). Practical auditing. Franklin Classics.

### **Other reading material**

- Sekar, G. (2019). Padhuka'S Mcq book Bank-CA final-group1 (Applicable for both old & new sly). Wolters kluwer india Pvt.
- Pankaj Garg(2020),Auditing & Assurance,CA Intermediate,Taxmann's Publication, 6th Edition
- BPP Learning Media. (2017). ACCA P7 advanced audit and assurance (International).
- BPP Learning Media. (2017). ACCA F8 audit and assurance.

**Evaluation Pattern:**

<b>Continuous Evaluation</b>		<b>End Semester Examination</b>	<b>Total</b>
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Financial Derivatives & Risk Management**

Course Code: **22MBADSE316**

Semester: **3**

Credits: **3**

Hour (LTP): **45 Hours**

**Course Objectives:**

- Introducing learners to the functioning of Derivative Markets
- Enabling learners to evaluate stock and Index future price
- Facilitating the learners assessing option price and option strategies
- Introducing learners to the use of commodity derivatives as a hedging tool
- Enabling learners to design interest and currency swaps to manage risk

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Explain the conceptual and practical framework of the functioning of Derivative Markets
CO2	Examine stock and index future price for hedging
CO3	Assess the option price & use option strategies
CO4	Employ commodity derivatives as a hedging instrument
CO5	Design Interest and currency swap structure for hedging

**Course Contents:**

**Module 1: Derivatives – An Introduction**

**4 Hours**

Introduction, Derivatives market in India, Derivatives products, Types of Derivatives - Participants in Derivative Market.

**Module 2: Forwards and Futures**

**15 Hours**

Introduction - Forward Contract - Settlement of Forward Contract Futures Contract- Specifications of Futures Contract - Open Interest – Terminologies of Futures contracts. Difference between- Forward and Futures Contract- Pricing a Forward and Futures Contract. Pricing of Futures. Introduction to Index Futures and Stock Futures -Application of Index Futures- Hedging through Index Futures. VAR and VIX

**Module 3: Energy and Commodity Derivatives**

**7 Hours**

Benefits of Commodity Futures- Futures Contract on Commodities- Pricing Commodities Futures- Hedging with Commodities Futures- Perfect and Imperfect Hedge- Basis & Basis. Risk, Optimal Hedge Ratio. Regulation- trading and settlements – physical delivery of commodities. Energy products, Weather derivatives.

**Module 4: Interest Rate Swaps**

**4 Hours**

Interest Rates and currency swaps- Introduction- Interest Rate Swaps- Features of Swap, Need of Swap Intermediary- plan vanilla swaps

**Module 5: Options**

**15 Hours**

Introduction- Terminology of options- Call option- Put Option- Moneyness of Options, Differences between options and futures/ Forwards

## PRICING

Binomial option pricing model (1,2and 3 step models)- Factors affecting the options priceBlack Scholes option pricing model-Black and Scholes Assumption-Interpreting the Black Scholes model-Implied volatility

## APPLICATION

Hedging with Stock options- Hedging with Index options- Straddle – Long and Short- Strangle

### Basic Texts

- Hull, J. C., & Basu, S. (2018), Options, futures, and other derivatives. Pearson Education India
- Gupta, S. (2017), Financial derivatives: Theory, concepts and problems. PHI Learning Pvt
- Chance, Don M, Brooks Robert (2008), Derivatives and Risk Management Basics, South-Western Cengage Learning
- Bradstreet, D. &. (2006), Financial risk management. Tata McGraw-Hill Education.
- Chatnani. (2010), Commodity markets. Tata McGraw-Hill Education.
- Corb, H. (2012), Interest rate swaps and other derivatives. Columbia University Press.

### Reference Books

- Yaragol, P. (n.d.), Financial derivatives: Text & cases. Vikas Publishing House.
- Kumar, S. S. (2007), Financial derivatives. PHI Learning Pvt.
- Parasuraman, N. R. (2008), Fundamentals of financial derivatives. John Wiley & Sons.

### Other reading material

- NISM (2020), Equity Derivatives: A Beginner’s Module
- NISM (2020) . Interest Rate Derivatives, Taxman.
- NISM (2020), Currency Derivatives, Taxman.
- Capital Markets & Derivatives, The Management Accountant, ICAI, April, 2018, Vol 53

### Website links

- Optionchain-<https://www.nseindia.com/option-chain?symbolCode=-10003&symbol=NIFTY&symbol=NIFTY&instrument=-&date=-&segmentLink=17&symbolCount=2&segmentLink=17>
- Trading Platform- <https://kite.zerodha.com/?next=%2Fdashboard#loggedout>
- Future contract [https://www1.nseindia.com/live\\_market/dynaContent/live\\_watch/get\\_quote/GetQuoteFO.jsp?underlying=ITC&instrument=FUTSTK&expiry=24JUN2021&type=-&strike=-](https://www1.nseindia.com/live_market/dynaContent/live_watch/get_quote/GetQuoteFO.jsp?underlying=ITC&instrument=FUTSTK&expiry=24JUN2021&type=-&strike=-)
- Greeks & Black-Scholes calculator- Option calculator | Black Scholes model | Option greeks | Nifty trader. (n.d.). <https://www1.niftytrader.in/option-pricing-calculator>
- Commodity Derivatives- Home. (n.d.). Home. <https://www.mcxindia.com/#>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**INTERNATIONAL FINANCIAL ACCOUNTING**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**

## Course Title: **Advanced Financial Reporting**

Course Code: **22MBADSE317**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Discuss theory and practice of financial reporting
- Value the corporate voluntary disclosures
- Interpret the emerging trends in financial reporting
- Test the financial statements of Insurance Companies
- Appraise financial statements of various sectors.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Explain theory and practice of financial reporting
CO 2	Appraise the corporate voluntary disclosures
CO 3	Illustrate the emerging trends in financial reporting
CO 4	Examine financial statement of Insurance Companies
CO 5	Value financial statements of various sectors

### Course Contents:

#### Module 1: Financial Reporting Framework:

**8 Hours**

Overview of Accounting Standards – Indian AS and IFRS – IFRS and Ind AS convergence, Global Reporting Initiative (GRI), Business Responsibility Report, Quarterly report filing, annual report filing. Annual Report: Important components of annual report - MD&A, Corporate Governance, Auditors report, Directors report.

#### Module 2: Cash flow Statements:

**8 Hours**

Cash flow statements: Cash and Cash Equivalents: Sources and Applications, Three Activities: Operating activities, Investing activities, financing activities – Methods - Preparation of statement of cash flows (Indirect method), Direct Method (concept only).

#### Module 3: Financial Statements of Banking Companies:

**10 Hours**

Banking company financial statements: Preparation of statement of Profit and Loss and balance sheet of banks (Simple Problems with Schedules)

#### Module 4: Financial Statements of Insurance Companies:

**8 Hours**

Insurance company financial statements: Preparation of final accounts of Life and non-life insurance companies; Revenue account, P&L Account and Balance sheet (simple problems only).

#### Module 5: Advanced issues in Financial Reporting:

**11 Hours**

Earnings per share (EPS): Basic and diluted EPS. Share based payments - Employee stock options plans (ESOP), Employee stock purchase plan (ESPP) and Stock Appreciation Rights (SAR), Ethics in Accounting, Creative

accounting, Accounting Scandals Enron, Xerox, Satyam. Introduction to Human Resources Accounting – Concepts.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

### Basic Texts

- Narayanaswamy, R. (2018). Financial Accounting: A Managerial Perspective, PHI Learning Pvt. Ltd.

### Reference Books

- S N Maheshwari; Suneel K Maheshwari & Sharad K Maheshwari. (2018). Corporate Accounting, (6th ed.) Vikas Publishing House.
- Hanif, M. &, & Hanif, A. M. (2017). Corporate Accounting (2nd ed.). Tata McGraw-Hill Education.
- Radhika, P., & Raman, A. (2018). Corporate Accounting (2nd ed.). McGraw-Hill Education.
- Khanuja.S.S, Piyush Mehta, Karim.A. (2015), Corporate Accounting, (1st ed.). New Delhi: SBPD Publishing House.
- Anthony, Robert. (2019), Accounting text and cases. (13th ed.). New Delhi: Tata McGraw-Hill Publications.
- Bhattacharya, A.B. (2016). Financial accounting for business managers. (4th ed.). New Delhi: Prentice Hall of India.
- Bagavathi, P. R. (2016). Management accounting (4th ed.). New Delhi: S. Chand Publishing.
- Goyal.V.K. (2012), Corporate Accounting, (3rd ed.). Prentice Hall India Learning Private Limited.
- Shukla.S.M & Gupta.K.L (2018). Corporate Accounting. (52nd ed.). Agra: Sahitya Bhawan Publications.
- Shukal.M.C.& Grewal.T.S.(2016), Advanced Accounts-II, (9th ed). New Delhi: S Chand Publishing.
- Kakani Ramchandran. (2020), How To Read A Cash Flow Statement. (2nd ed.). Delhi: Tata McGraw-Hill Publications.

### Other reading material

- Arimany, Nuria and Viladecans, Carme. (2015), Analysis of the Cash Flow Statement's Usefulness: An Empirical Study. European Accounting and Management Review, Volume 2, Issue 1, <http://dx.doi.org/10.2139/ssrn.2737292>.
- Nguyen, D. D., & Nguyen, A. H. (2020). The Impact of Cash Flow Statement on Lending Decision of Commercial Banks: Evidence from Vietnam. The Journal of Asian Finance, Economics and Business, 7(6), 85–93. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO6.085>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**BANKING, FINANCE AND ALLIED SERVICES**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**



## Course Title: **Corporate Banking**

Course Code: **22MBADSE318**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Introducing learners to the differing nature, attitude and financial needs of customers.
- Enabling learners to discern among the attributes of various asset classes
- Aiding learners to form a market view that can judge risk and return of investment decisions
- Equipping learners with portfolio creation and wealth management strategies
- Enabling learners to make effective client management decisions aligned to client's profile

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Interpret the nature, attitude and financial needs of customers
CO2	Examine the various asset classes
CO3	Appraise the impact of risk and return from asset classes through a market view
CO4	Construct alternative wealth management portfolios based on varied risk profiling
CO5	Design effective client management strategies aligned to a client's profile

### Course Contents:

#### Module 1: Financial Planning

**8 Hours**

Introduction to Wealth Management: Meaning of WM, Scope of WM, Components of WM, Process of WM, WM Needs and Expectations of Clients, Code of Ethics for Wealth Manager. Financial planning process, role, **Life cycle analysis, financial literacy, \* client education**, client profiling, goal-setting, Financial Blood Test Report (FBR)

#### Module 2: Wealth Management Asset classes

**8 Hours**

Personal Financial Statement Analysis: Financial Literacy, Financial Goals and Planning, Cash Flow Analysis, Building Financial Plans, Life Cycle Management., **Economic Cycles--Indicators, Interest rate views\***, Financial Planning v/s Wealth Management, PMS vs Wealth Management

#### Module3: Investment & Risk Management – Equity, Debt & Mutual Funds

**13 Hours**

Equity, Debt, Financial Mathematics: Calculation of Returns (CAGR, Post-tax Returns, etc.), Total Assets, Net Worth Calculations, Financial Ratios. **Insurance, Mutual Funds, Insurance for wealth Management\***, Portfolio construction – Stocks, debt, Mutual Funds

#### Module 4: Investment & Risk Management - Alternate Asset class

**8 Hours**

Asset classes--Gold, Real Estate, Private Equity, Venture Capital, Derivatives, Hedge funds, Structured Products

## Module 5: Client Management - Strategies

8 Hours

Role of a financial planner, Risk Profiling and Asset allocation form on Client's perspectives, Active & Passive strategy, Niche customers, HNI services, Case studies - Recommending Financial plans to the Clients, Retirement planning, employee benefit. **Dos and Don'ts in Wealth Management - Benjamin Graham, Warren Buffet - Investment philosophies. \***

(\*These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Dun & Bradstreet (2020). *McGraw Hill Professional: Finance Essential Series - Wealth Management*. McGraw-Hill Education.
- Butler, J. (2014). *The Financial Times Guide to Wealth Management: How to plan, invest and protect your financial assets*. Pearson UK.

### Reference Books

- Gannon, N. J. (2019). *Tailored Wealth Management: Exploring the Cause and Effect of Financial Success*. Springer.
- Fevurly, K. R. (2018). Elements of personal financial planning and the wealth-management process. *Plan Your Financial Future*, 31-45. [https://doi.org/10.1007/978-1-4842-3637-6\\_3](https://doi.org/10.1007/978-1-4842-3637-6_3)
- Billingsley, R., Gitman, L. J., & Joehnk, M. D. (2016). *Personal financial planning*. Cengage Learning.
- The tools of wealth planning. (2016). *The Destructive Power of Family Wealth*, 163-193. <https://doi.org/10.1002/9781119329046.ch6>
- Hallman, G. V., & Rosenbloom, J. (2015). *Private wealth management: The complete reference for the personal financial planner* (9th ed.). McGraw-Hill Education.
- Integrating the family business into wealth management strategy. (2013). *Family Wealth Management*, 119-132. <https://doi.org/10.1002/9781118637807.ch8>
- Pulling it all together: The successful management and transfer of wealth across generations. (2013). *Family Wealth Management*, 393-402. <https://doi.org/10.1002/9781118637807.ch26>
- Rethinking modern portfolio theory, considering goals-based wealth management. (2013). *Family Wealth Management*, 133-148. <https://doi.org/10.1002/9781118637807.ch9>
- Setting out a new approach to family wealth management. (2013). *Family Wealth Management*, 1-22. <https://doi.org/10.1002/9781118637807.ch1>
- About the Raffles family wealth trust. (2013). *Family Wealth Management*, 415-418. <https://doi.org/10.1002/9781118637807.oth03>

### Other reading material

- Firfiray, S., & Gomez-Mejia, L. R. (2021). Can family firms nurture socioemotional wealth in the aftermath of Covid-19? Implications for research and practice. *BRQ Business Research Quarterly*, 23409444211008907.
- Top Trends in Wealth Management 2020. Capgemini Report Brochure Potrait ([capgemini.com](http://capgemini.com))
- Das, S. R., Ostrov, D. N., Radhakrishnan, A., & Srivastav, D. (2018). A new approach to goals-based wealth management. *Available at SSRN 3117765*
- Van Rooij, M. C., Lusardi, A., & Alessie, R. J. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560), 449-478.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks Assessment 1 : 10 Marks Assessment 2 : 10 Marks Assessment 3 : 10 Marks Block End Test : 10 Marks	50 Marks	50 Marks	100 Marks

Course Title: **Retail Banking**

Course Code: **22MBADSE319**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Explain the structure and of assets and liabilities of a retail bank's Balance sheet
- Discuss retail banking products and services
- Outline aspects of credit risk management in banks
- Compare techniques in retail banking to attain operational efficiency
- Outline features of relationship management in retail banking

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Illustrate structure and of assets and liabilities of a retail bank's Balance sheet
CO 2	Evaluate the retail banking products and services offered in India
CO 3	Analyze the credit risk management techniques adopted by retail bankers
CO 4	Explain the techniques used in retail banking to attain operational efficiency
CO 5	Create relationship management techniques in retail banking

**Course Contents:**

**Module 1: Overview of retail banking**

**10 Hours**

Overview of retail banking- retail bank services in the real economy, **sources of funding**, Analysis of Balance sheet and Income statement - retail deposits – wholesale funding, Staff cost and operating cost in retail banking, Retail banking metrics - Net Interest Margin – Net Interest spread – Return on equity – Cost income ratio

**Module 2: Retail Banking products and services**

**8 Hours**

Common attributes of retail banking services – different retail banking products\*; Pricing formulae and Approaches for consumer loans and retail deposits - discussion of common products in Islamic Banking and other International Banking systems

**Module 3: Credit Loss Management**

**10 Hours**

Credit risk, market risk and operational risk – **dominant role of credit risk in retail banking** \*– Role of law in credit management, mark to market model in managing credit risk, credit scores and prediction of credit risks, Incurred loss and expected loss model of provisioning

**Module 4: Retail Banking Operations**

**10 Hours**

Efficiency in banking processes through **queuing theory concepts** \*, 6P model - Little's Law, which is also known as the Law of Velocity, the basis for lean processing, Pareto Principle – reduction of cost, CIR ratio theory of constraints to resolve bottlenecks in bank processes.

**Module 5: Relationship Management**

**7 Hours**

Maintaining long term Banker, Customer relationship - importance of bank adaptability and the quality of the relationship and which forms the basis for managerial actions to increase customer trust\* role of customer relationship management (CRM), Customer-managed relationship (CMR), Customer service

representatives (CSRs), The role of senior management in sound Retail governance in banking, Operational excellence through ethical Retail culture in banking, Case studies

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- IIBF. (2018). Retail Banking: (For CAIIB examinations). Macmillan.
- Koch, T. W., & MacDonald, S. S. (2009). Bank management. Cengage Learning.

### Reference Books

- Brealey, R. A., Myers, S. C., & Allen, F. (2019). Principles of Retail finance.
- Commercial bank management. (2013). Tata McGraw-Hill Education.
- Dill, A. (2019). Bank regulation, risk management, and compliance: Theory, practice, and key problem areas. Taylor & Francis.
- Gup, B. E., & Kolari, J. W. (2005). Commercial banking: The management of risk. John Wiley & Sons.
- Hull, J. C. (2018). Risk management and financial institutions. John Wiley & Sons.
- IIBF. (2018). Risk Management:(For CAIIB examinations). Macmillan.
- Indian Institute of Banking and Finance (2015). Principles and practices of Banking. Macmillan India.
- Indian Institute of Banking and Finance (2015). Legal and Regulatory aspects of Banking. Macmillan India
- Natarajan, R. (2016). Retail banking: A guide book for novice. Createspace Independent Publishing Platform.
- Swankie, A. G. (2015). Retail banking. Global Professional Pub.
- Tian, W. (2016). Commercial banking risk management: Regulation in the wake of the financial crisis. Springer.

### Other reading material

- Freek Vermeulen; Betine Bibonne (2017) [Capitec Bank - Redefining Retail Banking: Innovation Through Elimination](#)
- Frances X. Frei; Dennis Campbell (2002) HBR- Industry And Background Note [Economics of Retail Banking Note](#)
- Seyyed Ebrahim Hosseini (2019) Designing Optimal Banking Model Based on Customer Service - Journal of System Management 2019, Issue 4, pp. 137-148
- Estrada Guillén, Marta (2019) Increasing customer loyalty through customer engagement in the retail banking industry
- *Basel III: International regulatory framework for banks.* (2017, December 7). Bank for International Settlements. <https://www.bis.org/bcbs/basel3.htm>
- Llewellyn, D. T. (n.d.). Financial innovation and the economics of banking and the financial system. *Financial Innovation in Retail and Retail Banking*
- Mian Dai, Yuan Yuan, Product differentiation and efficiencies in the retail banking industry, Journal of Banking & Finance, Volume 37, Issue 12, 2013, Pages 4907-4919, ISSN 0378-4266,
- Timothy H. Hannan, Retail deposit fees and multimarket banking, Journal of Banking & Finance, Volume 30, Issue 9, 2006, Pages 2561-2578, ISSN 0378-4266
- FINTECH -Case study - INSEAD
- Nanduri Sireesha AAA Banking-(24\*7\*365)", published in IRJCBSS Vol.I, Issue7(1), pg no-65, October 2012, ISSN Number 2277-9310
- Nanduri Sireesha Banks-Tell-Talk- Listen –Action: Banking on Social media published in Emerging Trends in Banking published by Academic Foundation, Delhi and IPE, 2014 pg no-291-299- ISBN-9789332701984

- Financial Inclusion through Innovations” in Financial Inclusion: Prospect & Retrospect-(ed) pg no- ISBN Number 978-93-82163-39-8, Aug 21, 2012
- Teresa Fernandes, Teresa Pinto, Relationship quality determinants and outcomes in retail banking services: The role of customer experience, Journal of Retailing and Consumer Services, Volume 50,2019, Pages 30-41, ISSN 0969-6989

### Websites

- <https://treasury-management.com/>
- <https://www.finastra.com/>
- <https://www.thebanker.com/Podcast>
- [www.iba.org.in](http://www.iba.org.in)
- [www.rbi.org.in](http://www.rbi.org.in)
- [www.cafral.org.in](http://www.cafral.org.in)
- [www.bis.org](http://www.bis.org)
- [www.worldbank.org](http://www.worldbank.org)

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**MARKETING**  
**Discipline Specific Electives**  
**SEMESTER – III**

## Course Title: **Digital and Social Media Marketing**

Course Code: **22MBADSE301**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Instilling in a student the understanding of the basics of digital marketing and enabling them to build an effective website
- Developing a comprehensive understanding of Search Engine Optimization and Search Engine Marketing
- Creating awareness of various social media platforms to help them formulate effective social media marketing plans
- Enabling students to design a blue print for effective email marketing campaigns and creating an understanding of the importance of mobile applications and gaming in digital marketing
- Enabling students to design and develop appropriate content, marketing strategies and actions for online reputation management

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Assess the impact of digital technology on consumer purchasing behaviour
CO 2	Assess digital marketing strategy and successful marketing campaign with help of frameworks
CO 3	Design Search engine optimization road map
CO 4	Asses the apt mix of various social media for effective customer engagement
CO 5	Outlining the key essentials involved in online reputation management

### Course Contents:

#### **Module 1: Digital marketing and developing web owned presence**

**11 Hours**

Digital technology and its impact on consumer behaviour, Traditional and Digital Marketing, Digital Marketing mix, Components of Digital Marketing Planning and Strategy, Digital Marketing Channels. Integrated Digital Marketing Communication Website as Hub of Digital Marketing, building an effective website, enhancing website with additional functionalities and data mark-up, Web Analytics – Understanding website visitor behavior and their traffic source using various tools, Website and Competitor analysis. Off-site and On-site Analytics, Affiliate Marketing\*

#### **Module 2: Search Engine Optimization and Search Engine Marketing**

**11 Hours**

Search Engines, their functions and features, Keyword research.

**SEO:** SEO Process, SEO On-Page optimization – Site Navigation, URL, Meta tags, Image Alt tags, Content optimization, plagiarism and its effect on SEO. SEO Off-Page optimization, Link types and their role in SEO, Role of Social Media for SEO\*. **SEM:** Keyword Search, Long-tail and Short-tail keywords, Other types of keywords, Keyword match types, Quality score in SEM, Brief to Google AdWords working, Understanding of PPC and bidding processes, CTR and CPA as measurement metrics, **Search ads and display ads\***, Integration of SEO and SEM for effective results.



**Module 3: Social Media Marketing****9 Hours**

Social media and its role in digital marketing, Social media types and benefits they offer to marketers, User generated content, Word-of-Mouth, Social Listening and Engagement, Facebook – features, newsfeed, insights, **FB business page\***, analytics, Twitter – features, engagement, LinkedIn- features and Learning, Instagram-features, YouTube – features, channels and insights. Brief to Social Media Analytics and listening tools, Blogging and other social media\*

**Module 4: Email and Mobile Marketing****9 Hours**

**Email Marketing:** Key Email marketing concepts, Campaign Process, Online and Offline data capture, Email Design, Email Copy, Email Structure, CTA, Email delivery, Scheduling, metrics for measurement.

**Mobile Marketing:** Key Mobile marketing concepts, **Trends in Mobile / Mobility\***, Mobile Apps – attributes of effective apps; Location based advertising.

**Module 5: Content Marketing and Reputation Management****5 Hours**

**Content Marketing:** Use of content for digital marketing process, Developing Content Strategies for customer engagement, Fitment of content strategy in marketing, Production and Promotion of Content, **Native advertising\***, Content types.

**Online Reputation Management:** Understanding issue of reputation, Wider context of PR, Key essentials of ORM. Paid, Owned, Shared and Earned Media.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Ryan, D. (2017). Understanding Digital Marketing: Marketing strategies for engaging the digital. New Delhi, India: Kogan Page Limited.
- Greenberg, E., and Kates, A. (2014). Strategic Digital Marketing. USA: McGraw Hill.

**Reference Books:**

- Kotler, P., Kartajaya, H., and Setiawan, I. (2017). Marketing 4.0: Moving from traditional to digital. New Jersey, USA: John Wiley and Sons.
- Ryan, D., and Jones, Calvin. (2011). The Best Digital Marketing Campaigns in the World – Mastering the art of Customer Engagement. New Delhi, India: Kogan Page Limited.
- Strauss, J., and Frost, R. (2016). E-marketing. New York, USA: Routledge.
- Digital Marketing: Cases from India Nargundkar, R., & Sainy, R. (2018). Digital Marketing: Cases from India. Notion Press.

**Other references**

- Siegel, E. (2013). Predictive Analytics – The power to predict who will click, buy, lie or die. New Jersey, USA: John Wiley and Sons.
- Abstract of Marketing 4.0. (2017). Retrieved from [www.marketingtechnews.net](http://www.marketingtechnews.net).
- The SMAC Code: Embracing new technologies for future business. Retrieved from [www.KPMG.in](http://www.KPMG.in)
- Bullas, J. (2017). 101 tips and tactics to grow your web traffic. Retrieved from [www.jeffbullas.com](http://www.jeffbullas.com).
- Chaffey, D., and Bosomworth, D. (2013). Digital Marketing Strategy: Planning template. Retrieved from [www.smartinsights.com](http://www.smartinsights.com).

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Analytics for Marketing Decisions

Course Code: 22MBADSE302

Semester: 3

Credits: 3

Hours (LTP): 45 Hours

### Course Objectives:

- Enabling students to identify the importance and need for marketing analytics and data driven decision making
- Creating exposure to the use of appropriate statistical software for modelling and analysis for marketing related applications
- Enabling students to apply predictive and prescriptive analytics models for solution to marketing problems
- Equipping students with mathematical models to make marketing decisions on STP and 4Ps
- Instilling students with develop the ability to communicate through data.

### Course Outcomes (COs):

CO1	Understand the importance and need for marketing analytics and data driven decision making.
CO2	Apply appropriate statistical software such as MS Excel/SPSS/R/ SAS/ Python/ any other for modelling and analysis for marketing related applications.
CO3	Use Predictive and Prescriptive analytics models for marketing problems
CO4	Apply mathematical models to 4P's and STP of marketing.
CO5	Integrate data in communication to senior executives.

### Course Contents:

#### Module 1: Introduction to Marketing Analytics

6 hours

Introduction to Marketing Analytics, Evolution and Scope of Analytics, Decision Models – Descriptive, Predictive and Prescriptive Models, Problem Solving and Decision-making process, Models for customer value analysis.

Developing Spread Sheet Models. Art of developing Spread sheet models – Guidelines to develop an adequate spread sheet model. Application of Resource allocation models. Optimization using Excel solver.

#### Module 2: Time Series Methods

7 Hours

Forecasting models – Qualitative and Quantitative methods. Time series data and Components of a time series. Forecasting Techniques and Forecasting Accuracy, Decomposition models – Additive and Multiplicative, Deseasonalization, Moving average method, Single exponential smoothing, Double exponential smoothing (Holt's method) , Triple exponential smoothing (Holt Winter model) , Croston's forecasting method for intermittent demand, Auto Regressive, Moving Average and ARMA models, Auto Regressive Models (AR Model identification: ACF and PACF), Moving Average Process (q), Auto regressive integrated moving average process, Dickey Fuller test, Augmented dickey fuller test, Transforming non stationary process into stationary process using differencing, ARIMA Model building, Ljung box test for auto-correlations, Power of forecasting model-Theil's coefficient

### **Module 3: Predictive Analytics Methods in Marketing**

**13 Hours**

Principal Component Analysis, Eigen values Communalities, Rotation of factors, Kaiser-Meyer-Olkin Index, Bartlett's test of sphericity.

Multiple Linear Regression Model Building, Kolmogorov Smirnov test, Scatter Plot and Box Plot, Histogram, Interpretation of regression coefficients, standardized regression coefficients, , Regression models with qualitative variables, (Interpretation of regression coefficients of categorical variables, Interaction variables in regression models), Coefficient of multiple determination and adjusted R square, Statistical significance of individual variables in MLR- t test, validation of overall regression model using F test, residual analysis, Multicollinearity and variance inflation factor, Durbin Watson test for auto correlation Distance measures and outlier diagnostics (Mahalanobis distance, Cook's distance, Leverage values) Variable selection in Regression model building – Stepwise, forward selection, backward elimination and optimum sub set methods, Breusch Pagan test for heteroscedasticity

Understanding Dynamic Pricing, Sales Promotion and advertising, Sales forecasting through multiple linear regression

Market Mix Modelling through multiple linear regression and optimization

### **Module 4: Customer Segmentation and Classification Methods**

**11 Hours**

Analytics for Segmentation – Introduction to Clustering, Distance and dissimilarity measures used in clustering (Euclidean, Squared Euclidean and Manhattan distance), Quality and optimal number of clusters, Clustering algorithm (Variable selection, Deciding distance/similarity measures, linkage criteria, Number of clusters, cluster validation), Hierarchical, 2 Step and K Means cluster

Introduction Classification problems, Introduction to Logistic regression, Assumptions, estimation of parameters in logistic regression, Interpretation of logistic regression parameters, Logistic regression model diagnostics (Omnibus test, Wald's test, Hosmer-Lemeshow test, Pseudo  $R^2$ ), Classification table, sensitivity and specificity, ROC Curves, Youden's index for optimal cut off probability

Decision Trees Introduction, CHAID Tree Development, Bonferri Correction, Generating business rules using CHAID Tree, Classification and Regression Tree (CART), Gini Coefficient, Entropy, Cost based splitting criteria, Ensemble method, Random Forest

### **Module 5: Marketing Models for Positioning & Product Design – Perceptual Maps and Conjoint Analysis**

**8 hours**

Multidimensional scaling – Objectives, decision framework for MDS. Assumptions of MDS. Deriving the MDS solution and assessment of overall fit. Selecting the dimensionality of the perceptual map. Interpreting the MDS results – Identifying the dimensions. Validating the MDS results.

Perceptual maps using Discriminant analysis

Conjoint Analysis – objectives of conjoint analysis. Steps in conducting conjoint analysis. Examples of evaluating product design options using results from conjoint analysis. Strengths and limitations of conjoint analysis.

*(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)*

**Text Book(s)**

- Kumar U D (2017) Business Analytics The Science of Data-Driven decision making, Wiley

**Reference Book(s)**

- Evans J, (2017) Business Analytics. Pearson India
- Rao. P. H (2013). *Business Analytics- An Application Focus*. New Delhi. Prentice Hall India.
- Lilien, G. L., Rangaswamy. A., and Bruyn. A. D. (2013). *Principles of Marketing Engineering*. Pearson Education Inc.
- Winston, W.L. (2014). *Marketing Analytics: Data driven techniques with Microsoft. Excel*. John Wiley & Sons.
- Venkatesan, R.K., Farris., P., Wilcox, R.T. (2014). *Cutting edge marketing analytics: Real World cases and datasets for hands on learning*. New Jersey, Pearson Education Inc.

**Other references**

- Davenport, T.H., D'Amico L.D., D'Amico J. (December 2011). *Know what your customers want*. Harvard Business Review.
- Davenport, T. (January 2006). *Competing on Analytics*, Harvard Business Review
- Wilcox, R.T. (2003). *A practical guide to Conjoint Analysis*. Darden Business Publishing
- OdedNetzer et al. (2008). *Beyond Conjoint Analysis: Advances in preference measurement*. Springer
- Pfeiffer, P.E. (2012). *Alumni Giving*. Darden Business Publishing.
- Wilcox, R.T. (2003). *Portland Trailblazers*. Darden Business Publishing

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Sales and Distribution Management**

Course Code: **22MBADSE303**

Credits: **3**

Semester: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Introducing the Sales and Distribution Management function
- Enabling students to understand roles and responsibilities of a Sales and Distribution Manager
- Equipping students with effective Sales and Distribution management tools and techniques to deliver value to the customers.
- Enabling students to identify and analyse the business problems and provide effective logistics and supply chain management solutions to them.

**Course Outcomes (CO):**

At the end of the course, learners will be able to:

CO 1	Outline the significant responsibilities of Sales and Distribution Manager in the industry.
CO 2	Examine the strategies to effectively manage Distribution Management in an organisation
CO 3	Examine the roles and responsibilities of a Sales and Distribution manager in an organization.
CO 4	Appraise decisions involved in selecting, motivating, and controlling the channel members
CO 5	Compare competitive Sales and Distribution Management strategies

**Course Contents:**

**Module 1: Introduction to Sales Management, Budgeting and Planning** **10 Hours**

Understand the role and importance of Sales Management, Sales Management Process, Selling Process, Roles and responsibilities of a Sales Manager, Importance of Sales Planning, Sales Budgeting, Territory Planning and management, Various types of Quotas, and Sales forecasting.

**Module 2: Developing and managing effective Sales force** **7 Hours**

Sales organisation, Sales Executive functions and qualities required, Sales force recruitment and selection, Training programmes, Sales force motivation, performance evaluation, Sales Incentive, Sales Reports and Sales Audits, Sales force evaluation and control.

**Module 3: Distribution and Logistics Management** **10 Hours**

Functions of Logistics management- Purchasing, Inward Transport, Receiving, Warehousing, Stock Control, Order Picking, Materials Handling, Outward Transport, inbound and outbound Physical Distribution Management, Wholesaling and Retail Management.

**Technology in Logistics- Electronic Data interchange (EDI), Artificial Intelligence, Expert Systems, Communication Technology, Bar Coding and Scanning\***

**Module 4: Managing Channel Member Behaviour** **8 Hours**

Conflict in the marketing Channel, Power in the Marketing Channel, Conflict handling, Roles and responsibilities of the channel members, and Communication Processes in the Marketing Channel.

Learning Outcomes: Understand the importance team management and channel relations for effective channel management in an organisation

**Module 5: Developing the Marketing Channel****10 Hours**

Phases of Channel Design, Channel Structure, Channel Intensity, Types of Channel Intermediaries Channel Member Selection, motivation, evaluation and control.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Text Book**

- Tapan K.Panda, Sunil Sachdev (2019) Sales and Distribution Management, Oxford University Press, New Delhi.

**Reference Book**

- Richard R.Still, Edward W. Cundiff, Norman A.P.Govoni (2014) Sales Management Decisions, Strategies and Cases, Prentice Hall of India, New Delhi.
- Coughlan, A., Anderson, E., Stern, L.W., & El-Ansary. A (2019) Marketing Channel Strategy-An Omni Channel Approach (9th edition) Prentice Hall, New Delhi, India
- Rosenbloom B (2014) Marketing Channels – A Management View (8th Edition). Cengage Learning

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Retail Management

Course Code: **22MBADSE304**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Familiarizing students with working of retail industry
- Instilling in student keen understanding of retail management and application of marketing theory to retail context
- Examining the individual elements of a retail strategy (both controllable and uncontrollable), and to present strategic planning as a series of integrated steps
- Enabling students understand how the role of manager impacts upon the success of a retail business.
- Identifying how retailers can build a competitive advantage through customer service.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Discuss process, planning and implementation of retail management
CO 2	Develop an in-depth knowledge of product, pricing, distribution, promotion and global retail management strategies
CO 3	Identify strategic tools used by companies to measure impact of retail marketing efforts
CO 4	Appraise through cases varied real life issues of retail marketing and decision-making dilemmas faced in retail marketing practice
CO 5	Examine strategic analysis plans based on shopper segmentation, competition and retail environment

### Course Contents:

#### Module 1 Introduction to retailing

**6 Hours**

An introduction to retailing; types of retailers; delivering value through retail formats, e-tailing and multichannel retailing; emerging retail markets; careers in retailing. **Retail industry in India: overview of the retail sector\***.

#### Module 2 Retailing strategy

**12 Hours**

Shopper buying behavior; market segmentation; retail market strategy; financial strategy; retail locations; retail site locations; human resource management; information systems and supply chain management; customer relationship management. **Understanding India's new breed of shoppers: online shopping behavior in India\***.

#### Module 3 Merchandise management

**9 Hours**

Retail product planning and management; category management, managing merchandise assortments; merchandise planning systems; buying merchandise. **Merchandise management\***.



**Module 4 Pricing and Communication****9 Hours**

Retail pricing; setting retail prices; pricing strategies; connecting and communicating with shoppers; retail communication mix; planning retail communications. **Pricing in retailing\***.

**Module 5 Retail store operations and management****9 Hours**

Retail store operations management and financial planning; managing the store; store layout, in-store technologies, design and visual merchandising; customer service, **Store management and its operations\***.

**Text Book(s)**

- Seshanna, S. & Prasad R (2015). Retail Management. New Delhi, India: McGraw-Hill India Private Limited.
- Michael L., Weitz, B. & Grewal, D. (2014). Retailing Management. New Delhi, India: McGraw-Hill India Private Limited.

**Reference Book(s)**

- Bajaj, C., Tuli, R., Srivastava, N.V. (2010). Retail Management. New Delhi, India: Oxford University Press.
- Berman, B., Evans, J., & Mathur, M. (2010). Retail Management: A Strategic Approach. New Delhi: Pearson.

**Other references**

- Top Retail Companies in India. Retrieved from [www.ibef.org](http://www.ibef.org)
- Wal-Mart India. Retrieved from [www.wal-martindia.in](http://www.wal-martindia.in)
- Retail Industry in India: Overview of Retail Sector. Retrieved from [www.ibef.org](http://www.ibef.org)
- Understanding India's New Breed of Shoppers: online shopping behavior in India Retrieved from [retail.economictimes.indiatimes.com](http://retail.economictimes.indiatimes.com)
- Merchandise Management, pp 10-16. Retrieved from [http://164.100.133.129:81/eCONTENT/Uploads/Merchandise\\_Management.pdf](http://164.100.133.129:81/eCONTENT/Uploads/Merchandise_Management.pdf)
- Pricing in Retailing, pp. 129-143. Retrieved from [http://164.100.133.129:81/eCONTENT/Uploads/Retail\\_Strategies.pdf](http://164.100.133.129:81/eCONTENT/Uploads/Retail_Strategies.pdf)
- Store Management and its Operations, pp 5-19 & 39-46. Retrieved from [http://164.100.133.129:81/eCONTENT/Uploads/Store\\_Operations\\_&\\_Management.pdf](http://164.100.133.129:81/eCONTENT/Uploads/Store_Operations_&_Management.pdf)
- Mall Management in India. Retrieved from [elearning.nokomis.in](http://elearning.nokomis.in)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Name: **Advertising and Public Relations**

Course Code: **22MBADSE305**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives**

- To provide a comprehensive understanding of agency typology and structure.
- To acquaint learners with specific strategic frameworks, essential to developing brand/marketing communication strategy.
- To understand the diverse range of creative and tactical tools, essential to making communication effective.
- To recognize the process, tools and variables which drives media selection and media measurement.
- To comprehend the use and efficacy of varied public relations tools, available to a marketer.

**Course Outcomes**

At the end of the course, learners will be able to:

CO1	Construct frameworks for appraising and choosing agencies
CO2	Recommend a strategic pathway lay the foundation of an advertising campaign
CO3	Select inputs for the creative team, to enable development of creative solutions
CO4	Choose a lead medium, based on business realities and medium strength
CO5	Select appropriate public relation tools to boost efficacy of a campaign

**Course Contents:**

**Module 1: Agency typology & choice.**

**10 Hours**

*The communication framework\**, Brands and environmental challenges. Meaning of an agency, Agency types (traditional and digital), Client–agency relationships, Functional departments in an agency –account planning, account management, creative and media. Agency selection process (including remuneration).

**Module 2: Campaign Planning.**

**9 Hours**

JWT’s campaign planning process, defining target person, *Positioning approaches\**, Unilever’s key positioning framework, Advertising budget models. Digital consumer path: Aware-Appeal-Ask-Act-Advocacy; O3 Influence – Own, Other, Outer. Digital Marketing Strategy, RACE framework.

**Module 3: Creative frameworks and ethics.**

**10 Hours**

Theoretical frameworks in advertising, advertising objectives, the creative brief, Advertising design: appeals, message strategies and executional frameworks. Sources and spokespersons. Ethical concerns with advertising, *Advertising bodies (AAA & ASCI) and their roles\**. Ethical and privacy concerns in digital advertising. Permission marketing.

**Module 4: Media - traditional and digital.**

**8 Hours**

Media Planning, Media Scheduling, Media Buying. Media measurement – BARC, ADEX, IRS, ABC & RAM.

Digital media: Web presence, social media, search engines, Email, mobile application, games. Measurement of campaign success in digital media.

### **Module 5: The practice of PR.**

**8 Hours**

Theoretical frameworks in PR, meaning and type of publics, internal and external publics. *The PR process\**.

Functions of PR: Corporate reputation, CSR, Community relationships, managing positive / negative stories.

Key PR tools. PR statutory bodies. *Global protocol on PR ethics and Code of professional standards\**.

Digital content strategy, Online reputation management

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### **Basic Texts**

- Clow, K. E. (2004). Integrated advertising, promotion, and marketing communications. Pearson Education India.
- Lattimore, D., Baskin, O., Heiman, S. T., Toth, E. L., & Van Leuven, J. K. (2004). Public relations: The profession and the practice. New York, NY: McGraw-Hill.
- Purani, K., Belch, G. E., & Belch, M. A. (2010). Advertising and Promotion: An Integrated Marketing Communications Perspective. McGraw Hill Education.

### **Reference Books**

- Center, A. H., Jackson, P., Smith, S., & Stansberry, F. R. (2002). Public relations practices: Managerial case studies and problems. Pearson Prentice Hall.
- Baron, R., & Sissors, J. (2010). Advertising media planning. McGraw Hill Education.
- Menon, A. (2009). Media planning and buying in the Indian context. McGraw-Hill Education.
- Newsom, D., Turk, J., & Kruckeberg, D. (2004). This is PR: The Realities of Public Relations. Cengage Learning.
- Reddi, C. N. (2014). Effective public relations and media strategy. PHI Learning Pvt. Ltd.
- Ronald, L. W., King, K. (2000). (2008). Kleppner's advertising procedure. Pearson Education India.
- Shimp, T. A. (2010). Integrated Marketing Communication in Advertising and Promotion. Cengage Learning.

### **Other reading material**

- Gutman, J. (1982). A means-end chain model based on consumer categorization processes.
- The Journal of Marketing, 60-72.
- The Advertising Standards Council of India. The Code for Self-Regulation of advertising in India. Retrieved from <https://ascionline.org/index.php/ascicodes.html>
- Hackley, C. (2003). From consumer insight to advertising strategy: the account planner's integrative role in creative advertising development. *Marketing intelligence & planning*, 21(7), 446-452.
- Turnbull, S., & Wheeler, C. (2017). The advertising creative process: A study of UK agencies.
- *Journal of Marketing Communications*, 23(2), 176-194.

**Evaluation Pattern:**

<b>Continuous Evaluation</b>		<b>End Semester Examination</b>	<b>Total</b>
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Name: **Sales Promotion Management**

Course Code: **22MBADSE306**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives**

- To explain the major sales promotion concepts
- To equip students with tools and frameworks to make effective promotion decisions.
- To impart skills that would help students examine the impact of a sales promotion.
- To equip them with tools and techniques to create sales promotion strategies
- To orient them towards metrics to judge the effectiveness of a sales promotion plan.

**Course Outcomes**

At the end of the course, learners will be able to:

CO1	Demonstrate a thorough understanding of the major promotion concepts
CO2	Determine and Infer a framework to make effective promotion decisions
CO3	Adopt the necessary skills and assess the impact of an effective promotion
CO4	Construct a sales promotion plan for the chosen business
CO5	Judge the effectiveness of a sales promotion plan and design the right promotion for a chosen product

**Course Contents:**

**Module 1: Understanding the line**

**9 Hours**

Defining the line, Above-the-line (ATL) marketing, Below-the-line marketing (BTL), Through the line marketing, Understanding sales promotion essentials, Reasons for proliferation of sales promotions, **Consumer behavior and promotions\***.

**Module 2: Promotions design**

**9 Hours**

**Characteristics of successful sales promotions\***, Setting sales promotion objectives and budgets, Promotion design challenges, Promotion planning guidelines– product, promotion, market choices, Measuring sales promotion campaigns.

**Module 3: Promotions spectrum**

**10 Hours**

Consumer promotions: Meaning and importance of consumer promotions, Types of Consumer promotions- Price led promotions: Coupons, Sampling, Price offs and Bonus packs. Non-price led promotions: Premiums, Refunds and rebates, Contests and sweepstakes

Trade promotions: Meaning and importance of trade promotions, Trade promotion framework, Types of trade Promotions-Trade allowances, Cooperative advertising, Trade contests, Trade incentives and Trade shows. Sales force directed promotions: Meaning and importance of sales-force directed promotions, Types of sales-force directed promotions-Sales contest, Sales conferences, **Company bulletin, Personal correspondence\***.

**Module 4: Personal selling, events and sponsorships****10 Hours**

Personal selling: Personal selling essentials, personal selling process

Event Marketing: Meaning and benefits of internal and external events, event planning strategy – 5W model, funding event marketing programs

Sponsorships: **Sponsorship benefits to brands and sponsors\***, developing a sponsorship marketing plan, developing sponsorship value-add packages, measurement of sponsorship programs

**Module 5: Direct Marketing****7 Hours**

Components of a direct marketing campaign, building a direct marketing strategy, types of direct marketing – Internet, Direct-mail marketing, Catalogue marketing, Telephone marketing, Direct-response television marketing, kiosk marketing.

Word of mouth - **Meaning, importance and impact of opinion leaders\*** and word of mouth campaigns.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Drayton, B. (1995). Commonsense Direct Marketing. Kogan Page.
- Hoyle, L. H. (2002). Event marketing. How to successfully promote events, festivals, conventions, and expositions. Wiley.
- Mullin, R. (1998). Sales promotion: how to create and implement campaigns that really work. Kogan Page.
- Skinner, B. E., & Rukavina, V. (2003). Event sponsorship. Hoboken, NJ: John Wiley & Sons.

**Reference Books**

- Belch, G. E., & Belch, M. A. Purani. K. (2010), Advertising & promotion. McGraw Hill Education.
- Clow, K. E. (2004). Integrated advertising, promotion, and marketing communications.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Brand Management**

Course Code: **22MBADSE307**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Creating an understanding of the importance of products and brands for creating competitive advantage.
- Introducing students to cutting-edge frameworks, concepts and tools being used to build successful brands.
- Enabling students to understand the levers that can create relationships between the brand and the consumer.
- Enabling students to make key product and brand decisions for managing portfolios.
- Equipping students with tools and techniques to conduct brand audits and assess brand equity.

### Course Outcomes:

At the end of the course, learners will be able to:

CO 1	Define the concepts and purpose of products and brands from a marketing perspective
CO 2	Develop brand strategy through managing Brand Identity, Brand image and Brand elements
CO 3	Explain the brand-consumer relationship
CO 4	Assess the effectiveness of brand-product architectures in managing multi-brand / multi-product portfolios
CO 5	Examine the factors and measures used for Brand Audits and brand equity

### Course Contents:

#### Module 1: Products and Brand Management

**10 Hours**

Product characteristics and classification; Product lifecycle; Brands v/s Products; Brands and the concept of Brand Elements; **What can be branded\***; the importance of branding to firms and consumers; Branding Challenges and opportunities in the modern era; brief introduction to the concept of Brand Equity; Strategic Brand Management Process.

#### Module 2: Developing Brand Strategy

**10 Hours**

Customer Based Brand Equity; Process of building a Brand Image; Elements of Brand Identity; Developing Positioning strategies; Defining and understanding the importance of Brand Mantra; The brand value-chain; **Points of difference and points of parity\***; Developing Positioning strategies; Leveraging Brand Association for building Brand Equity

#### Module 3: Designing the Brand's Personality and Image

**9 Hours**

Understanding the various elements of developing a Brand's personality; Brand Personality dimensions; **Importance of brand image vs self-image\***; The brand Identity Prism; How to manage brands over a prolonged period of time

#### **Module 4: Managing Product and Brand Portfolios**

**10 Hours**

The Brand-Product matrix; Brand-Product hierarchy – levels of hierarchy and designing hierarchy; Brand and Product Extensions – advantages and disadvantages; Understanding how Consumers evaluate extensions; Evaluation of brand extension opportunities; **Managing brands overtime – Reinforcing and revitalizing; Managing brands across Geographic Boundaries and Market Segments- Advantages and disadvantages of Global Marketing Programs\***.

New Product Development- Need and strategies; Innovation Diffusion Model; Patents and copyright

#### **Module 5: Measuring and Interpreting Brand Performance**

**6 Hours**

Conducting brand audit; Brand Awareness Measures, Brand Experience and Usage Measures, Brand Image Measures; **Designing Brand Tracking Studies using CBBE\***;

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

#### **Basic Texts**

- Aaker, D. A. (2010). Building strong brands, USA: Simon and Schuster.
- Kapferer, J. N. (2012). The new strategic brand management: Advanced insights and strategic thinking, USA: Kogan Page publishers.

#### **Reference Books**

- Eppinger, S., Ulrich, K. Yang, Maria C (2020). Product design and development. McGraw-Hill Higher Education.
- Keller, K. L., & Brexendorf, T. O. (2019). Strategic Brand Management Process. In Handbuch Markenführung (pp. 155-175). Springer Reference Wirtschaft.
- Moore, Geoffrey A. (2014). Crossing the Chasm: Marketing and Selling Disruptive Products to Mainstream. Harper Business.
- Majumdar, R. (2007). Product management in India. PHI Learning Pvt. Ltd.
- Kotler, P. (2009). Marketing management: A South Asian perspective. Pearson Education India.
- Moorthi, Y. L. (2000). Brand management: The Indian context. Vikas Publishing House

#### **Other reading material**

- Levy, S. J. (1959). Symbols for sale. Harvard Business Review
- Park, C. W., Jaworski, B. J., & MacInnis, D. J. (1986). Strategic brand concept-image management. The Journal of Marketing, 135-145.
- Webster, F. E., and Keller, K. L. (2004). A roadmap for branding in industrial markets. The Journal of Brand Management, 11(5), 388-402.
- Lane Keller, K. (1999). Brand mantras: rationale, criteria and examples. Journal of Marketing Management, 15(1-3), 43-51.
- Levitt, T. (1980). Marketing success through differentiation-of anything (pp. 83-91). Graduate School of Business Administration, Harvard University.
- Carol Matlack, "How Danone Turns Bacteria into Bucks," Business Week, November 15, 2007, pp. 76-77.
- Govindarajan, V., & Trimble, C. (2010). Stop the innovation wars. Harvard Business Review, 88(7/8), 76-83.



**Evaluation Pattern:**

<b>Continuous Evaluation</b>		<b>End Semester Examination</b>	<b>Total</b>
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Business to Business Marketing**

Course Code: **22MBADSE308**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Creating an understanding of the basic principles of B2B marketing
- Creating the ability to working with and marketing for business to business companies
- Enabling students to apply marketing theory in the context of Business markets
- Facilitating the ability to develop of marketing plans for B2B products and services.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Design B2B marketing, terminologies, processes, frameworks and models
CO 2	Theorize organizational buying behaviour and factors impacting the behaviour
CO 3	Identify segmentation and positioning strategies for B2B markets
CO 4	Assess forecasting techniques for predicting demand in B2B markets
CO 5	Examine strategies and their implementation for B2B markets.

**Course Contents:**

**Module 1: Dimensions of business markets**

**4 Hours**

Understanding business markets and business marketing; contrasting business, industrial and consumer markets; characteristics of business markets; classification of business goods. **Trends in Business markets.**

**Module 2: The Organizational Buyer and Buying Behaviour**

**12 Hours**

Classification and characteristics of B2B customers- Commercial, Government and Institutional; Organizational buying behavior: Buying centre and roles, Buying process and situations, Buy grid model; Purchasing Toolkit: TCO, e-marketplaces, Reverse auctions, **e-procurement, segmenting the buy\***.

**Module 3: Segmenting and Customer Relationship Management**

**10 Hours**

Segmentation bases –macro and micro; segmentation process, Positioning in business markets CRM in business markets; Managing buyer seller relationships: relationship spectrum and switching costs; Organizational demand analysis; Determining market and sales potential; Sales forecasting methods.

**Module 4: Managing Pricing and new product development in business market**

**11 Hours**

Factors affecting pricing in business markets; Pricing process; Types of Pricing: Target pricing, Skimming, Penetration and competitive bidding; New product development process: Lead user method.

**Module 5: Managing business marketing channel and communications**

**8 Hours**

Direct and indirect channels; Participants in business marketing channel; Channel objectives and design Rational and informative advertisements in B2B markets, Trade shows, Key account management,

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Text

- Hutt, M. D., Speh, & Thomas, W. (2014). B2B: Marketing: South Asian perspective. New Delhi Cengage Learning

### Reference Books

- Reeder, R.R., Brierty, E. G., & Betty.H. (2007). Industrial marketing, analysis, planning and control, USA: PHI publication.
- Anderson, J. C., Narus, J. A., & Narayandas, D. (2004). Business Market Management: Understanding, Creating, and Delivering Value. New Jersey, USA: Pearson Prentice Hall.

### Other reading material

- Characteristics of target costing: theoretical and field study perspectives Patricia Everaert Lessius University College, Antwerp, Belgium, and Stijn Loosveld, Tom Van Acker, Marijke Schollier and Gerrit Sarens Ghent University, Ghent, Belgium
- How to manage an aggressive competitor? George E. Cressman, Jr. Senior Pricer and Director, Strategic Pricing Group, Inc., Waltham, Massachusetts. Thomas T. Nagle Chairman, Strategic Pricing Group, Inc., Waltham, Massachusetts ([www.strategicpricinggroup.com](http://www.strategicpricinggroup.com))
- Induced versus Autonomous Behaviour in Regional Development – A Process Model for Regional Strategy Formation. Thorsten Wiechmann Leibniz Institute of Ecological and Regional Development, T.Wiechmann@ioer.de
- Skimming or Penetration? Strategic Dynamic Pricing for New Products. Martin Spann 1 Marc Fischer 2 Gerard J. Tellis

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**HUMAN RESOURCE MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**

## Course Title: **Employee Compensation & Benefit Management**

Course Code: **22MBADSE320**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Examine the organizational implications of motivational theories in compensation management.
- Demonstrate how the pay is fixed based on internal and external factors of compensation for general job categories and special groups.
- Relate the concepts in compensation and apply them in the current business environment.
- Assemble the components of employee salary structure.
- Explain the institutional mechanisms of wage determination & issues connected to reward system

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Contrast different theories of motivation applied in reward management in the industry context
CO2	Investigate the pay grades in companies and construct a pay model for special groups of employees
CO3	Examine different incentive schemes in organization
CO4	Develop a comprehensive CTC pie for employees, factoring in different components of CTC
CO5	Classify the mechanisms of wage fixation in a company

### Course Contents:

#### **Module-1–Introduction to Employee compensation & reward management**

**9 Hours**

Reward management- Meaning, basic concepts and types of compensation, Financial and non-financial classification of remuneration and reward, Objectives of reward management system, Concepts of total earnings, Total remuneration and total rewards, Model of Total rewards- Transactional and relational rewards, Pay model – Policy choices and Pay techniques Tools and techniques of a reward system-Job analysis, Pay structure, Salary survey, Policies and regulations, Pay Policy Line, Pay Grades, Motivation theories pertaining to reward management-Equity, Need hierarchy , VIE ,Two factor, Goal theory ( MBO), The reward system , Elements of reward system , Factors affecting reward system , 3 P - Concepts in compensation management, **Motivational theories and contemporary reward management practices of corporate firms \***

#### **Module-2- Aligning reward strategy to company strategy, Rewarding special groups**

**9 Hours**

Concepts of reward strategy, Criteria for effective reward strategy. Principles of remuneration, Best practices Vs Best fit, Pay Policy Alternatives – Lead, Match , Lag. Rewarding Special groups- Meaning and definition, Types of special groups, Director & Senior executives, Meaning of executive compensation, Components of executive compensation, Rewarding virtual groups , Expatriate reward management- International reward strategy, rewarding expatriates, Reward management of sales and customer service staff, Rewarding contractual staff, Rewarding knowledge workers- Managing knowledge workers, **Approaches to rewarding knowledge workers\***Aligning rewards to company goals

**Module 3 – Job evaluation & Pay for performance****9 Hours**

Job evaluation – Definition – objectives, principles, Forms of pay equity -Internal, External, Individual, Procedural, methods of job evaluation- non analytical & analytical - ranking, classification, Market pricing, Job banding and Point Rating method of job evaluation. Pay for performance (P4P)-Basic concept of incentives, Specific pay for performance plans – Short term - Types of incentive plans-Short term incentive plan: Merit Pay, lump sum bonus, Individuals Spot awards, Individual and group incentives, Organizational incentive plans, Profit sharing & Gain sharing, **Review the incentive methods practiced by companies\***

**Module –4 Structure of employee compensation in India.****9 Hours**

Understanding the essential components of Indian compensation system- Basic, Allowance, Incentive, Benefits, Concept of Fringe benefits, Concept of Fringe benefits, Types of fringe benefits - Mandatory and non-mandatory benefits Flexible benefit plans (Cafeteria plans), Deductions: ESI, PF, PT, TDS, Contributions (PF ESI) Calculation of Gross salary and Net salary, Tax efficient compensation planning, Tax Calculations of CTC, Tax implication of employee CTC to employer, Preparation of CTC, Social security benefits & Retirement Plans including VRS/Golden handshake. **Illustration of CTC of companies\***

**Module 5 – Institutional mechanism of wage determination in Indian scenario, Administrative challenges of compensation management****9 Hours**

Wage determination mechanisms in India-Legislation, Wage boards, Pay commission, Job evaluation, Collective bargaining, Arbitration and Adjudication. Issues in compensation management- Pay secrecy, Disparate CEO: worker pay ratio, managing global pay, pay compression, Pay inversion. Concept of Comparatio, Green circle and red circle jobs, **Latest research in Indian compensation management \***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Newman, J. M., Gerhart, B., & Milkovich, G. T. (2013). Compensation. McGraw-Hill Higher Education.
- Singh, B. D. (2007). Compensation and reward management. Excel Books India.
- Armstrong, M., & Stephens, T. (2009). A handbook of employee reward management and practice. Kogan Page Publishers.
- DeVaro, J. (2020). Strategic Compensation and Talent Management: Lessons for Managers. Cambridge University Press.

**Reference Books**

- Armstrong, M., & Brown, D. (2006). Strategic reward: making it happen. Kogan Page Publishers.
- Biswas, B. D. (2012). Compensation and benefit design: Applying finance and accounting principles to global human resource management systems. FT Press.
- Balsam, S. (2002). An introduction to executive compensation. Academic Press.

**Other reading material**

- Koss, S. (2008). Solving the compensation puzzle: Putting together a complete pay and performance system. Society for Human Resource Management.
- Chingos, P. T. (2002). Paying for performance: a guide to compensation management (Vol. 9). John Wiley & Sons.

- Martocchio, J. J. (2004). Strategic compensation: A human resource management approach. Pearson EducationIndia.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Advanced Organizational Behavior**

Course Code: **22MBADSC321**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Describe the implications of team dynamics in modern organizational context.
- Distinguish the different leadership styles and the influence of each on employees.
- Develop the ability to deal with power, politics and to manage related issues in the organization.
- Develop the ability to deal with the conflict situations at workplace.
- Assess the effectiveness of interpersonal relationship through the understanding of key interventions and tools.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Identify the stages of group development and to compare and contrast the concept of groups and teams
CO2	Compare and contrast trait, behavioural and contingency theories of Leadership
CO3	Differentiate various bases of power
CO4	Develop capacity to analyse merits of various conflict handling styles
CO5	Assess the scores of assessment tools

**Course Contents:**

**Module 1: Team Dynamics**

**6 Hours**

Groups- Defining and classifying groups, stages of group development, Group properties – Norm, Status, Size, Cohesiveness and Diversity, Team v/s Group, Types of Teams, Importance of teams in contemporary work place\*. Identify the stages of group development and to compare and contrast the concept of groups and teams

**Module 2: Leadership**

**12 Hours**

Leadership: Meaning and importance, Leader v/s Manager, Leaders are born or made Traits of a leader\*. Types of Leadership, Leadership Theories- Trait, Behavioral, contingency Theories – Fiedler’s Contingency model, Hersey Blanchard situational model, Path Goal Theory, cutting edge approach to leadership – Transactional, Transformational, Charismatic, Visionary. Gender difference and Leadership,

**Module 3: Power and Politics**

**9 Hours**

Power – Meaning, Bases of power, Dependence – The key to power, consequences of power, Power tactics\*, Political tactics for increasing power base, Tactics for increasing power base, Organizational Politics, Causes and consequences, Impact of power and politics in organizations

**Module 4: Conflicts**

**9 Hours**

Meaning and importance of conflicts at organizations, Traditional and Interactional View of conflict, functional and dysfunctional conflicts, Conflict process, Understanding individual conflict handling style.



**Module 5: Enhancing Interpersonal Effectiveness****9 Hours**

Need and importance of interpersonal effectiveness. Introduction to Transactional Analysis, Johari Window, Strokes, FIRO-B. Understanding tools related to said concepts. Administering and interpreting the scores. Application of such tools in the industry.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Luthans, F (2018) Organizational Behavior, New Delhi: McGraw-Hill Professional
- Robbins, S.P., Judge. T & Vohra, N (2019). Organizational Behavior, 16th edition, Pearson Education

**Reference Books**

- Greenberg, J and Baron, R (2019) Behavior in Organisations New Delhi, India: PHI Learning Private Limited.
- Luthans, F (2018) Organizational Behavior, New Delhi: McGraw-Hill Professional
- Hellriegel, D and Slocum, J (2018) Organizational Behavior, South Western, CENGAGE Learning
- Nelson A & Quick K, (2020). Organizational Behaviour, India Edition, Cengage learning.

**Other reading material**

- Yukl,G (2013). Leadership in Organizations. 8th Edition. Pearson.
- Lussier A & Achua, K. (2013). Effective Leadership. 5th Edition. South Western
- Northouse.(2016) Leadership Theory and Practice. 7th Edition, Sage
- Leadership Lessons from India - Harvard Business Review <https://hbr.org/2010/03/leadership-lessons-from-india>
- Barnabas, A., & Clifford, P. S. (2012). Mahatma Gandhi—an Indian model of servant leadership. International Journal of Leadership Studies, 7(2), 132-150.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Performance Review System and Talent Retention.**

Course Code: **22MBADSE322**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Illustrate the core objectives of the performance management system (PMS) and its key components.
- Explain the various aspects of performance management and performance appraisal, its principles, concern with ethical backgrounds.
- Discuss and develop KRI and KRA for employees.
- Illustrate the importance of competency based performance management system.
- Illustrate the importance of competency based performance management system.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	List various components of performance management system
CO2	Outline challenges in the implementation of PMS
CO3	Design KRI and KPI for employees
CO4	Distinguish the different types of competencies of employees.
CO5	Assess different approaches of talent retention in India with the examples of different companies.

**Course Contents:**

**Module 1: Introduction to performance management and Components of Performance Management System** **9 Hours**

Introduction to Performance Management, importance, process of Performance Management, Difference and link between Performance Management and Performance Appraisal, , Performance planning; **Ongoing support and coaching\***; Performance measurement and evaluation; Performance management and appraisal; Methods of performance appraisal; organizational transformation, appraisal communication; Counseling, identifying potential for development; Linking pay with performance.

**Module 2: Implementation and Issues in Performance Management** **9 Hours**

Implementing performance management system- strategies and challenges; Performance metrics; Role of HR professionals in performance management; Performance management documentation; Performance management audit; Ethical and legal issues in performance management; Use of technology and E-PMS; **Performance management practices in Indian organizations\*.**

**Module 3: Tools to measure Performance** **9 Hours**

Performance Management for Teams, Performance Management in practice, Analyzing Performance problems, KRA and KPI -Introduction, Developing KRA and KPI, Implementing KRA based Performance Appraisal System, Identification and Measurement of KPA's, Role of Line Managers in Performance Management, Supervision - Objectives and Principles of Monitoring - monitoring performance planning

process - periodic reviews - problem solving - engendering trust - role efficacy, **Strengths and Limitations of KRA\***

**Module 4: Competency Mapping to enhance Performance**

**9 Hours**

Performance counselling- Concept, Principles and Skills competency based Performance Management, **Objective assessment of Competencies\***, Planning for Training and Development, Competency, Types of Competency, Identification of Competencies, Assessment of competencies.

**Module 5: Talent Retention Practices.**

**9 Hours**

Concept and approaches; Framework of talent management; Talent identification and integration; Talent retention diagnosing causes of talent departure, talent management and workplace diversity. Building the talent pipeline; Managing employee engagement; Key factors and different aspects of talent management; using talent management processes to drive culture of excellence; **Talent management in India\***; Future directions in talent management practice and research.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Rao, T.V. (2007). Performance Management and Appraisal Systems. Thirteenth Edition. Sage Publications.
- Varma, A., & Budhwar, P. (2019). *Performance management systems: An experiential approach*. SAGE.

**Reference Books**

- Goel, D. (2013). Performance Appraisal and Compensation Management. 2nd edition. PHI Learning.
- Demartini, C. (2013). Performance management systems: Design, diagnosis and use. Springer Science & Business Media.
- William P. Anthony, K. Michele Kacmar, Pamela L. Perrewé (2012). Human Resource Management: A Strategic Approach. Second Edition. South Western College.
- Armstrong, M. & Baron, A. (2005). Performance management and development. Mumbai: Jaico Publishing House.

**Other reading material**

- McClune, D. (2005), “Designing reward packages”, in Tyson, S. and Bournois, F. (Eds), Top Pay and Performance. International and Strategic Approach, Elsevier, Burlington, MA, pp. 120-56.
- Tu`rk, K. and Roolah, T. (2007), “Appraisal and compensation of the academic staff in Estonian public and private universities: a comparative analysis”, Trames, Vol. 11 No. 2, pp. 206-22
- Allen, P. (2003), “Performance appraisals with more gain, less pain”, Harvard Management Communication Letter, Vol. 6 No. 3.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Human Resource Management Practices Across Sectors**

**Course Objectives:**

- Explain the operations in different sectors.
- Discuss the methods of employee acquisition in different sectors.
- Describe the factors that influence performance management system in different sectors
- Classify the components of compensation in different sectors
- Compare the Industrial Relations environment in different sectors

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Compare the workforce dynamics in manufacturing and service sector
CO2	Develop the HR acquisition plan for a particular sector
CO3	Justify the human resource development decision in a typical sector
CO4	Designing the salary structure for different sectors
CO5	Illustrate the prevailing labor market situation

**Course Contents:****Module 1 - Sectoral Overview****8 Hours**

Overview of Indian Manufacturing and Service organizations both under public and private sectors. Understanding the differences between public and private sector HR operations. Human resource professional's' role in these sectors. Prevailing labor market scenario and demography of Indian workforce, **latest research\***

**Module 2 – Acquisition practices across sectors****9 Hours**

Manpower planning, recruitment and selection practices in public sector manufacturing and Service sector, Bank recruitments, Hiring scenario in private organizations – manufacturing And Service with reference to Information Technology, Hospitality and Banking, **latest research\***

**Module 3 – Human resource development practices across sectors****10 Hours**

Learning and Development practices in public sector manufacturing an Service sector, Overview of Performance Management systems in private organizations – Manufacturing and Service with reference to Information Technology, Hospitality and Banking. Cross training issues, Promotion policies in public sector undertakings, **latest research\***.

**Module 4 - Employee Reward practices across sectors****10 Hours**

Reward practices in public sector manufacturing and Service sector, Overview of compensation and benefits in private organizations - Manufacturing and Service with reference to Information Technology, Hospitality and Banking. ESPOS/ Bonus/ Profit Sharing across sectors, **latest research\***

**Module 5 - Labor Law and Industrial Relation environment across sectors****8 Hours**

Comparison of Industrial Relation scenario in public and private undertakings. Major laws applicable for both private and public sectors. Prevailing Indian labor market scenario. Trade Union. Collective Bargaining and Employee Participation issues across sectors – understating the differences, latest **research\***

**Basic Texts**

- Mathis, R. L., Jackson, J. H., & Valentine, S. R. (2015). Human resource management: Essential perspectives. Cengage Learning.
- Sanghi, S. (2016). The handbook of competency mapping: understanding, designing and implementing competency models in organizations. SAGE publications India.

**Reference Books**

- Varkkey, B., Tripathi, M. R., Mehta, K., & Budhiraja, S. (2007). Impact Assessment of HRD Training for ULBs in Rajasthan.
- Dessler, G., & Varkkey, B. (2005). *Human Resource Management, 15e*. Pearson Education India.

**Other reading material**

- Dessler, G., & Varkkey, B. (2012). Human Resource Management: Dorling Kindersley (India) Pvt. Ltd.(554- 573). Human resource management: Changing roles, changing goals, B Varkkey, P Parasher
- Agrawal, N. M., Jomon, M. G., Varkkey, B., & Banerjee, C. (2013). Inclusiveness, Sustainability and Human Resources Development.
- Sohani, S. S., & Varkkey, B. (2016). Social Issues in Labour Supply Chain: Broker Imposed Servitude of Indian Immigrant Technology Work. In Academy of Management Proceedings (Vol. 2016, No. 1, p. 11012). Briarcliff Manor, NY 10510: Academy of Management.
- Vanhala, S., & Stavrou, E. (2013). Human resource management practices and the HRM-performance link in public and private sector organizations in three Western societal clusters. *Baltic Journal of Management*. doi/10.1108/BJM-12-2012-0115
- Sahoo, C. K., & Jena, S. (2012). Organizational performance management system: exploring the manufacturing sectors. *Industrial and commercial training*. doi/10.1108/00197851211245059
- Inman, R. R., Blumenfeld, D. E., & Ko, A. (2005). Cross-training hospital nurses to reduce staffing costs. *Health Care Management Review, 30(2)*, 116-125.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Human Resource Management Metrics & Analytics**

Course Code: **22MBADSE324**

Semester: **3** Credits: **3**

Hours (LTP): **45 hours**

### Course Objectives:

- Explain how HR Analytics function adds value and demonstrates the value in business terms.
- Measure the value of intangibles that HR Analytics helps build to facilitate decision making.
- Build measurable variables across various domains of HR Analytics in management context.
- Analyse a study on employee's behaviour to the HR context in an organization.
- Explain the components of HR Scorecard.

### Course Outcomes (COs):

At the end of the course, the learner will be able:

CO1	Explain the importance of HR Analytics in an organisation
CO2	Support HR Analytics with Metrics and various measuring tools
CO3	Develop techniques to support data for performing outcomes in a Business of an organisation
CO4	Illustrate metrics to HRM functionalities and obtain performance -based results
CO5	Design a HR Scorecard for Business outcomes

### Course Contents:

#### Module 1: Introduction to HR Analytics

**9 hours**

Role of Analytics, Defining HR Analytics, HR Analytics: The Third Wave for HR value creation, HR Measurement journey in tune with HR maturity journey Understanding the organizational system (Lean)\*, Locating the HR challenge in the system, Valuing HR Analytics in the organizational system, Typical problems (working session), Typical application of HR analytics

#### Module 2: HRA Frameworks

**9 hours**

Current approaches to measuring HR and reporting value from HR contributions, Strategic HR Metrics versus Benchmarking, HR Scorecards & Workforce Scorecards and how they are different from HR Analytics\*, HR Maturity Framework: From level 1 to level 5, HR Analytics Frameworks: (a) LAMP framework; (b) HCM:21 Framework and (c) Talent-ship Framework, 5 overarching components of an effective Analytics framework.

#### Module 3: Insight into Data Driven HRA

**9 hours**

Typical data sources, Typical questions faced (survey), Typical data issues\*, Connecting HR Analytics to business benefit (case studies), Techniques for establishing questions, Building support and interest, Obtaining data, Cleaning data (exercise), Supplementing data.

**Module 4: HR Metrics****12 hours**

Defining metrics, Metrics for Human Resource planning, Recruitment and Selection, Compensation and Benefits, Training and Development, Performance Appraisal, Demographics, data sources and requirements, Types of data, trying data sets together\*, Difficulties in obtaining data, ethics of measurement and evaluation.

**Module 5: HR Scorecard****6 hours**

Assessing HR Program, engagement and Turnover, Finding money in Analytics\*, Linking HR Data to operational performance, HR Data and stock performance. Creating HR Scorecard, develop an HR measurement system, guidelines for implementing a HR Scorecard.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Motwani, B. (2021). HR Analytics- Practical Approach using Python. Wiley
- Ulrich, D. and Dulebohn, J. 2015. Are we there yet? What's next for HR? Human Resource Management Review. 25: 188-204.
- Levenson, A. (2011), Using targeted analytics to improve talent decisions. *People and Strategy*, 34 (2), 34-43.

**Reference Books**

- Levenson, A., Lawler III, E. E., & Boudreau, J. W. (2005). Survey on HR Analytics and HR transformation: Feedback report. Center for Effective Organizations, University of Southern California.
- Sharma, S., & Sharma, M. (2016) HR Analytics: Managing Human Capital to Execute Strategy.
- Evans J, (2017) Business Analytics. Pearson India

**Other reading material**

- Minbaeva, D.B. (2018). Building credible human capital analytics for organizational competitive advantage. Human Resource Management, 57, 701-713.
- Mohammed, A. D. (2019). HR analytics: a modern tool in HR for predictive decision-making. Journal of Management, 6(3), 51-63.
- Molefe, M. (2013). From data to insights: HR analytics in organizations. (Master's thesis, University of Pretoria).
- Pease, G., Byerly, B., & Fitz-enz, J. (2012). Human capital analytics: how to harness the potential of your organization's greatest asset (Vol. 64). John Wiley & Sons.
- Pemmaraju, S. (2007). Converting HR data to business intelligence. Employment Relations Today, 34(3), 13–16.
- Pfeffer, J. and Sutton, R.I. 2006. Evidence-based management. Harvard Business Review. January, 2006.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Contemporary Leadership in Practice**

Course Code: **22MBADSE325**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Discuss the diverse aspects of leadership, power and politics
- Explain leadership theories and their applicability
- Discuss team dynamics, effective communication, leadership styles and managing diversity at work place
- Describe entrepreneurial leadership, entrepreneurial orientation, dimensions and design thinking
- Elucidate various strategies that enhance leaderships skills and promote strategic leadership

**Course Outcomes (COs):**

**At the end of the course, learners will be able to:**

CO1	Illustrate the effect of power and politics on organizational functioning
CO2	Illustrate the applicability of different leadership styles in an organization
CO3	Exemplify the role of effective communication in day-to-day organizational functions
CO4	Develop a design thinking model/framework
CO5	Appraise the need for strategic leadership

**Course Contents:**

**Module 1: Introduction to Leadership**

**8 hours**

Nature and Definition of Leadership, Participative Nature of Leadership, Perspectives on Effective Leadership Behaviour, The Content of Managerial Work, Power and Politics, Types of Power, Use and Effectiveness of Power and Influence. Nature of Delegation, Guidelines for Delegating, **latest research\***.

**Module 2: Leadership styles, An essence of Leadership Theories and its applications and skills, Dyadic Relations.**

**9 hours**

Theories of Leadership: Trait, Behaviour, Contingency and Situational Theories.; Leader-Member Exchange Theory, Ohio State Studies and Michigan Studies, Managerial Grid, Fiedler Contingency Theory, Hersey and Blanchard's Situational Theory, Path Goal Theory, \*The effect of different leadership styles on an organization, **latest research\***.

**Module 3: Leadership in Teams and Decision Groups, Leading Change in Organizations, Effective Leadership Communication.**

**10 hours**

Leadership and Decision-Making Strategies, Determinants of Team Performance, Team Learning, Team Building, Change Processes in Organizations, Implementing Change,



Principles of Effective Communication: Authenticity, Clarity, Credibility, and Empathy, Impact Speech: Effective and Convincing Lines of Argument.

Charismatic and Transformational Leadership, and Creating Ethical Leadership, Servant, Spiritual, and Authentic Leadership, Cross-Cultural Leadership - Types and Difficulties, Cultural Value Dimensions and Leadership, Gender and Leadership, \*Managing Diversity, **latest research\***.

**Module 4: Entrepreneurial Leadership**

**9 hours**

Creative Leadership, Effectuation: How expert entrepreneurs think, what is different about entrepreneurial leadership? Effectuation and Cognitive Ambidexterity, Entrepreneurial orientation dimensions, Entrepreneurial Leadership, Leadership and Uncertainty, Leadership and Innovation, Leading Diversity and Change, Prediction, Risk and Uncertainty, Leading Innovation, Entrepreneurial Orientation Dimensions, Design Thinking, Design Thinking Models/ Framework, Design Thinking Tools, Business Planning Stages, **latest research\***.

**Module 5: Developing Leadership Skills.**

**9 hours**

Leadership Training Programs, Designing Effective Training Programs, Special Techniques for Leadership Training. Facilitating Conditions for Leadership Development, Strategic Leadership How Leaders Influence Organizational Performance, Need for Strategic Leadership, Strategic Leadership in Teams, \*Leadership skills of most effective leaders, **latest research\***.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Daft, R L (2012). Leadership. Cengage Learning.
- Schedlitzki, D., & Edwards, G. (2014). Studying leadership: Traditional and critical approaches. SAGE Publications Ltd.
- Simon Western, Garcia, E.J. (2018), Global Leadership Perspectives

**Reference Books**

- Global Leadership Perspectives: Insights and Analysis, Sage publications.
- Roe K. (2018), Leadership, practice and perspectives (2nd edn), Oxford university press.
- Yukl, G (2013). Leadership in Organizations. 8th Edition. Pearson.
- Lussier A & Achua, K. (2013). Effective Leadership. 5th Edition. South Western
- Northouse. (2016) Leadership Theory and Practice. 7th Edition, Sage

**Other reading material**

- Leadership Lessons from India - Harvard Business Review
- <https://hbr.org/2010/03/leadership-lessons-from-india>

Barnabas, A., & Clifford, P. S. (2012). Mahatma Gandhi—an Indian model of servant leadership. International Journal of Leadership Studies, 7(2), 132-150

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Labour Laws**

Course Code: **22MBADSE326**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Explain the factories act and employee provident fund act towards self & professional improvement.
- Interpret the various labour acts under the constitution applicable to the establishments in the state.
- Illustrate important provisions of employee's compensation act
- Explain various legal provisions affecting migrant workers and regulate their employment working condition.
- Discuss the provisions of various social security acts.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Interpret the provisions of Factories Act and Employees Provident Funds act
CO2	Discuss the wage determination factors in various sectors
CO3	Summarize the constitutional and labour law applicable to different sectors
CO4	Evaluate the statutory legislation with reference to interstate migrant workers including the bonus act
CO5	Evaluate the central policies with respect to various social security's measures.

**Course Contents:**

**Module 1: Law of Welfare & Working Condition**

**9 Hours**

The Factories Act, 1948 Short titles and extent, Definitions, Measures in regard to health, Welfare Measures under the act, Safety Measures under the act, Working Hours for adults, Annual leave with wages, Penalties and Procedures. The Employees Provident Funds and Miscellaneous Provisions Act, 1952: Short titles and extent, definition, objectives Application of the act. Employees' provident fund scheme, Employees' Pension Scheme, Employees' Deposit Linked Insurance Scheme, and funds. Administration of Scheme-Executive committee, Central and State board. Determination of money due from employers. Penalties and offences by the companies, the **Occupational Safety, Health and Working Conditions Code, 2020****The Occupational Safety, Health and Working Conditions (Central) Rules, 2020**.

**Module 2: Social Security Legislations:**

**9 Hours**

The Employees Compensation Act, 1923: Short title, extent, applicability of the act and definition. Rules regarding workmen's compensation, Employer's liability for compensation Amount of compensations, Distribution of compensation, enforcement of the act, Powers and procedure of Commissioners, New amendment in the act substituted/amended/inserted by Act 45 of 2009

The Payment of Gratuity Act, 1972: Scope of the act, Applicability of the act, Definitions, Payment of gratuity on termination, forfeiture of gratuity, nomination, determination and recovery of gratuity, penalty for offences, miscellaneous provisions, New amendment in the act. Payment of Gratuity (Amendment) Act,

2018, The Minimum Wages Act, 1948: Short title, extent, applicability of the act and definition. Fixation and revision of wages, advisory board, \*safeguard in payment of minimum wages, Offences and penalties. New amendment in the act. Conflict of MGNREGA wage rates and the Minimum Wages Act (2009) **Code on Wages 2019the Code on Wages (Central) Rules, 2020 (Draft)\*.**

### **Module 3: Constitution and Labour Laws**

**7 Hours**

Karnataka Shops and Establishments Act 1961: Short title, extent, commencement and application, Definitions, Exemptions. Registration of establishment, working hours and annual leave with wages and compensation, enforcement and inspection, offences, penalties and miscellaneous provisions.

The Employee State Insurance Act, 1948: Short title, extent, applicability of the act and definition. Contribution, benefits, administration of the scheme, adjudication of dispute and claims, \*Penalties and offences, miscellaneous provision Registration of establishments, Benefits, Restrictions, Protection, Penalties\***The Code on Social Security, 2020 (“SS Code”)\*** The Employees’ State Insurance Act, 1948.

### **Module 4: Statutory Legislation**

**11 Hours**

Payment of Bonus Act, 1965: Short title, extent, applicability of the act and definition, Computation of gross profits, Computation of available surplus, Eligibility and disqualification for bonus, Minimum and Maximum Bonus, set On Set Off of allocable surplus, Time limit for payment of bonus, Calculation, Forfeiture of Bonus and Bonus in case of New Establishments, Penalties and offences. New amendment in the act Details of amendments to the Payment of Bonus Act, 1965. The last amendment of 2015 was notified on 1st Jan., 2016 and is effective from 1st April, 2014.

The Inter-State Migrant Workmen (Regulation of employment and conditions of Service) Act, 1979: Definitions, Registration, Licensing of contractors, Revocation and suspension of licenses, \***Duties of contractors**, Welfare activities, Responsibility of payment of wages, Duties of inspecting staff, Contraventions of provisions of the act and Penalties.

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996: short title, extent, commencement and application, definitions. the advisory committees and expert committees, registration of establishments, hours of work, welfare measures and other conditions of service of building workers, inspecting staff, penalties and offences.

### **Module 5: Law of Social Securities**

**9 Hours**

The Sexual harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013. Short title, extent and commencement, Definitions, Prevention of sexual harassment, constitution of internal complaints committee, constitution of local complaints committee, inquiry into complaint, duties of employer and powers of district officer, Penalties and Provisions.

The Apprentices Act, 1969: Short title, extent, applicability of the act and definition, Apprentices and their Training, authorities, \*Qualifications for being engaged as an apprentice, Contract of apprentice, minor as an apprentice, Number of apprentice, Period of training, Termination, Penalties and offences.

**Occupational Safety, Health and Working Conditions Code, 2020 (OSHC) and the Code on Social Security (CSS)\***, Obligations of employer regarding Hours of work, safety and health measures, Penalties\*

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

### Basic Texts

- Padhi, P K. (2017). Labour and industrial laws (2nd Ed.). New Delhi, PHI Publishing.PvtLtd..
- Sinha, P., Sinha, I. B., &Shekhar, S. P. (2017). Industrial relations, trade unions and labour legislation. Pearson Education India.
- Sarma A.M., (2013). Industrial Relations and Labour Laws (2nded.). Mumbai: Himalaya Publishing House.
- Kumar, H.L. (2013). Labor Laws Everybody should know (9th ed.). New Delhi: Universal Law Publishing Co. Pvt Ltd

### Reference Books

- Roychowdhury, A. (2018). Labour law reforms in India: All in the name of jobs. Taylor & Francis.
- Taxmann. (2020). Taxmann’s New Labour & industrial laws – With comparative study, charts & tables of new and old labour laws | October 2020 edition. Taxmann Publications Private.
- Prof. Ahmedullah Khan &Amanullah Khan (2019) Commentary on Labour and Industrial Law (3rd Ed) Khan and Khan publication.

### Other reading material

- Youssef, C. M., &Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of Srivastava, S. (2012). Industrial relations and labour laws (6th ed.). Vikas Publishing House.
- Malik, S., & Malik, P. L. (2009). P.L. Malik's industrial law: A manual of central labour and industrial laws incorporating state amendments with rules, regulations, select notifications and case law.

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Learning and Development**

Course Code: **22MBADSE327**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Describe the relevance of training in the context of today’s business world
- Examine the various concepts of training and design
- Select an appropriate training method to conduct a training program
- Judge the suitability of a training evaluation model
- Explain the concepts of employee and management development

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Discuss the influence of organization strategy in the development of training strategy
CO2	Design a training program for an organization
CO3	Conduct a Training Need Analysis
CO4	Evaluate the effectiveness of a training program
CO5	Plan an employee development program

**Course Contents:**

**Module 1: Overview of Training**

**9 Hours**

Overview of learning and development, opportunities and challenges for learning and development, important concepts and meanings related to learning and development, why organizations learn? **Importance of Learning organizations in today’s world\***

**Module 2: Training Objectives and Design**

**10 Hours**

Needs analysis, steps in training need analysis, the framework for conducting a TNA, output of TNA, approaches to TNA, Company’s strategy and training, Introduction to Adult learning methods, **training process\*** model – Kolb’s experiential learning

**Module 3: Training Methods**

**9 Hours**

Purposes, procedures, strengths and limitations of simulations, various audio-visual options, programmed instruction, intelligent tutoring systems, virtual reality, Case studies, Coaching; Self Diagnostic Skills, Experience Learning, MOOCs, Blended learning, **Counselling\***, Sensitivity Training, Benchmarking

**Module 4: Training evaluation**

**9 Hours**

Rationale and resistance for training evaluations, pros and cons of training evaluation, Methods of evaluating effectiveness of training efforts, Kirkpatrick model of training effectiveness, Phillips ROI model, Kaufman model, technology and **training evaluation\***

**Module 5: Employee and Management Development****8 Hours**

Employee Development, management development, overview of managerial job, characteristics of managerial jobs, management development implications, **executive level management training\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Blanchard, P. N and Thacker, J. W. (2016) Effective Training: Systems, Strategies, and Practices, VI Edition, Pearson Education.
- Noe, A. R and Kodwani, D. A. Employee. (2016). Training and Development, V Edition, Tata McGraw Hill Education Private Limited, 2013 First Reprint

**Reference Books**

- Anderson, A.H. (2000). Training in Practice, Infinity Books,
- Goldstain, I, L & Ford, K. (2010). Training in Organization: Needs assessment, Development, and evaluation, IV edition, Thomson Learning,
- Janakiram, B. (2010) Training & Development, Biztantra innovations in management, Dreamtech press.
- Lynton, E. H & Pareek, (2011) U. Training for development, Sage Publications India Private Ltd, 2011.
- Abeba, M. A., Mesele, D. A. and Lemessa, B. (2015). The Impact of Training and Development on Employee Performance and Effectiveness: A Case Study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia. Journal of Human Resource and Sustainability Studies, 3, 188-202.
- Altschuld, J., Thomas, R, McColskey, W. (1984). An Evaluation Model for Development of Technical Training Programs. Evaluation News; 5,4, 3-36. Adoption of Cronbach's Lifecycle model to course development and evaluation.
- Brook, J. A., Shouksmith, G. A. and Brook, R. J. (1984). Research Report: Training. Part III Changes in Work Behaviour. Journal of European & Industrial Training, 8,3, 11-16
- Goldstein, I. (1980). Training in Work Organisations. Annual Review of Psychology, 31, 229-272

**Other reading material**

- Abeba, M. A., Mesele, D. A. and Lemessa, B. (2015). The Impact of Training and Development on Employee Performance and Effectiveness: A Case Study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia. Journal of Human Resource and Sustainability Studies, 3, 188-202.
- Altschuld, J., Thomas, R, McColskey, W. (1984). An Evaluation Model for Development of Technical Training Programs. Evaluation News; 5,4, 3-36. Adoption of Cronbach's Lifecycle model to course development and evaluation.
- Brook, J. A., Shouksmith, G. A. and Brook, R. J. (1984). Research Report: Training. Part III Changes in Work Behaviour. Journal of European & Industrial Training, 8,3, 11-16
- Goldstein, I. (1980). Training In Work Organisations. Annual Review of Psychology, 31, 229-272

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**BUSINESS ANALYTICS**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**

## Course Title: **Structured Query Language**

Course Code: **22MBADSE328**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives

- Understand structure of table and perform basic SQL operations in Oracle.
- Execute basic SQL operations from available datasets.
- Perform data extraction from multiple tables using different conditions.
- Understand use of PL-SQL for real life business applications.
- Execute programming using SQL for effective data management.

### Course Outcomes

**At the end of the course, learners will be able to:**

CO1	Recognize the importance of tables and database in RDBMS
CO2	Describe DDL, DCL and DML commands for data management.
CO3	Examine the importance of PL/SQL block and constructs.
CO4	Appraise PL/SQL techniques in different business situations.
CO5	Design SQL queries in R for business problems

### Course Contents:

#### Module 1: Basics of Database and SQL

**12 Hours**

Database Creation; Data Types; Table Creation and Alteration; Primary key; Foreign key; Unique and Check Constraint; Not null; Select Clause; Where Clause; Relational Operators; Logical Operators; IN and NOT IN; Like Operator; IS NULL; Insert Statement; Update Statement; Delete Statement; In-Built SQL Functions; ORDER BY clause; GROUP BY clause; Ranking Functions; **Advanced SQL using Different Operators and Functions\***

#### Module 2: SQL for Multiple Tables

**12 Hours**

Intersect and Union; SubQuery; Joining of Multiple Tables using different Relational and Logical Operators; Advanced SQL with Multiple Tables using Different Operators and Functions\*

#### Module 3: PL-SQL in Oracle

**12 Hours**

Basic PL-SQL; Triggers; Cursors and Functions; PL-SQL in Business Applications\*

#### Module 4: SQL in R using SQL alchemy library

**5 Hours**

Select Clause; Where Clause; Relational Operators; Logical Operators; IN and NOT IN; Like Operator; IS NULL; Insert Statement; Update Statement; Delete Statement; In-Built SQL Functions; ORDER BY clause; GROUP BY clause; Ranking Functions; Advanced SQL in R using Functions\*



## Module 5: SQL for Multiple Tables in R

4 Hours

Intersect and Union; SubQuery; Joining of Multiple Tables with different Relational and Logical Operators; Advanced SQL using Multiple Tables in R using Functions\*

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Molinaro, A. (2006). SQL Cookbook Paperback. O'Reilly.
- Silberchatz, A., Korth, H. F., Sudarshan, S. (2020). Database system Concepts. McGraw Hill.

### Reference Books

- Coronel, C., Morris, S. and Rob, P. (2010). Database Systems. Cengage Learning.
- Alapati, S.R. (2009). Expert Oracle Database 11g Administration, Apress.
- Malik, U., Goldwasser, M., Johnston, B. (2019). SQL for Data Analytics: Perform fast and efficient data analysis with the power of SQL. Packt.
- Elmasri, R. and Navathe, S.B. (2013). Fundamentals of Database Systems. Pearson.
- Ramakrishnan, R. and Gehrke, J. (2013). Database Management Systems. McGraw-Hill.

### Other reading material

- Abouzeid, A., Bajda-Pawlikowski, K., Abadi, D.J., Rasin, A., Silberschatz, A. (2009). Hadoopdb: an architectural hybrid of mapreduce and dbms technologies for analytical workloads. PVLDB 2(1), 922–933.
- Dean, J., Ghemawat, S. (2004). Mapreduce: simplified data processing on large clusters. OSDI, 137–150.
- Lee, K.-H., Lee, Y.-J., Choi, H., Chung, Y.D., Moon, B. (2011). Parallel data processing with mapreduce: a survey. SIGMOD Rec. 40(4), 11–20.
- Pavlo, A., Paulson, E., Rasin, A., Abadi, D.J., DeWitt, D.J., Madden, S., Stonebraker, M. (2009). A comparison of approaches to large-scale data analysis. SIGMOD Conference, 165–178.
- Zaharia, M., Chowdhury, M., Das, T., Dave, A., Ma, J., McCauly, M., Franklin, M.J., Shenker, S., Stoica, I. (2012). Resilient distributed datasets: a fault-tolerant abstraction for in-memory cluster computing. NSDI, 15–28.

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Machine Learning for Business Applications**

Course Code: **22MBADSE329**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Understand machine learning techniques to build models
- Understand non-linear class boundaries and use the kernel trick to transform data
- Generate business rules from models and aggregating trees to build powerful prediction models
- Discover subgroups among the variables or observations to prescribe right strategy for different groups
- Familiarize to use popular python modules like numpy, scipy and scikit-learn to implement machine learning algorithms

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Demonstrate the importance of predictive analytics in decision making and problem solving
CO2	Illustrate the technical details behind statistical learning approaches
CO3	Examine business problem using machine learning techniques
CO4	Develop models in Python software using machine learning
CO5	Design advanced machine learning algorithms to improve prediction accuracy

**Course Contents:**

**Module 1: Supervised Machine Learning – Regression & Classification** **10 Hours**

Introduction to Supervised Learning Algorithms; Overview of Classification and Regression; Logistic Regression; k-Nearest Neighbours; Regressor and Classifier; Naïve Bayes Classifiers; Cross-Validation on Classification Problems; ROC Curve; Accuracy score; RMSE; Confusion Matrix; Classification Report; **Designing Learning System; Perspective and Issues in Machine Learning\***

**Module 2: Support Vector Machines** **7 Hours**

Support Vector Machines; Maximal Margin Classifier; Support Vector Regressor and Classifier; Support Vector Machines; SVMs with more than two classes; The Kernel Trick; **Concept learning task; Find-S algorithm; Version space; Candidate Elimination Algorithm; Inductive Bias\***

**Module 3: Tree-Based Methods & Ensemble Methods** **8 Hours**

Decision Trees; Chi-square Automatic Interaction Detection; Classification and Regression Tree; Pruning & Rule Extraction; Ensemble Method: Bagging, Random Forests, Boosting for regression and classification; **Bayes Theorem; ML and LS Error Hypothesis, ML for Predicting Probabilities\***

**Module 4: Unsupervised Machine learning** **10 Hours**

Types of Unsupervised Learning; Challenges in Unsupervised Learning; Pre-processing and Scaling; Clustering : Distance and Dissimilarity measures used in Clustering; k-means clustering; Hierarchical clustering; Choosing the number of clusters; Profiling Clusters; Association Rule Learning; Dimensionality Reduction: Principal

Component Analysis (PCA); Factor Analysis; **Hypothesis Accuracy; Basics of Sampling Theorem; General Approach for Deriving Confidence Intervals; Difference in Error of Two Hypothesis, Compare Learning Algorithms\***

**Module 5: Machine Learning in Python**

**10 Hours**

Lab exercises for machine learning techniques discussed in Modules 1 to 4; **Instance Based Learning; Introduction to Reinforcement; Q Learning\***

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Motwani, B. (2020). Data Analytics using Python. Wiley.
- Motwani, B. (2019). Data Analytics with R. Wiley.

**Reference Books**

- Larose, D. (2016). Data Mining and Predictive Analytics. Wiley.
- Frank, M., Roehrig, P. & Pring, B. (2017). What to do when Machines do everything. Wiley.
- Downey, A. B. (2015). Think Python: How to think like a Computer Scientist. Green Tea Press.
- Adam, G. & Josh, P. (2017). Deep Learning: A Practitioner's Approach. O'Reilly.
- Sebastian, R. & Vahid, M. (2019). Python Machine Learning. Packt.

**Other reading material**

- Muller, A. C. & Guido, S. (2016). Introduction to Machine Learning with Python. O'Reilly.
- Janarthanam, S. (2017). Hands-on Chatbots and Conversational UI Development. Packt.
- Severance, C. R. (2016). Python for Everybody: Exploring Data Using Python 3. Autoedición
- [www.kaggle.com](http://www.kaggle.com)
- [www.towardsdatascience.com](http://www.towardsdatascience.com)
- [www.tensorflow.org](http://www.tensorflow.org)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Financial Analytics**

Course Code: **22MBADSE330**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

### **Course Objectives:**

- Developing among students an understanding of the basics of Financial Analytics.
- Creating a foundation for building complex Financial Analytics Models in Excel.
- Introducing students to latest packages, concepts and functions being used to build successful models.
- Enabling students to understand the Financial concepts.
- Enabling students to make understand financial data with Excel.
- Equipping students with financial tools and techniques to draw inferences out of financial data.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Demonstrate the financial analytics and time value of money fundamentals
CO2	Appraise modelling Long-term financial decision making
CO3	Design models to manage exposure to financial data accuracy and automation
CO4	Demonstrate creation of financial analytics models
CO5	Construct models to comprehend markets, financial data, and Fintech

### **Course Contents:**

#### **Module 1: Basics of Financial Analytics and Time Value of Money**

**10 Hours**

Advanced Excel for Finance, Data calculations, and Modelling, the Basic meaning of Finance and Financial Analytics, Time Value of Money – Present Value, Future Value, Annuity, and Perpetuity calculations using Excel, Financial Data Validation, Formatting, and Reconciliation with huge data sets, **Excel add-in for financial calculations \***

#### **Module 2: Modelling the Long-term Financial Decision making**

**10 Hours**

Financial Decision-making using Excel, Capital Budgeting Decisions– Pay Back Period, NPV, IRR, and ARR – calculations in MS Excel, Optimization using Solver, Financial Optimization, Solving complex problems using Goal Seek and Solver in MS Excel. Interest Calculation Models with the formula, function, and using the Table function, Loan Amortization Models – Logical calculations and Template, Excel Models. **Usage of templates in Excel for Financial models\***

#### **Module 3: Financial Data Accuracy and Automation**

**9 Hours**

Ensuring Financial Data Accuracy, Timeliness, and Completeness in Excel, Automation of Repetitive Financial data entry tasks in Excel through macro, Comparative Analysis of Financial Data, Creation of Financial Templates and Models. Creation of links, MIS Dash Boards for Financial Analytics, Finance calculations in Python. **Automating the huge financial data sets with macro and Dashboards\***

**Module 4: Financial Analytics Models****8 Hours**

Break even Analysis, Capacity Utilization Model, Working Capital Management Models, Capital Structure, Financial Models in Python, and TVM calculations in Python, Forecasting in Finance - Regression models in Python. **Realistic and practical financial model creations\***

**Module 5: Financial Markets, Analytics Models and Fintech****8 Hours**

Financial Markets, Primary Market, Secondary market, Speculation, Speculators – Bull, Bear, Lame duck, and Stag, Trading in Stock Market, Capital Asset Pricing Model – An analytics approach, Usage of Regression to create the Stock Pricing Models and Algorithmic Trading, FinTech and The Transformation in Financial Services, Money and payments, Payment systems, Lending, and Crowdfunding. **Current affairs in financial market and simulated trading\***

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Timothy R. Mayes Todd M. Shank (2014), Financial Analysis with Microsoft Excel-Cengage Learning
- Jonathan Swan (2005), Practical Financial Modelling a guide to current practice, 2nd edition, CIMA publishing Publication.

**Reference Books**

- MarekRutkowski (2005), Models in Financial Modelling. 2nd Edition, Springer.
- Benninga (2008), S. Financial Modelling, 3rd edition, Massachusetts: MIT Press.
- Pandey IM (2015), Financial Management, Vikas Publishing
- V.K. Bhalla (2014), Financial Management, S Chand
- Prasanna Chandra (2020), Fundamentals of Financial Management, McGraw Hill

**Other reading material**

- Shashi.K.Gupta(2017) , Financial Management, KALYANI PUBLISHER
- Van Horne JC (2002) , Financial Management and Policy, Prentice Hall
- Khan and Jain (2019), Fundamentals of Financial Management, Tata McGraw Hill
- Bhalla V.K.(2014) , Working Capital Management, Ahmed Publishing
- Khan M.Y.(2013), Indian Financial System,Tata McGraw Hill

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Security Analysis and Portfolio Management**

Course Code: **22MBADSE331**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

### **Course Objectives:**

- Formulate Security Analysis plans
- Appraise the Analytics models in Securities and Portfolios
- Experiment on Modelling Long-term Securities Decision making.
- Demonstrate the use of Security Analysis Models and create new models
- Create models with understanding of Markets, Analytics concepts, and Security concepts.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Demonstrate the basics of security and investment
CO2	Appraise efficient market and capital market theory
CO3	Design models to manage exposure to financial data accuracy and automation
CO4	Demonstrate creation of analytics models on fixed income securities and derivatives
CO5	Construct models to comprehend markets, financial data, and Fintech

### **Course Contents:**

#### **Module 1: Basics of Security and Investment**

**10 Hours**

Importance of Investments; Investment Environment; Classification and Functions of Financial Markets; Financial Instruments; Process of Investment; Securities Trading; Margin Trading etc; Types of Orders. Regulatory Systems for Equity Markets

#### **Module 2: Efficient Market and Capital Market Theory and Models**

**10 Hours**

Efficient Market Theory: Random Walk; The Efficient Market Hypothesis; Empirical Tests of the Efficient Market Hypothesis; Capital Market Theory: CAPM; Testing the Capital Asset Pricing Model; Arbitrage Pricing Theory;

#### **Module 3: Equity; Fixed Income Securities and Derivatives Models**

**10 Hours**

Fixed Income Securities: Investment in Bonds; Structuring Terms; Equity Valuation; Trading; Circuit Filters; Valuation of Bonds; Bond Pricing Theorems; Convexity; Duration; Bond Immunization; Derivatives: Forwards and Futures; Interest Rate Swaps; Options; Models in MS Excel

#### **Module 4: Portfolio and Risk Models**

**7 Hours**

Portfolio Theory: Concept of Risk; Measuring Risk and Returns; Portfolio Risk: Measurement and Analysis; Mean-variance Approach; Business Risk and Financial Risk and Treatment in Portfolio Management; Risk and Return in Investment; Real Return and nominal Return; Risk Management: Operational; Credit and Liquidity Risks; Risk Mitigation: VaR; Risk Valuation; Interest and Inflation; Models using MS Excel and Python

**Module 5: Portfolio Analysis and Portfolio Optimization Models****8 Hours**

Portfolio Analysis : Traditional Portfolio analysis; Effects of Combining Securities; Markowitz Risk and Return Optimization; Portfolio Analysis; Power of Diversification; Portfolio Selection: Risk and Investor Preferences; Selecting the Best Portfolio Models on Portfolio Optimization using Python

**Basic Texts**

- Chandra, P. (2012). Investment Analysis and Portfolio Management. Tata McGraw Hill.
- Kevin, S. (2015). Security Analysis and Portfolio Management. PHI Publishers.

**Reference Books**

- Ranganatham, M. (2006). Investment Analysis and Portfolio Management. Pearson.
- Ranganatham, M., and R. Madhumathi, R. (2012). Security Analysis and Portfolio Management: Second Edition. Pearson.
- Punithavathy, P. (2012). Security Analysis and Portfolio Management. MIT Press.
- Bhalla, V.K. (2016). Security Analysis and Portfolio Management. S. Chand and Co.
- Graham, B. (2005). Security Analysis. McGraw Hill Education
- Mayes, T. R., & Todd M. S. (2011). Financial Analysis with Microsoft Excel. Cengage Learning.
- Brentani, C. (2003). Portfolio Management in Practice. Elsevier.
- Cheng-Few, L. (2001). Advances in Investment Analysis and Portfolio Management. Elsevier.

**Other reading material**

- Nietert, B. (2000). CAPM Und Systematisches Bzw. Unsystematisches Risiko Unter Kurssprüngen. Operations Research Proceedings 1999. [https://doi.org/10.1007/978-3-642-58300-1\\_49](https://doi.org/10.1007/978-3-642-58300-1_49).
- Rahkovsky, I., Toney, A., Boyack, K.W., Klavans, R., Murdick, A.D. (2021). AI Research Funding Portfolios and Extreme Growth. Frontiers in Research Metrics and Analytics: 630124.
- Schnabel, Jacques A. (1985). On Cash Demands, Dividend Yields, and the CAPM. Journal of Business Research. [https://doi.org/10.1016/0148-2963\(85\)90031-1](https://doi.org/10.1016/0148-2963(85)90031-1).
- Stewart, S., Christopher D. P., Heisler, J. (2019). Portfolio Management: Theory and Practice. Wiley.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Human Resource Analytics**

Course Code: **22MBADSE332**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Understand importance of data extraction, processing and visualization
- Apply mathematical and statistical techniques for HR analytics.
- Execute unsupervised machine learning techniques for HR analytics.
- Execute supervised machine learning techniques for HR analytics
- Apply text data analysis for HR professionals

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Demonstrate employee data using different visualization techniques.
CO2	Interpret different mathematical and statistical techniques for employee data analysis.
CO3	Assess the HR models for formulating strategies.
CO4	Examine different machine learning techniques for employee data analysis.
CO5	Develop the HR models for analyzing data.

**Course Contents:**

**Module 1: HR Data Exploration, Extraction and Visualization using Python**

**9 Hours**

Understanding Employee Data; Outliers and Missing Values; Pre-processing Techniques for String and Date data type; Extracting Relevant Employee Data; Employee Data Visualization using Charts and Dashboards; **SQL for HR Data Extraction\***

**Module 2: HR Analytics with Mathematical and Statistical Techniques using Python**

**10 Hours**

Descriptive Analytical Techniques for HR Operations; Conjoint Analysis for Designing Compensation and Benefits Plan; Expense Forecasting using Time Series; Markov Chain Model and Monte Carlo Simulation for Man power Planning; Effectiveness of Employee Training using Compare Means; **ARIMA Modelling for Projecting Expenses, Salary\***

**Module 3: HR Analytics with Unsupervised Machine Learning using Python**

**9 Hours**

Association Rule Mining for Job Satisfaction; Employee Segmentation; Dimension Reduction Algorithms for Performance Management: Factor analysis and Principal Component Analysis; **Employee Segmentation on basis of Skills\***

**Module 4: HR Analytics with Supervised Machine Learning using Python**

**9 Hours**

Predicting Employee Salary; Predict Employee Promotion; Predict Employee Attrition; **Predict Employee Job Satisfaction and Performance\***



## Module 5: HR Analytics for Text Data using Python

8 Hours

Word Cloud for Employee Resume; Sentiment Analysis for Employee Reviews; Document Searching using Trained Models; Recommendation System for Job Skills; **Recommendation System for Candidates and Interviewers\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Motwani, B. (2021). HR Analytics- Practical Approach using Python. Wiley.
- Evans, J. (2017). Business Analytics. Pearson.

### Reference Books

- Bertsimas, D. & Freund, R. (2004). Data, Models, and Decisions: The Fundamentals of Management Science, Dynamic Ideas.
- Soundararajan, R. & Singh K. (2016). Winning on HR Analytics: Leveraging Data for Competitive Advantage. Sage
- Edwards, M. R. & Edwards, K. (2019). Predictive HR Analytics: Mastering the HR Metric. Kogan Page
- Bhattacharyya, D. (2017). HR Analytics: Understanding Theories and Applications Paperback. Sage

### Other reading material

- Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M. & Stuart, M. (2016). HR and Analytics: why HR is set to fail the Big Data Challenge. Human Resource Management Journal. 26(1), 1–11.
- Ben-Gal, H. C. (2019). An ROI-based review of HR analytics: practical implementation tools. Personnel Review, 48(6), 1429-1448.
- Dahlbom, P., Siikanen, N., Sajasalo, P. & Jarvenpää, M. (2020). Big Data and HR Analytics in the Digital Era. Baltic Journal of Management, 15(1), 120- 138
- Hamilton, R. & Sodeman, A. (2020). The Questions we Ask: Opportunities and Challenges for using Big Data Analytics to Strategically Manage Human Capital Resources. Business Horizons, 63(1), 85-95.
- Meena, R. & Parimalarani, G. (2019). Human Capital Analytics: A Game Changer for HR Professionals. International Journal of Recent Technology and Engineering, 8(2S11), 3963-3965.

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Predictive Analytics**

Course Code: **22MBADSE333**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Understand the approaches for exploration and application of Predictive Analytics techniques for prediction and classifications.
- Understand the different techniques of data modeling covered under the scope of Predictive Analytics
- Build the Predictive Models in the context of complex data sets.

**Course outcomes (Cos):**

At the end of the course, learners will be able to:

CO1	Illustrate the importance of Predictive Analytics
CO2	Demonstrate the techniques for Predictive Analytics
CO3	Construct suitable Predictive models
CO4	Interpret the data mining techniques
CO5	Appraise the use of Ad-hoc data analysis for prediction

**Course Contents:**

**Module 1: Overview of Predictive Analytics**

**8 Hours**

Nature of Predictive Analytics, Validity, and Reliability, Types of Predictive Analytics Techniques, Multiple Regression, Cox Regression, Canonical Correlation, Cluster Analysis, Multi-Dimensional Scaling, Correspondence Analysis, Multivariate Model Building, **Structural Equation Modeling\***.

**Module 2: Data preparation and Multivariate Techniques for Predictive Analytics**

**8 Hours**

Graphical Examination of Data for prediction, Convert Un-Tidy Data into Tidy Data. Missing Data, Testing the Assumptions of Multivariate Prediction Analysis, Incorporating Non-Metric Data with Dummy Variables, **Managerial Overview of the Results\***.

**Module 3: Techniques for Prediction in Business**

**8 Hours**

Customer Value and Conjoint Analysis, Price Recommendation, Smoothing Techniques—Moving Average Method, Weighted Moving Average Method, Semi Average Method; Exponential Smoothing Method, Double Exponential Smoothing, Evaluation of Smoothing Techniques, **Estimating the model and Assessing overall model fit\***.

**Module 4: Introduction to Data Mining**

**9 Hours**

Concepts of Data mining, Technologies Used, Data Mining Process, KDD Process Model, CRISP – DM, Mining on various kinds of data, Applications of Data Mining, Challenges of Data Mining, **Implementation of data mining algorithm\***

**Module 5: Volatility and Simulation Methods for prediction**

**12 Hours**

Models for volatility, Historical volatility, Implied volatility models, exponentially weighted moving average models, Bootstrapping, Random number generation, Cholesky Decomposition, **Evaluation of the simulation approach to prediction, Sensitivity Analysis. \***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Bari, Anasse, Mohamed Chaouchi, and Tommy Jung. (2016). Predictive Analytics for Dummies. John Wiley & Sons.
- Gilliland, Michael, Len Tashman, and Udo Sglavo. (2016), Business Forecasting: Practical Problems and Solutions, Wiley & Sons.

**Reference Books**

- Business Forecasting: Practical Problems and Solutions. John Wiley & Sons. 2021.
- Business Forecasting: The Emerging Role of Artificial Intelligence and Machine Learning. John Wiley & Sons.
- Hanke, John E., and Dean W. Wichern. 2014. Business Forecasting. Pearson Higher Ed.
- Kumar, Vijay, and Mangey Ram. 2021. Predictive Analytics: Modeling and Optimization. CRC Press.

Other reading material

- Predictive Analytics: Introduction to Predictive Analytics.” 2016. <https://doi.org/10.4135/9781529729108>.
- Siegel, Eric. 2016. Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die. John Wiley & Sons.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Marketing Analytics**

Course Code: **22MBADSE334**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

### Course Objectives:

- Understand the importance of data extraction, processing and visualization in marketing.
- Apply mathematical and statistical techniques for formulating effective marketing strategies.
- Execute unsupervised machine learning techniques for formulating effective marketing strategies.
- Execute supervised machine learning techniques for formulating effective marketing strategies.
- Apply reinforcement learning techniques for formulating effective marketing strategies.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Demonstrate data using different extraction and visualization techniques
CO2	Interpret data using mathematical and statistical techniques
CO3	Design marketing strategies for marketing mix elements
CO4	Develop marketing models for data analysis using machine learning techniques
CO5	Formulate marketing strategies based on results of data analysis

### Course Contents:

#### **Module 1: Data Exploration, Extraction and Visualization**

**8 Hours**

Explore Customer Data; Outliers and Missing Values; Pre-processing Techniques for String and Date Data; Customer Data Extraction; Customer Data Visualization using Charts and Dashboards; **SQL for Customer Data Extraction\***

#### **Module 2: Marketing Analytics with Mathematical and Statistical Techniques using Python**

**12 Hours**

Descriptive Analytical Techniques for Marketing Mix Elements; Dynamic Pricing practiced by Service Industry and its Determinants; Market Basket Analysis; RFM analysis; Sales Pipeline Analysis; Google Analytics; Markov Chain Model for Customer Acquisition and Retention; Estimating Revenues, Demand, Cost and Profit using Monte Carlo Simulation; Conjoint Analysis in Marketing; **Time Series Modelling for Projecting Revenues, Demand, Cost and Profit\***

#### **Module 3: Marketing Analytics with Unsupervised Machine Learning using Python**

**10 Hours**

Customer, Market and Product Segmentation; Dimension Reduction Algorithms- Factor Analysis and Principal Component Analysis; Multidimensional Scaling; Collaboration and Content based Recommendation System; User Based and Item Based Recommendation System; **Customer and Product Segmentation on basis of Reviews\***

#### **Module 4: Marketing Analytics with Supervised Machine Learning using Python**

**8 Hours**

Sales Forecasting; Price Analytics; Analytics for Impact of Marketing Mix Elements; Predicting Customer Attrition and Purchasing Behavior; **Analyze Customer Behavior on basis of Reviews\***

Reinforcement Learning for Optimizing Advertising Budgets; Personalized Recommendations; Select Best Content for Advertising Budget; Increasing Customer Life Time Value; **Applications for Reinforcement Learning in Marketing\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Winston, W. (2014). Marketing Analytics Data Driven Techniques with Microsoft Excel. Wiley.
- Motwani, B. (2020). Data Analytics using Python. Wiley.

**Reference Books**

- Lilien, G. L., Rangaswamy. A., Bruyn. A. D. (2013). Principles of Marketing Engineering. Pearson.
- Venkatesan, R.K., Farris, P., Wilcox, R.T. (2014). Cutting Edge Marketing Analytics: Real World Cases and Datasets for Hands on Learning. Pearson.
- Evans J, (2017). Business Analytics. Pearson.
- Davenport, T.H., Mule L.D., Lucker J. (2011). Know What your Customers Want. Harvard Business Review.
- Rao, P. H. (2013). Business Analytics- An Application Focus. Prentice Hall.
- Grigsby, M. (2018). Marketing Analytics. A Practical Guide to Improving Consumer Insights using Data Techniques. Kogan Page.
- Blanchard, T., Behera, D., Bhatnagar, P. (2019) Data Science for Marketing Analytics. Achieve your Marketing Goals with the Data Analytics Power of Python. Packt.
- Palmatier, R., Sridhar, S. (2017). Marketing Strategy: Based on First Principles and Data Analytics. Red Globe Press.

**Other reading material**

- Liang, B., Fu, W. (2021). The Choice of Brand Extension: The Moderating Role of Brand Loyalty on Fit and Brand Familiarity. Journal of Marketing Analytics, 9, 17–32.
- Alcaraz, R. (2014). The Business Case for Better Analytics: A Retrospective and the Future of Theory and Practice of Marketing Science. Journal of Brand Strategy, 3 (3), 295–303.
- Aggarwal, P., Vaidyanathan, R., Venkatesh, A. (2009). Using Lexical Semantic Analysis to Derive Online Brand Positions: An Application to Retail Marketing Research. Journal of Retailing, 85 (2), 145–158.
- Ngai, E.W.T., Xiu, L., Chau, D.C.K. (2009). Application of Data Mining Techniques in Customer Relationship Management: A Literature Review and Classification. Expert Systems With Applications, 36, 2592–2602
- Park, S., Suresh, N.C., Jeong, B.K. (2008). Sequence-Based Clustering for Web Usage Mining: A New Experimental Framework and ANN-Enhanced K-Means Algorithm. Data & Knowledge Engineering 65, 512–543.
- Xiao, J., Xiao, Y., Huang, A., Liu, D., Wang, S. (2015). Feature-Selection-Based Dynamic Transfer Ensemble Model for Customer Churn Prediction. Knowledge and Information Systems 43, 29–51.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Text and Image Data Analysis**

Course Code: **22MBADSE335**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Understand the real-time applications of text and image data analysis.
- Foster analytical and critical thinking abilities for data-based decision making.
- Applying knowledge of libraries existing in R for doing image data analytics.
- Evaluate the result of machine learning techniques used for text data analysis.
- Usage of libraries existing in python for doing image data analytics.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Understand representation of text data and image data.
CO2	Describe text analytics and image data analytics.
CO3	Gain familiarity with R and Python for text and images data analytics.
CO4	Application of text data analysis and image data analysis to business processes
CO5	Interpret and analyze sentiment analysis and image data analysis using analytics tools

**Course Contents:**

**Module 1: Basics of Text and Image Data**

**3 Hours**

Importance of text data and image data in business, text and image data representation, applications of text and image data analysis

**Module 2: Text Data Analytics in R**

**12 Hours**

Text Mining: Text cleaning, Stop words, Stemming and Lemmatizing and Word Cloud. Sentiment Analysis, Text Similarity Techniques, Unsupervised Machine Learning for Grouping Similar Text, Supervised Machine Learning for Classification Problems

**Module 3: Image Data Analytics in R**

**12 Hours**

Image Acquisition and Representation, Image Resizing and Rescaling, Image Rotation, Image Intensity, Image Cropping, Image Similarity Techniques, Unsupervised Machine Learning for Grouping Similar Images, Supervised Machine Learning for Classification Problems

**Module 4: Text Data Analytics in Python**

**9 Hours**

Text Mining: Text Pre-Processing, Shallow Parsing, Stop words, Stemming and Lemmatizing and Word Cloud. Sentiment Analysis, Text Similarity Techniques, Unsupervised Machine Learning for Grouping Similar Text, Supervised Machine Learning for Classification Problems

**Module 5: Image Data Analytics in Python**

**9 Hours**

Image Acquisition and Representation, Image Resizing and Rescaling, Image Rotation, Image Intensity, Image Cropping, Edge Extraction using Sobel Filter, Edge Extraction using Prewitt Filter, Image Similarity Techniques,

## Unsupervised Machine Learning for Grouping Similar Images, Supervised Machine Learning for Classification Problems

### Basic Texts

- Motwani, B. (2020). Data Analytics using Python. Wiley.
- Motwani, B. (2019). Data Analytics with R. Wiley.

### Reference Books

- Bernard, R. & Ryan, G.W. (2012). Analyzing Qualitative Data: Systematic Approaches. Sage Publications.
- Sponder, M. (2013). Social Media Analytics: Effective Tools for Building, Interpreting, and Using Metrics. McGraw Hill.
- Evans J, (2017). Business Analytics. Pearson.
- Rao, P. H. (2013). Business Analytics- An Application Focus. Prentice Hall.

### Other reading material

- Tan,S.,Bu,J.,Chen,C.,Xu,B.,Wang,C.,He,X.(2011).Using Rich Social Media Formation For Music Recommendation Via Hypergraph Model. ACM. Trans. Multimedia Computer Communication Applications, 7(1), 22.
- Baier,D. Bruschi, I. , Frost, S. (2012). Image Data analysis and Classification in Marketing. Advances in Data Analysis and Classification. Springer. DOI: 10.1007/s11634-012-0116-0
- Lee, H.J., Lim, H., Jolly, L., Lee, J. (2009). Consumer lifestyles and adoption of high-technology products: a case of south korea. International Journal of Consumer Marketing, 21(2),153–167
- Tuma, M., Decker, R., Scholz, S. (2011). A survey of the challenges and pitfalls of cluster analysis application in market segmentation. International Journal of Market Research, 53(3),391–415
- Yankelovich, D., Meer, D. (2006). Rediscovering market segmentation. Harvard Business Review, 84(2),122–131

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



**LOGISTICS & SUPPLY CHAIN MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**

## Course Title: **International Logistics Management**

Course Code: **22MBADSE336**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Understanding the fundamental concepts of international logistics and free trade area concepts in international business scenario.
- Gaining the knowledge about the procedures involved in international purchase and procurement systems.
- Constructing knowledge of the concepts of Multimodal transportation, their legal classifications, Characteristics and the choice of transport.
- Understanding and gathering concepts of containerization and chartering operations.
- Understanding the possible future issues of international logistics and gaining skills to resolve

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Understand the components of international logistics and concepts of FTA and trade barrier systems
CO 2	Understand the various processes involved in international purchase and procurement systems
CO 3	Develop knowledge of the concept of multimodal transportation, their legal classifications, characteristics and the choice of transport
CO 4	Develop model concepts of containerization and chartering operations
CO 5	Develop insights & solutions in future issues of international logistics

### **Course Contents:**

#### **Module 1: International Logistics in international trade**

**9 Hours**

Introduction to international logistics: Definition, Evolution, Concept, Components, drivers & challenges in international logistics, importance of Integrated Logistics; Trade-offs & key factors in international logistics, Concepts of international trade, FTA – free trade area & zones, trade & non-trade barriers and LPI – logistics performance index, counter trade, transfer pricing, export & import documentation, Role of CF agents & current trends in freight logistics.

#### **Module 2: International purchase and procurement system**

**9 Hours**

International sourcing: types, drivers / factors, sourcing strategies and supplier management practices, global merchandising, negotiation techniques and MOUs / contracts, advantages on sourcing 3 PL and 4 PL operators, international warehousing – design and strategies, trends in material handling and inventory practices along with role of automation.

#### **Module 3: Transportation in International Logistics**

**9 Hours**

Basics of global transportation- Transportation Modes & Multimodal Transport: Modal Characteristics; Modal Comparisons in international logistics; long haul routes and feeder service networks. International Air Transport; Air Cargo Tariff Structure; Hinterland and strategies to connect through sourcing & collaboration.

**Module 4: Containerization in International Logistics****9 Hours**

Containerization and Chartering Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, Export Clearance at ICD; CONCOR&ICDs under CONCOR, importance of FCL and LCL, RORO – ConRO, LMSR, RoPax & RoLo, Current trends and innovation in cargo handling equipment & technologies.

**Module 5: Emerging issues in international logistics****9 Hours**

Role of in integration like tracking, linking with client service providers and collaboration through advanced IT technologies, maritime challenges and uncertainties, technological measures in security and protection, insurance and role of international intermediaries & arbitration, multi country trade alliances, continuously delivering value with cost advantage. Sustainability: scope & importance, drivers and benchmark practices in international logistics,

(\*Self-learning topics are subject to testing)

**Basic Text**

- Alan Branch (2009), Global logistics and international logistics, Routledge edition, London.
- Donald Wood, Anthony Barone & Paul Murphy (2002), International logistics, Amacom publications, 2nd edition, New York.
- Dong Song & Photis Panayides (2015), Maritime logistics, Kogan page publication, New Delhi.
- Sak Onkvisit & John J. Shaw (1996) , International Marketing Prentice Hall of India, New Delhi.
- Donald J. Bowersox & David Closs (2017), Logistic and Supply Chain Management by, Prentice Hall of India, Delhi.
- David Burt & Richard Pinkerton (2010), Supply Management, McGraw Hill edition, New Delhi.

**Reference Books**

- Sunil Chopra, Peter Meindl (2016), Supply Chain Management, Pearson Education, New Delhi.
- Bowersox, Closs, Cooper(2019), Supply Chain Logistics Management, McGraw Hill, New Delhi.
- Burt, Dobbler, Starling(2002), World Class Supply Management, TMH Edition, New Delhi.
- Donald Waters (2002), Logistics, Palgrave McMillan Edition, New York.
- Douglas, James, Lisa (1996), Fundamentals of Logistics Management, Irwin Mc Graw Hill edition, New York.
- Martin Christopher (2016), Logistics and Supply Chain Management, Pearson Education, New Delhi.
- Allan Harrison, Remko van Hoek (2008), Logistics Management and Strategy, Pearson education, New Delhi.

**Other Reading Materials**

- <https://www.offshore-energy.biz/worldmaritimeneews/>
- <http://www.cargobusinessnews.com/>
- <https://www.palgrave.com/in/journal/41278>
- <https://www.logisticsmgmt.com/>
- LinkedIn: Defining logistics
- LinkedIn: Logistics, procurement, and operations
- LinkedIn: Lean logistics
- LinkedIn: Choosing the right transportation method
- LinkedIn: Workplace logistics and communication
- LinkedIn: Planning onsite logistics

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Technology and Innovation Management**

Course Code: **22MBADSE337**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Find the importance of Technology Management in Businesses.
- Describe enterprise effectiveness using technology and innovation.
- Choose technology processes and tools.
- Examine fundamental framework for Industrial Automation in an organization.
- Assess automation systems solutions related applications.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Inferring organizational efficiency and technology forecasting methods.
CO2	Interpreting the technology life cycle and financial assessment of business models.
CO3	Using technology processes and tools.
CO4	Examining industrial automation processes and automation tools in business.
CO5	Prioritizing the role of CAD/CAM integration in manufacturing processes.

**Course Contents:**

**Module 1: Technology**

**11 Hours**

Five Best New Technologies for Business; Role of Technology in Competitive Environment; Types of Technology- Product, Process, Tool, Automation; Industry 5.0; Technology forecasting; Disruptive Technologies; Feasibility study; Opportunities for Introduction of Technology; Innovation building with teams; Technology audit; **Technology diffusion and Deployment (\*)**.

**Module 2: Business Model**

**7 Hours**

Technology life cycle; Technology-based Start-ups; Business models innovations; Trends in Agile Business Models.

**Module 3: Technology Transfer and Technology Funding**

**8 Hours**

Technology acquisition; Issues in intellectual property rights. VC funding; Risk in technology management.

**Module 4: Industrial Automation**

**9 Hours**

Role of automation in industries; Benefits of automation, Introduction to automation tools.

**Module 5: Computer Integrated Manufacturing**

**10 Hours**

An introduction to computer-integrated design and manufacturing; Manufacturing process engineering; Computer-aided process planning; CAD/CAM integration. Applications for Industrial Automation and latest trends in technology Management, **Automation for different industries (\*)**.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

## Basic Texts

- Melissa Schilling and Ravi Shankar (2019). Strategic Management of Technological Innovation. Sixth Edition. McGraw Hill India. 6 Edition. (TB-1)
- E-Book: <https://pdfroom.com/books/strategic-management-of-technological-innovation-fourth-edition/3Jr2E10E2yv>
- David Ford, Michael Saren, Mike Saren (2001). Managing and Marketing Technology (1st ed.). Thomson Learning.

## Reference Books

- Scott Shane (2009). The Handbook of Technology and Innovation Management. Wiley-Blackwell.
- E-Book: [https://maryannfeldman.web.unc.edu/wp-content/uploads/sites/1774/2011/11/Contribution-of-Public-Entities\\_2008.pdf](https://maryannfeldman.web.unc.edu/wp-content/uploads/sites/1774/2011/11/Contribution-of-Public-Entities_2008.pdf)
- Fredrik, Betz (2011). Managing Technological Innovation: Competitive Advantage from Change, 3rd Edition, Wiley.
- Haag, Baitzan Phillips (2009). Business driven technology (2nd ed.). Publisher Tata Mcgraw Hill.

## Other reading material

- **Case-1:**  
[https://www.researchgate.net/publication/311979348\\_Financial\\_Feasibility\\_Analysis\\_of\\_Natura\\_Rab\\_Business\\_Case\\_Study](https://www.researchgate.net/publication/311979348_Financial_Feasibility_Analysis_of_Natura_Rab_Business_Case_Study)
- **Case-2:**  
[https://www.researchgate.net/publication/309563391\\_BUSINESS\\_MODEL\\_INNOVATION\\_-\\_A\\_CASE\\_STUDY\\_IN\\_A\\_VALUE\\_NETWORK\\_OPERATOR](https://www.researchgate.net/publication/309563391_BUSINESS_MODEL_INNOVATION_-_A_CASE_STUDY_IN_A_VALUE_NETWORK_OPERATOR)
- **Case-3:**  
[https://www.researchgate.net/publication/282996813\\_A\\_Case\\_Study\\_of\\_a\\_Technology\\_Acquisition\\_and\\_Assimilation\\_Methodology\\_of\\_a\\_Broadcast\\_Company\\_in\\_the\\_Philippines](https://www.researchgate.net/publication/282996813_A_Case_Study_of_a_Technology_Acquisition_and_Assimilation_Methodology_of_a_Broadcast_Company_in_the_Philippines)
- **LinkedIn Learning:**  
<https://www.linkedin.com/learning/lean-technology-strategy-managing-the-innovation-portfolio/the-life-cycle-of-innovation?u=92695330>

## Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Logistics Network Analytics**

Course Code: **22MBADSE338**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objective:**

- Classify optimization and networking models in supply chains.
- Demonstrate the use of Transportation Models and Network Models.
- Demonstrate use of scheduling algorithms in supply chain.
- Demonstrate the use of Inventory Models in supply chain
- Discuss dependent and independent variables in supply chain and validating of models.

**Course Outcomes (COs):**

At the end of the course, learner will be able to:

CO 1	Analyze the subject in depth by emphasizing the usage of advanced quantitative models and methods like optimization in logistics and supply chain management
CO 2	Demonstrate practical aspects of prescriptive analytics using excel
CO 3	Discuss the heuristics methods of analysis
CO 4	Demonstrate the role of Inventory models in supply chain
CO 5	Summarize the role of Predictive models in Supply Chain

**Course Contents:**

**Module 1: Context of Present supply chains**

**9 Hours**

Context of today's supply chains (SC) Analytics-Understanding and defining the supply chain analytics (SCA)  
-Revisions of Basic Lessons of Supply Chain Management-Analytics Important in a supply chain-  
Relating Operations Management with Supply chain concepts with SC Analytics-The importance of supply chain analytics in the flows involving material, money, information and ownership

**Module 2**

Supply Chain Analytics and its importance in logistics - Classification of analytical models- Mathematical functions. Optimization-Types- Role of linear programming in logistics and supply chain Planning- -, Solution of simple simplex problems-- Models in practice **\*Non Linear optimization**

**Module 3: Transportation Models**

**9 Hours**

Transportation Network Models, Minimal Spanning Tree, Shortest Path Algorithms- Maximal Flow Problems- Multistage Transshipment and Transportation Problems- Multimodal transport solution design and optimization- Transshipment in industry **\*Simple examples**

**Module 4- Inventory Models**

**9 Hours**

Inventory Models for Probabilistic Demand-Single period/newsvendor, Base stock policy, Continuous review Policy (S,Q.) Periodic Review Policy(R,S), **\*Level of Service metrics**- Cycle service level, Cost per stock out event, Item fill rate, and cost per item short

**Module 5: Building Predictive Models**

**9 Hours**

Building predictive models, Dependent versus independent variables, Variable types, Linear Regression models, Residuals, Validating the model (Overall fit, individual coefficients, Regression Assumptions-Freight predictive modeling based on analytics.

Building descriptive models, Simulation models in the supply chain, Monte Carlo Simulation, Markov analysis in the supply chain, Characterizing the Queuing system- **\*Trends**

(\*Self-learning topics are subject to testing)

**Basic Texts**

- By Kurt Y. Liu (2022), Supply Chain Analytics: Concepts, Techniques, and Applications 1st ed. 2022 Edition, Palgrave MacMillan, UK.
- Robertson Peter (2020), Supply Chain Analytics: Using Data to Optimize Supply Processes, Routledge Processes, India.
- Chopra Sunil (2019), Supply Chain Management: Strategy, Planning, and Operation, 7<sup>th</sup> Edition, Pearson, India

**Reference Books**

- Hillier and Lieberman (2021), Introduction to Operations Research, 11<sup>th</sup> Edition, McGraw Hill, India.
- Albright, Winston, Zappe (2010) Data Analysis and Decision Making, Cengage Learning, India.
- Sharma J.K, (2013). Operations research, Macmillan, New Delhi, India.
- Hamdy A Taha, (2014). Operations Research: An Introduction, Prentice Hall, New Delhi India.
- Frederick S. Hillier & Gerald J. Lieberman (2017), Introduction to Operations Research. McGraw-Hill, New Delhi, India.
- Sharma J K (2014), Business Statistics, 4<sup>th</sup> Edition, Vikas Publishing Pvt Ltd.

**Other reading material**

- <https://www.edx.org/course/supply-chain-analytics>
- MIT Center for transportation and Logistics
- Wayne Winston on Analytics (linkedin.com)
- Gabor Belvardi et al (2012) Monte Carlo Simulation Based Performance Analysis of Supply Chains International Journal of Managing Value and Supply Chains (IJMVSC) Vol. 3, No. 2
- <https://www.linkedin.com/learning/inventory-management-foundations/what-is-inventory-management>

• **Evaluation Pattern:**

	Continuous Evaluation	End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Title: **Purchasing and Inventory Management**

Course Code: **22MBADSE339**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Gain knowledge of possibilities of efficient optimization and management of operation in Purchasing and Inventory Management.
- Examine the role of vendor analysis in supply chains.
- Examine the role of Material Management in a supply chain environment.
- Describe the codification in Materials management
- Describe the inventory management concepts and models

**Course Outcomes:**

At the end of the course, learners will be able to:

CO 1	Define the role of Purchasing polices, documentation process and pricing in purchase processes.
CO 2	Develop the manufacturer and vendor management relations in a supply chain environment.
CO 3	Explain the components and processes of material management and material planning.
CO 4	Assess the codification and International Codification process in LSCM.
CO 5	Examine the use of various inventory concepts models and apply them in business world

**Course Contents:**

**Module 1: Introduction to Purchasing**

**11 Hours**

Purchase policy- Rate and Running Contract – Subcontracting- Systems Contract – Stockless purchase – Buying seasonal items – Forward Buying – Hedging – Purchasing Activities – Indent Status – A to Z of Purchase Order –Transportation – Incoming Inspection – Bill settlement –Documentation- Meaning of Right Price – Price Analysis – Determination of Right Price – Influencing Factors on Pricing – Classification of Pricing – Price Forecasting - Right Place – Purchase Budgets – Budgetary control – Need Identification Problems – Definition of lead time Elements- **\*Cost Reduction and Lead time.**

**Module 2: Vendor Management**

**7 Hours**

Relevance of Good Supplier - Advantages of Good Relations –Prerequisites – Evaluation of Suppliers – The Buyers Role – Role of the Vendor –Relevance of Good Suppliers – Need for vendor evaluation – Goals of Vendor Rating – Advantages of Vendor Rating – **\*Parameters of Vendor Rating.**

**Module 3: Material Management**

**8 Hours**

Role of Material Management – Classes of Material – Materials and Profitability – Profit Center Concept – Material Objective –Centralized Purchasing Decentralizing – Delegation of Powers. Disposal of obsolete and scrap items- management of SOS, categorization of absolute/surplus, reason for obsolescence, control of obsolescence and control of scrap, responsibility for disposal. Definition of Material Planning –Bill of Material – Material Requirement Planning – Importance of Material Research- Definition – **\* Advantages of Materials Information System.**

**Module 4: Codification in Material Management****9 Hours**

Codification – Classification – Methodology–Requirement of codes – Coding Structure and Design – Advantages - International Codification – Cost and Consequences -**\*Right Quantity**

**Module 5: Inventory concepts and models****10 Hours**

Inventory-an essential requirement, Objectives of inventory, functions of inventory, classification, factors affecting inventory, concept of economic ordering quantity, Inventory modelling, **Quantity discount models and Deterministic models.**

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Text**

- Gopalakrishnan (2001). Purchasing and Materials management. Tata McGraw Hill
- Jeet Patidar (2011). Purchasing and Materials Management. S. Chand Publication
- S.A. Chunawalla (2017). Materials and Purchasing Management, Himalaya Publishing House.

**Reference Books:**

- Chopra, Sunil and Peter Meindl, Supply Chain Management, Strategy, Planning, and Operation, 5th edition, Pearson Prentice Hall, 2012.
- Menon (2009) Purchasing and Inventory management. Shroff Publishers
- John, Amar (2010). Principles of Inventory Management. Springer Publication.

**Other Reading Material**

- Website:<https://alison.com/course/inventory-management-using-inventory-models>
- <https://www.vskills.in/certification/material-management-certification>
- [https://www.youtube.com/watch?v=PuhgTVN\\_E\\_I](https://www.youtube.com/watch?v=PuhgTVN_E_I)
- <https://www.youtube.com/watch?v=t1OKbpDnCcY>
- <https://www.youtube.com/watch?v=sI5zEPRkpOU>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Port and Airport Management**

Course Code: **22MBADSE340**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Understand role of port structure and functions.
- Know different port operations methods.
- Grasp different port development method in the port operations.
- Take best administration decisions in the port operations management.
- Analyse air transport decisions.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Summarize the knowledge and understanding of port structure and concepts and use of these concepts for today's business decision making.
CO2	Examine the different port operations methods.
CO3	Analyse different port development methods in the port management
CO4	Demonstrate the role of decision making in the port management
CO5	Discuss the idea of air transport in the logistics management

### Course Contents:

#### Module 1: Port Structure and Functions

**10 Hours**

Definition - Types and Layout of the Ports Organisational Structure-Fundamental observations. Main functions and features of ports: Infrastructure and connectivity Administrative functions- Operational functions. Main services: Services and facilities for ships -Administrative formalities - Cargo transfer - Services and facilities for cargo - Additional "added value" service- Ports and their stakeholders like PHO, Immigration, Ship agents, Stevedores, CHA

#### Module 2: Port Operations:

**8 Hours**

Berths and Terminals - Berth Facilities and Equipment -ship Operation – Pre-shipment planning, the stowage plan and on-board stowage - cargo positioning and stowage on the terminal – Developments in cargo/container handling and terminal operation - Safety of cargo operations - Cargo security: Measuring and evaluating performance and productivity

#### Module-3 Port Development:

**10 Hours**

Phases of port development - Growth in world trade -Changes in growth Development in terminal operation. Shipping technology and port: Ship knowledge Ship development and port development - Port time and ship speed - Other technical development affecting port.

#### Module 4: Port Administration

**10 Hours**

Port Administration Ownership and Management Port ownership structure- Types of port ownership and administration – Organizations concerning ports - Boards governing the ports - Port management

development Rise and fall of Ports - information technology in ports. Port ownership in Indian context: Acts governing the Ports in India – Port ownership structure in India. Port reform: Framework for port reform - Evolution of ports in a competitive world Alternative Port Management Structure and Ownership Models.

**Module 5: Air Transport**

**7 Hours**

Introduction to Air Transport – Air Freight – IATA – Cargo Handling at Goods at Air Port – Information Management of Air Cargo – System and Modules – Distribution of Goods.

**Reference Books**

- ALAN E. BRANCH. 2008, Elements of Shipping. Chapman and Hall, Fairplay Publications, U.K.
- Alexander T.Well, Seth Young –Principles of Airport Management-McGraw Hill 2003
- DE MONIE. 1989., Measuring and Evaluating Port Performance and Productivity. UNCTAD, New York.
- Doganis.R(1992).-The Airport Business-Routledge, London.
- MARIA G. BURNS. 2014. , 9th Edition, Port Management and Operations. CRS Press, U.K.
- Marketing Management – RAJAN SAXENA –Tata McGraw Hill 6. International Marketing – Philip R.Cateora-IrwinMcGraw Hill
- PATRICK M. ALDERTON. 2008, Port Management and Operations. Information Law Category, U.K
- Gregory G.Dess and Alex Miller(2011) ,Strategic Management—McGraw Hill
- A.C.Hax and NS-Majifu (2012),Strategic Management: An Integrative Perspective-, Prentice Hall. 4. MarketingManagement –Philip Kotler – Pearson Education/PHI
- P.S.Senguttuvan(2003) –Fundamentals of Airport Transport Management – McGraw Hill .New delhi
- P.S.Senguttuvan(2007) –Principles of Airport Economics-Excel Books-New delhi

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Applied Geographic Information Systems and Spatial Data Analytics**

Course Code: **22MBADSE341**

Semester: **3**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Understand geographic information system and functions.
- Know different GIS source and its importance.
- Grasp different data source in the GIS.
- Know analyzing GIS data.
- Analyse application of GIS in the logistics and operations management.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Summarize the knowledge of GIS and use of these concepts for today's business decision making.
CO 2	Examine the different GIS sources
CO 3	Analyse different GIS data sources and its types
CO 4	Demonstrate the different GIS analytical Methods and decision making
CO 5	Applying different GIS business applications in the study area

**Course Contents:**

**Module 1: GIS**

**10 Hours**

GIS -Definition – Principles – Concepts –Components of MIS functions of GIS, Uses of GIS; Important GIS Vendors – ESRI – ArcGIS, MAPINFO, GEOMEDIA - Open source GIS-QGIS

**Module 2: DATA SOURCES**

**10 Hours**

Data sources (Open Source for Vector data - glcf, Google Earth, Bing Maps, Bhuvan for Raster data) Data acquisition from data sources – (Topographic, Cartographic, remotely sensed, Census, other records and Surveys). Data input -Scanning, Registration, Digitizing, Editing.

**Module 3: GIS DATA**

**7 Hours**

GIS data– Spatial and Attribute data. Data types- spatial, attribute, topology - Spatial data models – Raster and vector – advantages and disadvantages Data conversion. R2V, V2R. shp, dxf etc., Attribute data models – Hierarchical, relational and network. Database Management Systems: types -merits and demerits.

**Module 4: GIS DATA ANALYSIS**

**10 Hours**

GIS data analysis – Query (onscreen query, attribute query, spatial query) Classification, reclass, Overlay, Buffer, interpolation Advanced analysis – Network analysis, Terrain analysis, Morphometric analysis, creation of TIN and DEM and multi criteria evaluation (MCE)

**Module 5: GIS APPLICATION**

**8 Hours**

GIS Application: GIS as a Decision Support System, GIS for Business solutions, application of GIS in Land Information System and site suitability analysis, probability analysis, Location and Network Analysis

Application of mapping in Retail business and international trade. Tracking. Environmental Management, coastal management, Emergency Response System

**Reference Books**

- Aronoff S. Geographic Information Systems: A Management Perspective, DDL Publication Ottawa, 1989
- Burrough P.A. Principles of Geographic information Systems for Land Resource Assessment Oxford University Press, New York, 1986
- Chang, & K.-T. (2008). Introduction to geographic information systems. Boston: McGraw-Hill.
- Davis, B. E. (2001). GIS: A visual approach. Albany, NY: Delmar Thomson Learning
- Fraser Taylor D.R. Geographic information Systems. Pergamon Press, Oxford, 1991. Maquire D.J.M.F. Goodchild and D.W. Rhind (eds.). Geographic information Systems: Principles and Application. Taylor & Francis, Washington,
- GRASS Development Team, 2012. Geographic Resources Analysis Support System (GRASS) Software, Version
- 6.4.1. Open Source Geospatial Foundation. <http://grass.osgeo.org>
- Ian Heywood, Sarah Cornelius, Steve Carver, Srinivasa Raju, (2007) An Introduction Geographical Information Systems, Pearson Education, 2nd Edition,
- Kang – Tsung Chang, (2011) Introduction to Geographic Information Systems, McGraw Hill Publishing, 2nd Edition, 2011.
- Mark S Monmonier. (1982) Computer-assisted Cartography. Prentice-Hall, Englewood Cliff, New Jersey,
- Lo.C.P., Albert K.W. Yeung, (2006) Concepts and Techniques of Geographic Information Systems, Prentice-Hall India Publishers,

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Materials Management

Course Code: **22MBADSE342**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Describe the processes and methods in materials management
- Examine the advanced and recent techniques in materials management.
- Develop the skills necessary in the present dynamic environment.
- Describe the role of Quality control in Material Management
- Enhance the decision-making capabilities in a materials environment.

### Course Outcomes:

At the end of the course, learners will be able to:

CO 1	Define the processes and methods in materials management.
CO 2	Develop the 5Rs of Purchasing and analyse Make or Buy decisions.
CO 3	Explain the aspects related to Buying and identify aspects of Purchasing and Outsourcing.
CO 4	Assess the insights to stores function and stores identification systems.
CO 5	Examine the Quality Control in Materials Management

### Course Contents:

#### Module 1: Materials Management

**10 Hours**

Introduction and Objectives - Materials Management Concepts and their Importance Integrated Materials Management, Role of learning curve in Materials management, Profit Centre Concept Purchasing Function - Objectives, Scope and Importance, Organization for Purchasing, Centralization vs. Decentralization, Delegation of Powers, Purchasing Cycle Elements and their Importance, **\*Purchase Policies and Procedures**

#### Module 2: Make or Buy decisions in Business Logistics

**10 Hours**

5R's of Purchasing and Related issues Technical, Commercial and Legal Aspects of Purchasing Contracts Management - Make or Buy decisions - Import Policy and Procedures- Capital Goods and Project Imports, Spares, Consumables and Components, **\* Specific Licensing Provisions**

#### Module 3: Purchasing and Outsourcing

**9 Hours**

Project Buying and Related Aspects. Vendor Rating and Source Location. Negotiations in Purchasing - Outsourcing Management, application of Cloud Computing-**\* Latest Trends**

#### Module 4: Stores Management

**10 Hours**

Stores Function, Relevance and Importance- Objectives - Stores Identification System and Codification Stock valuation and verification-need, methods-FIFO, LIFO, Average Price, weighted average, Standard cost, replacement price

**Module 5: Quality control in Materials Management****6 Hours**

Introduction, evolution of quality concepts and applications, Quality and design spiral, Theory of sampling Inspection-OC Curve, AQL, LTPD, AOQ and AOQL curves, Sampling Plans, Control charts and in-process monitoring of Quality

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Chitale and Gupta (2014). Materials management – Text and Cases, 3rd Edition, PHI publication.
- Gopalakrishnan. Purchasing and Materials management. Tata McGraw Hill.

**Reference Books**

- Rajendra Mishra (2008). Materials Management. Excel Publication.
- Datta (2004). Materials Management: Procedures, Text and Cases. PHI Learning Pvt. Ltd.,
- Arnold (2009). Introduction to Materials Management. Pearson Education India.
- Richard J. Tersine (2004). Principles of Inventory and Materials, Management. Prentice Hall.
- Richard J. Tersine (2004). Modern Materials Management. John Hardin Campbell
- Gopalakrishnan (2004). Handbook of Materials Management. PHI Learning Pvt. Ltd.
- A.K. Singh (2008). Materials Management. First edition. Laxmi Publications Private Limited

**Websites:**

- <https://materialmg.com/>
- <https://www.bestsaptraining.com/sap-mm-course-sap-mm-module-sap-mm-training-mm-syllabus-mm-fees/#page-content>
- <https://www.welingkaronline.org/certificate-in-materials-management>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



## Course Title: **Operations Strategy**

Course Code: **22MBADSE343**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Familiarise the concepts of Operations Strategy
- Train the students to examine the NPV
- Make the students to practice the vendor management techniques.
- Nurture among the students, the Automation process in modern businesses.
- Encourage the students to apply the techniques of Innovation strategies.

### Course Outcomes (Cos):

At the end of the course, learners will be able to:

CO 1	Apply the techniques of Operations strategy to the real time Business situations.
CO 2	Evaluate the risk management and NPV of the resources
CO 3	Experiment the process of managing vendors
CO 4	Outline the role of Automation strategies in Operations Management.
CO 5	Construct the innovation strategies in Operations Management

### Course Contents:

#### Module 1: Uncertainty, Process & Content

**9 Hours**

Uncertainty and its measurement, Four V's of processes, modern thinking of strategy, Operations management vs Operations strategy, sometimes any plan is better than no plan, Case discussion – Online vs supermarket grocery retailing, Application - Four perspectives on Operations strategy, Metrology instruments, Everyday low prices at Aldi, Biases in Operational Decisions-Tailoring Operations Strategy-Theatre Lighting, Operational capabilities of Amazon, VRIO framework, IKEA's culture, **Process vs Content\***.

#### Module 2: Resource view

**9 Hours**

Risk Management- Network, capacity and Operational Hedging-Influence of Operations strategy on net present value and risk exposure, Case analysis - Operations strategy matrix for Pret A Manger, Behavioural view of Operations strategy, **OS new dimensions\***.

#### Module 3: Sourcing strategy

**9 Hours**

Strategic Sourcing and Supplier Relations\*, Sourcing Process, Supplier economics, Innovations: Make or Buy decisions, Supplier negotiations, Role of the Vendor, Relevance of Good Suppliers, Vendor Management, Vendor evaluation.

#### Module 4: Automation

**9 Hours**

Introduction: Automation in Production System, Principles and Strategies of Automation, Basic Elements of an Automated System, Advanced Automation Functions, Levels of Automations- **Computer based automation\***

#### Module 5: Improvement strategy

**9 Hours**

Operations improvement, Continuous and breakthrough improvement, Exploration improvement, organizational ambidexterity Improvement cycles, performance measurement, Innovations Concept-  
**Strategic Innovations Management in Operations Applications\***

**Basic Text**

- Nigel Slack, Michael Lewis, (2017), fifth edition, Pearson Education Limited

**Reference Books:**

- Terry Hill & Alex Hill – Operations strategy: Design, Implementation and delivery
- M P Groover, Automation, Production Systems and Computer Integrated Manufacturing
- David A Garwin, Operations Strategy, Text and cases, Harvard Business School

**Other reading material**

- <https://www.linkedin.com/learning/leading-in-uncertain-times/assume-responsibility-for-the-new-normal?u=92695330>
- <https://www.linkedin.com/learning/the-new-age-of-risk-management-strategy-for-business/risk-strategy-increases-opportunity?u=92695330>
- <https://www.linkedin.com/learning/strategic-negotiation/intentional-negotiation?u=92695330>
- <https://www.linkedin.com/learning/introducing-robotic-process-automation/welcome-to-the-future-of-work?u=92695330>
- <https://www.ida.liu.se/~steho87/und/htdd01/sdarticle5.pdf>
- <https://hbr.org/2012/06/managing-risks-a-new-framework>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**SYSTEMS AND OPERATION MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**

## Course Title: **Advance Operations Research**

Course Code: **22MBADSE345**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Familiarise the students in applying the concepts of Operations Research in real time situations.
- Train the students to minimize the cost of transportation and increase the profit of the firm.
- Encourage the students to understand the importance of sequencing the Jobs and machines.
- Apply the decision-making techniques in business situations.
- Nurture the students of using simulation techniques

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Apply Linear Programming Simplex method to the real time Business situations.
CO 2	Evaluate the transportation cost and hence minimize the cost incurred to the Industry.
CO 3	Experiment the sequence of Jobs/machines to maximize the profit.
CO 4	Outline the criteria to make the near perfect decision.
CO 5	Construct the process of simulation for the start-ups.

### Course Contents:

#### Module 1: Linear Programming

**9 Hours**

Variables – dynamic, slack, surplus; Standard Form of LPP, Fundamental theorem of LPP, Solution of LPP in Simplex Method (Maximization and minimization cases); Dual simplex, **Big M method\***, Case study.

#### Module 2: Transportation Problem

**9 Hours**

Formulation of Transportation Problem (TP), Initial Basic Feasible Solution, **Transportation Algorithm\***, moving towards optimality, stepping stone corner rule, MODI Method, (degeneracy and non-degeneracy cases), multiple optimal solutions, unbalanced transportation problems, maximisation in transportation, Routing Problem, Travelling Salesman Problem with the case of News-paper boy problem.

#### Module 3: Sequencing theory

**9 Hours**

Introduction, Solution of sequencing Problem-Processing n Jobs through 2 Machines-Processing n Jobs through 3 Machines- Processing 2 jobs through m machines-**Processing n –jobs through m Machines\***.

#### Module 4: Decision theory

**9 Hours**

Introduction, **Structure of Decision-making problem\***, types of Decision criteria - Decision under certainty, Decision under risk, Decision under uncertainty: Posterior probabilities and Bayesian analysis, Laplace criterion, MaxiMin criterion, MiniMax criterion, savage MiniMax regret criterion, Hurwicz criterion, Decision tree analysis, utility theory and decision making.

**Module 5: Simulation****9 Hours**

Introduction, Methodology of Simulation, Basic Concepts, Simulation Procedure, Application of Simulation, **Random numbers\***, Monte-Carlo Simulation, **Investment decision through simulation\***, Advantages of Simulation, Limitations of Simulation.

**Basic Texts**

- J K Sharma, Operations Research, 3rd edition, Macmillan
- Hamdy A Taha, Operations Research: An Introduction (9th Edition) Prentice Hall 2010.

**Reference Books:**

- Frederick S. Hillier & Gerald J. Lieberman, Introduction to Operations Research, McGraw-Hill, 2009.
- V K Kapoor, Operations Research, Sultan Chand & sons
- Ronald L. Rardin, Optimization in Operations Research, Prentice Hall, 1998
- Richard Bronson & Govindasami Naadimuthu, Schaum's Outline of Operations Research, McGraw Hill Professional, 1997

**Other reading material**

- Asia-Pacific Journal of Operational Research, World Scientific
- Journal of Operational Research Society, Taylor & Francis
- <https://www.linkedin.com/learning/fundamentals-of-dynamic-programming/the-importance-of-dynamic-programming?u=92695330>
- <https://www.linkedin.com/learning/excel-supply-chain-analysis-solving-transportation-problems/solve-supply-chain-transportation-problems-with-excel?u=92695330>
- <https://www.linkedin.com/learning/programming-foundations-discrete-mathematics/welcome?u=92695330>
- <https://www.linkedin.com/learning/decision-making-strategies/welcome?u=92695330>
- <https://www.linkedin.com/learning/critical-thinking-for-better-judgment-and-decision-making/upgrading-critical-thinking-2?u=92695330>
- [https://en.wikipedia.org/wiki/Operations\\_research](https://en.wikipedia.org/wiki/Operations_research)
- <https://towardsdatascience.com/what-is-operations-research-1541fb6f4963>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Technology Strategy**

Course Code: **22MBADSE346**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Creating an understanding of technology concepts
- Introducing students to frameworks, concepts and tools for building successful hi-tech products
- Enabling students to understand the technology levers
- Enabling students to make key product and technology decisions for better business decisions.
- Introduce students to the concepts of IP and tools and techniques for choosing technology.
- Equipping students with tools and techniques for Technology forecasting and examining technology choice and evaluation methods

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Define technology concepts
CO 2	Develop technology strategy through managing the elements of technology development
CO 3	Able to discuss the methods of technology choice
CO 4	Able to evaluate different technologies and make the best choice.
CO 5	Expose students to understand and analyse the latest technologies in logistics and supply chain management.

### Course Contents:

#### Module1: Technology Management

**10 Hours**

Introduction to Technology Management-Technology and Society – Technology in business context – Strategic technology process – Plan – Vision, Mission and Objectives -Technology origin and evolution –  
**\*Tailoring technology to fit specific industry requirements**

#### Module 2: Organizational Design in Technology management

**8 Hours**

Organization redesign –Importance- Organizational re-engineering – Financial considerations for technology Planning -**\*Trends**

#### Module 3: Technology Forecasting

**9 Hours**

Technology Forecasting – Need – Methodologies: - Trend Analysis, Analogy, Delphi, Soft System Methodology, Mathematical Models, Simulation, System dynamic, S-curve, **\*Role of Technology Information Forecasting and Assessment Council (TIFAC).**

#### Module 4: Technology and Strategic Planning

**9 Hours**

Dissemination of technology information- and strategic planning - Technology choice and evaluation methods – Analysis of alternative technologies - **\*Implementing technology programs.**

**Module 5: Intellectual Property Rights****9 Hours**

Intellectual Capital - An introduction to Intellectual Property Right - Patent - Copyrights - Trademarks and other Issues-**\*Trends.**

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Text**

- Strategic Management of Technological Innovation. 2016. Fifth Edition. Melissa Schilling. McGraw Hill Education.

**Reference Books**

- Eppinger, S., Ulrich, K. Yang, Maria C (2020). Product design and development. McGraw-Hill Higher Education.
- Gerard H. Gaynor, 1996, Handbook of Technology Management – McGraw-Hill.
- Robbert Szakonyi, 2006, Handbook of Technology Management – Viva books private limited.
- Vijay Kumar Khurana, 2007, Management of Technology and Innovation, Ane books India, Chennai
- Manav Gupta (2020). Blockchain for Dummies. 3rd IBM Limited Edition. John Wiley and sons.
- Betz, Frederic, 1996, Strategic Technology Management, New Delhi, McGraw Hill.

**Other Reference Material**

- Levitt, T. (1980). Marketing success through differentiation-of anything (pp. 83-91). Graduate School of Business Administration, Harvard University.
- Govindarajan, V., & Trimble, C. (2010). Stop the innovation wars. Harvard Business Review, 88(7/8), 76-83.
- <https://www.techcrunch.com>
- <https://www.thenextweb.com>
- <https://www.wired.com>
- <https://www.digitaltrends.com>
- <https://www.open.edu/openlearn/money-management/management/technology-innovation-and-management/content-section-2.1>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Service Operations Management**

Course Code: **22MBADSE347**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Understand the critical perspectives on the nature of service
- Observe and analyze an organization from a systems or process-perspective
- Apply the principles, tools and techniques of service design
- Aligning service strategy and service competitiveness
- Design, operate, and improve the systems that deliver goods and services through OM tools

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Understand the role of operations research in making the managerial decisions.
CO2	Solve the product mix problems using the LPP model.
CO3	Discuss waiting behaviour and service efficiency.
CO4	Analyze project networks and calculate the project duration time.
CO5	Describe inventory control and replacement models and network analysis.

### Course Contents:

#### Module 1: Service Management

**9 Hours**

The role of services in economy, The nature of services –service classification, service package, Distinctive characteristics of service operations, Open system view of services, The virtual value chain Technology in service management –Emergence of self service, Technology in service encounter, Automation in services and Internet services-Managerial implications of bi directional relationships, Sources of value in service supply relationships, Outsourcing services, Vehicle routing - Field service, Clark wright algorithm, vehicle routing with constraints and **\*manual routing system**

#### Module 2: Service Quality

**9 Hours**

Defining service quality – Dimensions of service quality, gaps in service quality, SERVQUAL, Scope of service quality, Walk Through Audit, Service recovery- **\*unconditional service guarantee**

#### Module 3: Growth and Globalization of Services

**9 Hours**

Domestic growth and expansion strategies- Focused service, focused network, clustered service diversified network, Franchising, Generic International Strategies -**\* trends**

#### Module 4: Service Operations

**9 Hours**

Service Blueprint- Product Process Matrix in Services- Capacity Planning and Facility Planning in Service Operations- Models in Service Operations- Domestic growth and expansion strategies- **\*Global service strategies**



**Module 5: Service Operations in Banking, Hospital Industry and IT/ITES Industry****9 Hours**

Identification of Different operations involved. History, Current and Future Practices. Role of Government Regulations-Capacity Management-Facility location and Process Planning- History, Current and Future Practices. **\*Role of Government Regulations.**

**Basic Text**

- James A Fitzmmons, M. J. (2006). Service Management Operations, Strategy, Information technology. New Delhi: Tata Mc Graw Hill.

**Reference Books**

- RBI. (2000). Reserve bank of India: functions and working. New Delhi: Government of India.
- Dr. Malhotra, A.K. (2009). Hospital management-an evaluation. New Delhi: Global India Publications.
- 3.B. Fitzsimmons, James A., and Mona J. Fitzsimmons, Service Management: Operations, Strategy, and Information Technology, 6th Ed., Irwin/McGraw-Hill, 2019.
- C. Haksever, Render B., Russel S. R. and Murdick R. G., Service Management and Operations, 2nd Ed., Prentice Hall, 2020.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Statistical Process control**

Course Code: **22MBADSE348**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Drive the concept of quality standards used across the globe.
- Create an awareness of Inspection department and its importance to maintain the quality.
- Train the students in solving the acceptance sampling techniques
- Familiarise the students to design the process and fractional experiments.
- Equip the students in using the control charts in floor shop

**Course Outcomes (Cos):**

At the end of the course, learners will be able to:

CO 1	Apply the concepts of quality in real time Business situations.
CO 2	Evaluate the procedures applied in Inspection department.
CO 3	Construct the control charts in production to achieve efficiency.
CO 4	Outline the process design and the fractional experiments.
CO 5	Experiment the Acceptance sampling techniques.

**Course Contents:**

**Module 1: Statistical methods in Quality control and improvement** **9 Hours**

Dimensions of Quality, CTQ characteristics, **Brief history of quality control and improvement\***, Quality philosophy and management strategies, Deming philosophy, Deming's seven deadly diseases of Management, TQM & six sigma\*, DMAIC process, Probability distributions and plots

**Module 2: Statistical Process control and capability analysis** **9 Hours**

Methods and philosophy of statistical process control, Construction of a Cause-and-effect diagram, **Application of SPC\***, Control charts for variables, Control charts for attributes.

**Module 3: Statistical process monitoring and control techniques** **9 Hours**

Cumulative sum control chart, exponentially weighted moving average control chart, statistical process control for short production runs, modified and acceptance control charts, **control charts for multiple stream processes\***, **multivariate process monitoring and control\***.

**Module 4: Process Design and improvement with designed experiments** **9 Hours**

Experimental design, guidelines for designing experiments, Factorial experiments, residual analysis, **Blocking and confounding\***, **Fractional replication\***, **Philosophy of process control\***.

**Module 5: Acceptance sampling** **9 Hours**

Lot by lot acceptance sampling for attributes, types of sampling plans, Lot formation, random sampling, single sampling plans, OC curve, double, multiple and sequential sampling, military standard, Dodge-Romig sampling plans, **Chain sampling\***.

### Basic Texts

- Douglas C Montgomery, Introduction to Statistical quality control, sixth edition, John Wiley & sons.
- T R Banga & S P Sharma, Industrial organization & Engineering Economics, Khanna publishers

### Reference Books:

- Duncan, A. J. (2003.). Quality Control and Industrial Statistics, Irwin-Illinois, US.
- Grant, E. L., and Leavenworth, R. S. (2000). Statistical Quality Control, Seventh Edition, Tata McGraw Hill, New Delhi.
- Montgomery, D. C. (2009). Introduction to Statistical Quality Control, Sixth Edition, Wiley India, New Delhi
- Ross, S. M. (2009). Introduction to Probability Models, Tenth Edition, Academic Press, MA, US

### Other reading material

- [http://bmepedia.weebly.com/uploads/2/6/6/8/26683759/unit\\_4\\_quality\\_control.pdf](http://bmepedia.weebly.com/uploads/2/6/6/8/26683759/unit_4_quality_control.pdf)
- <http://www2.ing.unipi.it/lanzetta/stat/Chapter20.pdf>
- <https://www.win.tue.nl/~adibucch/2WS10/SPCLecturenotes.pdf>
- [https://wps.prenhall.com/wps/media/objects/7117/7288732/65767\\_28\\_SuppG.pdf](https://wps.prenhall.com/wps/media/objects/7117/7288732/65767_28_SuppG.pdf)
- [https://www.cs.odu.edu/~zeil/cs795SR/Papers/TextBook/Appendix\\_B.pdf](https://www.cs.odu.edu/~zeil/cs795SR/Papers/TextBook/Appendix_B.pdf)
- [https://www.ravenshawuniversity.ac.in/Study\\_Materials/Statistics\\_PG/PG\\_2nd\\_Year\\_/reliability.pdf](https://www.ravenshawuniversity.ac.in/Study_Materials/Statistics_PG/PG_2nd_Year_/reliability.pdf)
- <https://nptel.ac.in/courses/116/102/116102019/>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Enterprise Resource Planning Systems**

Course Code: **22MBADSC389**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Describe the fundamental framework for Enterprise Resource Planning (ERP) in an organization.
- Examine the components of ERP Project team
- Gain knowledge of the various functional modules for vertical and horizontal workflow of business operations.
- Adopt an integrated approach for better decision making.
- Gain insights to the applications of EPR based new technologies

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Define Enterprise Resource Planning systems improving business processes.
CO2	Develop the role of Project team members to enhance the effectiveness of the system
CO3	Explain business process re-engineering and ERP modeling in business operations.
CO4	Assess the ERP implementation life cycle in managing projects
CO5	Examine the applications of EPR based new technologies such as cloud computing.

**Course Contents:**

**Module 1: ERP Fundamentals**

**11 Hours**

Conceptual and Basic Definition of ERP, ERP potential in business transformation, Demand of ERP, Evolution, ERP market-Conceptual Roles of ERP, Need for ERP, Risks of ERP, Gap analysis, Competitive environment analysis, Strategic needs analysis, Feasibility analysis, ERP Market Tiers, ERP Functional Modules and Extended Modules – SCM, CRM & BI, ERP Project life cycle, **\*Cost elements**

**Module2: ERP Project Teams: Organization of the Implementation Team.**

**8 Hours**

ERP Vendors, Consultants & Users: Pro & Cons of In-house Implementation, Vendors, Consultants, Employees and Employee Resistance, Reasons for Resistance, Contract with Vendors, Consultants and Employees, **\* competitive environment**

**Module 3: ERP enabled Business Process re-engineering**

**8 Hours**

Business process re-engineering definition, common myths about BPR, Process improvement Vs Process innovation, 7 R's of Reengineering, how to minimize failure of BPR Projects, Implementing BPR -BPR characteristics and steps, ERP and BPR, , Business case, five stage AS-IS/TO- **\*BE analysis**

**Module 4: ERP Project Implementation**

**8 Hours**

Conceptual ERP implementation lifecycle, ERP Transition Strategies, ERP implementation process, Project related factors, ERP with respect to small and medium enterprises (Indian perspective), Issues in ERP project management- **\*Innovations**

**Module 5: Managing ERP-ES Enabled Change****10 Hours**

Conceptual Introduction, planning for integration, Change management strategies, ERP- Trends in ERP Technology & Business, Conceptual SaaS, SOA, Industry Specific ERP Solutions, Cloud computing, Integration with e-business, mobile commerce, IOT **\*ERP solution providers / vendors**

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts:**

- Alexis Leon (2019). Enterprise Resource Planning. Fourth edition. Tata McGraw Hill Publications.
- Sumner, M. (2004). Enterprise Resource Planning. Pearson Publications.

**Reference Books**

- O'Leary, D. E. (2000). Enterprise Resource Planning Systems: Systems, Life Cycle, Electronic Commerce, and Risk. United Kingdom: Cambridge University Press.
- Dey (2005). Business process re-engineering and change management. Biztantra.
- Ganesh, et al., (2014). Enterprise Resource Planning. First edition. Springer International publication.
- Rajesh Ray (2011). Enterprise Resource Planning. Tata Mc Graw Hill Publications.
- Erlend and Jaran (2020). ERP Systems for Manufacturing supply Chains. CRC press.

**Other reading material**

- <https://www.saponlinetutorials.com/what-is-erp-systems-enterprise-resource-planning/>
- <https://www.smartsheet.com/newbies-business-processing-reengineering-guide-experts-insights>
- <https://www.netsuite.com/portal/resource/articles/erp/what-is-erp.shtml>  
<https://www.youtube.com/watch?v=Nfq3OC6B-CU>
- <https://www.saponlinetutorials.com/what-is-erp-systems-enterprise-resource-planning/>
- <https://www.smartsheet.com/newbies-business-processing-reengineering-guide-experts-insights>
- <https://www.netsuite.com/portal/resource/articles/erp/what-is-erp.shtml>
- Video Link: <https://www.youtube.com/watch?v=Nfq3OC6B-CU>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Data Driven Decision Making**

Course Code: **22MBADSE349**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Understand the structure for effective data driven decisions
- Understand the big data tools and techniques
- Analyse the key analytical tools and techniques for data 310 visualisation
- Apply the analytical tools for prediction modelling.
- Apply data in to real time projects.

### **Course Outcomes (Cos):**

At the end of the course, learners will be able to:

CO1	Discuss the framework for data analytics for effective decision making.
CO2	Discuss the key analytical tools and techniques for big data
CO3	Illustrate the analytical tools for data visualisation
CO4	Develop data models from the insights of collected data
CO5	Examine data centric projects for decision making

### **Course Contents:**

#### **Module 1: Data and Decision Making**

**9 Hours**

Introduction to data driven strategy and its importance, businesses problem solving using data analytics, the value data analytics brings to business decision-making processes, framework for data analysis and tools used in data analytics-\*Careers and roles in data analytics and data science- Innovations- Case studies.

#### **Module 2: Big Data**

**9 Hours**

Introduction to big data and big data analytics, different types of data, the impact of big data on businesses, different types of tools and technologies used to gather data (Spark, Hadoop, HIVE,)-\*trends. Introduction to Spark Software.

#### **Module 3: Data analysis techniques**

**9 Hours**

Intro to SPSS, Basics of data analytics, Tools for data analytics and some of the key technologies for data analysis, importance of visualization in data analytics, identify a variety of tools and languages used and considering when those tools are best used. (data visualization, frequency distributions, mean comparisons, cross tabulation, Statistical inferences using chi-square, t-test and ANOVA using SPSS software.). -\*Examples.

#### **Module 4: Data Models**

**9 Hours**

Secondary data analysis research in decisions and in conceptual model, important aspects of regression modeling-Simple data analysis visual techniques- Evaluating insights from data to make a data-driven decision – Simulating data to analyze level of risk and identify the most impactful variables-\* Iterating through data collection to make a data-driven decision, data modelling through regression analysis.

**Module 5 Data-driven decision making projects****9 Hours**

Use of AI in decision making process, Project based work instruction – Appropriate use of descriptive statistics and inferential statistics (how to make inferences from our data to general population using a data set. The course project to practice what you have learned, students will participate in a simulated business situation in which you will select the best course of action and will then prepare a final deliverable- \*Examples

(\*Self-learning topics are subjected to testing)

**REQUIRED: SPSS PASW Statistics 21****Basic Texts**

- Evans J. R (2013). Business Analytics Methods, Models and Decisions. Pearson, Upper Saddle River, New Jersey.
- Deepak Chawla and Neena Sondhi (2016)2/e, Research methodology- Concepts and cases, Vikas Publishing
- Amar Sahay (2018), Business Analytics, Volume I: A data Driven Decision making approach for Business, Business Expert press

**Reference Books**

- Kowalski, T., & Lasley, T. J. (2009). Handbook of data-based decision making in education New York: Routledge.
- Norusis, J. (2005) SPSS 13.0 Guide to Data Analysis, New Jersey, Prentice Hall ISBN 0-13-186535-8
- Thomas H. Davenport, Jeanne Harris (2017) Competing on Analytics: Updated, with a New Introduction: The New Science of Winning , Harvard Business School Press.
- Hillier(2018) Introduction to Management Science, 6th ISBN: 9781264178049, McGraw-Hill

**Other reading material**

- Hagi, A., & Wright, J. (2020). When Data Creates Competitive Advantage. Harvard Business Review, 98(January– February), 94–102.
- Lee, Y., Wang, F., Madnick, S., Zhang, H., & Wang, R. (2014). A Cubic Framework for the Chief Data Officer : Succeeding in a World of Big Data. MIT ESD Working Paper Series, 13(November), 1–13. Retrieved from <https://dspace.mit.edu/handle/1721.1/103027>
- Davenport, T. H., & Harris, J. G. (2017). Managing Analytical People chapter in Competing on Analytics - The New Science of Winning. Boston, Massachusetts: Harvard Business School Publishing. p. 69-90., p. 187-216.
- Agrawal, A., Gans, J., & Goldfarb, A. (2018). Prediction Machines. Boston, Massachusetts: Harvard Business Review Press. p. 1-100
- McAfee A. 2010. The Future of Decision Making: Less Intuition, More Evidence. Available at: <https://hbr.org/2010/01/the-future-of-decision-making>
- New Vantage Parters. (2019). How big data and AI are accelerating business transformation. Retrieved January 3, 2020, from newvantage.com website: [www.newvantage.com](http://www.newvantage.com)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**ENTRPRENEURSHIP & NEW VENTURE CREATION**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**



## Course Title: **Corporate Entrepreneurship**

Course Code: **22MBADSE350**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Describe the dimensions of entrepreneurship and intrapreneurship in organizations.
- Assess the tools, methods and approaches to corporate entrepreneurship.
- Identify the key stages of creating successful corporate entrepreneurship.
- Explain the stages of developing an intrapreneur in a company.
- Enumerate the stages of developing intrapreneurial teams in corporations.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Explain the dimensions of entrepreneurship and intrapreneurship in organizations
CO 2	Discuss the tools, methods and approaches to corporate entrepreneurship
CO 3	Identify the key stages of creating successful corporate entrepreneurship
CO 4	Assess the stages of developing an intrapreneur in a company
CO 5	Enumerate the stages of developing intrapreneurial teams in corporations

### Course Contents:

#### Module 1: Corporate entrepreneurship

**8 Hours**

Strategic challenges facing organizations, **nature of entrepreneurship\***, Corporate Venturing, entrepreneurial process, corporate entrepreneurship, entrepreneurship and intrapreneurship-need and importance.

#### Module 2: Need for corporate entrepreneurship

**9 Hours**

Entrepreneurship in established companies, corporate evolution, levels of entrepreneurship in organizations, entrepreneurial intensity-**start-up vs corporate entrepreneurship\***, organizational life cycle.

#### Module 3: Developing corporate entrepreneurship in corporations

**10 Hours**

Enabling environment for entrepreneurship creation, embracing new business models, corporate incubators, function and organization of new venture units, new approaches-**incorporating creativity into the corporate process\***.

#### Module 4: Evolution of intrapreneurship in corporations.

**9 Hours**

Life cycle of an intrapreneur-classification- role and responsibilities, mindset change, roles of traditional managers, **emerging concepts in intrapreneurship\***, ideas, opportunities, creativity.

#### Module 5: Developing intrapreneurial teams

**9 Hours**

Phases of intrapreneurial team development-solo-network-bootleg-format team, corporate intrapreneurs, corporate entrepreneurship in the social sector, **\*challenges and opportunities in corporate entrepreneurship**.

(\* Self-learning topics and are subjected to testing)

**Basic Texts:**

- Histrich D. Robert and Peters P. Michal Shepherd A Dean, (2007), Entrepreneurship, McGraw Hill India.
- Holt H. David, (2005), Entrepreneurship New Venture Creation, Prentice-Hall India.
- Kuratko F. Donald and Hornsby S. Jeffery (2009): New Ventures Management, Entrepreneur Road Map, Pearson Education India.
- Morris, M.H, Kuratko, D.F, and Covin, J.G., 2010 Corporate Entrepreneurship & Innovation, 3<sup>rd</sup> Edition, Cengage Learning Publishing

**Reference Books:**

- Stevenson, H.H., Grousebeck, H.I., Roberts, M.J. and Bhide, A. (2000), New Business Ventures and the Entrepreneur, McGraw-Hill, Singapore.
- Stutely, R. (2002), The Definitive Business Plan, FT Prentice Hall
- Smith, K.S. and Alexander, R.C., 1999 Fumbling the Future: How Xerox Invented then Ignored, the First Personal Computer, toExcel publishing
- Toftoy, C., Chatterjee, J., & Toftoy, C. (2004). The intrapreneurial revolution: now is the time for action. *Retrieved from <http://www.sbaer.uca.edu/research/icsb/2005/192.pdf>*.
- Heinonen, J., & Toivonen, J. (2007). Approaching a deeper understanding of corporate entrepreneurship-focusing on co-evolutionary processes. *Journal of Enterprising Culture*, 15(02), 165-186.
- Stopford, J. M., & Baden-Fuller, C. W. (1994). Creating corporate entrepreneurship. *Strategic management journal*, 15(7), 521-536.

**Other reading material**

- García-Morales, V, J., Bolívar-Ramos, M.T., Martín-Rojas, R., (2013), “Technological variables and absorptive capacity's influence on performance through corporate entrepreneurship”, *Journal of Business Research*.
- Rutherford, Matthew W., Holt, Daniel T., (2007), Corporate entrepreneurship An empirical look at the innovativeness dimension and its antecedents, *Journal of Organizational Change Management*, Vol. 20 No. 3, pp.429-446.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Opportunity Sensing and Preparing for Launch**

Course Code: **22MBADSE351**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Understand the process of identifying and recognizing opportunities
- Leverage creativity with opportunity recognition in dynamic environments
- Apply intellectual property rights and measures to secure ideas and models
- Assess challenges and opportunities through feasibility analysis
- Assemble a validated plan for the new venture by consolidating ideation processes, marketing efforts and financial aspects

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Illustrate the process of identifying and recognizing opportunities
CO 2	Examine the macro-level components and drivers that determine the environment of entrepreneurial development
CO 3	Assess the steps to protect business ideas
CO 4	Assess new business venture attractiveness and feasibility
CO 5	Develop a business plan for a new business venture

### **Course Contents:**

#### **Module 1: Identifying and Recognizing Opportunities**

**6 Hours**

Opportunity, problem recognition-opportunity gap, idea, **window of opportunity\***, approaches to identify an opportunity, essential qualities of an opportunity.

#### **Module 2: Generating Creative Ideas**

**9 Hours**

Opportunity recognition and creativity; steps to generate creative ideas-preparation-incubation-insight-evaluation- elaboration, opportunity recognition process-environmental trends-cognitive factors-business, product or service opportunity gap, **techniques for generating new ideas\***.

#### **Module 3: Encouraging and Protecting New Ideas**

**10 Hours**

**Finding gaps in the marketplace\***, opportunity recognition, establishing an idea bank, creativity, actions and behaviour that encourage/discourage creativity, intellectual property-patents-trademarks-copyright-trade secrets.

#### **Module 4: Developing New Business Ideas**

**10 Hours**

Four stage process, role of feasibility analysis, concept test, financial attractiveness of a new venture, new entry and new entry opportunity, test-validate-prototype, incubation and go-to-market, **startup-profit-non-profit\***.

**Module 5: Writing a Business Plan****10 Hours**

Business plan-reasons, **audiences-employees-stakeholders-investors\***, guidelines, summary plan, full business plan, operational business plan.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Text:**

- Barringer, R.B., & Ireland, D, R. (2020). Entrepreneurship: Successfully launching new ventures. Sixth edition, Pearson Education, India.

**Reference Book:**

- Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd. (2017). Entrepreneurship, Tenth edition, The McGraw-Hill Education, New York.
- Ramaguera, J. (2013). The Entrepreneurial Spark: Recognizing Opportunities and Developing Them into Viable Businesses, Second edition, International Entrepreneurship Institute, USA.
- Stephen Spinelli, Jr. & Robert Adams. (2012). New Venture Creation – Entrepreneurship for the 21st Century, Ninth edition, The McGraw-Hill Companies, Inc, New York.

**Other reading material**

- Cohen, D. (2020). Creating and Recognizing New Opportunities. Sage edge, Sage Publications Inc., USA. [https://us.sagepub.com/sites/default/files/upm\\_assets/107801\\_book\\_item\\_107801.pdf](https://us.sagepub.com/sites/default/files/upm_assets/107801_book_item_107801.pdf)
- Lisa K. Gundry and Jill R. Kicku. (2007). Strategies for Opportunity Identification: The Creative Process in: Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention. <https://sk.sagepub.com/books/entrepreneurship-strategy/n2.xml>
- Kai-Ingo Voigt, Oana Buliga, Kathrin Michl. (2017). Business Model Pioneers – How Innovators Successfully Implement New Business Models, Springer International Publishing, Switzerland.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Design Thinking for Entrepreneurs**

Course Code: **22MBADSE352**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Articulate the concepts of design thinking approaches
- Construct design thinking teams and conduct design thinking sessions
- Acquire both critical thinking and design thinking in parallel to solve problems
- Adapt design thinking concepts to their daily work
- Assign the systematic approach to new product development

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Discuss the concepts of Design thinking and its implication
CO 2	Outline the various frameworks for design thinking and how it can be implemented for business ideas
CO 3	Illustrate and discuss the steps for idea formulation for design thinking
CO 4	Compare and interpret the design thinking concepts
CO 5	Ascertain the visualization techniques and maps for presenting the startup idea

### Course Contents:

#### Module 1: Design Thinking Overview

**8 Hours**

Overview of Design thinking, Design Thinking Skills, Design Thinking Mindset, Principles of Design Thinking

#### Module 2: General Approaches to Design Thinking

**9 Hours**

Basis for Design Thinking, Design Thinking Frameworks, The Design Thinking Team, elements of Design Thinking Team, Design Thinking Workshops and Meetings, Characteristics, Types of Workshops

#### Module 3: A Design Thinking Approach in Stages

**9 Hours**

Apply the Design Thinking Frameworks, Empathize with the Customers and/or Users, Define the Problem, Ideate, Prototype Alternate Solutions, Test the Solutions

#### Module 4: Design Thinking Techniques

**9 Hours**

Empathizing Techniques, Define and Ideation Techniques, Prototype and Test Techniques, Types of Prototypes, Forms of Testing in Design Thinking.

#### Module 5: General Design Thinking Practices

**10 Hours**

Visualization Techniques and Diagrams, Use of Diagrams and Maps in Design Thinking, creating an Empathy Map, Revisit the Wall, create an Affinity Diagram, Create a Mind Map, Create a Journey Map, Story Telling Techniques.

**Basic Text:**

- Mootee, I. (2013). Design thinking for strategic innovation: What they can't teach you at business or design school. John Wiley & Sons.

**Reference Book:**

- Ingle, B. R. (2013). Design thinking for entrepreneurs and small businesses: Putting the power of design to work. Apress.

**Other reading material:**

- von Busch, O., & Palmas, K. (2016). Designing Consent: Can Design Thinking Manufacture Democratic Capitalism? *Organizational Aesthetics*, 5(2), 10-24.
- Woolery, E. (2019). Design thinking handbook. Retrieved April, 5, 2020.
- Penzenstadler, B. (2020). When Does Design Help Thinking, and When Does Design Thinking Help? *IEEE Software*, 37(2), 6-9.
- Pitsis, T. S., Beckman, S. L., Steinert, M., Oviedo, L., & Maisch, B. (2020). Designing the future: strategy, design, and the 4th industrial revolution—an introduction to the special issue.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Name: **Entrepreneurship Finance**

Course Code: **22MBADSE353**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Creating an understanding of the importance of products and brands for creating competitive advantage.
- Introducing students to cutting-edge frameworks, concepts and tools being used to build successful brands.
- Enabling students to understand the levers that can create relationships between the brand and the consumer.
- Enabling students to make key product and brand decisions for managing portfolios.
- Equipping students with tools and techniques to conduct brand audits and assess brand equity.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Identify the theoretical frameworks of entrepreneurship finance
CO 2	Define the types of entrepreneurship finance
CO 3	Demonstrate the business model for entrepreneurship finance
CO 4	Construct the growth and exit strategies of new business ventures
CO 5	Conclude on the successes, opportunities and risks in entrepreneurship finance

**Course Contents:**

**Module 1: Entrepreneurial Finance**

**7 Hours**

Entrepreneurial finance, theoretical frameworks, **valuation for entrepreneurial ventures\***, possible funding sources, types of investments, planning horizons, tools for analyses.

**Module 2: Venture Capital Funding**

**10 Hours**

Venture capital industry, structure of venture capital funds, venture capital funding, **funding rounds and the business of funding\***, the challenges of managing and funding growth, term sheets and the concept of due diligence.

**Module 3: Financing Options**

**10 Hours**

Angel, venture capital and private equity funding, platforms, **business plans start-up ventures\***.

**Module 4: Growth and Exit Strategies**

**9 Hours**

Liquidity events-Initial Public Offerings, sales and mergers, later stage financing- mezzanine financing- buy-outs, international growth, **corporate and strategic venture funds\***.

**Module 5: Career Options in Entrepreneurial Finance**

**9 Hours**

Opportunities and challenges, founder and promoter contribution, **professional management and work teams\***, career opportunities in entrepreneurial finance.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Text:**

- Rogers, S., & Makonnen, R. (2014). Entrepreneurial finance: Finance and business strategies for the serious entrepreneur, Third edition, McGraw-Hill India.

**Reference Books:**

- Leach, J. C., & Melicher, R. W. (2021). Entrepreneurial finance, Cengage Learning
- Alemany, L., & Andreoli, J. J. (Eds.). (2018). Entrepreneurial Finance: The Art and Science of Growing Ventures. Cambridge University Press.

**Other reading material**

- Matlay, H., & Sørheim, R. (2005). Business angels as facilitators for further finance: an exploratory study. Journal of Small Business and Enterprise Development.
- Emerald emerging market case studies (EEMCS), Emerald
- Albornoz, C. A. (2018). Toward a set of trainable content on entrepreneurship education: a review of entrepreneurship research from an educational perspective. Journal of Technology Management & Innovation, 3(2), 86-98.
- Palepu, K. G., & Healy, P. M. (2013). Business analysis and valuation: Using financial statements, text and cases.
- Aktan, B., & Bulut, C. (2018). Financial performance impacts of corporate entrepreneurship in emerging markets: A case of Turkey. European Journal of Economics, Finance and Administrative Sciences, 12(8), 1530-2275.
- Family Business Review (FBR), Sage.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Name: **Strategic Leadership in Family Business**

Course Code: **22MBADSE354**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Outcomes:**

- Outline family business planning approaches.
- Describe the family business system and its components.
- Discuss the importance of succession planning in a family firm.
- Recognize business continuity for long-term success in family-owned businesses.
- Explore approaches to family stewardship and governance.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Illustrate the dimensions of entrepreneurship and intrapreneurship
CO 2	Examine entrepreneurship creation in established companies.
CO 3	Describe the enabling environment for entrepreneurial development in corporations.
CO 4	Explain the life cycles stages in developing an intrapreneurial mindset.
CO 5	Discuss them stepsm involved in establishing intrapreneurial teams.

**Course Contents:**

**Module 1: Planning for Family Business**

**8 Hours**

The benefits of family business planning, balancing family and business demands, **\*the challenge of creating a family business legacy**, three-circle model of family business-family-ownership-business, important strategic skills and personal traits of leaders of a family business.

**Module 2: Succession Planning**

**10 Hours**

Preparing the next generation of family managers and leaders, trans-generational leadership and entrepreneurship, **\*succession planning and managing**, transitions in leadership and ownership, family agreements and exit dynamics.

**Module 3: Strategic potential of a family business**

**9 Hours**

Securing family commitment, encouraging family participation, core competencies and competitive advantages, assessing the family-owned firm, strategic potential, **\*roles and challenges of family businesses in transitioning from trade to industry**.

**Module 4: Family boards and strategic leadership value**

**9 Hours**

Board in family business planning-role, exploring business strategies, **\*estimating market value of the family business**, reinvestment decision, professionalizing work teams and, second generation entrepreneurs.

**Module 5: Family business rewards and governance**

**9 Hours**

Family business ownership configurations, estate plans, **\*family business governance**, stewardship as a family ownership value, the challenge of creating a family business legacy.

(\* Self-learning topics and are subject to testing)

**Basic Texts:**

- Carlock, R., & Ward, J. (2001). Strategic planning for the family business: Parallel planning to unify the family and business. Springer, USA.

**Reference Book:**

- Calabro, A., Torchia, M., Jimenez, D. G., & Kraus, S. (2021). The role of human capital on family firm innovativeness: the strategic leadership role of family board members. *International Entrepreneurship and Management Journal*, 17(1), 261-287.
- Samimi, M., Cortes, A. F., Anderson, M. H., & Herrmann, P. (2020). What is strategic leadership? Developing a framework for future research. *The Leadership Quarterly*, 101353.
- Castellanos, J. D., & George, B. (2020). Boardroom leadership: The board of directors as a source of strategic leadership. *Economics and Business Review*, 6(1), 103-119.
- Carlock, R. S., & Ward, J. L. (2010). *When family businesses are best*. Hampshire/New York: Palgrave Macmillan.
- Poza, E. J. (2013). *Family business*. Cengage Learning.

**Other Reading Material:**

- <https://johndavis.com/three-circle-model-family-business-system/>
- <https://hbr.org/2020/05/is-the-next-generation-of-your-family-business-entrepreneurial-enough>
- <https://insight.kellogg.northwestern.edu/article/family-businesses-adapt-next-generation>
- <https://hbr.org/2020/01/does-your-family-business-have-a-succession-plan>
- [https://www.google.com/search?q=Nest+Generation+of+family+Business&rlz=1C1CHBD\\_enIN821N821&oq=Ne](https://www.google.com/search?q=Nest+Generation+of+family+Business&rlz=1C1CHBD_enIN821N821&oq=Ne)  
[st+Generation+of+family+Business&aqs=chrome..69i57j0i22i30l3.10297j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=Nest+Generation+of+family+Business&aqs=chrome..69i57j0i22i30l3.10297j0j7&sourceid=chrome&ie=UTF-8)
- <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Strategy/gx-family-business-nextgen-survey.pdf>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Managing Innovation and Technology**

Course Code: **22MBADSE355**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Interpret the innovation imperatives for new businesses
- List down the dimensions of innovation portfolio in new venture creation
- Illustrate the steps involved in innovating a new enterprise
- Assess the stages involved in developing an entrepreneurial mindset
- Create a strategic business plan for an innovative idea

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Employ the innovation imperative in the context of new businesses
CO 2	Examine the dimensions of innovation portfolio in new venture creation
CO 3	Demonstrate the steps involved in innovating a new enterprise
CO 4	Appraise the stages in developing an innovative entrepreneurial mind-set
CO 5	Compose a strategic business plan for innovative idea

**Course Contents:**

**Module 1: The innovation imperative**

**10 Hours**

Why innovate, innovation to energize, innovate for growth and profit\*, innovate for survival.

**Module 2: The innovation portfolio**

**10 Hours**

Vision, portfolios and feelings, identifying feelings and needs, innovating experiences, battling commoditization, technology and psychology\*, process innovation, innovation portfolios for new business ventures-pioneers-migrators- settlers.

**Module 3: The innovation voices**

**9 Hours**

Thinking 'inside the box', four voices, voice of the product, \*profile for profit and growth, voice of the customer, voice of the organization, inspiration, perspiration, creativity in organizations, listening to your inner voice.

**Module 4: The innovative organization**

**10 Hours**

Levels of innovation, the individual innovator, creativity muscles, \*innovative teams, innovative organization, framing the technological opportunity.

**Module 5: Linking technology to business goals**

**6 Hours**

Creating a Strategic Technology Plan, \*Aligning R&D project portfolios with the organization's business strategy, developing an exploratory and fundamental research strategy, corporation's strategy and technology alignment, core technological competencies.

**Basic Texts:**

- Maital, Seshadri (2007). Innovation Management, First edition, Sage Publications. New Delhi, Thousand Oaks, London.
- Robert Szakonyi (2006). Handbook of Technology Management, First edition. Viva Books Private Limited, New Delhi.
- V.K Narayan(2021). Managing Technology and Innovation for competitive advantage. Eleventh edition. Pearson Publication

**Reference Books:**

- Joe Tidd, John R. Bessant (2018). Managing Innovation: Integrating Technological, Market and Organizational Change, 6th Edition. Wiley. USA.
- Other reading material
- James Collins (2001). Good to Great: Why Some Companies Make the Leap....and Others Don't, New York: Harper Collins.
- W. Chan Kim and Renee Mauborgne (2005). Blue Ocean Strategy. Boston, M.A. Harvard Business School Press.

**Other reading material:**

- Ralph Katz(2003), Managing Creativity and Innovation, Harvard Business Essentials, , Boston, M.A. Harvard Business School Press.
- Tara Duggan(2021)," The Strategy of Managing Innovation & Technology", Small Business chronicle Times, pp. 1- 4
- Anil Nair et al (2015), "Innovation in India: A review of past research and future directions", Asia pacific Journal of Management, Vol.32, No.4, pp. 925-958.
- Han, J. and Park, C.-m. (2017), "Case study on adoption of new technology for innovation: Perspective of institutional and corporate entrepreneurship", Asia Pacific Journal of Innovation and Entrepreneurship, Vol. 11 No. 2, pp. 144-158.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Name: **Entrepreneurship Development**

**Course Code: 22MBADSE356**

**Semester: 3**

**Credits: 3**

**Hours (LTP): 45 Hours**

**Course Objectives (CO):**

- Illustrate entrepreneurship and the environment of entrepreneurial development.
- Explain the process of entrepreneurship development
- Identify the competencies needed to become an entrepreneur.
- Recognize the special challenges in starting new ventures
- Enumerate the steps of the business plan preparation process.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Understand entrepreneurship and the environment of entrepreneurial development.
CO2	Explain the process of entrepreneurship development
CO3	Identify the competences needed to become an entrepreneur.
CO4	Recognize the special challenges in starting new ventures
CO5	Enumerate the steps of the business plan preparation process

**Course Contents:**

**Module 1: Entrepreneurial Competence**

**6 Hours**

Entrepreneurship and firm dynamics, entrepreneurial competencies, motives and drives, **entrepreneurship as a professional career\***, **behavioral traits of an entrepreneurs, women entrepreneurs\***,

**Module 2: Entrepreneurial Environment**

**10 Hours**

Enterprise and environment-components, business environment, **role of family and society\***, business-government-entrepreneurship, Social Entrepreneurship institutional assistance and skill building, support and incentive schemes, Start Up India-Make in India- Smart Cities; export promotion and international business.

**Module 3: Business Plan Preparation**

**10 Hours**

Entrepreneurship process, business model canvas, business plan-components, opportunity/need, value proposition, market analysis, industry analysis, sources of product for business–pre-feasibility study, criteria for selection of product - ownership - capital – budgeting, project profile preparation, feasibility report preparation and evaluation criteria, new venture creation, Role of Design in Entrepreneurship

**Module 4: Evaluating Entrepreneurial Options and Start-up Opportunities**

**10 Hours**

Understanding the idea and opportunity, opportunity creating-shaping- recognizing-sensing- seizing, screening venture opportunities, gathering information and analyzing, evaluating venture opportunities and develop start-up strategy, feasibility analysis and risk-taking ability.

**Module 5: Launching and Managing the New Venture****9 Hours**

Small scale enterprises, starting a small business, legal issues-regulations-clearances, legal form of new venture, entrepreneurial challenges as an individual and as an entrepreneur, skills of managing business risk, enhancing success, Alpha Testing and Beta Launch.

**Basic Text:**

- Holt D. (2016) Entrepreneurship and New Venture Creation, Second edition, Pearson, USA.

**Reference Books:**

- Brad Feld(2012), Startup Communities: Building an Entrepreneurial Ecosystem in Your City
- Rashmi Bansal, "I Have a Dream: The Inspiring Stories of 20 Social Entrepreneurs Who Found New Ways to Solve Old Problems".
- Burns P. (2016). New Venture Creation, Second edition, Macmillan International.
- Jeffrey A. Timmons, New Venture Creation: Entrepreneurship for 21st Century, McGraw Hill Education.
- Peters, M, P., Hisrich, R, D. & Shephed, A,D., & (2012). Entrepreneurship. New Jersey, USA: McGraw Hill Education.

**Other reading material**

- <https://www.wfglobal.org/nen/>
- International Journal of Entrepreneurship & Innovation (IJEI), IP Publishing
- International Journal of Globalization and Small Business (IJGSB)
- Journal of Business Venturing (JBV)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Business Plan and Project Implementation**

Course Code: **22MBADSE357**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Interpret business models and frameworks in entrepreneurship.
- Develop and design an effective business plan for a new venture.
- Examine the regulatory environment for setting up an entrepreneurial firm.
- Discuss steps involved in hiring and establishing a project team.
- Identify the growth and expansion stages in project implementation.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Interpret theoretical frameworks and models in entrepreneurship.
CO 2	Develop a business plan for setting up a new venture.
CO 3	Examine the regulatory framework to set up a new business venture
CO 4	Identify a project team and create a digital marketing campaign.
CO 5	Explain the marketing and growth stages involved in implementing a project

**Course Contents:**

**Module 1: Business models in entrepreneurship**

**8 Hours**

Business model-categories-templates, industry types and industry analysis- five forces model-**industry life cycle analysis\***.

**Module 2: Developing and designing business plans**

**9 Hours**

Business plan-contents-components, guidelines for writing a business plan, types of business plans, partnerships arrangement in business plans, **presenting business plan to investor audiences\***.

**Module 3: Setting up a new business venture**

**10 Hours**

Legal compliance, code of conduct, obtaining business licenses and permits, form of business organization, intellectual property protection, **intellectual property audit\***, financial requirements-financial statements, pro-forma financial statements, sourcing of funding-debt-equity-personal financing.

**Module 4: Building project teams**

**9 Hours**

Establishing a project team, roles and responsibilities, competencies and skills, **HR planning for future hiring\***, web creation- website-driving traffic-web searches, social media.

**Module 5: Project implementation**

**9 Hours**

Unique marketing issues – Selecting a market and creating positioning, Branding, marketing mix elements design and development, **sales process and related issues\***, preparing for growth–core strategy-growth-managing growth, challenges of expansion in new venture creation.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

## Basic reading material

### Books:

- Barringer, b., & B. R. (2014–15). *Preparing effective business plans: An entrepreneurial approach* (2nd ed). Upper SaddleRiver, NJ: Pearson Prentice Hall and accompanying resource materials. ISBN-10. PubMed: [0133506975](#) ISBN-13: 9780133506976.
- Leong, a. (2013). *Alan introduction to writing a business plan*. Carnation, WA: Koyoti.
- Bangs, c., & David. (2010). *A crash course on financial statements for small business owners*. Madison, WI: Entrepreneur Press.
- Barringer, d., R. B., & Ireland, D. R. (2008). *Entrepreneurship: Successfully launching new ventures* (2nd ed). London: Pearson Education.

### Reference:

#### Research articles (in alphabetical order)

- Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12(1), 9–30. doi:10.1016/S0883-9026(96)00003-1
- Butler, J. E. (Ed.). (2006). *Opportunity identification and entrepreneurial behavior*. IAP.
- Demmert, H., & Klein, D. B. (2003). Experiment on entrepreneurial discovery: An attempt to demonstrate the conjecture of Hayek and Kirzner. *Journal of Economic Behavior and Organization*, 50(3), 295–310. doi:10.1016/S0167-2681(02)00024-0
- Desai, V. (2019). *The dynamics of entrepreneurial development and management*. Mumbai, India: Himalaya Publishing House.
- Gutterman, A. S. (2019). *Strategic planning and business plan preparation (1st ed)*. : Sustainable Entrepreneurship Project.
- Kirzner, I. (1997). Entrepreneurial discovery and the competitive marketprocess: An Austrian approach. *Journal of Economic Literature*, 35, 60–85.
- Klevorick, A. K., Levin, R. C., Nelson, R. R., & Winter, S. G. (1995). On the sources and significance of interindustry differences in technological opportunities. *Research Policy*, 24(2), 185–205. doi:10.1016/0048-7333(93)00762-1
- Mellor, R. (2009). *Entrepreneurship for everyone (1st ed)*. UK: SAGE.
- Minniti, M. (2013). *The dynamics of entrepreneurship: Evidence from global entrepreneurship monitor data*. Oxford: Oxford University Press.
- Nicolaou, N., Shane, S., Cherkas, L., Hunkin, J., & Spector, T. D. (2008). Is the tendency to engage in entrepreneurship genetic? *Management Science*, 54(1), 167–179. doi:10.1287/mnsc.1070.0761
- Sarasvathy, D. K., Simon, H. A., & Lave, L. (1998). Perceiving and managing business risks: Differences between entrepreneurs and bankers. *Journal of Economic Behavior and Organization*, 33(2), 207–225. doi:10.1016/S0167-2681(97)00092-9
- Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243–263. doi:10.5465/amr.2001.4378020
- Schumpeter, J. (1934). *The theory of economic development* (pp. 65–74); 128-156. Oxford: Oxford University Press.
- Shane, S. (2000). Prior knowledge, and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448–469. doi:10.1287/orsc.11.4.448.14602
- White, R. E., Thornhill, S., & Hampson, E. (2006). Entrepreneurship and evolutionary biology: The relationship between testosterone and new venture creation. *Organizational Behavior and Human Decision Processes*, 100(1), 21–34. doi:10.1016/j.obhdp.2005.11.001



- Xia, R. (2015). Building a bridge between work-family issues and growth intentions of female entrepreneurs (Doctoral dissertation, Université d'Ottawa/University of Ottawa).

**Other reading material**

- Retrieved from <http://www.ddegjust.ac.in/studymaterial/mba/fm-405.pdf>.
- Retrieved from <https://hbr.org/2016/11/the-four-phases-of-project-management>.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**AVIATION MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVES**  
**SEMESTER – III**

Course Title: **Management of Airline Operations**

Course Code: **22MBADSE322**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Understand the evolution of air transportation and the air travel ecosystem.
- Understand the theory of flight and its mechanics.
- Understand the structure of the aircraft and helicopter operations.
- Learn the structure of Aircraft and the principles of its operations and to understand the aspects related to airfare and ticketing.
- Learn about the documents related to Passenger and Baggage Handling.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Appreciate the evolution of Air Transportation and Air travel Eco system
CO 2	Understand the theory of flight and its mechanics
CO 3	Examine the Structure of Aircraft and its parts and principles of operations
CO 4	Explore various Flight operations and aspects related to airfare and ticketing
CO 5	Learn the documents related to Passenger and Baggage Handling and cargo flights and its functioning

**Course Contents:**

**Module 1: Evolution of Air Transportation and Air travel Eco system** **5 Hours**

Evolution of transportation – land, sea, air, space; National importance of Air transportation; History of aviation and Present Scenario; IATA/ ICAO / DGCA its role and responsibilities; Categories of Airlines – Passenger, Cargo; Emergence of low-cost airlines and its impact.

**Module 2: Theory of Flights** **5 Hours**

Atmosphere, and its properties, and Standard atmosphere; Mechanics of Flight.

**Module 3: Structure of Aircraft and its parts** **10 Hours**

Types of Aircraft - Turbofan, Turboprop, Turbojet; Aircraft layout, its major components, and their functions; Classification of aircraft – Narrow body, wide body; Helicopters and Helicopter operations – Off shore and Land operations, Private / Business services, Chartered services, Air Ambulance; Aircraft power plants – classification & principles of operation; Aerospace materials.

**Module 4: Flight operations** **10 Hours**

Weight and load restrictions; Structural limitations; Operational limitations; Types of flights - Scheduled flights, Non- Scheduled, Freighters, Rescue and General Aviation; Documents required for a flight; Mandatory Airline Manuals; Airline Safety Management Systems; Air fare and Ticketing, Passenger and Cargo Air Tariffs, IATA Rates of Exchange; Single fare, Return fare, special fare, circle trips, e- ticketing, Payment of Air-fare, Role of Travel Agents; Flight Operational Policies & Procedures; Hub and Spoke-Route Development; Flight

scheduling process; Load factor and seat factor and frequency; Flight operating crew; Cockpit crew flight duty timings and regulations; Cabin Crew flight & Duty time limitations.

**Module 5: Passenger, and Baggage Handling**

**15 Hours**

Passengers - Travel documents, Reservations; Passengers needing special attention; Back office procedures; Checking formalities, Security clearance, boarding; Alighting procedures; Passenger ticketing and Reservation; Different types of Passport and Visa; Passenger on ground and Passenger on air; Passenger Meal upliftment; Different Types of Baggage; Registered Baggage Acceptance; Excess Baggage; Cabin Baggage acceptance and procedure; Mishandled Baggage; Baggage losses/thefts/pilferage and claim settlement; Baggage Reconciliation system;

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Uwayo Edissa, Airline and Airport Operations

**Reference Books**

- IATA and ICAO MANUALS.

**Other Reading Material**

- Publications related to Airlines' Management at ICAO/IATA website.
- <https://www.iata.org/cargo>
- <https://www.icao.int>

**Journals & Internet Sources for Reference:**

- <https://www.iata.org/en/training/courses/flight-operations-management/talp03/en/>
- [https://www.slideshare.net/Service\\_supportAssignment/airline-operational-management](https://www.slideshare.net/Service_supportAssignment/airline-operational-management)
- <https://www.cfinotebook.net/notebook/operation-of-aircraft-systems/powerplant>
- <https://up.codes/s/helicopter-landing-operations>
- [https://www.skybrary.aero/index.php/Offshore\\_Helicopter\\_Operations](https://www.skybrary.aero/index.php/Offshore_Helicopter_Operations)
- <https://mausam.imd.gov.in>
- <https://library.wmo.int>
- <https://www.researchgate.net/NewTheoryofFlight>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Flight Operations and Route Development**

Course Code: **22MBADSE359**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Identify the flight operations process at airports
- Recognise the several aspects of aircraft ground operations
- Appraise the challenges pertaining to flight route development
- Understand the various challenges involved in airport business
- Examine the process involved in airline schedule development process

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Identify the various processes in flight operations
CO 2	Interpret the various challenges involved in airport business
CO 3	Differentiate the several components of aircraft ground operations
CO 4	Examine the challenges in the airline schedule development process
CO 5	Organize and develop a route for an airline

### Course Contents:

#### Module 1: Flight Operations

**9 Hours**

Organisation Structure of Airline Sectors Airline Terminal Management- Flight Information Counter/Reservation and Ticketing- Check In/Issue of Boarding pass-Customs and Immigration formalities-Co-ordination- Security Clearance-Baggage-Handling- Handling of Stretcher Passengers and Human Remains- Handling of CIP, VIP & VVIP- Co-ordination of Supporting Agencies /Departments.

#### Module 2: Airport Business

**9 Hours**

International Trends, Emerging Indian scenario- Private Participation: International Developments, PPP: Public Private Participation in Indian Airports- Environmental Regulations, Regulatory Issues Meteorological services for Aviation -Airport fees, rates, and charges

#### Module 3: Aircraft Ground Operations

**9 Hours**

Upkeep of aircraft equipment, components and doors, Aircraft ground movement operations including Towing operations, Movement in/out of hangars, Safety practices- Fire protection and prevention, Safety practices for the ground handling personnel in the airside operational area, Aircraft ground support equipment – Overview, Loading and securing of baggage and cargo, Standard operating procedures (SOP) for various Ground Handling equipment, Procedure for overnight or layover parking.

#### Module 4: Airline Schedule Development Process

**9 Hours**

Airline Schedule Development Process, Frequency Planning, Time table development, Fleet selection, Fleet planning, Operations schedule, Fleet Assignment Optimization

**Module 5: Airline Route Development****9 Hours**

Great Circle, Rhumb Line, Shortest distance between two stations, Reporting points, Route profitability analysis, Constraints- Cover constraints, Balance constraints, Aircraft count constraints, Network effects, Agreements with service providers, Airport agreements

**Basic Texts**

- Abdelghany, Ahmed et.al., (2017). Airline flight schedule planning under competition

**Reference Books:**

- Bazargan, Massoud., (2010). Airline Operations and Scheduling
- Cook, Gerald N., (2017). Airline operations and management: A management text book

**Other reading material**

- Halpern, Nigel., (2015). Airline Route Development: A survey of current practise
- Camilleri, Mark., (2018). Airline Schedules Planning and Route development

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Airport Management**

Course Code: **22MBADSE360**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Helps understand the application of Airport Management concepts in the aviation industry.
- Enable Understand various aspects of Managing Airports.
- Enable understand Various environmental issues concerning Airport Operations.
- Gives a clear understanding of the various levels of airport operations specific to the aviation industry.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Understand the Fundamentals of Airport operations
CO 2	Recognize existing levels of Airport operations
CO 3	Adopt techniques in understanding various issues related to eco-system and environmental issues in Aviation sector
CO 4	Understand the entire process of Approval of an Airport in line with ICAO Guidelines.
CO 5	Examine and apply skills and techniques to manage Airport operations.

**Course Contents:**

**Module 1: Introduction to Airports and Heliports**

**5 Hours**

History and Evolution of Airports; Types of Airports – Civil, Military, Joint Venture, Brownfield, Greenfield, Cargo Learning Outcome: Familiarizing evolution process and categories of Airports.

**Module 2: Organization and Structure of Airports and Eco system**

**8 Hours**

Airport Authority of India - Role and Responsibilities ATC, Meteorological departments - Role and Responsibilities Customs and Immigrations – Role and Responsibilities

**Module 3: Topography / Physical Layout of Airports**

**8 Hours**

General Layout of Airports Land / City side – Curb area, Car park & Bus bay Terminal area - Check-in area; Pre-security area; Security-hold area Airside - Runway; Taxiway; Apron; Air Traffic Control (ATC) Tower; Maintenance Hangers; Fire and Rescue station & Perimeter road.

**Module 4: : Management of and environmental issues concerning Airport Operations**

**12 Hours**

Air side Management Ground Flight safety–Organization, Role and Responsibility Management of Operational Area Operational Vehicular traffic, regulation and lane disciplines Ramp Area Management; Runway checks/FOD Bay Allotment Menace of Birds and Wild animals and prevention; Airport and Environment concerns; Emerging Initiatives for Eco-friendly Airport

**Module 5: Terminal and Air Cargo Operations****12 Hours**

Terminal Facilities and Management; Introduction & Cargo Eco system; Cargo Regulatory and Facilitating bodies; Ministry of Commerce; Custom house agents; APEDA; Air cargo Complex- functions, evolution; Import, Export, and Transshipment cargo; Procedures for Storage, Retrieval and Delivery; Documentation.  
 (\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Text:**

- Ashford, Stanton, et al, Airport Operations, Mc Graw Hill publications.

**Reference Book:**

- Uwayo Edissa, Airline and Airport Operations

**Journals & Internet Sources for Reference:**

- <https://www.airsight.de/training/item/introduction-to-airport-operations/>
- <https://www.aai.aero>
- <https://mausam.imd.gov.in>
- <https://library.wmo.int>
- <https://www.slideshare.net>
- <https://www.ana.co.jp>
- [https://www.civilaviation.gov.in/sites/default/files/moca\\_001669.pdf](https://www.civilaviation.gov.in/sites/default/files/moca_001669.pdf)

**Other Reading Material**

- Publications related to Airport Management at ICAO/IATA website.
- <https://www.iata.org/cargo>
- <https://www.icao.int>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



## Course Title: **Ground Handling Operations**

Course Code: **22MBADSE361**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Understand the various aspects of Airports and its importance in the Aviation Ecosystem.
- Learn the various elements and the procedures involved in airside operations for coordination between departments within an airport.
- Understand various safety issues, safety practices and support equipment in Ground Handling Operations.
- Understand the Baggage and cargo handling and overnight parking of aircraft.
- Recognize the need for anti-icing and de-icing and the process of Aircraft Marshalling

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Understand the procedures involved in ground handling operations
CO 2	Learn the overview of Airports
CO 3	Recognize various safety issues at airports and ways to counter them
CO 4	Evaluate the baggage and cargo handling at airports
CO 5	Learn to improve efficiencies in operations using tools.

### **Course Contents:**

**Module 1:** Understand the procedures involved in ground handling operations **9 Hours**

Overview of Airports and Eco System Airport Overview, AAI Ground Handling Regulation-2000

**Module 2:** Learn the overview of Airports **9 Hours**

Ground Handling Operations Airside operations, Flight handling, Ramp handling, Coordination aspects with stake holders - Need and procedures, Airside driving - Issue and renewal of permits.

**Module 3:** Recognize various safety issues at airports and ways to counter them **9 Hours**

Safety issues in Ground handling operations Upkeep of aircraft equipment, components and doors, Aircraft ground movement operations including Towing operations, Movement in/out of hangars, Safety practices- Fire protection and prevention, Safety practices for the ground handling personnel in the airside operational area, ground support equipment operations, Safety precautions during fueling, Safety Circles, Safety Circulars, Prevention of Aircraft incidents and accidents during ground handling

**Module 4:** Evaluate the baggage and cargo handling at airports **9 Hours**

Baggage and Cargo Handling; Aircraft ground support equipment – Overview, Loading and securing of baggage and cargo, Standard operating procedures (SOP) for various Ground Handling equipment, Procedure for overnight or layover parking.

**Module 5:** Learn to improve efficiencies in operations using tools.  
Miscellaneous activities Aircraft de-icing /anti-icing, Aircraft marshalling

**9 Hours**

**Basic Texts**

- Ashford, Stanton, et all, Airport Operations, Mc Graw Hill publications
- Uwayo Edissa, Airline and Airport Operations
- AAI Ground Handling Regulations—2000, GOI.

**Reference Books**

- IATA and ICAO MANUALS.

**Journals & Internet Sources for Reference:**

- <https://www.airsight.de/training/item/introduction-to-airport-operations/>
- <https://www.aai.aero>
- <https://www.slideshare.net>
- [https://www.civilaviation.gov.in/sites/default/files/moca\\_001669.pdf](https://www.civilaviation.gov.in/sites/default/files/moca_001669.pdf)

**Other Reading Material**

- Publications related to Airport Management at ICAO/IATA website.
- <https://www.iata.org/cargo>
- <https://www.icao.int>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Aviation Safety and Security**

Course Code: **22MBADSE362**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Recognise the safety and security norms in the aviation industry
- Appraise the security protocols followed in the aviation industry
- Recognise the various international conventions on civil aviation
- Develop and adapt to safety protocols
- Understand the growth of the aviation industry and recognise the importance of safety and security in civil aviation

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Adapt to safety and security norms in the Aviation industry
CO 2	Use the various international conventions relating to safety and security in aviation
CO 3	Dissect and deploy security procedures at airports
CO 4	Appraise the disaster management and preparedness in Aviation
CO 5	Develop and deploy fool-proof safety systems

**Course Contents:**

**Module 1: Introduction**

**9 Hours**

Contents: Importance of Air Transportation-Airways, Growth of Aviation Industry, Deregulation and Globalization, Protecting Public Air transportation

**Module 2: International Conventions**

**9 Hours**

ICAO- Security conventions - Tokyo, Montréal, Hijacking, Anti-Hijacking Measures, Profile of Hijacker, Sky marshals, Terrorist organizations

**Module 3: Security Procedures at Airports**

**9 Hours**

Airport Induction of CISF, Screening-measures-equipment-facilities, Public-private security interface, Counter terrorist out fits, Cargo carrier Responsibilities, Baggage tags

**Module 4: Safety**

**9 Hours**

Accidents/Incidents. Reporting and remedial measures, Safety management systems (SMS), Safety culture in Aviation, Safety circulars from DGCA, Safety Audits

**Module 5: Disaster Management and Disaster Preparedness**

**9 Hours**

Fire and its characteristics, Definitions of fire, flame, stages of fire, Solid, Liquid and Gas, Factors affecting ignition or combustion, Types of flame, Storage and handlings of combustibles, Fire Extinguishers,

Classification of Fire extinguishers and examples, Hazardous gases, liquids and solids; Aircraft Fire and Rescue services, Location of Fire Station, Fire crew, Category of Fire system, Emergency Fire Drills, National Disaster Management Authority, Precautions during Earthquake, Floods, Cyclone, Storms, Tsunami.

**Basic Texts**

- Wood, Richard H Aviation Safety Programmes, Jappesen Sanderson Inc.

**Reference Books:**

- Gupta R S, A Hand book of fire technology.
- Sweet, Kathene M, Aviation Airport Security

**Other reading material**

- Manual of Fire services of Airports.
- DGCA Safety circulars.
- 

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Airline Accounting and Cost Management**

Course Code: **22MBADSE363**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Discuss the Components of Financial Statements
- Explain the performance appraisal for airline business
- Interpret the fuel hedging strategies
- Explain Aircraft leasing options
- Discuss the Airline Cost Structure

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Grasp the conceptual framework of financial statement
CO 2	Examine the Financial Performance of Airline Industry
CO 3	Gauge the Fuel Hedging strategies
CO 4	Assess the aircraft leasing strategies
CO 5	Affix cost cutting strategies for airline business

### Course Contents:

#### Module 1: Presentation of Financial Statements

**10 Hours**

Outline for the Preparation of Financial Statements, Statement of Financial Positions, Comprehensive Income Statement, Statement of changes in equity. IAS 18, Revenue elements of financial statements as per IFRS, Non-Current Assets, Current Assets, equity, Non-Current liability, Current liability. Revenue, cost of sales, Distribution costs, Administrative expenses, financial costs, profits attributable to owners of controlling interest and non-controlling interest\*, practical problem.

#### Module 2: Financial Performance of Airline Industry

**7 Hours**

Introduction – Deregulation – Airline Industry Before and After Deregulation – Airline Profitability – Airline Mergers and Bankruptcies\* – Financial Statement Analysis

#### Module 3: Fuel Hedging and Structure

**9 Hours**

Fuel Hedging – Financial Derivatives – Airline Industry and Fuel Hedging\* – Futures Market – Forward Market – Option Contracts

#### Module 4: Analysis and Leasing

**10 Hours**

Depreciation Analysis – Methodology – Using Spreadsheet for Depreciation Practices – Analysis for Break Even and Payback Period – Breakeven analysis – Breakeven Load Factor – Scenario Analysis – Aircraft Leasing – Types of Leases – Buy Versus Lease Analysis – Major Commercial Leasing Companies\*

**Module 5: Airline Cost Structure****9 Hours**

Airline Cost Structure – Cost Component\* – Operating Costs – Cost Cutting Measures – Low Cost Airlines – Business Model Growth – Reason for Success – Cost Structure

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- FlySky Aviation (2020) Airline Accounting and Financing
- N.D Vora and Bagri, Second Edition, Futures and Options

**Reference Books**

- Vitaly S. Guzhva, Sunder Raghavan, Damon J. D’Agostino (2020). Aircraft Leasing and Financing: Tools for Success in International Aircraft

**Other reading material**

- IATA Financial Management

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Disaster Management in Aviation**

Course Code: **22MBADSE364**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Recognise the need for disaster management in aviation
- Analyse the importance of human factors in avoiding disasters
- Plan to reduce the impact of natural disasters on aviation infrastructure
- Identify various types of fires and its avoidance
- Appraise the importance of Emergency response team and Airline Crisis Management Team

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Recognize the various types of Disasters
CO 2	Compare the various types of fires, and recommend the different types of fire extinguishers
CO 3	Analyze the Emergency response action and procedures followed by Airlines around the world.
CO 4	Recognize the impact of human factors in Disaster Management
CO 5	Evaluate the Crisis Response and Management in Aviation

**Course Contents:**

**Module 1: Disaster Management and Disaster Preparedness**

**9 Hours**

Fire and examples, Hazardous gases, liquids and solids; Aircraft Fire and Rescue services, Location of Fire Station, Fire crew, Category of Fire system, Emergency Fire Drills, National Disaster Management Authority, Precautions during Earthquake, Floods, Cyclone, Storms, Tsunami.

**Module 2: Mitigation and Management techniques of Disaster**

**9 Hours**

Fire and its characteristics, Definitions of fire, flame, stages of fire, Solid, Liquid and Gas, Factors affecting ignition or combustion, Types of flame, Storage and handlings of combustibles, Fire Extinguishers, Classification of Fire extinguishers, Basic principles of disasters management, Disaster Management cycle, Disaster management policy, National and State Bodies for Disaster Management, Early Warning Systems, Building design and construction in highly seismic zones, retrofitting of buildings.

**Module 3: Emergency Response Action and Procedures**

**9 Hours**

Composition of Airline Emergency Response Team, Emergency Notification Action, Responsibilities of Emergency Response Coordinator, Quick Response Checklist, General Instructions, Initial Response Team, Responsibilities of Initial Response Team Composition of Initial Response Team, Crisis Management Centre, Responsibilities of Crisis Management Centre, Director Operations – Responsibilities of Director Operations, Quick Response Checklist

**Module 4: Human Factors****9 Hours**

Communication during Disasters, Physical and Emotional Stress, Situational Awareness, Hazardous Attitudes, Crew Resource Management, Leadership and role of leaders in Disaster Management

**Module 5: Crisis Management in Aviation****9 Hours**

Airline Crisis Response, Humanitarian Assistance, Crisis Communications, Public Enquiry Centre, Investigation Insurance and Financial Risk Management, Data Management, Government and Community Affairs, Fatality Operations, Personal Effects Operations, Business Continuity, Crisis Leadership, Family Assistance Program, Public Relations, Corporate Communication Coordinator, Responsibilities, Press Release, Media Centre Programme, Airline Emergency Response Team’s Responsibilities. Learning Outcome: To evaluate the Crisis Response and Management in Aviation

**Basic Texts**

- Ray, Sally J., (1999). Strategic Communication in Crisis Management: Lessons from the Airline Industry

**Reference Books:**

- Ferguson, M.D. & Nelson, S., (2014). Aviation Safety: A Balanced Industry Approach
- Yilmaz, Ayse Kucuk., (2019). Values, Ergonomics and Risk Management in Aviation Business Strategy

**Other reading material**

- D, Mondal., (2020). Disaster Management Concepts and Approaches

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Title: **Human Factors in Aviation**

Course Code: **22MBADSE365**

Semester: **3**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Recognise the importance of human factors in aviation
- Differentiate various factors contributing to human errors
- Examine the various causes for human errors
- Appraise the tools to improve human performance in the aviation sector
- Appreciate the role of Crew Resource Management in Aviation

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Discuss the importance of Human Performance and examine the incidents and accidents attributable to human factors.
CO 2	Interpret the various physical and psychological factors affecting Human performance
CO 3	Distinguish various factors contributing to human errors.
CO 4	Apply the factors causing human errors in the aviation sector and develop numerous error avoidance mechanisms
CO 5	Recognize and interpret the role of Crew Resource Management in Aviation

**Course Contents:**

**Module 1: Human performance and Limitations**

**9 Hours**

The need to take human factors into account, Incidents and Accidents Attributable to Human Factors, Human Error, Murphy's Law, Human Performance as Part of the Maintenance Engineering System, Vision, Hearing, Information Processing, Workload in aviation operations and the importance of its management, Difference between workload and task load, Workload management, Specific human performance issues related to aviation operations

**Module 2: Social psychology and factors affecting performance**

**9 Hours**

Fitness and Health Stress: Domestic and Work Related, Time Pressure and Deadlines, Workload - Overload and Underload, Sleep, Fatigue and Shift Work, Alcohol, Medication and Drug Abuse, Fatigue and Stress- Causes, symptoms and effect of fatigue, Fatigue Risk Management System (FRMS), Stress and its effects on operational performance

**Module 3: Human Errors**

**9 Hours**

Understanding Human Error, Error Models and Theories, Types of Error in Aviation Routine Tasks, Implications of Errors, Avoiding and Managing Errors, Communication- within and between teams, Error reporting, Work Logging and recording, Inspection, recognizing and avoiding hazards

**Module 4: Human Errors and Performance in Aviation****9 Hours**

Accident causation in complex systems, The “organizational accident”, The Reason model, The importance of organizational culture in employee safety reporting, A frequent dilemma, The traditional view of error management, The contemporary view of error management.

**Module 5: Crew Resource Management in Aviation****9 Hours**

The objective of resource management training in aviation, Historical perspective, CRM training, purpose and typical contents, TRM training, purpose and typical contents, Threat and Error Management- The components of the TEM model, TEM in flight operations, TEM in air traffic control, TEM in cabin operations

**Basic Texts**

- Aswathappa, K., (2017)., Human Resource Management

**Reference Books:**

- Salas, Eduarado., (2010). Human factors in Aviation
- Kanki, Barbara., (2010). Crew Resource Management

**Other reading material**

- ICAO- CRM Manual

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

# **SEMESTER - IV**

**CORE COURSE**  
**SEMESTER IV**

## Course Title: **Strategic Management**

Course Code: **22MBACC401**

Semester: **4**

Credits: **2**

Hours (LTP): **30 Hours**

### Course Objectives:

- Define and Illustrate a range of strategic management theories and models.
- Develop an understanding of the industries micro and macro environmental issues.
- Develop insights on industry factors to identify their impact on a business's competitiveness and strategic positioning.
- Appraise the impact of technological advances upon the firm's performance for achieving competitiveness.
- Determine strategic capabilities and gaps; and
- Formulate and implement strategy at the single business unit level.

### Course Outcomes

CO1	Analyse an organisation's strategically relevant internal and external environments by applying appropriate theories and models;
CO2	Construct evidence-based best practice strategy and execution;
CO3	Evaluate the dimensions of strategic change
CO4	Evaluate critical technological business challenges which impeded strategic decisions in real-world scenarios;
CO5	Construct integrative strategies for global business implementation and be able to measure the performance.

### Course Contents:

#### Module 1: Environment Analysis:

**13 Hours**

**Industry analysis:** Industry life-cycle, Analysis tools - PESTEL, Porter's five forces Game theory, Market share dynamics

**Behavioural Strategy-** psychological foundations, behavioural theory of the firm

**Non-Market Strategies-** market and non-market components, corporate political activity, value of political connections 100%

#### Module 2: Business and Functional Strategies

**13 Hours**

**Business and Functional Strategies** - Functional Strategies, Building competitive advantage through Innovation, Efficiency, Quality, and Customer responsiveness. **Value Creation, Configuration, and Coordination.**

**Business level strategies** – Porter's generic strategies

**Competitive Advantage** – Resource-Based View, Sustainability of Competitive Advantage, Market imperfections & failures

**Strategic Change** – Strategic Inflection points, information asymmetry, disruptive change, change in the presence of fit **43%**

### Module 3 : Technology Strategy

7 Hours

Why is Tech Strategy Development Important?

#### What is a Technology Strategy?

**Selecting the Right Technology Strategy for Your Business**, Existing Technology vs. Emerging Ecosystems, implementing an Information Technology Strategy, Benefits of Developing a Technology Strategy and Framework, Reasons for developing technology strategies.

**Innovation** – process, sustainability of competitive advantage through innovation **25%**

### Module 4 : Technology Strategy

12 Hours

**Corporate Development – Three Dimensions of Corporate Strategies – Business Diversification** (Horizontal Expansion), **Vertical Integration** (Forward or Backward Expansion), **Geographic Scope** (Geographic/ and or Global Expansion).

**Positioning & Diversification** – Reasons for diversification, Related and Unrelated diversification.

**Global expansion - Mergers and Acquisitions Strategy** – Causes & Motives for mergers and acquisitions. Strategy, valuation and Integration.

**Strategic Alliances** – Types of strategic alliances, reasons for strategic alliances, value creation, and understanding the challenges faced by firms in their strategic alliances.

Average percentage change- 42 %

#### References:

##### Books:

1. Hill, C.W. L. & Jones, G. R. (2010), Strategic Management – An Integrated Approach, 10<sup>th</sup> edition, Cengage Learning
2. Tzu, S. (2010), The Art of War: Spirituality for Conflict, Jaico Publishing House
3. Kim, W. C. & Mouborgne, R. (2005), Blue Ocean Strategy, Harvard Business School Press

##### Readings:

1. Barney, J., M. Wright, and D.J. Ketchen (2001). "The Resource-Based View of the firm: ten years after 1991." *Journal of Management*, pp. 625-641. · Priem, R.L. & Butler, J. (2001). Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review*, 26: 22-40.
2. Baron DP (1995) Integrated strategy: Market and nonmarket components. *Calif. Management Rev.* 37:47–65.
3. Baron DP (2001) Private politics, corporate social responsibility, and integrated strategy. *J. Econom. Management Strategy* 10(1):7–45.
4. Brandenburger, Adam, and Harborne Stuart. 1996. "Value-Based Business Strategy." *Journal of Economics and Management Strategy* 5 (1): 5–24.
5. Christensen, Clayton M. 1997. The Innovator's Dilemma pp. 3–28.
6. Fisman R. Estimating the Value of Political Connections *The American Economic Review*, Vol. 91, No. 4, (Sep., 2001), pp. 1095-1102
7. Gavetti, G., Greve D, Levinthal D., and Ocasio W., "The Behavioral Theory of the Firm: Assessment and Prospects," *Academy of Management Annals*, 2012
8. Gavetti, Giovanni. 2011. "The New Psychology of Strategic Leadership," *Harvard Business Review* (July-August): 118–125. Menon, Anoop R. 2017. "Bringing Cognition into Strategic Interactions: Strategic Mental Models and Open Questions." Forthcoming in the *Strategic Management Journal*.

9. Grove, Andrew S. 1996. Only the Paranoid Survive. pp. 27–35. Arthur, Brian W. 1996. “Increasing Returns and the New World of Business.” Harvard Business Review (July-August): 101–109.
10. Holburn, G ...”Integrated Market and Nonmarket Strategics” Political Campaing Contributions Around Merger and Acquisition Events in the Energy Sector” SMJ 2014.
11. Lenox, M., S. Rockart and A. Lewin (2006). “Interdependency, Competition, and the Distribution of Firm and Industry Profits,” Management Science 52, pp. 757-772.
12. Makowski, L., J.M. Ostroy. 2001. Perfect competition and the creativity of the market. Journal of Economic Literature 39(2) 479–535.
13. Newbert. 2007. Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. Strategic Management Journal.
14. Nonmarket Strategy Research Through the Lens of New Institutional Economics: an integrative review and future directions Strategic Management Journal Strat. Mgmt. J., 38: 114–140 (2017)
15. Oberholzer-Gee, Felix, and Dennis Yao. 2013. “Market Imperfections and Sustainable Competitive Advantage.” Chap. 12 in Oxford Handbook of Managerial Economics, edited by Christopher Thomas and William Shughart II, pp. 262–277.
16. Optional: Sosa, Manuel, Steven D. Eppinger, and Craig M. Rowles. 2007. “Are Your Engineers Talking to One Another When They Should?” Harvard Business Review, November, pp. 133-142.
17. Powell T, Lovallo D, and Fox C (2011). Behavioral Strategy. Strategic Management Journal, Vol. 32, No. 13, Psychological Foundations of Strategic Management (December 2011), pp. 1369-1386
18. Schmalensee, Richard. 1985. Do Markets Differ Much? American Economic Review 75 (3):341–351.
- Porter, Michael E. 1979. How Competitive Forces Shape Strategy. Harvard Business Review, March/April, 137–145.
19. Sutton, John. 2007. Market Share Dynamics and the “Persistence of Leadership” Debate. The American Economic Review 97:222–241.
20. Thompson, P (2001) “How much did the Liberty shipbuilders learn? New evidence for an old case study.” Journal of Political Economy, 109: 103-137
21. Thompson, P. (2005), “Selection and firm survival: Evidence from the shipbuilding industry, 1825-1914,” Review of Economics and Statistics, 87(1): 26-36
22. Winter, N. (2012) Purpose and Progress in the Theory of Strategy: Comments on Gavetti Organization Science, 23, January/February 2012

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Organization Design**

Course Code: **22MBACC402**

Semester: **4**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Identify organizations as dominant form of institutions in the society and at every level of human life.
- Examine the reciprocal relationships between organization strategy, design and its effectiveness.
- Describe the different forms of organization structures and design that facilitates in the attainment of organizational goals.
- Develop an understanding of organization culture, shared beliefs, norms and values within the organizations.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Identify the symbiotic relationship between Organizations, Businesses and Society.
CO2	Discuss the dimensions of organization design and its effectiveness in the goal attainment
CO3	Examine the different types of structures and its suitability across different organization contexts.
CO4	Demonstrate an understanding of organization culture and recognize the nature of cultural identity among individuals and organizations.

**Course Contents:**

**Module 1: Organization Theory and Design**

**6 Hours**

Introductions to organizations, Evolution of organization Theory and Design, Early Contributions, Characteristics, Common Elements in organizations, Five General Configurations- Mintzberg's configuration.  
**\*Contemporary Issues, Challenges and Trends in organization design and management.**

**Module 2: Organization Strategy and Effectiveness**

**9 Hours**

Strategy, Role of strategic direction in organization design, types of strategy, classifying strategic dimensions, contemporary structure- structure theory, Miles and Snow Strategy Typology, SWOT Framework, Porter's Competitive Strategies, and Limitations to the strategy imperative, Importance of Organization effectiveness and Four approaches to effectiveness.

**\*Contemporary organization structure forms and their effectiveness relationships.**

**Module 3: Dimensions of Organizations Structures**

**9 Hours**

Complexity, Formalization and Centralization, Organization Structure, Information-Sharing Perspective on Structure Vertical Information Sharing, Horizontal Information Sharing, Organization Design Alternatives Reporting Relationships, Departmental Grouping Options, Functional, Divisional, Geographic, Matrix Structure, Virtual Networks, Outsourcing and Hybrid Structure, **\*Relationships between Formalization, Complexity and Centralization and Restructuring among organizations.**



## Module 4: Creating and Managing Organizational Culture

6 Hour

Definition of organization culture, key characteristics, organizations and uniform cultures, Dominant and Subcultures, characteristics of organizations with Strong culture, creating, sustaining and transmitting culture, Factors affecting the success of mergers and acquisitions and conditions that favor the successful change of culture. **\*Changing nature of workplace culture.**

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Text:

- Robbins, S.P and Mathew, M (2019) Organization Theory- Structure, Design and Applications Noida, India: Pearson Prentice Hall.
- Richard Hall, (2016) Organizations: Structures, Processes and Outcomes, Routledge publications

### Reference Book:

- Richard. L. Daft (2017) Organization Theory and Design, South Western Cengage Learning.
- John M Ivancewich(2017)Organizations: Behavior, Structure, Processes, Tata McGraw-Hill Publications
- HBR's 10 Must Reads on Building a Great Culture (with bonus article "How to Build a Culture of Originality" by Adam Grant) Paperback – 10 August 2020.

### Other Reading Material:

- <https://hbr.org/1981/01/organization-design-fashion-or-fit>
- Henry Mintzberg, The structuring of organizations (Englewoods Cliffs, N J Prentice Hall, 1979,
- Harold Koontz, Making Theory Operational: The Span of Management, Journal of Management Studies, October, 1966, p 229
- Peter H Grinyer and Masound Yasai- Ardekani- Dimensions of organization Structure- A Critical Replication, Academy of Management Journal, September 1980, pp 405-21
- <https://hbr.org/2011/02/the-importance-of-organization>
- <https://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy>
- <https://www.isc.hbs.edu/strategy/business-strategy/Pages/the-five-forces.aspx>
- <https://www.mckinsey.com/business-functions/organization/our-insights/organizational-culture-in-mergers-addressing-the-unseen-forces#>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**FINANCE**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

## Course Title: Indirect Taxes

Course Code: **22MBADSE409**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Explain the concept nature, role and significance of GST
- List the provision relating to supply event
- Understand the charging provisions of GST
- Discuss the provisions related to exemptions, time and place of supply
- Outline the various aspects of GST Compliance procedures

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Describe GST rules, fundamentals to GST along with framework
CO 2	Assess Supply as tax event and provisions relating to Supply
CO 3	Apply the provisions relating to the Charge of GST
CO 4	Analyze the Provisions related to exemptions, time and place of supply
CO 5	Discuss the practical aspects of GST compliance process

### Course Contents:

#### Module 1: Introduction to GST

**9 Hours**

GST – Genesis, nature, basic concepts of GST, SGST, CGST, UTGST, IGST, Inter-State and Intra-State Supply of Goods or Services or both, constitutional provisions pertaining to levy of various taxes, significant amendments made by the Constitution (101st Amendment) Act, 2016. GSTIN, GST Council, framework of GST in India, GSTN, Significance of GST, simple problems on SGST, CGST and IGST computations.

#### Module 2: Supply under GST

**9 Hours**

Relevant definitions, Business, consideration, money, aggregate turnover, Related person, distinct person, non-supplies under GST Goods, Services, Taxable Supply, Person, Supplier, meaning and scope of supply, composite and mixed supplies, taxability of composite and mixed supplies, modes of supply, consideration and furtherance of business as essentials of supply, simple problems.

#### Module 3: Charge of GST

**9 Hours**

Levy and collection of GST, forward charge, reverse charge, E Commerce Operator, no levy of GST, Classification of Goods and Services, composition levy, meaning of aggregate turnover under composition levy, composition scheme, conditions, eligibility, persons not eligible, advantages, compositions scheme procedure, validity, provisions relating to charging IGST, simple problems.

#### Module 4: Exemptions, Place and Time of Supply

**9 Hours**

Power to grant exemptions, goods exempt from GST, services exempt from GST, Zero rated supply, provisions relating to place of supply, provisions relating to time of supply, simple problems.

**Module 5: Miscellaneous aspects of GST****9 Hours**

Registration, input tax credit, tax invoice, debit and credit note, assessment and returns. Statutory requirement to e-way bill, TDS & TCS

**Basic Text**

- Datey, V. S. (2008). Taxmann's indirect taxes: Law & practice.
- Datey, V. S. (2013). Indirect taxes: Law and practice.
- Garg, R., & Garg, S. (2020). GST laws manual: Acts, rules and forms. Bloomsbury Publishing.
- T .S.Reddy, Y.Hari Prasad Reddy(2018),Indirect taxation(GST)- Margham Publications

**Reference books**

- Batra, A. (2018). GST ready reckoner. Wolters kluwer india Pvt.
- Batra, C. A. (2019). Gst audit. Wolters kluwer india Pvt.
- Collectif. (2017). International VAT/GST guidelines. OECD.
- CTC. (2018). Key rulings under indirect tax laws- A Gst perspective. Wolters kluwer india Pvt.
- Hiregange, M. N. (2019). Compendium of issues and solutions in GST. Wolters kluwer india Pvt.
- Rao, R. K., & Mukherjee, S. (2019). Goods and services tax in India. Cambridge University Press.
- Sinha, Y., & Srivastava, V. K. (2020). Indirect tax reform in India: 1947 to GST and beyond. SAGE Publishing India.
- Sury, M. M. (2017). Goods and services tax (GST) in India: Background, present structure and future challenges.
- Viswanathan, B. (2016). Goods and services tax (GST) in India.

**Other reading materials**

- CA Anoop Modi; CA Mahesh Gupta ; CA Nikhil Gupta. (2020). Goods and services tax (GST): SBPD publications. SBPD Publications.
- Sekar, G. (2019). Padhuka'S students Referencer on indirect Taxes,16Ed. Wolters kluwer india Pvt.
- ACCA- Text Books (2018-20) – Goods & Services taxes, Indirect taxes

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Financial Strategy**

Course Code: **22MBADSE410**

Semester: **4**

Credits: **3**

Hours (LTP): **45 hours**

### Course Objectives:

- Discuss relevance of financial strategies in augmenting a successful business.
- Identify financial strategies that contribute to corporate value.
- Develop approaches for asset valuation of firms.
- Develop strategies to attain synergy in mergers and acquisitions.
- Discuss value-based management trends.

### Course Outcomes (COs):

CO 1	Assess the relevance of financial strategies in augmenting a successful business and in creation of sustainable corporate value
CO 2	Examine various financial strategies based on their relevance on overall corporate value
CO 3	Develop optimal financial strategies for stellar value creation
CO 4	Demonstrate expertise in using various approaches for business and asset valuation
CO 5	Interpret the results and impact of various financial strategies on corporate value

### Course Contents:

#### **Module 1: Financial Strategy-An Introduction**

**8 Hours**

Corporate Strategy, Business level Strategies, Business model, Managing Strategy for Value, Formulation of Financial Strategy – framework, linking corporate and financial strategy, types of strategies, Stakeholder theory, survival strategies, creation of shared value, Sustainability and Triple bottom line, SWM- logic and limitations, Corporate governance-key principles

#### **Module 2: Corporate Finance Strategies**

**10 Hours**

Capital allocation, Investment Decisions, Project Implementation & Control, Mitigating risk & uncertainty, Inflation, country risk, taxation (withholding taxes) and Forex issues in Capital Budgeting, WC Management & Control, Dividend theories & policies, capital structure issues, Financial distress and restructuring Financial Planning and Control, Corporate risk management

#### **Module 3: Corporate Valuation**

**10 Hours**

Approaches to Valuation, FCFE and FCFF, Enterprise DCF valuation, Real options, Intangibles valuation

#### **Module 4: Mergers, Acquisitions and Restructuring**

**10 Hours**

Reasons for merger or acquisitions (e.g. synergistic benefits). Valuation of synergy, Anti Takeover Defense, LBO, Forms of consideration & terms for acquisitions (e.g. cash, shares, convertibles & earn-out arrangements), & their financial effects. The post-merger or post-acquisition integration process (e.g. management transfer & merger of systems). The implications of regulation for business combinations. The function/role of management buy-outs, venture capitalists. Types of exit strategy & their implications.

**Module 5: Value based management and emerging trends:****7 Hours**

Decision Support Models – Financial modeling - Value Based Management - Shareholder Value Analysis – Marakon Model, Alcar Model, and McKinsey Model, EVA Approach, BCG approach, emerging developments/disruptions in the area of finance.

**Basic Texts**

- Chandra, P. (2020). Strategic Financial Management - Managing for value creation (Second ed.). McGrawhill.
- Koller, T., Goedhart, M., & Wessels, D. (2020). Valuation: Measuring and Managing the Value of Companies (Seventh ed.). McKinsey & Company Inc./ John Wiley & Sons.

**Reference Books**

- Bender, R. (2013). Corporate Financial Strategy (Eighth ed.). Routledge.
- Burner, R. F., Eades, K. M., & Schill, M. J. (2018). Case Studies in Finance: Managing for Corporate Value Creation (Eighth ed.). McGrawHill.
- Gatti, S. (2018). Project Finance in Theory and Practice: Designing, Structuring, and Financing Private and Public Projects (Third ed.). Academic Press.

**Other reading material**

- Atsmon, Y. (2016, August). How nimble resource allocation can double your company’s value. McKinsey & Company.
- Hall, S., Lovallo, D., & Musters, R. (2012, March). How to put your money where your strategy is. McKinsey Quarterly.
- Hansel, G., Kotzen, J., Roos, A., Wick, E., & Foldesy, J. (2018, June). Disruption and Reinvention in Value Creation: The 2017 Value Creators Report. BCG Report.
- Jiang, B., & Koller, T. (2011, October). The savvy executive’s guide to buying back shares. McKinsey Quarterly.
- Kuijpers, D., & Wintels, S. (2015, August). Is your company a value creator or a value destroyer? McKinsey Report.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Behavioural Finance**

Course Code: **22MBADSE411**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Sensitize the learners to the role and scope of Behavioral finance in capital market
- Critically discuss the biases and errors of judgment that affect financial decisions
- Evaluate behavioral aspects of investing and value investing.
- Analyze role of irrationality and heuristics and biases.
- Evaluate the metrics of market outcomes and examine the philosophy of value investing.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Define the concepts and purpose of behaviour finance in the context of Neo-classical finance
CO2	Develop an understanding of behavioural biases and errors of judgement in financial decisions
CO3	Explain the behavioural aspects of investing and value investment
CO4	Assess the effectiveness of irrationality and heuristics in financial markets
CO5	Examine the factors and measures of market outcome and examine value investment

### **Course Contents:**

#### **Module 1: Neo Classical Finance and Behavioral challenge**

**9 Hours**

Intellectual Underpinnings, the rise of the Rational Markets Hypothesis and the challenge of Behavioural lists, expected utility theory, modern portfolio theory, CAPM, EMH, challenges in EMH, Agency theory and the influence of Psychology.

#### **Module 2: Foundations of Behavioural Finance**

**9 Hours**

Heuristics and Biases, How the human mind works, anchoring, irrationality and adaptation, hyperbolic discounting, self- deception, overconfidence, untangling skill and luck in business, Prospect theory.

#### **Module 3: Emotional Factors and Social Forces**

**9 Hours**

Substance of Emotion, Theories of Emotion, Evolutionary perspective, types and dimensions of emotions, emotions and investing, fairness, reciprocity and trust, conformity, social influence.

#### **Module 4: Behavioural Aspects of Investing**

**9 Hours**

Investment behavior, Heuristics and biases in financial decision making, influence of emotions, implications of mental accounting, behavioural portfolio theory, Psychological models, basic ingredients of a sound investment philosophy, guidelines for overcoming Psychological biases, fear of loss, disposition effect, Neurofinance, Market Bubbles.

#### **Module 5: Market Outcomes and Value investing**

**9 Hours**

Size effect, seasonality, momentum and reversal, post earnings announcement drift, value premium, equity premium puzzle, volatility, behavioural asset pricing model, tenets of value investing, strategies of legendary value investors, academic research on value investing, Animal spirits, halo effect, flaws of finance.  
(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### **Text Book:**

- Chandra Prasanna (2017). Behavioural Finance. Delhi, Mcgraw Hill Education

#### Reference Books:

- William Forbes (2011). Behavioural Finance. Wiley
- Lucy Ackert (2012). Understanding Behavioral Finance. Cengage India
- M.M. Sulph (2014). Behavioural Finance. Delhi, PHI Learning Private Limited
- Szyszka A. (2013). Behavioral Approach versus Neoclassical Finance. In: Behavioral Finance and Capital Markets. New York, Palgrave Macmillan
- Baker, H. K., & Ricciardi, V. (2014). Investor behavior: The psychology of financial planning and investing. John Wiley & Sons.
- Berns, D. M. (2020). Modern asset allocation for wealth management. John Wiley & Sons.
- Burton, E., & Shah, S. (2013). Behavioral finance: Understanding the social, cognitive, and economic debates. John Wiley & Sons.
- Chandra, P. (2020). Behavioural finance | Second edition. McGraw-Hill Education.
- Copur, Z. (2015). Handbook of research on behavioral finance and investment strategies: Decision making in the financial industry: Decision making in the financial industry. IGI Global.
- Pompian, M. M. (2012). Behavioral finance and investor types: Managing behavior to make better investment decisions. John Wiley & Sons.
- Richards, T. (2014). Investing psychology: The effects of behavioral finance on investment choice and bias. John Wiley & Sons.
- Sonkin, P. D., & Johnson, P. (2017). Pitch the perfect investment: The essential guide to winning on Wall Street. John Wiley & Sons.
- Statman, M. (2019). Behavioral finance: The second generation. CFA Institute Research Foundation.
- Other Reading Materials:
- Asymmetric relationship of investor sentiment with stock return and volatility: Evidence from India. (2020, June 18). Discover Journals, Books & Case Studies | Emerald Insight. <https://www.emerald.com/insight/content/doi/10.1108/RBF-07-2019-0094/full/html>
- Behavioural finance and investors' psychology. (n.d.). Emerald Publishing. [https://www.emeraldgroupublishing.com/archived/products/journals/call\\_for\\_papers.htm%3Fid%3D7231](https://www.emeraldgroupublishing.com/archived/products/journals/call_for_papers.htm%3Fid%3D7231)
- Behavioural finance, alt data and risk-free rate problems. (2020, October 31). Risk.net. <https://www.risk.net/7-days-in-60-seconds/7650881/behavioural-finance-alt-data-and-risk-free-rate-problems>
- The hidden effects of stress on risktakers. (2021, March 17). Risk.net. <https://www.risk.net/investing/7729691/the-hidden-effects-of-stress-on-risk-takers>
- An introduction to behavioral finance. (n.d.). Investopedia. <https://www.investopedia.com/articles/02/112502.asp>
- Personal routes into behavioural finance. (2020, May 4). Discover Journals, Books & Case Studies | Emerald Insight. <https://www.emerald.com/insight/content/doi/10.1108/RBF-12-2019-0176/full/html>
- Skin in the game – investor behavior in asset pricing, the Indian context. (2019, November 11). Discover Journals, Books & Case Studies | Emerald Insight. <https://www.emerald.com/insight/content/doi/10.1108/RBF-10-2019-0138/full/html>



- A test of the association between the initial surge in COVID-19 cases and subsequent changes in financial risk tolerance. (2020, August 24). Discover Journals, Books & Case Studies | Emerald Insight. <https://www.emerald.com/insight/content/doi/10.1108/RBF-06-2020-0121/full/html>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Strategic Cost Management**

Course Code: **22MBADSE412**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Determining cost for a product or service
- Examining the marginal costing technique for managerial decision making and problem solving
- Evaluating the budgetary control technique as a means to combat changing business environment
- Assessing performance of different business verticals
- Appraising evolving and traditional trends of costing

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Explain the theoretical background of Cost Accounting
CO2	Determine the cost of products and services
CO3	Examine how marginal costing is applied for decision making and problem solving
CO4	Assess performance of different business verticals
CO5	Critically appraise evolving and traditional trends of costing

### Course Contents:

#### Module 1: Costing methods

**7 Hours**

Cost, types of costs, elements of cost, Product costs (manufacturing costs), Period costs (non-manufacturing costs), Product Costs on the Balance Sheet & Income Statement, Schedule of raw materials placed in production, Schedule of cost of goods manufactured, Schedule of cost of goods sold, cost sheet, tenders and quotations, job costing, overheads, allocation, apportionment and absorption, absorption costing, Process costing, joint and by-products and standard costing.

#### Module 2: CVP Analysis

**13 Hours**

Concept of CVP, break even chart, computation of break-Even Point, Margin of safety, Angle of Incidence Application of CVP analysis, make or buy decision, shut down or continue, product sales pricing and mix limiting factors, pricing decisions and pricing strategies, Weighted Average Contribution Margin Ratio for Multiple- Product and Service Companies, Cost optimization using MS-Excel Solver, Case study on CVP analysis

#### Module 3: Activity Based Costing (ABC)

**8 Hours**

Activity Based Costing (ABC)- identifying cost drivers/activities, ABM – Activity Based Management, Activity Based Costing, Pareto analysis, Using Activity-Based Costing to Assess Customer Profitability, Using Activity-Based Management to Improve Operations, Case study on ABC

**Module 4: Budgeting and Budgetary control****10 Hours**

Advanced discussions on budgeting and budgetary control, kaizen budgeting, ZBB, flexible budgets and preparation of master budgets, Case study on budgeting

**Module5: Performance Measurement & trends in compensation and Multinational considerations****7 Hours**

Uniform Costing and Inter firm comparison – Industry specific ratios, evaluating business verticals across value chain, benchmarking, Economic Value Added, Return On Investment, Residual Income BPR, Process Innovation, Performance measurement – CSFs, KRAs, KPIs, Balanced Score Card\* manufacturing resources planning, (MRP), automated manufacturing, synchronous manufacturing and back flush costing\*, total quality management, JIT, value engineering, Throughput accounting, Life cycle costing, Target costing

(\* These topics are categorized as 'Self--learning' topics and are subjected to testing)

**Basic Texts**

- Aggarwal S.K. (2018), Cost Management & Accounting, Reliance Publication
- Arora, M. N. (2009). Cost and management accounting: (theory, problems and solutions)
- Gupta S K, Sharma R K (2017), Management Accounting Principles Practice, Kalyani Publisher
- Horngren, C. T., Datar, S. M., Rajan, M. T., & Rajan, M. V. (2014). Cost accounting. Prentice Hall
- Jain S.P, Narang K.L (2015), Cost & Management Accounting, Kalyani Publishers
- Khan & Jain (2006), Management Accounting, Tata Mcgraw Hill

**Reference Books**

- Jazayeri, M., & Hopper, T. (1999). Management accounting within world class manufacturing: A case study. *Management Accounting Research*, 10(3), 263-301. <https://doi.org/10.1006/mare.1999.0106>
- Forthcoming articles. (2020). *Management Accounting Research*, 1(2), 165. [https://doi.org/10.1016/s1044-5005\(90\)70055-8](https://doi.org/10.1016/s1044-5005(90)70055-8)
- Munday, M. (1992). Accounting cost data disclosure and buyer-supplier partnerships—a research note. *Management Accounting Research*, 3(3), 245-250. [https://doi.org/10.1016/s1044-5005\(92\)70014-6](https://doi.org/10.1016/s1044-5005(92)70014-6)
- Activity-based costing in manufacturing. (n.d.). Springer Reference. [https://doi.org/10.1007/springerreference\\_6356](https://doi.org/10.1007/springerreference_6356)
- (n.d.). Springer Reference. [https://doi.org/10.1007/springerreference\\_6356](https://doi.org/10.1007/springerreference_6356)
- Ahmad, I., Alam, S., & Yameen, M. (2019).
- A study of economic value added (EVA) and market value added (MVA) of Hindustan petroleum Corporation Limited. *Global Journal of Economics and Business*, 6(1), 225-237. <https://doi.org/10.31559/gjeb2019.6.1.14>
- C, V. R. (2013). An empirical analysis of linkage between economic value added (EVA) and market value added (MVA). *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3461131>
- Thomas T. Amlie (2009), *Constrained Optimization Problems In Cost And Managerial Accounting – Spreadsheet Tools*. *American Journal of Business Education*, 2(6)
- Dwivedi, R., & Chakraborty, S. (2017). Strategic decision making for a footwear industry using activity based costing and value chain models. *Leather and Footwear Journal*, 17(3), 119-128. <https://doi.org/10.24264/lfj.17.3.1>

**Other reading material**

- The Institute of Cost Accountants of India, Study Notes, Cost Accounting

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Investment Banking**

Course Code: **22MBADSE413**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- List the fundamental activities of an investment Banker.
- Explain the allied activities in Investment Banking
- Discuss various business valuation models
- Outline aspects of Underwriting, Buyback and Delisting
- Discuss aspects of rights issue, venture capital and private equity

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Outline the roles of an investment Banker.
CO 2	Examine the structure of investment banking and allied activities
CO 3	Assess businesses based on asset-based model and cash flow-based model.
CO 4	Elaborate concepts on underwriting, buyback, listing and delisting
CO 5	Examine the process of rights issue, role of venture capitalists & Private equity

### Course Contents:

#### **Module 1: Foundations of Investment Banking**

**7 Hours**

History of Investment Banking, introduction of Investment Bankers' core activities, Application of valuation mechanics and techniques, Financial modeling and comprehensive valuation analysis, M&A, LBOs, Deal mechanics, Corporate restructuring, corporate defense, legal and ethical issues in investment banking industry

#### **Module 2: Investment Banking**

**9 Hours**

Investment Banking and allied activities – core, front and back office activities - Due diligence, term sheet, profiling of investment bankers like UBS, Bank of America, Goldman Sachs and Morgan Stanley, J P Morgan Chase, Credit Suisse, Deutsche Bank, Barclays and Wells Fargo, Kotak Investment Banking\*

#### **Module 3: Business valuation**

**11 Hours**

Bond and equity valuation – Corporate valuation using Business valuation models – Asset based valuation models , Financial forecasting , Cashflow based valuation models, Economic profit model - Additional dimensions in valuation (Investment Banker's Perspective)

#### **Module 4: Underwriting, Buybacks and Delisting**

**8 Hours**

Underwriting in fixed price and book built offers, regulatory framework – Share buyback – Buyback by listed and unlisted companies – Investment banking perspectives in share buyback, Delisting of a listed company, voluntary and compulsory del-listing, re-listing, currency acquisition – challenges and opportunities

**Module 5 Private placements & Private equity****10 Hours**

Private placements – Venture capital – Institutional private equity, strategic equity investments, Overview of PE, profiling of international and Indian PE funds\*, covenants, Exit and referencing, Role of SEBI in promoting VC and PE, Study of Ecosystem for PE exit, PE term sheet, due diligence and deal cycle

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic texts:**

- Indian Institute Of Banking & Finance (2021). Principles and Practice of Banking: For JAIB Examination. Macmillan India Ltd.
- Pratap Giri S (2017). Investment Banking: Concepts, Analysis and Cases, 3rd Edition, McGraw Hill Education

**Reference Books:**

- Indian Institute of Banking & Finance (2021). Legal & Regulatory Aspects of Banking. Macmillan Publishers India Pvt. Ltd.
- Steve J Sanders (2021) Investment Banking: Step-by-Step Technical Guide to Investment Banking. Tools and Strategies to Start Successfully
- Joshua Rosenbaum, Joshua Pearl , et al (2021) Investment Banking Workbook: Valuation, LBOs, M&A, and IPOs (Wiley Finance).
- Robert R. Johnson, Bob, (2020) Investment Banking for Dummies, For Dummies; 2nd edition (July 21, 2020)
- Krantz, M., & Johnson, R. R. (2020). Investment banking for dummies. John Wiley & Sons.
- Indian Institute of Banking & Finance (2018). Retail banking. MacMillan Publishers India Pvt. Ltd.
- NISM (2017). Equity Sales. NISM.
- NISM (2017). Mutual fund foundation. Taxman.
- NISM (2015). Mutual fund distributors (Level 2). Taxman.
- Iyengar, Vijayaragavan G (2014). Introduction to Banking. Excel Books Private Limited.
- Muraleedharan D (2009) . Modern Banking: Theory and Practice. Prentice Hall of India Private Limited.
- Indian Institute of Banking and Finance (2007). General Bank Management. Macmillan India Ltd.

**Other reading materials:**

- World Bank Group. (2020). Global investment competitiveness report 2019/2020: Rebuilding investor confidence in times of uncertainty. World Bank Publications.
- Pearl, J., & Rosenbaum, J. (2020). The little book of investing like the pros: Five steps for picking stocks. John Wiley & Sons.
- Joshua Rosenbaum, Joshua Pearl, et al. (2020) Investment Banking (3rd Edition): Valuation, LBOs, M&A, and IPOs
- Joshua Pearl , Joshua Rosenbaum , et al. (2020) The Little Book of Investing Like the Pros: Five Steps for Picking Stocks (Little Books. Big Profits)
- Iannotta, G. (2010). Investment banking: A guide to underwriting and advisory services. Springer Science & Business Media.
- Subramanyam. (2005). Investment banking. Tata McGraw-Hill Education.
- Pearl, J., & Rosenbaum, J. (2013). Investment banking: Valuation, leveraged buyouts, and mergers and acquisitions. John Wiley & Sons.
- Knee, J. A. (2006). The accidental investment banker: Inside the decade that transformed Wall Street. Oxford University Press.

- 14. Gutmann, A. (2013). How to be an investment banker: Recruiting, interviewing, and landing the job. John Wiley & Sons.
- Endlich, L. (2000). Goldman Sachs: The culture of success. Simon & Schuster Joshua
- Claudia Zeisberger , Michael Prah, et al (2017) Private Equity in Action: Case Studies from Developed and Emerging Markets
- Zeisberger, C., Prah, M., & White, B. (2017). Private equity in action: Case studies from developed and emerging markets. John Wiley & Sons.
- Paul Pignataro (2013) Leveraged Buyouts, + Website: A Practical Guide to Investment Banking and Private Equity.
- David P. Stowell | Sep 1, 2012 Investment Banks, Hedge Funds, and Private Equity
- Paul Pignataro Paul Heitsch et al. (2020) Financial Modeling and Valuation: A Practical Guide to Investment Banking and Private Equity. Gildan Media.
- Brandon Turner and BiggerPockets Publishing, LLC (2015) The Book on Rental Property Investing: How to Create Wealth and Passive Income Through Smart Buy & Hold Real Estate Investing.
- Turner, B. (2020). The book on investing in real estate with no (and low) money down: Creative strategies for investing in real estate using other people's money.
- Michael Fox-Rabinovitz (2020) Own a Fraction, Earn a Fortune: The Complete Guide to Co-investing in Art and Collectibles: How to Generate High Returns from Collectibles Through Fractional Ownership
- Bashir, I. (2020). Mastering blockchain: A deep dive into distributed ledgers, consensus protocols, smart contracts, DApps, cryptocurrencies, Ethereum, and more (3rd ed.). Packt Publishing.
- Antoinette Matlins PG FGA and Antonio C. Bonanno FGA ASA MGA (2016) Jewelry & Gems—The Buying Guide, 8th Edition: How to Buy Diamonds, Pearls, Colored Gemstones, Gold & Jewelry with Confidence and Knowledge (Jewelry and Gems the Buying.
- Hall, C. (2021). Gemstones. DK.
- Private equity fund management and investing. (2015).  
<https://doi.org/10.1002/9781119197201.ch8>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Fintech**

Course Code: **22MBADSE414**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives

- Enabling students to understand opportunities for disruption in financial services sector
- Introducing to the learners the innovative lending & payment methods
- Create an understanding of the role of technology in financial services
- Explain the various payment and lending platforms
- Enable the students to appreciate the role of Fintech in sustainable finance

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Examine disruptions leading to threats and opportunities in financial services sector
CO 2	Discuss the importance of Blockchain Technology in Fintech
CO 3	Examine the impact of AI, ML & Big Data on financial services
CO 4	Appraise the innovative payment and lending platforms
CO 5	Assess the role of Fintech in sustainable finance

### Course Contents

#### Module 1: Introduction to FinTech

**8 Hours**

Introduction to the Fintech landscape -Modern Banking Landscape -The Intersection of traditional and new-age banking - Dissecting Financial Services Value chain

#### Module 2: Crypto currencies & Blockchain Technology

**8 Hours**

Cryptocurrency- definition, features, types, bitcoin & its features Blockchain fundamentals –definitions, features, types, versions, structure & mechanism – Initial coin offering - Introduction to major blockchain platforms- Application of Blockchain in Banking and Financial services\* – Approach from RBI

#### Module 3: Artificial Intelligence, Machine Learning & Big Data

**11 Hours**

Introduction to Machine Learning - Impact of AI/ML on Various Industries & Business Models\*- Robotic Process & Intelligent Automation - Business Process Reengineering – Cloud Computing - Use of AI & ML + Bots in Smart Payment - Using Credit Counsellor Robo/Bot for faster approvals & funding – Applications of Augmented reality and Quantum Computing



**Module 4: Fintech in Payments & Lending****8 Hours**

Global payment Eco-system- Innovative products in mobile based applications – Peer to Peer lending – Credit Cards- POS based eco system. Dynamic credit rating – Risk Management and Underwriting – Crowdfunding Platforms- P2P Insurance – Regtech.

**Module 5: Sustainable Finance & Innovative Fintech Business models****10 Hours**

Green Finance – Green Fintech -Green Financial Instruments – Green global Financial Inclusion – Innovative Fintech Business models – Alternative insurance underwriting – Digital wallets – Asset Management – Public Cloud adoption – Fintech & Python – Introduction to Jupiter Notebook -Emerging trends in Fintech\*

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Text**

- Susanne Chishti, Janos Barberis (2016). The FINTECH Book: The Financial Technology

**Reference Books**

- Sanjay Phadke (2020) Fintech future, The Digital DNA of Finance,SAGE Publishing.
- Susanne Chishti, Janos Barberis (2016), THE FINTECH BOOK: The financial technology handbook for investors, entrepreneurs and visionaries, Wiley.
- Agustin Rubini (2018). Fintech in a Flash: Financial Technology Made Easy, Zaccheus Entertainment, 3rd edition (2018), ISBN-10: 1547417161, ISBN-13: 978-1547417162.

**Other reading materials**

- KPMG (2017) “The pulse of Fintech Q4 2016: Global analysis of investment in fintech,” KPMG,.
- G. Hileman and M. Rauchs (2017), Global Cryptocurrency Benchmarking Study, Cambridge: Cambridge Centre for Alternative Finance.
- CrowdfundingHub (2016) Current State of Crowdfunding in Europe: An Overview of the Crowdfunding Industry in more than 25 Countries: Trends, Volumes & Regulation.
- PwC (2016), “Financial services technology 2020 and beyond: Embracing disruption”.
- Citigroup(2016), “Digital disruption: How FinTech is forcing banking to a tipping point,”
- Innovate Finance(2015) , “Innovate finance manifesto: UK 2020”.
- Palgrave Macmillan (2017) Investigating the global FinTech Talent Shortage, Toronto: Ryerson University, 2017.
- R. McWaters (2015) “The future of financial services: How disruptive innovations are reshaping the way financial services are structured, provisioned and consumed,” World Economic Forum.
- **Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Financial Modeling**

Course Code: **22MBADSE415**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Describe the conceptual framework in financial modelling.
- Create Corporate Financial Statements forecasting
- Explain the concepts of time value of money through financial analytics
- Examine the financial decisions in business
- Decide business valuation techniques for various areas

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Explain the theory and practice of financial modelling
CO 2	Construct the corporate valuation using excel
CO 3	Employ the application of time value money
CO 4	Test financing, investing and dividend decisions in business
CO 5	Appraise business valuation using financial modelling techniques.

### Course Contents:

#### Module 1: Introduction to financial modelling

**9 Hours**

Conceptual framework of Financial modelling, steps in modelling, Business models, **Recap of Major Functions in Excel\***, Accuracy, Flexibility & User-friendliness of Financial models, Defining Model objectives, Setting up modules, Identifying inputs and variables, Defining deliverables and functionality, Stress testing Models and Model Documentation, introduction to simulation, **decision tree analysis, scenario analysis\***, Excel functions with illustrations.

#### Module 2: Corporate Valuation

**9 Hours**

Adjusted Book Value Approach, Forecasting performance, **Asset based valuation\***- Projecting financial statements, Income Statement, Balance Sheet, **Cash Flow Statement\***.

#### Module 3: Applications of Time value of money

**9 Hours**

Time value of money, present and future values, **EMI Calculation and loan amortization table\***, sensitivity analysis, **capital budgeting analysis\***.

#### Module 4: Financing, working capital and dividend decision

**10 Hours**

Capital structure analysis, **cost of capital analysis\*** at various capital mixes, working capital management, **dividend decisions\***.

#### Module 5: Business Valuation

**8 Hours**

Break even analysis with sensitivity analysis, Regression Analysis, **Monte Carlo Simulation\***, **Derivatives and Pricing using Excel\***, Financial Modeling for Bonds and Bond Pricing, Valuation for Mergers, Synergy computation.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

## Basic Texts

- Simon Benninga (2014), *Financial Modelling*, (4th ed.). Cambridge: The MIT Press.

## Reference Books

- Pignataro, P. (2013). *Financial Modelling and Valuation: A practical guide to investment banking and private equity*. (2nd ed.). John Wiley & Sons.
- Joachim Hacker & Dietmar Ernst (2017), *Financial Modelling: An Introductory Guide to Excel and VBA Applications in Finance (Global Financial Markets)*. (1st ed.), London: Palgrave Macmillan
- Chandan Sengupta (2011), *Financial Analysis and Modelling using Excel and VBA*, (2nd ed.). Wiley
- Michael Rees (2017), *Principles of Financial Modelling: Model Design and Best Practices Using Excel and VBA*. (1st ed). New York: Wiley.
- Shmuel Oluwa. (2019), *Hands-On Financial Modelling with Microsoft Excel 2019: Build practical Models for Forecasting, Valuation, Trading, and Growth analysis using Excel 2019*, Birmingham: Packt Publishing Limited
- Tom Y. Sawyer (2014), *Financial Modelling for Business Owners and Entrepreneurs: Developing Excel Models to Raise Capital, Increase Cash Flow, Improve Operations, Plan Projects, and Make Decisions*, (1st ed), Basingstoke: Springer Nature; 1st ed. Edition
- Christie Karis (2016), *Financial Modelling: Basics for the Small Business*. (Kindle Ed), New York: Wiley.
- Michael Samonas. (2015), *Financial Forecasting, Analysis, and Modelling: A Framework for Long-Term Forecasting*, (1st ed.). New York: Wiley.
- Liam Bastick. (2016), *Introduction to Financial Modelling: How to Excel at Being a Lazy That Means Efficient! Modeller*. (Kindle ed). Holy Macro! Books.

## Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Equity Research**

Course Code: **22MBADSE416**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives

- Introducing valuation methods and applications
- Understanding the computation of Discounted cash flow technique
- Facilitating the learners to apply relative valuation for investment decisions
- Enabling the learners on application of advanced valuation techniques
- Enhancing skill of the learner to use valuation model building through MS Excel

### Course Outcomes (Cos):

At the end of the course, learners will be able to:

CO1	Describe the fundamentals on valuation methods and its application
CO2	Employ discounted cash flow valuation for investment decisions
CO3	Appraise relative valuation metrics for banking sector
CO4	Examine advanced valuation techniques for mergers and acquisitions
CO5	Create valuation models for manufacturing and service-based companies in India.

### Course Contents:

#### Module 1: Introduction to Valuation

**7 Hours**

Valuation and Common Valuation Methods: Why Valuation, Various Methods of Valuation, Introduction to Discounted Cash Flow Valuations, Relative Valuations and Other Methods, Advantages and Disadvantages of the various Methods. **Valuation in Portfolio Management\***.

#### Module 2: Discounted Cash Flow Valuation

**10 Hours**

Introduction to Dividend Discount Model, Free Cash Flow to Firm and Free Cash Flow to Equity Model, Cost of Equity, Cost of Capital, Practical Methods of Cost of Capital Calculations, Interpretation of Capital Asset Pricing Model, and other methods of calculating cost of equity, Cash Flow Calculations and Interpretations, Usage of methods based on industries and companies. **Tax effects on measuring cash flows\***.

#### Module 3: Relative Valuation

**10 Hours**

Relative Valuation Metrics – Ubiquity of relative valuation – Reasons for Popularity and Potential Pitfalls- Four Basic Steps to using Multiples: Price to Earnings Ratio, Price to Book Ratio, Price to Sales Ratio, Enterprise Value ratios, Exercise on Relative Valuation using Banking Sector. **Reconciling relative and discounted cash flow valuations\***.

#### Module 4: Advanced Valuation Techniques

**7 Hours**

Introduction to distressed company valuation, Valuation and its applications in Mergers and Acquisitions: Synergy – Process of Value synergy, effects, dubious synergies, evidence on synergy, common errors in valuing synergy, Transaction Comparable Methods. **Case Study: Value Vodafone and Idea Merger\***.

## Module 5: Valuation Model Building

11 Hours

Valuation model building using Microsoft Excel for a services company in India, Valuation model building using Microsoft Excel for a manufacturing company in India, including concepts of DCF Valuations and Relative Valuations. Other Exercises – **Students to build a detailed model on their own\***.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

1. Aswath Damodaran (2012), Investment Valuation: Tools and Techniques for Determining the value of any Asset. 3 Ed. John Wiley & Sons.
2. Jerald E Pinto (2020), Equity Asset Valuation (CFA Institute Investment Series). 4 Ed. Wiley.

### Reference Books

1. Sheeba Kapil (2021). Financial Valuation and Modelling. Wiley India.
2. Frank J Fabozzi and Harry M Markowitz (2017). Equity Valuation and Portfolio Management. John Wiley & Sons.
3. Vikash Goel (2020). Handbook on Valuation of Securities and Financial Assets. 3 Ed. Bloomsbury Professional India.
4. Dun. Bradstreet (2017). Equity Research and Valuation. McGraw Hill Education.
5. John D Stowe et al. (2017), Equity Asset Valuation, 3 Ed. John Wiley & Sons.
6. James Valentine (2019), Best Practices for Equity Research Analysts: Essentials for Buy-Side and Sell-Side Analysts.

### Other reading material

1. Shapiro, E., Mackmin, D., & Sams, G. (2019). *Modern methods of valuation*. Estates Gazette.
2. French, N. (2004). The valuation of specialised property: A review of valuation methods. *Journal of Property Investment & Finance*.
3. Discounted cash flow (DCF). (n.d.). Springer Reference. [https://doi.org/10.1007/springerferece\\_6589](https://doi.org/10.1007/springerferece_6589).
4. Tan, Z., 2017. Application of Discounted Cash Flow Model Valuation Wal-Mart. *SSRN Electronic Journal*,.
5. Barth, M. E., Beaver, W. H., & Landsman, W. R. (1998). Relative valuation roles of equity book value and net income as a function of financial health. *Journal of Accounting and Economics*, 25(1), 1-34.
6. Sharma, M., & Prashar, E. (2013). A conceptual framework for relative valuation. *The Journal of Private Equity*, 16(3), 29-32.
7. Widiatmoko, J., & Indarti, M. K. (2019). Book Tax Differences, Operating Cash Flow, Leverage and Earning Persistence in Indonesia Manufacturing Companies. *Jurnal Dinamika Akuntansi*, 11(2), 151-159.
8. Petitt, B. S., & Ferris, K. R. (2013). *Valuation for Mergers and Acquisitions: Valuation\_2*. FT Press.

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**BANKING, FINANCE AND ALLIED SERVICES (BFAS)**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

## Course Title: **Credit Risk Management**

Course Code: **22MBADSE417**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Enabling the learners to identify various types of risks in a Bank
- Introduce to the learners the structure, information content and sources of revenues and expenses of corporate banking
- Describe various risks mitigation techniques to the learners
- Familiarize learners about various market risks
- Enabling the learners to understand ALM techniques in banking

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Identify the different types of risks in a Bank
CO 2	Examine risk regulations – Basel II, III and RBI Regulations
CO 3	Appraise the credit risk management in banks
CO 4	Examine ALM (Asset-Liability Management) techniques in banking
CO 5	Interpret Risk Mitigation and Management Methods

### Course Contents:

#### Module 1: Risk Management in Banks

**10 Hours**

Meaning and Definition of Risk-Risk Process-Risk Identification, Monitoring and Control. Risk Organization-Key Risks-Credit Risk, Market Risk, Operational Risk, Liquidity Risk, Interest Rate Risk, Currency Risk and Insolvency Risk, NSFR (Net Stable Funding Ratio). ALM (Asset Liability Management)-Purpose and Objective of ALM-ALCO techniques/tools-Simulation, Gap Analysis involving Structural Liquidity Statement, Duration Analysis, Scenario Analysis, Simulation, Value at Risk (VaR) and other statistical methods of control.

#### Module 2: Risk Measurement and Control

**8 Hours**

Risk Exposure Analysis-Transaction, Translation, Operating and Economic Exposure. Risk Management/mitigation Policy-Risk immunization policy/strategy for fixing exposure Limits-Risk management policy and Procedure-Prudent Valuation Risk-FRTB (Fundamental Review of Trading Book)-Risk Adjusted Return on Capital (RAROC)

#### Module 3: Credit Risk Management

**10 Hours**

Introduction-BCBS (Basel Committee on Banking Supervision)-Basel I – Three Pillars of Basel-II, Pillar I – Capital Adequacy Requirements, Pillar II - Supervisory Review and Pillar III – Market Discipline - Contents of Basel-III- and Capital for Operational Risk - Capital Adequacy Requirements. Methods for estimating capital requirements- Credit Risk-Standardized Approach-Credit Risk-Internal ratings-based approach. Credit Rating/credit scoring and ratings system design\*-Credit Bureaus-Stress test and Sensitivity Analysis-Altman's-Z Score-Loan Review Mechanism-Credit Risk and Investment Banking, Credit Risk in Off Balance Sheet Exposure, Credit Risk in Inter-Bank Exposure and Country Risk. Internal Capital Adequacy Assessment Process (ICAAP)-Introduction to Structured Products.

**Module 4: Operational Risk****9 Hours**

Introduction, Basel I, II and III – RBI Guidelines-Likely forms of operational risk and Causes for significant increase in Operational Risk-Sound Principles of Operational Risk Management-Role of Board of Directors and Senior Management in Operational Risk Management(ORM)\* – SPOR-Organizational set up and key responsibilities of ORM-SPOR- policy requirements and strategic approach for ORM-SPOR identification measurement, control/mitigation of operational risks-Capital allocation for operational risk, methodology, qualifying criteria for banks for the adoption of the methods-Computation of capital charge for operational risk-Basic Indicator Approach and Standardized Approach.

**Module 5: Market Risk****8 Hours**

Introduction and definition -Prescriptions of Basel I, II and III – Liquidity Risk-Interest Rate Risk-Gap Risk, Basis Risk, Net Interest Position risk, Embedded Option Risk, Yield Curve Risk, Price Risk and Re-Investment Risk-Foreign Exchange Risk – Price Risk (Equity)-Commodity Risk-Treatment of Market Risk under Basel a) Standardized Duration Method b) Internal Measurement Approach-VaR

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- K. Vaidya Nathan. (2013), Credit Risk Management for Indian Banks. Sage publications
- Joel Bessis (2015). Risk Management in Banking. Wiley Finance.

**Reference Books**

- John C. Hull (2012). Risk Management and Financial Institutions. John Wiley & Sons.
- T. Ravi Kumar. (2005). Asset Liability Management, Vision Publications.
- Koch W, Timothy, and S. Scott. (2005) Bank Management. Thomson, New Delhi.
- S. Murali, K.R. Subbakrishna (2012). Bank Credit Management. Himalaya Publishing House.
- Lev Borodovsky, Marc Lore (2000). Professional’s Handbook of Financial Risk Management. Butterworth-Heinemann

**Other Reading Material**

- <http://www.rbi.org.in> (Monetary Policy review)
- Guidelines and circulars of RBI <https://www.rbi.org.in/upload/notification/pdfs/61494.pdf>
- [www.iba.org.in](http://www.iba.org.in)
- <https://www.hdfcbank.com/content/api/contentstream-id/723fb80a-2dde-42a3-9793-7ae1be57c87f/1bcf4f2c-17cc-4759-9081-dcc0f5beeb60?>
- <https://www.pnbindia.in/downloadprocess.aspx?fid=s1d6Z2gyk/XHdtU0omsGsA==>
- <https://www.icicibank.com/aboutus/Annual-Reports/2019-20/ICICI-Bank-Annual-Report-FY2020.pdf>
- [https://www.yesbank.in/pdf/annual\\_report\\_2019\\_2020\\_pdf](https://www.yesbank.in/pdf/annual_report_2019_2020_pdf)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



**MARKETING**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

## Course Title: **Marketing of Services**

Course Code: **22MBADSE401**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Introducing students to the nature and scope of services marketing, consumer behavior and positioning of services.
- Enabling students to develop marketing strategies and marketing mix for services.
- Explaining the service process through productive operation, customer experiences, value co-creation
- Enabling students to work effectively within a service environment, and to demonstrate integrative knowledge of marketing issues associated with service productivity, and customer loyalty.
- Developing an understanding of the importance of Service Recovery and relationship between customer relationship management and customer profitability

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Articulate the nature and scope of services marketing, consumer behavior and positioning of services.
CO 2	Develop marketing strategies and marketing mix for services.
CO 3	Demonstrate the knowledge of value co-creation and various service systems to develop service blueprint for various service process through productive operations and customer experiences.
CO 4	Demonstrate the capability to work effectively within the service environment by understanding the marketing issues associated with services and customer loyalty.
CO 5	Illustrate GAPS model of service quality to Investigate service delivery systems for better service quality, service leadership and customer service.

### **Course Contents:**

#### **Module 1: Understanding Service Products, Consumers and Markets**

**8 Hours**

Understanding and Defining Services; Distinguishing Services from Products; Extended marketing mix for Services Marketing (7Ps approach); Understanding & Applying Gaps Model of Services Quality; Market Research for Services Marketing.

#### **Module 2: Customer Driven Services Marketing Program**

**11 Hours**

Analyzing Customer Expectations - Meaning and Types of Customer Expectations, Factors influencing customer expectations and Customer perceptions; Analysing the Zone of Tolerance (ZoT); Factors influencing Customer Satisfaction; Distinguishing between front office and back office in relation to customer service delivery.

#### **Module 3: Service Processes, Service Encounters and Service Quality**

**9 Hours**

SERVQUAL and SERVPERF Models; Identifying and designing Service Encounters; the moment of truth, Sources of Customer's Pleasure and Displeasure; Strategies for influencing Customer Perceptions; Service quality and customer satisfaction at every service encounter.

**Module 4: Service Environment and Design****9 Hours**

Service Process and Blueprinting; Managing People for building Service Oriented brands; Physical evidence of Service Promise - the roles played by the Physical evidence of a service, self-service technologies.

**Module 5: Service Recovery and Service Leadership****8 Hours**

Complaint Handling and Service Recovery - Customer Complaining Behavior, Customer Responses to Effective Service Recovery, Principles of Effective Service Recovery Systems; the Service-Profit Chain; Service Guarantees.

**Text Book(s)**

- Zeithaml, V.A., Bitner, M.J., Gremler, D.D., Pandit, A. (2013). Services marketing. Integrating customer focus across the firm. New Delhi, India: McGraw Hill.
- Lovelock, C., Wirtz, J. Chatterjee, J. (2011). Services Marketing. People, Technology, Strategy. New Delhi, India: Pearson.

**Reference Book**

- Skaalsvik, H. (2012). Why service recovery fails: A case study on the Norwegian Coastal Voyage (Hurtigruten). European Journal of Tourism Research, 5(2), 129.

**Other references**

- Davis, J. C. (2007). A conceptual view of branding for services. Innovative Marketing, 3(1), 7.
- Johnston, R., and Michel, S. (2008). Three outcomes of service recovery: customer recovery, process recovery and employee recovery. International Journal of Operations and Production Management, 28(1), 79-99.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Name: **Tourism Marketing**

Course Code: **21MBADSE402**

Semester: **4**

Credit: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Sensitizing the participants with the recent trends and contemporary issues in the field of tourism marketing.
- Creating an understanding about marketing principles in relevance to travel and tourism industry.
- Enabling participants to understand the consumer decision journey with regard to the tourism consumption.
- Appreciating the role marketing can play in the development and promotion of tourism.
- Examining the various tourism trends and understanding its role in promotion of different forms of tourism.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Outlining the fundamentals of Tourism Marketing
CO 2	Choosing the right strategies for marketing tourism products
CO 3	Examining the motivation and purchase behaviour pertaining to the tourism products and services.
CO 4	Recommending a thought about destination development, management and marketing.
CO 5	Proposing the various forms of tourism and its significance in attracting tourists.

### Course Contents:

#### Module 1: Tourism Marketing Fundamentals

**9 Hours**

Evolution of Tourism and understanding its potential, Tourism Marketing – Tourism Product – Features of Tourism Product & design and mapping the products –Functions, Concepts of Services Marketing, Challenges in tourism marketing, trends in tourism marketing, **Tourism Marketing Environment\***.

#### Module 2: Tourism Marketing Strategies

**8 Hours**

8 P's of Tourism Marketing, Designing Tourism Product – Branding and Packaging Product Development – Product Life Cycle & Its Various Stages, Pricing Strategies and Approaches, Channels of Distribution, Tourism Promotion Mix **Digital Transformation in Tourism.**

#### Module 3: Motivation for Travel and Purchase Behavior

**8 Hours**

Need for Tourism Marketing Information, Tourism Marketing Research, Characteristics of consumer behavior, Factors influencing consumer behavior, Stages involved in consumer decision journey for tourism, Motivations and its sources for travel and tourism, CRM in tourism **Building customer loyalty in tourism.**

**Module 4: Destination Development and Marketing****10 Hours**

Concept of destination marketing, Destination development, management and marketing overview, various issues involved in destination marketing, Destination marketing planning and principles, Destination marketing objectives (DMO), Destination product development, Destination branding, Sustainable tourism and impact on community **Popular Tourist Destinations (Domestic & International\*)**.

**Module 5: Emerging Tourism Trends****10 Hours**

Health, Wellness and Medical Tourism, Business Travel and Business Event Market, Adventure and Sports Tourism, Nature based and Eco-tourism, Culture, Heritage and Religious Tourism, Niche-Tourism. **Ongoing trends in different forms of tourism\***.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Prescribed Text:**

- Jha, S. M. (2015). Tourism marketing. Himalaya Publishing House.
- Swain, S.K. and Mishra, J.M. (2012). Tourism Principles and Practices. Oxford Publication.
- Walker, J. R., & Walker, J. T. (2011). Tourism concepts and practices. Pearson Education India.
- Morrison, Alastair M. (2013). Marketing and Managing Tourism Destinations. New York: Routledge.
- Philip Kotler, John T. Bowen, James C. Makens (2016). Marketing for Hospitality and Tourism (7th ed.). Pearson.

**References**

- Smith, M. K., MacLeod, N., & Robertson, M. H. (2010). Key concepts in tourist studies. SAGE Publications.
- Dasgupta, D. (2010). Tourism marketing. Pearson India.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Strategic Marketing**

Course Code: **22MBADSE403**

Semester: **4**

Credits: **3**

Hour (LTP): **45 Hours**

### Course Objectives:

- Providing students with frameworks which would help them examine the development and implementation of marketing strategy
- Enabling students to examine issues in Strategic Marketing decision making and planning.
- Enabling students to evaluate key marketing concepts, theory and practice.
- Introducing students to latest strategic marketing practices in a changing environment.
- Equipping students with theories on strategic options for product planning, pricing, distribution and promotion activities, to develop marketing plans

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Define the role of Marketing strategy in the context of the overall Corporate Strategy.
CO 2	Examine competition and design marketing strategies to create competitive advantage.
CO 3	Identify market opportunities and design targeting strategies.
CO 4	Develop broad marketing strategies in the context of the changing business environment.
CO 5	Develop marketing programs to implement the marketing strategy.

### Course Contents:

#### Module 1: Fundamentals of Strategic Marketing

**9 hours**

Compare and contrast between marketing management and strategic marketing, role of Marketing in Corporate Planning Process; the importance of Vision and Mission Statements and use of Abell's framework while developing mission statement, SBU and its characteristics, Tools for managing SBUs (Ansoff's matrix, BCG and GE grids), **Marketing as a function within a SBU\***, Corporate appraisal to enable alignment of strategic marketing to overall corporate strategy.

#### Module 2: Identifying and Analyzing Competition, Building Competitive Advantage

**9 hours**

Models for identifying competition; Sector, Industry and Business Segment; Porter's 5-Forces Analysis for identifying competition; Product-Market Competition; Level of Demand Being Met; **Strategic Group Analysis\***; Analyzing competition, developing general picture of competition; Building overview of competitor's strengths; Developing competitors' response profiles; Competitive equilibrium, Sources of Competitive Advantage;

#### Module 3: Understanding customers, Segmentation and Targeting Strategies

**9 hours**

Types of Needs and Wants; **External and Internal influences in Consumer Behavior\***; Identifying Markets to serve and their potentials; Market emergence dimensions; Size, Growth, Profitability and Market structure,

Using the Abel's framework to create Market Boundaries; Possible targeting options; Creating a Value Proposition and positioning basis chosen market boundaries.

**Module 4: Broad Marketing Strategies**

**9 hours**

Marketing strategies basis stage in the Product Life-cycle; Marketing Strategies basis the market share; Leadership, Follower, Challenger and Nicher strategies, Market entry (internal development, acquisition, joint venture, strategic alliance) and Exit strategies (spin-off, sell-off, phase-out) Blue Ocean Strategy, **Marketing audit and its importance**

**Module 5: Designing, Delivering and Communicating customer value**

**9 hours**

**Classifying products and understanding the strategic implications of such classification\***; Strategic decisions to be made in terms of individual product, product line and product mix; Approaches to new product; Brand-Product architectures; 3C approach to pricing, Pricing strategies for new products; Pricing strategies for existing products; Distribution strategies; Promotion mix strategies.

**Basic Texts**

- Subhash C. Jain. Marketing Planning and strategy, South-Western Educational Publishing.
- Nigel Piercy, David Cravens. Strategic Marketing, Tata McGraw - Hill Education,8th edition, 2009

**Other reading material**

- HBR's 10 Must Reads on Strategic Marketing, Harvard Business Review Press,2013
- Graham Hooley. Marketing Strategy and Competitive Positioning, Pearson,4th edition, 2009
- 3. Marketing Strategies, Acontemporary approach by Ranchod & Gurau,Pearson India, 2012.
- Strategic Marketing by Xavier, Response Books, 2010.
- Marketing: Planning, Implementation, Control by Pride and Ferrell, Cengage, 2010.
- Strategic marketing problems: Cases & Comments by Kerin & Peterson, Pearson, 2012.
- GE McKinsey Matrix: How To Apply it To Your Business, (<https://www.cleverism.com/ge-mckinsey-matrix-how-to-apply-it-to-your-business/>)
- Making a strategy: Learning by doing it, HBR Nov-Dec 1997

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Global Marketing**

Course Code: **22MBADSE404**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Enable the student to develop a keen understanding of the global dimensions of marketing and delve into the relevance and application of marketing theory to the global context
- Organize, interpret, and evaluate relevant information about global markets
- Assess the cultural environments of country markets and examine how brands adjust marketing practices based on these factors
- Analyze customers, competitors, and product markets in different countries and apply this analysis to developing global marketing strategies
- Develop product strategies, pricing practices, and distribution approaches globally
- Develop in a student key critical and problem-solving skill and an understanding of the application and practice of the global dimensions of marketing

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Examine the global dimensions of marketing and the relevance and application of marketing theory to the global context.
CO 2	Assess the role of culture and its impact on the marketing activities of corporations in global markets
CO 3	Apply tools, frameworks, and techniques to conduct market assessments and opportunities
CO 4	Evaluate strategies and plans for product and brand related decisions in global markets by using the experiential learning method.
CO 5	Develop pricing approaches and channel structures to create value for consumers in global markets.

### Course Contents:

#### **Module 1: Scope of and Challenges in Global Marketing**

**9 Hours**

International marketing vs. Global Marketing; International Task Environment; Business orientations towards global opportunities – EPRG framework; Global Awareness\*; Stages of International marketing.

#### **Module 2: Assessing Global Marketing Opportunities and Market Entry Strategies**

**9Hours**

Global Information and information systems and marketing research; **Developing global vision through marketing research\***; International marketing process; Market entry through – Direct and indirect exporting; Contractual agreements; Strategic alliances and direct ownership; Market expansion strategies.

#### **Module 3: Global Segmentation, Targeting and Positioning**

**11 Hours**

Global segmentation: universal, regional, and unique; Global targeting: Criteria for targeting; **Global Positioning: Hi-tech and Hi-touch positioning\***, Positioning strategies for global markets.



**Module 4: Product and Promotion related Decisions****9 Hours**

Product related decisions for global markets – Product attributes; **Packaging, Support services, Branding decisions\***; Local, National, International, Global products.

**Module 5: Pricing and Channel Decisions****7 Hours**

Factors influencing Pricing decisions; Pricing objectives; **Parallel import and its influence on pricing on global markets\***; Pricing approaches and strategies; Types of channel structures.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Text Book(s)**

- Cateora, P, R., Gilly, M, C., Graham, J, L. and Money, B. (2020). International Marketing. USA: McGraw Hill Education.

**Reference Book(s)**

- Keegan, W, J., and Green, M, C. (2017). Global Marketing. Essex, England: Pearson Education Limited.
- Masaki, M., and Helsen, C. (2008). Global Marketing Management. USA: John Wiley and Sons Inc.

**Other references**

- Deshpande, R. (2014). Marketing Reading: Global Marketing. MA, USA: Harvard Business School Publishing.
- Business Environment Rankings. (2014). Retrieved from [http://www.iberglobal.com/files/business\\_climate\\_eiu.pdf](http://www.iberglobal.com/files/business_climate_eiu.pdf).
- Agtmael, A, V. (2007). The Emerging Markets Century. New York, USA: Free Press
- Sirkin, H, L., Hemerling, J, W., and Bhattacharya, A, K. (2008). Globality. London, UK: Headline Publishing Group.
- Meredyth, R. (2007). The Elephant and the Dragon, The rise of India and China and what it means for all of us. New York, USA: W.W Norton and Company.
- Friedman, T, L. (2007). The World is Flat, A Brief History of the Twenty-first Century. New York, USA: Farrar, Strauss and Giroux.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Marketing to the Bottom of the Pyramid**

Course Code: **22MBADSE405**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Illustrating the need of the "BOP" market.
- Enabling students to determine the factors that impact Segmentation, targeting and positioning in BOP markets.
- Enabling students to analyze the factors impacting consumer behavior among BOP.
- Creating an understanding of the marketing elements for BOP consumers
- Facilitating students to examine and assess the opportunities in the marketing of services to the BOP customers

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Describe the nature of the bottom of the pyramid market and consumers
CO 2	Design Segmentation, Targeting and Positioning strategies in the BOP market
CO 3	Recommend various factors for price setting, price setting strategies and price decision
CO 4	Examine the distribution channels catering to the BOP market with the help of various existing and emerging tools
CO 5	Assess the challenges and opportunities in marketing of services and financial products to the BoP segment

**Course Contents:**

**Module 1: Marketing to the bottom of the pyramid**

**6 Hours**

Evolution of bottom of the pyramid marketing, marketing to the base of the pyramid consumers, producers, consumers, entrepreneurs, consumption, marketing mix, understanding poverty and the base of the pyramid, structure, informal economy, marketing research.

**Module 2: Consumer behaviour and market segmentation**

**9 Hours**

Understanding the bottom of the pyramid buyers, models and frameworks, role of social class and referents, culture, family structure, STP, bases of segmentation, criteria for effective segmentation, targeting and positioning strategies for rural markets.

**Module 3: Product and Pricing strategies**

**9 Hours**

Classification of products, product development, branding, packaging, duplicate and counterfeit products, factors to be considered for price setting, price setting strategies and pricing decisions.

**Module 4: Distribution and Promotion strategies**

**12 Hours**

Marketing channels of distribution; distribution models in rural markets: distribution models of FMCG, Emerging Distribution Models, and other channels.

Challenges in rural communication, IMC-concept and management, objectives and frame work of IMC, promotional mix, communication process, developing effective rural communication message, sales promotion and events and experiences, rural centric and non-centric media.

**Module 5: Marketing of Services in the Bottom of the Pyramid Markets****9 Hours**

Telecommunication, ICT, Banking, and rural health care services.

Challenges in marketing for banking services in rural, opportunities for banking in rural areas, marketing strategies for banking services.

**Text Book(s)**

- Prahlad, C.P. (2014). The Fortune at The Bottom of the Pyramid: Eradicating Poverty Through Profits, New Delhi, India: Pearson Publication.
- Ramedra Singh.(2015). Marketing to the Bottom of the Pyramid: Text and Cases, Business Expert Press

**Reference Book(s)**

- Kashyap, P. (2012). Rural Marketing, New Delhi, India: Pearson Publication.
- Krishnamacharyulu, C.S.G., & Ramakrishnan, L. (2011), Rural Marketing Text and Cases, New Delhi, India: Pearson Publication.
- Balram, D., & Ghuman, K. (2007). Rural Marketing: Concepts and Practices, New Delhi, India: McGraw Hill Publication

**Other references**

- BaseofThePyramidDefinitionfromFinancialTimesLexicon.  
Retrievedfrom [lexicon.ft.com/Term?term=base-of-the-pyramid](http://lexicon.ft.com/Term?term=base-of-the-pyramid)
- RealityCheckattheBottomofthePyramid -HarvardBusinessReview.  
Retrievedfrom <https://hbr.org/2012/06/reality-check-at-the-bottom-of-the-pyramid>
- Serving the world's poor: innovation at the base of the pyramid- Emerald Insight.  
Retrieved from <https://www.emeraldinsight.com/doi/10.1108/02756660710732611>
- Businessmodelstoserve low-incomeconsumersinemergingmarkets.  
Retrievedfrom [journals.sagepub.com/doi/10.1177/1470593117704262](http://journals.sagepub.com/doi/10.1177/1470593117704262)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Luxury Marketing**

Course Code: **22MBADSE406**

Semester: **4**

Credit: **3**

Hours (L-T-P): **45 Hours**

### **Course Objectives:**

- Understand the fundamentals of luxury as a concept and trace its evolution.
- Explore the economic, social and ethical considerations in the marketing of luxury.
- Explore the factors that impact consumer behaviour in luxury markets.
- Understand and appreciate the differences between luxury marketing and traditional marketing.
- Understand the strategic implications of the luxury specificities.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Differentiate between luxury and non-luxury
CO 2	Examine the concept of luxury in context of the micro and macro environment
CO 3	Examine consumers' value drivers for luxury consumption, thus the segmentation and targeting of luxury markets
CO 4	Assess the differences between traditional marketing and marketing of luxury.
CO 5	Develop marketing strategies and marketing programs to create sustainable luxury businesses and brands.

### **Course Contents:**

#### **Module 1: Understanding the Concept of Luxury**

**10 Hours**

Introduction to the Luxury; Evolution and history of Luxury; Luxury perceptions across cultures; Luxury in the Indian context; Defining Luxury; Distinguishing between Luxury, Premium, Prestige and Masstige; Various types of products and services in Luxury;

#### **Module 2: Consumer Behaviour, Segmentation and Targeting in Luxury**

**9 Hours**

Value drivers of Luxury consumption; Self-driven motivations for Luxury consumption; Societal motivations for Luxury consumption; Trends in wealth ownership across economies; Understanding wealth reports; Identifying bases for segmenting the luxury consumers; Identifying various types of luxury consumers; Targeting in luxury markets.

#### **Module 3: The Specificities of Luxury Marketing – Product and Price**

**9 Hours**

Types of luxury products and services; Methods of production for luxury goods and services; Brand and Product Extensions; Combatting counterfeits; “Country of Origin effect” in luxury; Creating exclusivity through supply scarcity; Pricing in luxury; Bases for pricing; Creating exclusivity through unaffordability

#### **Module 4: The Specificities of Luxury Marketing – Advertising and Distribution**

**9 Hours**

Advertising objectives for luxury brands; Advertising metrices for luxury; Choice of communication channel in luxury; Digital marketing for luxury; Luxury supply chain; luxury retailing; Selling luxury; Creating exclusivity and scarcity through distribution channels

**Module 5: Building Sustainable and profitable Luxury Brands****8 Hours**

Economic theories on luxury; Luxury business models; entering and leaving the luxury market; Building 'affordable' luxury; Masstige strategies; Luxury and Ethics; Luxury and sustainable development

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Kapferer, J. N., & Bastien, V. (2012). The luxury strategy: Break the rules of marketing to build luxury brands. Kogan page publishers.
- Chevalier, M., & Mazzalovo, G. (2008). Luxury brand management: A world of privilege. John Wiley & Sons.

**Reference Books**

- Som, A., & Blanckaert, C. (2015). The road to luxury. Wiley.
- Chadha, R., & Husband, P. (2010). Cult of the luxury brand: inside Asia's love affair with luxury. Nicholas Brealey International.

**Other reading material**

- Park, C. W., Jaworski, B. J., & MacInnis, D. J. (1986). Strategic brand concept-image management. The Journal of Marketing, 135-145.
- Kapferer, J. N., & Bastien, V. (2017). The specificity of luxury management: Turning marketing upside down. In Advances in luxury brand management (pp. 65-84). Palgrave Macmillan, Cham.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. Journal of marketing, 74(4), 15-30.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Marketing Research

Course Code: **22MBADSE407**

Semester: **4**

Credits: **3**

Hours (LTP): **45 hours**

### Course Objectives:

- Identify the needs of marketing managers for marketing and market information
- Develop appropriate research design
- Develop appropriate research instruments with suitable measurement scales
- Identify suitable sampling method and field procedure
- Analyse information to generate marketing insights for use by decision makers

### Course Outcome (Cos):

CO1	Learners will be able to identify the needs of marketing managers for market information by specifying the objectives of marketing research projects and
CO2	Learners will be able to develop appropriate research techniques that will best help achieve the objectives.
CO3	Learners will be able to develop research instruments with suitable measurement scales.
CO4	Learners will be able to identify suitable sampling method and field procedure.
CO5	Learners will be able to apply suitable statistical analysis on collected data to generate insights.

### Course Contents:

#### Module 1: Introduction and the Marketing Research Process

**5 Hours**

Marketing Research Process, Information need and consumer insights through marketing research, Applications of Marketing Research, Limitations of Marketing Research, Ethical considerations in Marketing Research. Developing an approach to Marketing Research Problem, Tasks involved in problem definition, environmental context of the problem, Designing the Research Methodology (Objectives, research questions and hypothesis, analytical models), Plan for Sampling, Field Work, and Analysis, Analysis Plan and Expected Outcome; Research Design classification: Exploratory, Descriptive and causal, Cross-sectional and Longitudinal designs, Potential sources of error.

**Primary versus Secondary Data, Advantages and uses of Secondary Data, Disadvantages of Secondary Data\***, Criteria for evaluating secondary data, Classification of secondary data, Published external secondary sources, Syndicated data from households and institutions.

#### Module 2: Types of Research Methods

**10 Hours**

Qualitative versus quantitative research, Rationale for using Qualitative Research, Classification of qualitative research procedures: Focus Group discussion, Depth Interviews, Projective Techniques.

Descriptive Research design: Survey and observation methods, **The differences between conventional and online data collection\***, Process and tools for online gathering of consumer data.

Causal research design: conditions for causality, extraneous variables, classification of experimental designs.

**Module 3: Measurement and Scaling and Questionnaire Design****12 Hours**

Primary scales of measurement, Comparative and non-comparative scales of Measurement. Designing Questionnaires for Market Research, Structured and Unstructured Questionnaires, Questionnaire design process, Types of Questions, Reliability and Validity of a Questionnaire.

**Module 4: Sampling Methods and Field Procedure****8 Hours**

Basic Terminology in Sampling, The Sampling design process, Defining the population and sampling frame, The Sample Size Calculation, Sampling Techniques. Design of fieldwork, Selection of cities/centres, Organizing Field Work, Quotas, Selection of Respondents, **Control procedures on the field\***.

**Module 5: Statistical Testing****10 Hours**

Logic of Hypothesis testing, Steps in Hypothesis testing, Steps in Hypothesis testing, Concepts of hypothesis testing, Null and alternate hypothesis. Statistical tests and appropriate probability distribution. Parametric (t test, z test) and non-parametric tests for single, two and multiple group comparison, One way ANOVA. Covariance and Correlation, Simple correlation coefficient, Significance of correlation coefficient. Linear functions of Random variables, Linearity and correlation.

**Basic Texts:**

Malhotra,,N., Dash, S. (2017). *Marketing Research: An applied orientation*. New Delhi, India: Pearson Education

**Reference Books:**

- Aaker, D. A., Kumar, V., & Day, G.S. (2015). *Marketing Research*. New Delhi, India: Wiley India Pvt. Ltd.
- Easwaran S., & Singh, S. (2006). *Marketing Research*. New Delhi, Oxford University Press.
- Zikmund, W. G. (2002). *Business Research Methods*. New Delhi, India: Cengage Learning.
- Kothari, C.R. (2014). *Research Methodology Methods and Techniques*. New Delhi, India: New Age International (P) Limited.

**Other reading material:**

- Haws, K.L., Bearden,W.O., & Netemeyer R.G. (2009) *Handbook Of Marketing Scales: Multi-Item Measures For Marketing And Consumer Behavior Research*. California, S

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Marketing Metrics**

Course Code: **22MBADSE408**

Semester: **4**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Creating an understanding of the measures and frameworks essential for creating and measuring marketing success.
- Enabling students to assess and analyze the context in which a business competes
- Introducing students to key financial measures of used in a marketing context
- Equipping students with measures for assessing customer costs and life time value
- Enabling students to measure effectiveness of various marketing activities

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Understand numbers that assess size, share, potential and performance
CO 2	Understand numbers that measure general business performance, brand value and qualitative frameworks that review the organization
CO 3	Analyze customers and customer value
CO 4	Evaluate marketing programs including marketing communications and retail performance
CO 5	Evaluate marketing programs including Sales force management and Direct/Digital Marketing

**Course Contents:**

**Module 1: Numbers for Understanding a Market**

**7 Hours**

Market Size, Market Growth, Market Coverage, Market Share, Market Penetration, Market-Share Index, Market Share Potential, Market-Share Development Index

**Module 2: Numbers for Understanding a Company**

**9 Hours**

Revenue, Gross Profit, Net Profit, Profit Impact, Earnings based Value, Return on Sales, Return on Assets, Return on Equity, Brand-Value Frameworks, Brand Equity, Brand-Name Premium, Recall, Recognition

**Module 3: Numbers for Understanding Customers**

**7 Hours**

Segment Profitability, Loyalty Frameworks, New Product Purchase Rate, Share of Customer, Customer Investment, Customer-Acquisition Costs, Customer Break-Even Analysis, Lifetime Value of Customer (CLTV)

**Module 4: Numbers for Understanding Marketing I**

**11 Hours**

**Advertising and Promotion Measures**

Share of Voice, Advertising-to-Sales Ratio, Reach, Frequency, Gross Rating Points, Cost per Gross Rating Point, Click through Rates, Profit per Campaign Temporary Price Promotions, coupons, rebates and trade allowances

**Retail Marketing Measures**

Turnover, Gross Margin Return on Inventory Investment, Sales Per Square Foot, Sales/ Profit Per Employee, Average Transaction Size, Average Items Per Transaction, Retailer's Margin Percentage



**Module 5: Numbers for Understanding Marketing II****11 Hours****Sales Force Management and Distribution Measures**

Considerations in defining sales territories, Sales Potential, Workload, Considerations in defining salesforce objectives, Measuring salesforce effectiveness, Salesforce Compensation, Prospect Management System Numeric Distribution, All Commodity Volume, Product Category Volume

**Digital/Direct Marketing Measures**

Response Rate, Conversion Rate, Direct-Mail Revenue Goals, Direct-Mail Profit Goals, Direct-Mail Gross Profit, Direct-Mail Net Profit, Direct-Mail ROI

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Text Book(s)**

- Davis John (2007), *Magic Numbers for Consumer Marketing*, Wiley India Pvt. Ltd.

**Reference Book(s)**

- Farris Paul W, Bendle Neil T, Pfeifer Philip E, Reibstein David J *Marketing Metrics The Definite Guide for Measuring Marketing Performance*, Pearson Education

**Other references**

- Mintz Ofer and Currim Imran S (2015) When does metric use matter less *European Journal of Marketing*
- Srinivasan Shubha and Hanssens Dominique M (June 2009) Marketing and Firm Value Metrics, Methods, Findings and Future Directions *Journal of Marketing Research*
- Ambler Tim, Roberts John H, (2008) Assessing Marketing Performance: Don't settle for a silver bullet *Journal of Marketing Management*
- Ambler Tim, Kokkinaki Flora, (1997) Measures of Marketing Success *Journal of Marketing Management*
- Measuring Marketing *Mc Kinsey Global Survey Results*

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**HUMAN RESOURCE MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

## Course Title: **Positive Organizational Behaviour**

Course Code: **22MBADSE418**

Semester: **4**

Credits: **3**

Hours (LTP):**45 Hours**

### **Course Objectives:**

- Examine the influence of hope and efficacy on the performance of employees.
- Summarize the influence of resiliency and optimism on the performance of employees.
- Explain key theories in the field of happiness at the workplace.
- Discuss the phenomenon of mindfulness.
- Elaborate the experience of mindfulness among employees.

### **Course Outcomes (COs):**

At the end of the course, the learner will be able:

CO1	Design interventions to improve hope and efficacy of employees
CO2	Develop methods to improve the levels of resiliency and optimism of employees
CO3	Illustrate methods to improve the happiness among employees at the workplace
CO4	Propose methods to develop positive leadership among managers
CO5	Evaluate interventions to improve the spirituality at the workplace

### **Course Contents:**

#### **Module 1: Psychological Capital: Hope and Efficacy**

**9 hours**

Hope: Meaning, trait or state, importance at the workplace, level of hope at the individual level and its applications at the workplace, interventions to improve the level of hope, **latest research\***. Efficacy: Meaning, theories, importance at the workplace, difference in efficacy in different functions, measurement, interventions to improve self-efficacy, **latest research\***.

#### **Module 2: Psychological Capital: Resiliency and Optimism**

**9 hours**

Resiliency: Meaning, importance of resiliency at the workplace, measuring the level of resiliency among employees, interventions to develop resiliency, **latest research\***.

Optimism: Meaning, theories, applications, measurement, interventions, **latest research\***.

#### **Module 3: Individual Happiness and Happiness at the workplace**

**11 hours**

Happiness: Meaning, importance, importance, set point theory, measuring individual happiness levels, what reduces happiness levels, ways to improve happiness, **latest research\***.

Happiness at the workplace: Meaning, importance, Self-determination theory, individual happiness to workplace happiness, instruments to measure workplace happiness, methods to improve workplace happiness, **latest research\***.

#### **Module 4: Mindfulness**

**7 hours**

Meaning, theories of mindfulness, applications of mindfulness at the workplace, mindfulness scales, interventions to improve the level of mindfulness, MBSR technique to improve mindfulness, **latest research\***.

**Module 5: Workplace Spirituality**

**9 hours**

Meaning, importance, theories, dimensions of spirituality, understanding meaningful work, alignment of values and sense of community, measuring spirituality at the workplace, interventions to improve spirituality, **latest research\***.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Luthans, F. (1998). Organisational behaviour 8th Edition.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The leadership quarterly*, 15(6), 801-823.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). “Can you see the real me?” A self-based model of authentic leader and follower development. *The leadership quarterly*, 16(3), 343-372.

**Reference Books**

- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(6), 695-706.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. *Positive organizational scholarship*, 241, 258.
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of management*, 33(3), 321-349.

**Other reading material**

- Youssef, C. M., & Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of management*, 33(5), 774-800.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital: Developing the human competitive edge.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel psychology*, 60(3), 541-572.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Research Methodology in Human Resource Management Practices**

Course Code: **22MBADSE419**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Explain different approaches that can be used in varying contexts in research.
- Critiqued and develop specific research objectives and hypotheses.
- Illustrate different research Instruments required to conduct a research.
- Use different types of data in varying research contexts.
- Demonstrate data analysis methods using statistical and qualitative techniques.

**Course Outcomes (COs):**

At the end of the course, the learner will be able:

CO1	Compare qualitative and quantitative approaches in research
CO2	Develop literature review, research question and hypothesis
CO3	Identify appropriate Instrument to conduct a research
CO4	Organize the data for different types of research
CO5	Examine the data using statistical and qualitative Methods

**Course Contents:**

**Module 1: Introduction to Research**

**7 Hours**

Introduction to business research, Principles of HR research, types of research, significance and relevance, limitations & Ethics, features of a good research study, designing all the stages of a typical research in HRM using qualitative and quantitative approach, common problems/ errors with metrics, advantages of measuring HRM.

**Module 2: Research Process**

**8 Hours**

Research process- formulation of research problem, developing hypotheses, literature review, types of research designs, sampling, plan of analysis and expected outcomes, writing a research proposal.

**Module 3: Understanding Measurements**

**10 Hours**

Measurement & scaling Measurement – concept, data types, impact on analysis, types of measurement scales - single Vs multiple items, comparative Vs non comparative scales, scale construction, item analysis, measurement error -validity & reliability of the scale, questionnaire design – criteria, types of questionnaire, question design, Structure, physical characteristics of questionnaire.

**Module 4: Data Collection Methods**

**10 Hours**

Data collection methods, primary & secondary data, benefits, drawbacks, Evaluation. distinguishing quantitative Vs Qualitative Methods, Observation, FGD (Focused Group Discussion), depth interview & projective techniques – process, merits and limitations, types of secondary data – Internal and external data sources.

**Module 5: Analyzing and reporting the data****10 Hours**

Qualitative and quantitative methods, hypothesis testing - hypothesis testing for single, two and multiple groups (t-test, ANOVA, Chi-Square), factor analysis, narrative/ transcript analysis - purpose, application, research report –types – contents of report – need for executive summary – chapterization – contents of chapter – report writing – the role of audience – readability – comprehension – tone – final proof – report format, reporting interpretations of results.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Kothari, C.R. (2012). Research Methodology. Methods and Techniques. New Age International (P) Limited, Edition 2.
- Anderson, V. (2011). Research Methods in Human Resource Management. University Press, 2<sup>nd</sup> Edition.

**Reference Books**

- Bhattacharyya, D.K. (2006). Human resource research methods. Excel Books, 2<sup>nd</sup> Edition.
- Cooper, D. R. & Schindler, P. S. (2008). Business Research Methods. McGraw Hill publications, 10<sup>th</sup> Edition.
- Zikmund, W. (2008). Business Research Methods, Thomson South Western Publishers (9<sup>th</sup> ed.).
- Gittelsohn, J; Bentley, Margaret E. &Pelto, Pertti J. (1994). Listening to Women Talk About Their Health Issues and Evidence from India, South Asia Books, 1994, 1<sup>st</sup> edition.

**Other reading material**

- Sanders. K.K.; Cugin, Julie & Bainbridge, Hugh T.J. (2014). Research Methods for Human Resource Management, Publisher: Routledge, ISBN: 9781317918295, 1<sup>st</sup> edition.
- Schaefer, R. A., & Palanski, M. E. (2014). Emotional Contagion at Work: An In-Class Experiential Activity. Journal of Management Education, 38(4), 533– 559. <https://doi.org/10.1177/1052562913489030>
- Chawla, D & Sondhi, N (2016). Research Methodology: Concepts and Cases, Vikas Publishing House Pvt. Ltd. (2<sup>nd</sup> ed.).

Nicolescu, O. (2009). Methods and Techniques Specific to Human Resource Management. Accessed from: <https://core.ac.uk/download/pdf/6331001.pdf>.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Professional Human Resource Competencies and Behaviour

Course Code: **22MBADSE420**

Semester: **4**

Credits:**3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Describing self-awareness and transactional analysis
- Elucidating the diverse aspects of emotional intelligence and resilience with their organizational relevance.
- Discussing the concept of personality and applicability of personality instruments.
- Explain leadership instruments and coaching techniques with applications.
- Discuss the components of effective communication, creativity and innovation.

### Course Outcomes (COs):

At the end of the course, the learner will be able:

CO1	Illustrate the dynamics of self-awareness and transactional analysis in practice
CO2	Articulate relevant emotional intelligent models and resilience strategies
CO3	Interpret the scores of personality instruments
CO4	Illustrate leadership instruments and techniques of coaching
CO5	Identify best practices for creativity, innovation and coaching

### Course Contents:

#### Module 1: Self-awareness

**9 hours**

Who Am I?, Johari Window, What are you doing?, What are you feeling?, What are your blind spots?, Increasing Self Awareness, Observation and Value Judgements: Looking at self-awareness and acceptance, Self-Acceptance is the goal, **latest research\***

**Transactional Analysis:** Life Positions – Beliefs about Self and Others, Justifying decisions and Behaviour, The OK Corral, Ego States, Role of Ego States in TA, Scripts, Games, Self-Defeating and Self-Perpetuating Transactions, **latest research\***.

#### Module 2: Emotional Intelligence

**9 hours**

Components Of Emotional Intelligence, Modelling, Measurement And Future Applications, Strategies To Improve Emotional Intelligence, Organizational Behavioural Intelligence, Behavioural Intelligence And Working In Teams, Interpersonal Communication & Conversational Intelligence, Corporate & Business Strategy: Success Through Emotionally Intelligent Leadership, Emotional Intelligence & Behavioral Intelligence Assessment, Bar-On Model of Emotional Social Intelligence and the Genos Model, **latest research\***.

**Resilience-** Developmental And Clinical Perspectives, Protective Factors - Variables That Contribute To A Person'S Resilience, Goal Setting, Mental Agility, Multiple Perspectives, Problem Solving, Optimism-How Optimism Works, What Does Optimism Do Differently?, Resilience Pitfalls- Danger Thoughts, Adversity Triggers And Adversity Thinking, Instant Resilience Strategies, Building Positive Emotion By Identifying Character Strengths, Resilience Strategies, **latest research\***

### **Module 3: Personality**

**8 hours**

Types, Personality traits, Personality Assessment, Personality Instruments - (Application and Analysis), Personal effectiveness, Stages of Development- Freudian stages of development, Erik Erickson's stages of development, How needs impact personality, Personality Judgement in daily life, Personality and Behaviour, Psychoanalysis , Unconscious Mind – Defenses and Slip, Humanistic and Positive Psychology, Personality Disorders, Myers Briggs Type Indicator test (MBTI), 15FQ+ Personality Instrument, Personality and Career Choice, Self Efficacy, **latest research\***

### **Module 4: Leadership Instruments**

**9 hours**

Application And Analysis, Leadership Trait Questionnaire, Skills Inventory, Style Questionnaire, Leader-Member Exchange (Lmx 7) Questionnaire, Authentic Leadership Self-Assessment Questionnaire, Team Excellence And Collaborative Team Leader Questionnaire, The Gender-Leader Implicit Association Test, Dimensions Of Culture Questionnaire, Perceived Leader Integrity Scale, **latest research\***.

**Coaching Skills**, Coaching Psychology, Theories & Techniques, Coaching Models, Executive Coaching, Relationship Coaching, Group Coaching, Leadership Coaching - Executive Coaching - Manager Coaching - Team Leader Coaching, Life Skills Coaching - Transformational Coaching, Relationship Coaching, Career & Transition Coaching, Work/Life Balance Coaching, Cross Cultural Coaching, Business Coaching - Entrepreneur Coaching, Creativity Coaching, - Sustainability Coaching, **latest research\***.

### **Module 5: Effective Communication**

**10 hours**

Understanding Communication Barriers, Language Barriers, Cultural Barriers, Differences, Paraverbal Communication Skills, The Power of Pitch, The Truth about Tone, The Strength of Speed, Interpreting Gestures, Speaking Like a STAR- S = Situation, T = Task, A = Action, R = Result, Listening Skills, Ways to Listen Better Today, Understanding Active Listening, Sending Good Signals to Others, Asking Good Questions, Appreciative Inquiry, The Purpose of AI, Mastering the Art of Conversation- Sharing Ideas and Perspectives, Understanding Precipitating Factors, Establishing Common Ground, Using "I" , Effective Presentation Skills, Effective Interviewing Skills, Helpful Feedback- Negative and Positive Feedback, **latest research\***

**Creativity and Innovation** - Stages of Innovation, Where Ideas Come From, Creative Problem Solving, After Ideation, Best Practices for Creativity, Creative Intelligence, Design Thinking, Frameworks and Models, Empathy, Customer Experience Map, Empathy, DT Tools - Journey Map, Mind Mapping, Visualisation, Story Telling, Prototyping, **latest research\***.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### **Basic Texts**

- Berne, E. (2011). Games people play: The basic handbook of transactional analysis. Tantor eBooks.



- Berne, E. (2016). Transactional analysis in psychotherapy: A systematic individual and social psychiatry. Pickle Partners Publishing.

**Reference Books**

- Cornell, W. F. (2018). Into TA: A comprehensive textbook on transactional analysis. Routledge.
- Goleman, D. (2012). Emotional intelligence: Why it can matter more than IQ. Bantam.
- Janasz, D. (2006). Interpersonal skills in organisation. Tata McGraw-Hill Education.
- Larsen, R. J., Buss, D. M., Wismeijer, A., & Song, J. (2005). Personality psychology: Domains of knowledge about human nature.

**Other reading material**

- Liedtka, J., & Ogilvie, T. (2011). Designing for growth: A design thinking tool kit for managers. Columbia University Press.
- Northouse, P. G. (1999). Leadership: Theory and practice (p. xxiii). E-Content Generic Vendor.
- Rogers, J. (2016). Coaching skills: The definitive guide to being a coach. Open University Press.

Solidoro, A. (2009), "Interpersonal Skills in Organizations", Journal of European Industrial Training, Vol. 33 No. 5, pp. 472-474. <https://doi.org/10.1108/03090590>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Analytics for Human Capital Decisions**

Course Code: **22MBADSE421**

Semester: **4**

Credits:**3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Explain the importance of data and importance of processing data.
- Measure analytical data using various techniques in HR function.
- Build various algorithms for analysis of data management.
- Demonstrate techniques for classification of data.
- Build the ability to perform data analysis for HR professionals.

**Course Outcomes (COs):**

CO1	Develop skills for data extraction, processing and visualization
CO2	Use mathematical and statistical techniques for data analysis.
CO3	Use of factor analysis and cluster analysis for data analysis.
CO4	Interpret the results of data analysis.
CO5	Conclude the results of qualitative analysis.

**Course Contents:**

**Module 1: Data Exploration, Extraction and Visualization**

**9 Hours**

Understanding employee data, determining outliers and handling missing values, extracting relevant employee data, employee data visualization using charts and dashboards.

**Module 2: Basic Mathematical and Statistical Techniques**

**9 Hours**

Descriptive analytical techniques for HR operations, conjoint analysis for designing compensation and benefits plan, Expense forecasting using time series, Markov chain model and Monte Carlo Simulation for man power planning, Effectiveness of employee training using compare means, Human Resource allocation using Linear Programming

**Module 3: Factor Analysis and Cluster Analysis**

**9 Hours**

Employee segmentation, dimension reduction algorithms for performance management- factor analysis and principal component analysis,

**Module 4: Classification and Regression Techniques**

**9 Hours**

Predicting employee salary, predicting employee promotion, predicting employee attrition.

**Module 5: HR Analytics for Text Data**

**9 Hours**

Word cloud for employee resume, Sentiment analysis for employee reviews, recommendation system for job skills.

**Reference Books:**

- Motwani, Bharti (2021). HR Analytics- Practical Approach using Python. Wiley
- Evans J, (2017) Business Analytics. Pearson India
- 1.Bertsimas and Freund, (2004) Data, Models, and Decisions: The Fundamentals of Management Science, Dynamic Ideas.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Organization Change & Development**

Course Code: **22MBADSE422**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Recalling the concepts of Organizational challenges.
- Discuss the need for Organizational change process.
- Explain OD interventions for developing the organizations.
- Illustrate the role of an OD practitioner in problem solving.
- Collaborating appropriate OD interventions for change & development management.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Remembering the basic concepts of OD
CO2	Summarizing the Change Management process
CO3	Applying the interventional technique for OD in Organizations
CO4	Evaluating the skills of OD Practitioner
CO5	Creating an effective intervention for development

**Course Contents:**

**Module1: Overview of Organization Development**

**7 Hours**

General introduction to OD, Nature of Planned Change, Role of OD practitioner in Organization development, **Innovative practices in the field of OD\***

**Module 2: Process for Organization Development**

**9 Hours**

Entering into an OD Relationship, Personal process issues in entering into a Contract, Diagnosing Organizations, Groups and Jobs, Collecting and Feeding back diagnostic information, **Strategic orientation towards OD Process in dynamic business environment\***

**Module 3: Designing OD interventions**

**9 Hours**

Overview of Human Process, techno structural, human resource management strategic interventions, Designing effective intervention, implementation and evaluation, Institutionalizing the interventions, **Intervention is the strategic key for OD\***

**Module 4: Human Capital Management Interventions**

**11 Hours**

Individual & Group level interventions, Conflict resolution process, Process consultation, third party intervention, Team building, Organization confrontation meetings, Intergroup relations intervention & Large group interventions, Model of Performance Management, Reward System, Career Planning & development interventions, Workforce diversity interventions, Employee stress & wellness interventions, **Improving HR Process through effective interventions\***

## Module 5: Techno structural & Strategic Interventions

9 Hours

Restructuring Organizations, Structural design, Downsizing & Re-engineering, Employee Involvement and Work Design – approaches, Strategic Change interventions, Competitive, Collaborative & Transformational strategies for OD, **Culture as competitive advantage for OD\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Cummings, T.G and Worley,C.G (2015) Organization Development and Change, Stamford, USA: Cengage Learning
- French,W.L and Bell,C.H (2007) Organization Development New Delhi. India: PHI Private Limited

### Reference Books

- Brown,D and Havey,D (2009) An Experiential Approach to Organization Development New Delhi, India: Pearson Education
- Kotter, J.P. (1996). Leading Change. Boston: Harvard Business School Press. ISBN # 0-87584-747-1
- Singh, K. (2011). Organization Change and Development, Excel Books
- R.Jones & Mathew Mary (2017) Organizational theory, design & change, Pearson Paperback
- Kumkum Mukherjee (2018) Organization Change & development, Pearson
- Burke W.W.(1994) Organization development : A process of learning & changing, 2nd ed. Reading, MA: Addison- Wesley

### Other reading material

- Scott Highhouse. (2002). A History of the T-Group and Its Early Applications in management development, Group Dynamics: Theory, Research, and Practice Copyright 2002 by the Educational Publishing Foundation, Vol. 6, (4), 277–290
- Brian & Markus (2018). Outcomes & Impacts of Development interventions: toward conceptual clarity, American Journal of Evaluation, Vol. 39 (4), 236-257, Retrieved from:<https://doi.org/10.1177%2F1098214018765698>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Human Resource Management Functional Skills**

Course Code: **22MBADSE423**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Explain the components of an employee handbook.
- Discuss the importance of competency in the development of job description and job specification.
- Describe the training process in a company.
- Classify the salary structure of employees.
- Describe the process of performance appraisal.

**Course Outcomes (COs):**

At the end of the course, the learner will be able:

CO1	Design an employee Hand Book
CO2	Develop formats to be used for interview
CO3	Design formats for various training activities such as training Schedule, training handouts, pre and post training feedback
CO4	Plan the salary structure of an employee
CO5	Write the performance review formats for an employee’s performance appraisal

**Course Contents:**

**Module 1: HR policy and practices**

**9 hours**

Employee Hand book: Contents (Including Standing Orders) for employee handbook – Related metrics.

Replacement chart & Succession Planning: Prepare Replacement Chart, Action Plan for Succession Planning – Related metrics, **latest research\***.

Disciplinary Action: Process to conduct an enquiry, Develop the format for “Memo”, **latest research\***.

**Module 2: Competency and interviews**

**9 hours**

Competency Dictionary: - Design a competency dictionary – Related metrics. Design a Job description & Specification template. Conduct Interviews: Formats for different rounds of interviews. Induction: developing Induction plans/ feedback sheets, **latest research\***.

**Module 3: Learning Organisation**

**9 hours**

Formats to identify training needs, design Training objectives, prepare training schedule, training handouts pre and post training feedback form, **latest research\***.

**Module 4: Compensation Management**

**9 hours**

Design compensation structure and calculate Salary, take home salary, components. Calculate salary structure from pay commission reports, **latest research\***.

**Module 5: Performance Review & Practice****9 hours**

Design KRA and KPI, Prepare guidelines for effective appraisal and Conduct Performance feedback.

Performance appraisal: Design a Performance Appraisal Form and related metrics BARS: Develop Behaviourally Anchored Rating Scales (BARS), Develop formats for 360 degrees. Prepare / Develop Employee development plan, employee feedback, **latest research\***.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Dessler, G & Varkey, B. (2018). Human resource management. 15 Edition Pearson.
- Decenzo, D A & Robbins, S P (2010). Human resource management, John Wiley & Sons.

**Reference Books**

- Camen, M M., Croucher, R & Leigh, S (Eds)(2011). Human resource management: A case study approach. India: Jaico.
- Fisher, C D., Schoenfeldt, L F & Shaw, J B (2011). Human resource management, Biztantra.
- Mathis, R L & Jackson, J H (2000). Human Resource Management, 9th ed, South Western: Thomson Learning Publications.

**Other reading material**

- Monappa, A (1992) Personnel management & industrial relations. Tata Mc Graw Hill. Rao, V S P (2000). Managing people. Amexcel Publisher.
- Rudrabasavaraj, M.N. (2000). Dynamic personnel administration, Himalaya Publishing House.
- Sinha, R N., Sinha, I B, & Shekhar S P (2001). Industrial relations, trade unions and labour legislation. India: Pearson Education.
- Snell, S & Bohlander, G (2009). Human resources management: A SouthAsian perspective. India: Cengage Learning.

Venkataratnam, C S & Srivastava, B N (2001). Personnel / Human Resource Management. New Delhi, Amexcel publisher.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Employer - Employee Relations**

Course Code: **22MBADSE424**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Describe the basic concepts of industrial relations, its philosophy, origin and development in India.
- Explain the government's role and evaluate the impact of technology in Industrial relations.
- Demonstrate the collective bargaining and trade union process in India.
- Examine the importance of worker's participation in management including disciplinary action.
- Discuss the need of health and safety measures at workplace.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Summarize dynamics link between parliament, judiciary and executive.
CO2	Illustrate diverse perspectives on role of government and technological changes in industrial relation
CO3	Relate process and techniques of collective bargaining to improve the relation between employer & employee.
CO4	Demonstrate grievance redressal mechanism at the work place
CO5	Appraise industrial health and safety measures taken for employees.

### Course Contents:

#### **Module 1: Economy and the Labor Force in India and Industrial relations**

**9 Hours**

Labour market and economic performance; Structure for management of industrial relations; Management of labour; Management control strategies; Business strategies and industrial relations; Role of market conditions. Concept, nature and models of IR-unitary, pluralist, Dunlop's and Marxist perspectives of IR; Industrial relations system in India- structure and its evolution; **Major contemporary developments in global economy and polity and their impact on industrial relations scenario in India\***.

#### **Module 2: The Role of Government in Industrial Relations, Technological change and Industrial relations.**

**9 Hours**

Divergent perspectives on the role of the government in industrial relations. Types of government interventions the means of state intervention, role of state in industrial relations at the state level, Future role of the government. Impact of technological changes on employment. Response of the trade unions to new technology, **emerging dynamics in industrial relations\***

#### **Module 3: Collective Bargaining and Trade union**

**9 Hours**

Concept, functions and types of collective bargaining; Impact of technological and political changes; Approaches to collective bargaining; Theories of collective bargaining- Hick's analysis of wages setting under collective bargaining, Conflict-choice model of negotiation, Behavioral theory of labour negotiation; Collective bargaining in the Indian context. Trade Unions – Management of Trade Unions in India, Trade



Unions and Economic Development, **Trade Union recognition\*** Industrial Relations Code, 2020 Rights and responsibilities of TUs, Problems of trade unions, Employee relations in IT sector New amendment in the act, the Trade Unions (Amendment) Bill, 2019.

**Module 4: Employee/workers participation and Discipline**

**9 Hours**

Meaning of participation, Purpose of worker’s participation, Forms of workers ‘participation in management, Government policy and participation, Structure of participative management, Nature and benefits of participative management. Essential Conditions for Successful Working of WPM Nature of grievances and grievance procedures; Handling employee grievances; Industrial indiscipline- an overview of disciplinary enquiries, Guiding principles for grievance procedure and Disciplinary Process in different companies **Labour Relations Agency (LRA) Code of Practice on Disciplinary and Grievance Procedures (the Code)2020\***.

**Module 5: Employee Wellness-**

**9 Hours**

Concept of Wellness- Industrial Hygiene; Need and Importance, Occupational Hazards and Diseases- Occupational Health Services - Industrial Pollution Prevention and Control- Industrial safety; accidents-Safety Organization, concept of safety climate, statutory safety provisions \*.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Venkata Ratnam C, S. & Dhal,M. (2017), Industrial relations (2nd edition.). New Delhi: Oxford University Press.
- Gupta, O., Gupta, V., & Gupta, M. S. (2020). Company law. SBPD Publishing House.
- Saha, S. K., & Agarwal, A. (2020). Industrial relation & labour law latest edition 2020 a book based on the industrial dispute act, 1947 and the factories act, 1948: SBPD publication (English). SBPD Publications.
- SarmaA.M. (2013), Industrial Relations, (10th ed.), Mumbai: Himalaya Publishing House

**Reference Books**

- Ghosh, P., & Nandan, S. (n.d.). (2017) Industrial relations and labour laws. McGraw-Hill Education
- Sinha, P., Sinha, I. B., & Shekhar, S. P. (2017). Industrial relations, trade unions and labour legislation. Pearson Education India.
- Kumar H.L. (2010), Labor Law Management from Selection to Separation (7th ed.), Delhi: Universal Law Publishing Co. Pvt. Ltd.

**Other reading material**

- Arun M, Ranjeet N and Patturaja S (2012), Industrial relations and Labor Laws (2nd ed,). New Delhi: Tata Mac Graw Hill Publishing Company Limited.
- Punekar S.D., Deodhar S.B., Sankaran Saraswathi (2011), Labour Welfare, Trade Unionism and Industrial Relations, ((14th rf.), Mumbai: Himalaya Publishing House
- Biswajeet P (2006), Human Resource Management, (3rd ed.), New Delhi: Prentice Hall of India Pvt Ltd.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **International Human Resource Management**

Course Code: **22MBADSE425**

Semester: **4**

Credits: **3**

Hours (LTP):**45 Hours**

### **Course Objectives:**

- Examine the fundamentals of IHRM.
- Discuss various international recruitment strategies in global organization.
- Explain different cross cultural training program for global business.
- Describe expatriate performance management methods.
- Discuss HR practices of select nation with emphasis on international compensation management.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Differentiate between domestic HRM and IHRM.
CO2	Appraise various international recruitment strategies.
CO3	Design a simulated cross cultural training program in different scenarios.
CO4	Illustrate the process of expatriate performance management system.
CO5	Build different HR functional strategies based on National culture.

### **Course Contents:**

#### **Module 1 - International HRM – An introduction**

**9 Hours**

Introduction -International Human Resource Management (IHRM), Models of IHRM- Matching model, Harvard Model, Contextual Model, 5P Model, European Model. Need for IHRM- Cultural diversity, Language diversity, Demographic diversity, Economic diversity, Hofstede’s cultural dimensions to understand diversity, **\*Differences between domestic HRM and IHRM, Stages of internationalisation Equity & Non-equity modes of global operations.**

#### **Module 2 - International Staffing**

**10 Hours**

Approaches to international staffing- ROI approach- short-term, extended, traditional, commuter, rotational, contractual, virtual, Factors affecting Global HR management, Global HRP, Issues in supply of International human resource, International recruitment practices, International recruitment policies by Pearl mutter, Types of Expatriates- PCN, HCN, TCN, - **\*Tools and techniques in expatriate selection, Selection criteria of an expatriate, Issues in selection, Skills for expatriate manager.**

#### **Module 3 - Expatriate adjustment, Expatriate failure Cross cultural training & repatriation**

**8 Hours**

Expatriate adjustment, Phases in acculturation- Honeymoon, Culture shock, Learning and Biculturalism. Expatriate failure – Reasons, cost of failure, Managing expatriate failure, Expatriate training need, Methods of cross-cultural training, Mendenhall CCT model, components of an effective CCT. Repatriation, Reasons for repatriation, **\*Process of repatriation, designing a repatriation program, Issues in repatriation.**

**Module 4 - Expatriate performance management****9 Hours**

Expatriate performance management: Essentials of an appraisal system, Conventional and modern methods of performance appraisal, Process of international performance appraisal, Dimensions for evaluating subsidiary performance, **\*Variables affecting expat performance, PMS in US, Europe, China & Japan.**

**Module 5 - Expatriate compensation management, international legal framework of employment & HR practices of select nations**
**9 Hours**

Key components of international compensation, Complexities of international compensation management, Factors affecting international compensation, Approaches to international compensation- Balance Sheet Approach, Global market approach, Government regulations regarding compensation, Social security & tax and benefits management of expatriates, **\*HR practices in- USA, UK, Japan, China, Middle East.**

(\* These topics are categorized as 'Self-learning 'topics and are subjected to testing)

**Basic Texts**

- Dowling, P. J., Festing, M. ,&Engle, A.D. (2013). International Human Resource Management, 6th Ed Cengage Learning, London. ISBN-13: 978 1 408 07574 6.
- Sengupta, N. (2007). International human resource management. Excel Books India. P. Subbarao : International Human Resource Management, HPH, latest edition
- Bornay-Barrachina, Mar. (2019). International Human Resource Management: How should employees be managed in an international context?. 10.4018/978-1-5225-5781-4.

**Reference Books**

- Rao, P. L. (2008). International Human Resource Management: Text and Cases, Excel Books, Reprint
- Varkkey, B. (2007). Formulating the Concept, Principles, and Parameters for Performance-Related Incentives (PRI) in Government. Framework, 4, 39.
- Tayeb. M. (2005). International Human Resource Management: A Multinational Company Perspective, OUP Oxford
- Mutsuddi, I. (2011). Managing human resources in the global context. New Age International.

**Other reading material**

- Chris Brewster, Paul Sparrow and Guy Vernon. (2011). International Human Resource Management: The Universities Press
- Dennis R. Briscoe, Randall S. Schuler. (2004). International Human Resource Management: Policy and Practice for the Global Enterprise: Psychology Press
- Adler, N. (2010). International Dimensions of Organizational Behavior: South-Western College Publishing

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**BUSINESS ANALYTICS**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

## Course Title: **Deep Learning and Trained Models**

Course Code: **22MBADSE426**

Semester: **4**

Credits: **3**

Hours (LT):**45 Hours**

### Course Objectives:

- Attain competence in creating neural network model.
- Attain competence using different arguments for increasing accuracy.
- Implement different deep learning algorithms based on nature of data
- Apply the expertise of trained models for image data.
- Apply the expertise of trained models for text data.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Illustrate the basics of neural network model
CO2	Appraise the different types of neural network mode
CO3	Interpret the available trained models for text and image data
CO4	Design different models to increase accuracy of the model
CO5	Develop trained models for text and image data

### Course Contents:

#### Module 1: Neural Network Model

**10 Hours**

Basics of Neural Network; Steps for Building a Neural Network Model: Data Preparation, Building the Basic Sequential Model and Adding Layers; Compiling the Model; Fitting the Model on Training Dataset, Evaluating the Model; **Optimization: Types of Errors; Bias-Variance Trade-off; Overfitting and Underfitting\***

#### Module 2: Basic Multi-Layer Perceptron Model

**10 Hours**

Creating a Basic Model; Developing Better Model with Increased Accuracy: Changing units, Dropout, Epoch and Batch\_Size; Activation; Loss and Optimizer; Recurrent Drop Out; Grid Approach to Determine Best Model; **Brief Review of Concepts from Vector Calculus and Optimization; Variants of Gradient Descent, Momentum\***

#### Module 3: RNN and CNN Model

**10 Hours**

Adding Conv1D and Conv2D layer; Creating Model with One Hot Encoding; Creating Model with ModelCheckPoint API; Creating Denser Model by Adding Hidden Layers; Making Model Deeper; Early Stopping API; Regularization; Autoencoder as Classifier; Data Augmentation; **Softmax Cross Entropy Loss Function; Convolution and Pooling Operation\***

#### Module 4: Trained Models for Image Data

**8 Hours**

MobileNet; MobileNetV2; VGG19; VGG16; Resnet Models for Unsupervised and Supervised Machine Learning Algorithms; **ConvNet Architectures: AlexNet, ZFNet, C3D, GoogleNet\***

#### Module 5: Trained Models for Text Data

**7 Hours**

Bert; Roberta; GPT2; XLM models for unsupervised and supervised machine learning algorithms; **Recurrent Neural Networks (RNNs); Long-Short Term Memory (LSTM) Architectures and Basics of Word Embedding\***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Motwani, B. (2020). Data Analytics using Python. Wiley.
- Motwani, B. (2019). Data Analytics with R. Wiley.

### Reference Books

- Adam, G., & Josh, P. (2017). Deep Learning: A Practitioner's Approach. O'Reilly.
- Sebastian, R., &Vahid, M. (2019). Python Machine learning. Packt.
- Larose, D. (2016). Data Mining and Predictive Analytics. Wiley.
- Janarthnam, S. (2017). Hands-On Chatbots and Conversational UI Development. Packt.
- Downey, A. B. (2015). Think Python: How to think like a Computer Scientist. Green Tea Press.

### Other reading material

- Muller, A. C., & Guido, S. (2016). Introduction to Machine Learning with Python. O'Reilly Media, Inc.
- Frank, M., Roehrig, P., &Pring, B. (2017). What to do when Machines do everything. Wiley.
- Severance, C. R. (2016). Python for Everybody: Exploring Data Using Python 3. Autoedición
- [www.kaggle.com](http://www.kaggle.com)
- [www.towardsdatascience.com](http://www.towardsdatascience.com)
- [www.tensorflow.org](http://www.tensorflow.org)
- [www.blog.marvelapp.com/guide-developing-bot-personalities/](http://www.blog.marvelapp.com/guide-developing-bot-personalities/)
- [www.theatlantic.com/technology](http://www.theatlantic.com/technology)

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Econometrics**

Course Code: **22MBADSE427**

Semester: **4**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Integrate Econometrics concepts and models
- Evaluate and analyse the Econometrics models in financial environments.
- Describe Econometrics Modelling Long-term Financial Decision making.
- Demonstrate the use of Econometrics Models and create new models
- Create models with understanding of Financial data and Analytics concepts.
- Equipping students with financial tools and techniques to draw inferences out of financial data.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Analyse, evaluate the Econometrics models for financial data
CO2	Create the linear models for time series
CO3	Apply the existing models in econometrics on big data and create new models.
CO4	Create risk management models in analytics
CO5	Create Time Series models

**Course Contents:**

**Module 1: Econometrics; Financial Data and Their Properties**

**9 Hours**

The Fundamentals of Econometrics; The Nature of Regression Analysis; Two-Variable Regression Analysis; Two-Variable Regression Model; Multiple Regression Analysis: The Problem of Estimation; Multiple Regression Analysis: The Problem of Inference; Econometric models in R using quantmod; fBasics; mnormt; **New Packages in R for Econometrics \***

**Module 2: Linear models for time series**

**8 Hours**

Time series; Linear and Non-Linear; Example Data Sets; Linear Models for Time Series; Regression; Residuals; Least Squares Estimation; Residual Variation; Multivariable Regression; Residuals Diagnostics and Variation Econometric Models in R Using quantmod; fUnitRoots; TSA; fracdiff; **Exploration and Usage of R Packages to Create Linear Models for Time-series\***

**Module 3: Asset Volatility and Volatility Models**

**8 Hours**

Asset Volatility; How to Calculate Volatility; Other Measures of Volatility; Real World Example of Volatility; Implied Volatility vs. Historical Volatility; Market Indicators that Reflect Volatility in the Stock Market; CBOE Volatility Index; Tracking Volatility; Econometric Models in R Using fGarch; **Creation of Volatility Models Using R Packages \***

**Module 4: High Frequency Financial Data; Risk Management****10 Hours**

High Frequency Financial Data; Management of Risk; Trade Data; Trade and Quote Data; Ultra-High Frequency Data; Algorithmic Trading; Hedge Funds; High-Frequency Trading (HFT); Econometric Models in R Using fGarcg; MASS; **New Analytics Packages for High Frequency Data Analytics \***

**Module 5: Time Series Volatility ARCH/GARCH Models and VaR****10 Hours**

Time Series; Models; Volatility; ARCH/GARCH Models and VaR Trend; Naïve; Moving Average; Exponential Smoothing; Holt's Two-Parameter Model; and Comparison of the Models; **Exploration and Usage of R Packages to Create Time-Series Models for Volatility \***

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Brooks, C. (2008). Introductory Econometrics for Finance. Cambridge University Press.
- Damodar, G., Porter, D. (2008). Basic Econometrics. McGraw-Hill Education.

**Reference Books**

- Campbell, John Y., Andrew W. L., and MacKinlay, A.C. (2012). The Econometrics of Financial Markets. Princeton University Press.
- Jianqing, F. ,Yao, Q. (2017). The Elements of Financial Econometrics. Cambridge University Press.
- Lumsdaine, R. L. (2008). "Correlation, Models, and Risk Management in Challenging Times." Journal of Financial Econometrics. <https://doi.org/10.1093/jfinec/nbn018>.
- Shumway, R., Stoffer, D. S. (2010). Time Series Analysis and its Applications. Springer. 3rd Edition.
- Enders. W.,Hoboken. NJ (2010). Applied Econometric Time Series. John Wiley & Sons.
- Eric Z.andJiahui J. (2002). Modeling Financial Time Series with SPLUS. Wang: Springer-Verlag
- Studenmund, A.H. (2010). Using Econometrics: A Practical Guide Hardcover

**Other reading material**

- Fromm, G. (1975). Conference on Econometrics and Mathematical Economics, Workshop on Energy-Related General Research in Micro-Economics: Conference on Natural Resources.
- Huynh, V., Kreinovich, V., Sriboonchitta, S., Suriya, K. (2014). Econometrics of Risk. Springer.
- Cheng-Few,L., Chen,H., John, L. (2019). Financial Econometrics, Mathematics and Statistics: Theory, Method and Application. Springer.
- Lumsdaine, R. L. (2008). Correlation, Models, and Risk Management in Challenging Times. Journal of Financial Econometrics. <https://doi.org/10.1093/jfinec/nbn018>.
- Robinson, P.( 2007).Correlation Testing in Time Series, Spatial and Cross-Sectional Data. Working Paper Series. <https://doi.org/10.1920/wp.cem.2007.0107>.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Title: **Business Intelligence**

Course Code: **22MBADSE428**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- To familiarize with Multivariate Techniques in different Businesses
- To understand the different techniques of data cleaning covered under the scope of Multivariate Analysis.
- To build the Predictive Models in the context of Binary Classification and Time Series.

**Course outcomes (Cos):**

At the end of the course, learners will be able to:

CO 1	Illustrate the importance of Business Intelligence
CO 2	Demonstrate the techniques for Business Intelligence
CO 3	Construct suitable models
CO 4	Interpret the output of models
CO 5	Appraise the use of data automation

**Course Contents:**

**Module 1: Understanding Business Intelligence**

**5 hours**

The Challenge of Decision Making, Meaning of Business Intelligence, The Business Intelligence Value Proposition, The Combination of Business and Technology, Decision-making with data, Data-driven actions, plans, and strategies, Introduction to AWS, Azure and Google analytics.

**Module 2: Power Query Language to automate data processes**

**10 Hours**

Power Query, getting data, transform data, combining data, connecting the data sets, Language m, Creation of a Data Model. Power Query connectors, Joining the data sets, Creation of queries, updating and modifying the queries, Real-time usage of Power Queries.

**Module 3: DAX and Power Pivot in Business Decision-making**

**10 Hours**

DAX language, the syntax to test and catch errors, catching an error with try and applying custom conditional logic, Power Pivot ribbon tab, Data Model, Power Pivot window, Diagram view, Calculations in Power Pivot, Power Chart, Calculated Columns, Measures, Data Analysis Expressions (DAX) in Power Pivot, Data Analysis Expressions (DAX) Reference, DAX Scenarios in Power Pivot, Recalculate Formulas in Power Pivot

**Module 4: Business Optimization Techniques**

**10 Hours**

Advanced Linear Programming, Problem Formulation, Mathematical Models, Guidelines for Model Formulation, Structuring an LP Problem, Graphical Solution Procedure for Maximization Problems, Extreme Points and the Optimal Solution, Solver in Excel

**Module 5: Business Intelligence Tools****10 Hours**

Decision-making tools and templates, Dynamic data models, Getting data updated in real-time, Flash fill, Filter and calculate with tables, Dropdown lists, Isolate variable data in a data area, Exception reporting with conditional formatting, Tools in Google Sheets, Data warehouse. Break-Even Analysis, Break Even Analysis using MS Excel.

**Basic Texts**

1. Knight, D. (2018). Microsoft Power BI Quick Start Guide: Build dashboards and visualizations to make your data come to life. Packt.
2. Powell, Brett. (2018). Mastering Microsoft Power BI: Expert Techniques for Effective Data Analytics and Business Intelligence. Packt Publishing Ltd.
3. Sinha, Chandraish. (2021). Mastering Power BI: Build Business Intelligence Applications Powered with DAX Calculations, Insightful Visualizations, Advanced BI Techniques, and Loads of Data Sources (English Edition). BPB Publications.

**Reference Books**

- Jones, B. (2014). Communicating Data with Tableau: Designing, Developing, and Delivering Data Visualizations, O’reilly.
- Chellappan, A. S. (2017). Pro Tableau: A Step-by-Step Guide. Apress.
- Nussbaumer C.K. (2015). Storytelling with Data: A Data Visualization Guide for Business Professionals. Audible Studios.
- Munzner, T. (2014). Visualization Analysis & Design. CRC Press.
- Donabel S. (2018). Tableau 10 Business Intelligence Cookbook. Packt.
- Baldiwn, D. (2019). Mastering Tableau. Packt.

**Other reading material**

1. <https://technologyadvice.com/business-intelligence>
2. [www.boldbi.com](http://www.boldbi.com)
3. <https://www.cogsdale.com/business-intelligence>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Blockchain Technology**

Course Code: **22MBADSE429**

Semester: **4**

Credits: **3**

Hours (LTP):**45 Hours**

### Course Objectives:

- Understand the basic cryptographic primitives
- Understand the concept of distributed system
- Understand abstract model for Blockchain technology
- Apply EVM and solidity for Blockchain technology
- Understand the applications of Blockchain technology

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Demonstrate the importance of Blockchain technology
CO2	Appraise the importance of distributed record keeping
CO3	Illustrate the abstract models of Blockchain technology
CO4	Examine the role of Ethereum in Blockchain
CO5	Interpret the applications of Blockchain technology

### Course Contents:

#### Module 1: Cryptographic Primitives

**8 Hours**

Introduction; Basic Cryptographic Primitives used in Blockchain: Secure, Collision-Resistant Hash Functions; Digital Signature, Public Key Cryptosystems; Zero-knowledge Proof Systems; Blockchain as Public Ledgers; Bitcoin; **Blockchain 2.0; Block in a Blockchain; Transactions: Distributed Consensus; Chain and Longest Chain\***

#### Module 2: Byzantine Models

**10 Hours**

Need for Distributed Record Keeping; Modelling Faults and Adversaries; Byzantine Generals Problem Technologies Borrowed in Blockchain; Hash Pointers; Consensus; Byzantine Models of Fault Tolerance; Digital Cash etc; Cryptocurrency to Blockchain 2.0: Permissioned Model of Blockchain; **Cryptographic: Hash Function, Properties of Hash Function; Hash Pointer and Merkle Tree\***

#### Module 3: Abstract Models of Blockchain

**10 Hours**

Abstract Models for BLOCKCHAIN; GARAY model; RLA Model; Proof of Work (PoW) as Random Oracle; Formal Treatment of Consistency; Liveness and Fairness: Proof of Stake (PoS); **Bitcoin P2P Network; Transaction in Bitcoin Network; Block Mining; Block Propagation and Block Relay; Consensus Introduction; Distributed Consensus in Bitcoin Network\***

#### Module 4: Ethereum and Solidity

**8 Hours**

Ethereum: Ethereum Virtual Machine (EVM); Solidity: Smart Contracts; Modelling Faults and Adversaries; Myths vs. Reality of Blockchain Technology; **RAFT Consensus-Byzantine general Problem; Byzantine Fault Tolerant System; Agreement Protocol\***

**Module 5: Applications of Blockchain Analytics****9 Hours**

Applications of Blockchain in Cyber Security; Integrity of Information; E-Governance and Other contract Enforcement Mechanisms; Limitations of Blockchain as a Technology; **Bitcoin Miner; Mining Difficulty; Mining Pool-Permissioned Model and Use Cases; Design Issues for Permissioned Blockchains; Execute Contracts: Consensus Models for Permissioned Blockchain; Distributed Consensus in Closed Environment\***  
 (\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Shukla, S., Dhawan, M., Sharma, S., & Venkatesan, S. (2019). Blockchain Technology: Cryptocurrency and Applications. Oxford University Press.
- Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction. Princeton University Press.

**Reference Books**

- Thompson, J. (2017). Blockchain: The Blockchain for Beginnings, Guild to Blockchain Technology and Blockchain Programming. Create Space Independent Publishing Platform.
- Bashir, I. (2018). Mastering Blockchain. Packt.
- Larose, D. (2016). Data Mining and Predictive Analytics, Wiley.
- Frank, M., Roehrig, P., & Pring, B. (2017). What to do when Machines do everything. Wiley.
- Severance, C. R. (2016). Python for Everybody: Exploring Data Using Python 3. Autoedición

**Other reading material**

- Swan, M. (2015). Blockchain: Blueprint for a New Economy. O' Reily.
- <https://github.com/anders94/blockchain-demo>
- <https://anders.com/blockchain/>
- <https://blockgeeks.com/guides/what-is-blockchain-technology/>
- <https://shecancode.io/blog/an-introduction-to-blockchain-distributed-ledgers>
- <https://www.coindesk.com/information/ethereum-smart-contracts-work>
- <https://mlsdev.com/blog/156-how-to-build-your-own-blockchain-architecture>
- <http://www.conceptfound.com/Misunderstandings-of-Blockchain>
- <https://www.coindesk.com/information/what-is-a-decentralized-application-dapp>
- <https://mlsdev.com/blog/156-how-to-build-your-own-blockchain-architecture>
- <https://www.business-case-analysis.com/ledger.html>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Advanced Machine Learning**

Course Code: **22MBADSE430**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Define machine learning and understand the theory underlying machine learning
- Perform statistical analysis of machine learning techniques.
- Understanding instant based learning
- Understand environment for creating chatbot.
- Develop interactive chatbot with new entities, actions, and forms.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Illustrate the concept of Machine Learning
CO2	Assess Machine learning techniques
CO3	Employ Instant based learning
CO4	Illustrate the chatbot using python
CO5	Appraise chatbot using RASA framework

### Course Contents

#### Module 1: Concept learning and Learning Problems

**9 Hours**

Designing Learning systems, Perspectives and Issues, Concept Learning, Find S-Version Spaces. Classification: MNIST, training a Binary classifier, performance measure, multiclass classification, error analysis, multi label classification, multi output classification

#### Module 2: Probability and Distribution

**9 Hours**

Concept Learning: Maximum Likelihood, Minimum Description Length Principle, Bayes Optimal Classifier, Gibbs Algorithm, Naïve Bayes Classifier, EM Algorithm

#### Module 3: Instant based learning

**9 Hours**

Evaluating Hypothesis: Motivation, estimating hypothesis accuracy, Comparing learning algorithms. AI in Natural Language Processing, Introduction to Recommender system.

#### Module 4: Introduction to chatbot

**9 Hours**

Characteristics of a chatbot, understanding the environment for creating chatbot, executing a basic chatbot in Python.

#### Module 5: Chatbot Development using RASA

**9 Hours**

Understanding the importance of data folder nlu.md, stories.md and domain.yml file in creating a chatbot, action.py file, creating a basic chatbot.

### Basic Texts

- Sebastian, R., & Vahid, M. (2019). Python Machine Learning. Packt.
- Brownley, C. W. (2016). Foundations for Analytics with Python. O'Reilly Media; Inc
- McKinney, W. (2018). Python for Data Analysis: Data Wrangling with Pandas; NumPy; and IPython. O'Reilly
- Larose, D. (2016). Data Mining and Predictive Analytics. Wiley.
- Motwani, B. (2020). Data Analytics using Python. Wiley.

### Reference Books

- Severance, C. R. (2016). Python for Everybody: Exploring Data Using Python 3. Autoedición
- Muller, A. C.& Guido, S. (2016). Introduction to Machine Learning with Python. O'Reilly.
- Janarthnam, S. (2017). Hands-on Chatbots and Conversational UI Development. Packt.

### Other reading material

- <https://www.python.org/>
- <https://pandas.pydata.org/>
- <https://numpy.org/devdocs/user/quickstart.html>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Framework of Business Analytics**

Course Code: **22MBADSE431**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Familiarize with Framework of Business Analytics
- Understand the different techniques of Business Analytics
- Build the theoretical framework for Models in the context of Business Analytics
- Understand the simulation models in Data Analytics.

**Course outcomes (Cos):**

At the end of the course, learners will be able to:

CO1	Illustrate the importance of the Business Analytics Framework
CO2	Demonstrate the Concepts for Business Analytics
CO3	Construct suitable models with suitable variables and observations
CO4	Interpret the output of models
CO5	Appraise the use of tools of data analytics

**Course Contents:**

**Module 1: Strategy and environment**

**10 Hours**

Strategy and data environment, business objectives, integrate business objectives with IT strategy using business tools. Introduction to cloud technology, Cognitive services: Speech, Language, vision.

**Module 2: Models and frameworks in business analytics**

**10 Hours**

IT Maturity model-structure-components; Capability Maturity model (CMM)-structure. AR and VR techniques, Impact of AI in leading edge industries,

**Module 3: ETL processes and frameworks**

**10 Hours**

BI competency center-role; BI tools for business process integration; data requirements for BI implementation; assessment. Gather, Clean, Build, implement cycle, ETL process, Sampling, Data Cleaning, Model building, Model Validation.

**Module 4: Practical Simulation Models for Analytics**

**7 Hours**

Simulation in Excel, Simulating Profit generation model with Unit cost and Sell Price, NORM.INV and RAND functions, Fill series technique, Simulation softwares, Virtual trading models, Customizing the models to suit the business requirement.

**Module 5: Practical Simulation Models for Customer Analytics**

**8 Hours**

Models on Average time in system, Percent idle time, Queue Average time, Median time, Wait Fraction, Average waiting, Inferences, Model Replications, Analytics models for Simulation to improve precision, Error detection and prevention, Corrective and Preventive Action Plans.

**Basic Text:**

1. Sharda, R., Delen, D., and Turban, E. (2018). Business Intelligence, Analytics, and Data Science: A Managerial Perspective, 4/e. USA: Pearson.
2. Al-Begain, K., and Bargiela, A., Eds. (2016), Seminal Contributions to Modelling and Simulation: 30 Years of the European Council of Modelling and Simulation. Springer.
3. Arifin, S. N., Madey, G. R., and Collins, F. H. (2016), Spatial Agent-Based Simulation Modeling in Public Health: Design, Implementation, and Applications for Malaria Epidemiology. John Wiley and Sons.

**Reference Book:**

1. Kimball, R. & Caserta, J. (2017). The Datawarehouse ETL Toolkit, 2/e. USA: Willey.
2. Asmussen, S., and Glynn, P. W. (2007), Stochastic Simulation: Algorithms and Analysis (Vol. 57), Springer Science and Business Media.
3. Banks, J., Ed. (1998), Handbook of Simulation: Principles, Methodology, Advances, Applications, and Practice, John Wiley & Sons, New York, NY.

**Other Reference:**

1. <http://homes.dcc.ufba.br/~mauricio052/Material%20Artigo/Wiley%20Publishing%20-%20The%20Data%20Warehouse%20ETL%20Toolkit.pdf>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Title: **Business Process Re-engineering**

Course Code: **22MBADSE432**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives**

- Understand business process engineering as a business tool.
- Integrate BPR, TQM and IT environments.
- Apply BPR methodologies & frameworks
- Prepare professionals for a career in Management Consulting
- Equip professionals with knowledge, skills and attitude desirable for a career in Management Consulting

**Course Outcomes**

**At the end of the course, learners will be able to:**

CO1	Illustrate business process engineering as a business tool
CO2	Appraise and test the process of Integrating BPR, TQM and IT environments.
CO3	Design BPR methodologies & Framework for business development
CO4	Illustrate the application of Consultant and Consultancy tools and techniques in various sectors.
CO5	Develop a greater understanding about strategies adopted/undertaken by Consultant and Consultancy.

**Course Contents:**

**Module 1: Business Process Reengineering**

**10 Hours**

BPR Strategies, BPR, Success and Failures, Factors Relating to BPR Success, Factors relating to change management systems and culture, Committed and strong leadership, Factors relating to organizational structure, Factors related to BPR program management, Factors related to IT infrastructure, Factors Relating to BPR Failure, Problems in communication and organizational resistance, Lack of organizational readiness for change, Problems related to creating a culture for change;

**Module 2: BPR TQM and IT**

**5 Hours**

Information Technology, Information Technology and the Value Chain, IT Value and business alignment, IT infrastructure, IT Network Infrastructure, Elements of BPR, Prepare the Organization for Change, Redesign the Business Process

**Module 3: BPR methodologies & Framework**

**10 Hours**

BPR Methodologies, The Advantages of a BPR Methodology, First, Phase, Second Phase, Third Phase, Fourth Phase, Fifth Phase, Extended Framework, An Integrated Methodology; BPR Framework, The Situational Context for the Case Study, Resource Constraints and Limitations, \*BPR Essential Elements, Stage 1: Planning for Reengineering, Stage 2: Analyze the “AS-IS” Process, Stage 3: Design the HRA “TO-BE” Process, Hazard Rating Number; Stage 4: Implementation of the Reengineered Process, Stage 5: Improve Continuously.

**Module 4: Business Excellence**

**10 Hours**

Client development, Client engagement, Basic and Advanced tools, techniques and frameworks used by management consultants- simulation analysis, decomposition analysis, feasibility analysis and sensitivity

analysis/ rankings, scenario analysis, representative element analysis, decision tree, Theory of constraints, Critical chain; issue tree, bottom-up approach, top-down approach, backward reasoning, 80/20 rule, benchmarking, cost drivers, opportunity tree; Ethics of Consulting; Pre requisite needed for Consultancy as Profession.

**Module 5: Consulting Services**

**10 Hours**

Enterprise Resource Planning (ERP); E-Governance; Strategic restructuring through alliances and Joint ventures. Consulting Services to design and implement policies, systems and processes in functional and cross-functional areas of business. Project Feasibility studies and appraisal; Performance measurement and evaluation of public and corporate sectors;

**Basic Texts**

- Sturdy, G.R. (2017). Business Process Reengineering: Strategies for Occupational Health and Safety, 1/e. Cambridge: Cambridge Scholars Publishing, UK.
- Dey B. R. (2012). Business Process Reengineering and Change Management, India: Wiley Publishing.

**Reference Books**

- U. K. Srivastava; Pramila Srivastava (2012). Management Consulting in India Practice and Experiences for Business Excellence. SAGE Response.
- Book by Graham Manville (2018). Management Consultancy Insights and Real Consultancy Projects. Routledge

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Big Data and Web Analytics**

Course Code: **22MBADSE433**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Describe the fundamental concepts of big data analytics
- Discover Hadoop distributed file system
- Illustrate association rule mining
- Describe the web and social network analysis
- Demonstrate data processing in web analytics

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Illustrate the importance of big data analytics
CO2	Demonstrate Hadoop distributed file system
CO3	Interpret the concepts of association rule mining
CO4	Illustrate web and social network analysis
CO5	Appraise data processing in web analytics

**Course Contents:**

**Module 1: Introduction to Big Data Analytics**

**8 Hours**

Introduction to Big Data Platform; Challenges of Conventional Systems; Business Intelligence Concepts and Application; Data Warehousing; Data Mining; **Apache Hadoop; Analyzing Data with Unix Tools; Analyzing Data with Hadoop; Hadoop Streaming\***

**Module 2: Hadoop Distributed File System**

**10 Hours**

Hadoop Distributed File System Basics; HadoopMapReduce Framework; MapReduce Programming; Essential Hadoop Tools; Basic Hadoop Administration Procedures; **Hadoop Echo System; IBM Big Data Strategy; Design of HDFS; HDFS Concepts; Command Line Interface; Hadoop File System Interfaces\***

**Module 3: Distributed Databases and Association Rule**

**10 Hours**

Introduction to Distributed Databases; Distributed DBMS Architectures; Cluster Analysis, Association Rule Mining, Architectures for Parallel Databases; **Anatomy of a Map Reduce Job Run; Failures, Job Scheduling; Shuffle and Sort; Task Execution; Map Reduce Types and Formats; Map Reduce Features\***

**Module 4: Web and Text Mining**

**8 Hours**

Data (Structured data, Unstructured Data, Metadata, Big Data); Text Mining; Web Mining; Social Network Analysis; **Digital Data Creation; Domain Names; Web Browsers; Multimedia and its Applications: Concepts of Text, Graphics; Animation; Audio; Images, Video\***

**Module 5: Web Metrics**

**9 Hours**

Web Metrics and Web Analytics: PULSE Metrics; HEART Metrics (Happiness, Engagement, Adoption, Retention, and Task Success); User Behaviour Issues; On-site Web Analytics, Off-site Web Analytics;

## Multimedia Application in Education; Entertainment; Marketing Names of common multimedia file formats\*

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Eadline, D. (2016). Hadoop 2 Quick-Start Guide: Learn the Essentials of Big Data Computing in the Apache Hadoop 2 Ecosystem. Pearson.
- Maheshwari, A. (2017). Data Analytics. McGraw Hill.

### Reference Books

- Elmasri, R., & Navathe, S., (2016). Fundamentals of Database Systems. Pearson.
- Ramakrishnan, R., & Gehrke, J. (2013). Database Management Systems. McGraw-Hill.
- Adam, G., & Josh, P. (2017). Deep Learning: A Practitioner's Approach. O'Reilly.
- Sebastian, R., & Vahid, M. (2019). Python Machine learning .Packt.
- Larose, D. (2016). Data Mining and Predictive Analytics. Wiley

### Other reading material

- Berthold, M., & Hand, D. J. (2007). Intelligent Data Analysis. Springer
- Muller, A. C., & Guido, S. (2016). Introduction to Machine Learning with Python. O'Reilly Media, Inc.
- Adam, G., & Josh, P. (2017). Deep Learning: A Practitioner's Approach. O'Reilly.
- Severance, C. R. (2016). Python for Everybody: Exploring Data Using Python 3. Autoedición
- [www.kaggle.com](http://www.kaggle.com)
- [www.towardsdatascience.com](http://www.towardsdatascience.com)
- [www.tensorflow.org](http://www.tensorflow.org)

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**LOGISTICS & SUPPLY CHAIN MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

Course Title: **Supply Chain Modelling and Dynamics**

Course Code: **22MBADSE434**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Analyse role of analytical models in supply chain.
- Describe concepts of echelon model in supply chain.
- Evaluate role of pricing and revenue management in supply chain.
- Analyse supply chain performance using different performance metrics.
- Discuss supply chain dynamics and risk management.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Discuss the applications of network design models used in supply chain.
CO 2	Describe advanced models used in supply chain.
CO 3	Evaluate revenue management methods in supply chain.
CO 4	Describe performance metric design and analyse tools of organizational design in supply chain organizations.
CO 5	Discuss supply chain dynamics.

**Course Contents:**

**Module 1: Introduction to Supply Chain Models**

**11 Hours**

Supply chain design Concepts-Value of Design-Supply Chain Design for a new Product-Integrated Supply Chain Design - Optimization models in practice- Design of structural elements of supply chain - Facility Location, and Network Design - Problems- Capacity Planning

**Module 2 Supply Chain Advanced Modelling**

**7 Hours**

Concept of Echelon supply chain- Adding costs to two-echelon supply chain - Analysis of service levels -Three Echelon Supply Chain Models-Multi-Site Production Sourcing-Multi-Objective Optimization

**Module 3 Pricing & Revenue Management in Supply Chain**

**9 Hours**

The Role of Pricing & Revenue Management in the Supply chain, Revenue Management for Multiple Customer Segments, Revenue Management for Perishable Asset, Seasonal Demand-Role of IT in pricing and Revenue Management-Costing in supply chain- Trends in revenue management in SCM.

**Module 4 Performance metrics**

**9 Hours**

Performance metric Design - Tools -Organizational design within the supply chain organization- Tools of design- Implementation - Trends - Challenges in implementation of the metrics

**Module 5 Risk Management**

**9 Hours**

Supplier Management - Supply chain risk Management - Supply Chain Dynamics – Methods - Risk Management tools - Models in risk management - End to End Supply Chain Management-Case studies

**Basic Texts:**

- Chopra Sunil(2018),Supply Chain Management: Strategy, Planning, and Operation, 7th Edition, Pearson
- Robertson Peter(2020), Supply Chain Analytics: Using Data to Optimise Supply Processes, Routledge Processes

**Reference Books:**

- Jay Jayaraman, Peter Cacioppi, Sara Lewis, Michael Watson, Arthur V. Hill, Stephen B. LeGrand, Mark J. Schniederjans Supply Chain Design (Collection)
- Watson Michel, Sara Lewis , Cacioppi Peter, Jay Jayaraman: Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain (2012)
- Coyle, John J;langley, John C;Gibson, Brian J (2009). A logistics approach to Supply chain management. Cengage Learning
- Ballov, Ronald H; Srivastava, Samir K (2007). Business Logistics/Supply Chain Management: Planning Organizing and Controlling the Supply Chain. Pearson Education
- Ballou, Ronald H; Srivastava, Samir K (2007). Business Logistics: Supply chain management: planning organizing and controlling the supply chain. Pearson Education
- Simchi-Levi,David;Kaminsky,Philip;Simchi-Levi,Edith;Shankar,Ravi (2008). Designing and Managing the supply chain:concepts,Strategies,and case studies. Tata McGraw Hill Education Private Limited
- Dornier, Philippe-Pierre; Ernst, Ricardo; Fender, Michel, Kouvelis, Panos (2002). Global operations and logistics: text and cases. John Wiley & Sons. Inc
- Mohanty R P; Deshmukh S G (2005). Indian Case Studies In Supply Chain Management and Other Learning Resources. Biztantra Dreamtech
- David, Pierre (2003). International Logistics. Biztantra Dreamtech

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Information Technology for Managers**

Course Code: **22MBADSE435**

Semester: **4**

Credits: **3**

Hours (LTP):**45 Hours**

**Course Objectives:**

- Provide students with comprehensive knowledge and technical skills needed to successfully participate in and support the increasingly applied role of information technology in corporate decision making.
- Enable graduates to conceptualize and manage the specification, design and implementation of applied information systems.
- Provide the knowledge of contemporary issues related to the field of managing information systems.
- Develop knowledge and skills required to work effectively in a profession.
- Enhance self-confidence, ability to make proper decisions and effective communication, and Pursue lifelong learning and continuing education.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Describe various IT tools for management.
CO 2	Interpret the methodologies of organizing data.
CO 3	Examine the applications of IT and new trends.
CO 4	Construct insights into Enterprise Systems and Decision Support Systems.
CO 5	Select cloud computing method and its effect in management.

**Course Contents:**

**Module 1: Introduction to IT**

**9 Hours**

Information Technology- Definition- Utility- Software: Systems and Application Software – Organizing Data and Information- Tools used- Introduction to different software.

**Module 2: Knowledge Management Systems**

**9 Hours**

Knowledge management theory and practice, Major approaches to KM cycle, Zack, Bukowitz and Williams, McElroy, Wiig, Integrated cycle.

**Module 3: E- Commerce Applications**

**9 Hours**

Business, e-business vs e-commerce, Economic forces – advantages – myths – e-business models, design, develop and manage e-business. Internet and World Wide Web, internet protocols - FTP, intranet and extranet, information publishing technology- basics of web server hardware and software. Electronic and Mobile Commerce- Business Applications and trends.



**Module 4: Decision Support Systems****9 Hours**

Management Support systems, Decision making, Models, DSS Overview, Data, Model, Knowledge Management system. Data Collection, Data Warehousing, Data Mining, Data visualization, Modeling, Static and dynamic, Optimization, Heuristic, Simulation, Multidimensional modeling.

**Module 5: Cloud Computing****9 Hours**

Introduction to Cloud Computing, Evolution - Cloud Computing, Hardware, Internet and Software, Virtualization, Web Services on Cloud, Infrastructure-as-a-Service, Platform-as-a-Service, Software-as-a-Service, Building Cloud Network.

**Basic Texts**

- Ralph Stair, George Reynolds (2006), Fundamentals of Information Systems, Fourth Edition, Course Technology.
- Laudon, J.P and Laudon, K.C. (2007). Management Information System. Pearson Education: India.

**Reference Books**

- James A O'Brien (2008). "Introduction to Information Systems", Tata McGraw Hill, India.
- Haag, S., Cummings, M., and Phillips, A. (2008). Management Information Systems, Tata McGraw Hill: India
- George Reynolds(2011), Information Technology for Managers, Cengage Learning , Delhi, India.
- Rajkumar Buyya, James Broberg, Andrzej M. Goscinski (2011), Cloud Computing: Principles and Paradigms, Wiley, Delhi, India.

**Other reading material**

- [www.businessinsider.com](http://www.businessinsider.com)
- [https://onlinecourses.nptel.ac.in/noc20\\_mg60/preview](https://onlinecourses.nptel.ac.in/noc20_mg60/preview)
- <https://www.edx.org/course/introduction-to-management-information-systems-mis>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: Rail, Road and Air Cargo Logistics

Course Code: **22MBADSE436**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Understand significance of transportation in logistics management.
- Know road ways method and future of road ways.
- Grasp different cargo movement in the logistics world.
- Know different ways of air transportations.
- Analyse air cargo methods in the logistics and operations management.

### Course Outcomes:

At the end of the course, learners will be able to:

CO1	Apply the purchasing procedures and techniques in real time Business
CO2	Understand the need of inventory and various available inventory systems
CO3	Evaluate the material requirement and plan accordingly
CO4	Analyse the local and international coding structures
CO5	Develop the inventory polices and create customized procedures

### Course Contents:

#### Module 1: Transportation logistics

**10 Hours**

Significance of transportation logistics: utility created by transportation in logistics transportation as a means of conquering time and space features of inbound, outbound, local and medium, long and continental transportation- features of logistics transportation- Features and facilities offered by Railways- Factors influencing growth in Rail Logistics- Suitability for different Cargo and distance Ranges segments – Innovative schemes/facilities to popularize rail logistics in India- Railway infrastructure in India and Freight movement- **\*Share of Railways in Cargo movement in India and world-wide**

#### Module 2: Road Transportation

**9 Hours**

Roadways as a primary mode and complementary mode of transportation in Logistics – Features, Facilities and suitability- Innovations in roadways to make it Logistics friendly- Factors influencing choice- **\*Factors influencing growth in Road Logistics- Suitability for different Cargo and distance Ranges segments**

#### Module 3: Cargo Movement

**9 Hours**

Innovative schemes/facilities to popularize rail logistics in India- Share of Railways in Cargo movement in India and world-wide. Role National Highways and the Toll highways- Outsourcing Fleets from others Technology, Cost, Speed, Security and Dynamics-**\*Competition with other modes**

#### Module 4: Air Transportation

**9 Hours**

Significance of air transportation in logistics: utility created by air transportation in Logistics- Air transportation as a means of conquering time and space features and facilities offered by air cargo ways factors influencing growth in air logistics air suitability for different cargo- Innovative schemes facilities to

popularize air cargo logistics in India –\*share cargo movement in India and worldwide conventions covering the movement of dangerous goods by air

**Module 5: Air Transportation**

**8 Hours**

Concept, needs and areas of coordination among different modes coordination among supply chain partner’s energy product prices and logistics environments and logistics problem and prospects in interstate logistics by road role of truckers bodies in road rail air cargo

Movement-**\*Trends.**

**Basic Text**

- Coyle, Bardi &Novack Transportation: A Supply Chain Perspective, South-Western College, 2010

**Reference Books**

- MB. Stroh, A Practical Guide to Transportation and Logistics, Logistics Network Inc. 2006
- Ritter, Barrett and Wilson, Securing Global Transportation Networks, McGraw Hill, 2006
- MOSWest, Transportation and Cargo Security, Prentice Hall, 2005.
- Chi Chu, C. Leung, Van Hui & Cheung, 4th Party Cyber Logistics for Air Cargo, Spring, 2004
- Hui, Leong, Arming Zhang, et al, Air Cargo in Mainland China and Hong Kong, Ash gate, 2004

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Lean Management**

Course Code: **22MBADSE437**

Semester: **4**

Credits: **3** Hours (LTP): **45 hours**

### Course Objectives:

- Creating an understanding of the importance of products and brands for creating competitive advantage.
- Introducing students to cutting-edge frameworks, concepts and tools being used to build successful brands.
- Enabling students to understand the levers that can create relationships between the brand and the consumer.
- Enabling students to make key product and brand decisions for managing portfolios.
- Equipping students with tools and techniques to conduct brand audits and assess brand equity.

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Describe various IT tools for management.
CO2	Interpret the methodologies of organizing data.
CO3	Examine the applications of IT and new trends.
CO4	Construct insights into Enterprise Systems and Decision Support Systems.
CO5	Select cloud computing method and its effect in management.

### Course Contents:

#### Module 1: Operations Overview

**10 Hours**

The manufacturing planning and control system –closed loop system, planning and control process The manufacturing planning and control activities –Planning interfaces –Business planning, Sales and operations Planning-Master Production Scheduling(MPS), Capacity Requirements Planning (CRP). Execution Interfaces – Material Requirements Planning (MRP) and ERP, Production activity control(PAC)-Demand forecasting-\* Forecasting methods

#### Module 2: Scheduling Production and process operations

**10 Hours**

Objectives of a schedule, establishing a schedule, Production scheduling, operations scheduling and project scheduling, Managing operations scheduling-\*Examples

#### Module3: Process Analysis Concepts

**6 Hours**

Process Selection-Manufacturing: Process Selection, Manufacturing Process Flow Design, Process Selection-Services: The Nature of Services, An Operational Classification of Service, Designing Service Organizations, Structuring the Service Encounter, Service-System Design Matrix- \*Service Blueprinting and Fail-Staffing.

#### Module 4: Lean Manufacturing System

**10 Hours**

Value Stream Mapping, Pull Manufacturing System, Waste classification and elimination concepts, JIT, Application of Lean in manufacturing and service sectors. Production Activity Control(PAC), Performances of

production operation, accuracy of inventory records, performance reporting, evaluating cost of operations, audits and reporting- \*Applications of lean systems.

**Module 5: Trends in Manufacturing**

**9 Hours**

Controlling resources –integrating suppliers, controlling storage and movement of goods, quality control initiatives, Quality Management Process, Flexible Manufacturing Systems, Agile manufacturing, Rapid prototyping- \*E- manufacturing.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Arnold, J.R.T., & Chapman, S.N., & Clive, L. M. (2011). Introduction to Materials Management. New Delhi:Pearson.

**Reference Books**

- Chapman, S.N. (2008). The Fundamentals of Production Planning & Control. Inida: Pearson.
- Starling, B. D. (2009). World class supply management. New Delhi: Tata McGraw Hill.
- [Mario Fernández](#)(2020)Industrial engineering –operations management, Independentlypublished, ISBN-13 : 979-8568373124.
- [J. T. Black](#), [Ronald A. Kohser](#)(2020):Materials and processing in manufacturing-wiley

**Other Reading Materials**

- Website :<https://www.leanproduction.com>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Name: Global Supply Chain Management

Course Code: **22MBADSE438**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Creating an understanding of global supply chain concepts.
- Introducing students to frameworks and tools for building successful scalable global supply chains
- Enabling students to understand the levers in supply chain management
- Enabling students to make key product and technology decisions for better business decisions.
- Equipping students with tools and techniques for global demand forecasting and examining

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Establish a global supply chain strategy
CO 2	Evaluate Global supply chain Infrastructure
CO 3	Leveraging logistics in global supply chain
CO 4	Gain Insights to Purchasing in supply chains
CO 5	Examine the role of maximizing Operations and Market Channels in Global Supply Chains.

### Course Contents:

#### Module 1: Establishing a Global Supply Chain Strategy:

**9 Hours**

Insight into global trade and global supply Chains-Expertise in emerging markets and global supply Chains-Best practices for strategic global supply chain Management-How to integrate global supply chain Functions-Strategic benefits of global supply chains-Ways to identify key market global Drivers-Knowledge of how market globalization drivers influence supply Chains-Exploration of the declining role of governments as producers and customers, and how their new role adds value for global supply Chains-How competitive globalization drivers better facilitate global supply chains-The influence of competitive globalization drivers, including the increase in world trade levels, increased “born-global” companies and the \*growth of global networks.

#### Module 2: Evaluating Global Supply Chain Infrastructure:

**9 Hours**

Analysis of transportation, communication, utilities and technology Infrastructure-Supply chain security, risks and Value-Legal considerations, international contracts and insurance Issues-Commercial documents and customs Clearance-\*International commerce terms (incoterms)

#### Module 3: Logistics and Purchasing in Global Supply chains:

**9 Hours**

How to design a global logistics Strategy-Managing Global Inventory-Global packaging and materials Handling-Understanding of global distribution Centers-\*Ocean, air, land and intermodal transportation. Key elements of a global purchasing Strategy-How to move from international to global Purchasing-Types of global purchasing Strategies-Strategies for outsourcing and Offshoring-\*

**Module 4: Technology Issues in Global Supply Chains:****9 Hours**

Logistics and the Internet of Things – Automation in Logistics – Data capture and transfer technologies – RFID – Global Standards – Block chain – Use of Block chain in shipping and logistics

**Module 5: Operations and Market Channels in Global Supply Chains****9 Hours**

How to create a global operations Strategy-Strategic make or buy decisions in global supply Chains-Total cost analysis in global supply chains-Process-based quality Standards-Comprehension of the Supply Chain Operations Reference Model-Using a first-party logistics (1PL), 2PL, 3PL, 4PL, 5PL supplier-Creating a global market channels Strategy-Customer value-\*Creating global Processes

(\*Self-learning topics are subject to testing)

**Basic Text**

- Mangan, J., Lalwani, C., and Butcher, T., Global Logistics & Supply Chain Management, John Wiley, 2008

**Reference Books**

- Bernstein, W. A Splendid Exchange: How Trade Shaped the World. Grove Press. 2009.
- Coe, N., Kelly, P., and Yeung. H “A Geographical Approach to the Economy” pgs. 3-30 in Economic Geography: A Contemporary Introduction.
- Blackwell, 2007. Appiah, K.A., The Case for Contamination, New York Times, January 1, 2006. Online at [www.nytimes.com](http://www.nytimes.com).

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Business Intelligence & Data Mining**

Course Code: **21MBADSE439**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Basic understanding about data warehousing and data mining.
- Provide knowledge about various descriptive data analytics and Visualization tools.
- Accomplish projects utilizing business theories, Internet resources and computer technology in SPSS.
- Conduct data analytics using scientific methods, and make appropriate and powerful connections between quantitative analysis and real-world problems.
- Show substantial understanding of the real problems; conduct deep data analytics using correct methods; and draw reasonable conclusions with sufficient explanation and elaboration

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Explain insights to a fundamental framework for OLAP, Data Warehousing and Data Mining in an organization.
CO 2	Interpret the concepts of Data warehousing.
CO 3	Create on the practical areas of Data Visualization and Dimension Reduction.
CO 4	Examine and developing an analytical ability for understanding business tool.
CO 5	Select information systems solutions for vertical and horizontal workflow of business operation and different classification systems.

**Course Contents:**

**Module 1: Introduction to Data ware house and Business Intelligence** **9 Hours**

**What is Data ware house-** Data warehouse properties- Data ware house architecture-Relational Data Model- Analytical Data Model - OLAP categories- OLAP operations -**What is Business intelligence-** What are Business intelligence tools- What are Business intelligence categories- Business products.

**Module 2: Data ware house Dimension and fact table-** **9 Hours**

Dimension table- Dimension table characteristics- Dimension table types- Dimension table categories- Fact table- Fact table types- Measure types -**Data Modeling-** Data Normalization- Data De normalization- Dimensional Modeling- Schema type- Star VS Snow Flake Modeling

**Module 3 Introduction to Data** **9 Hours**

Why data visualization- what is data visualization- how to achieve data visualization- BI tool and comparison- Introducing Tableau- Tableau architecture and business application

**Module 4: Dimension Reduction, Classification: Techniques and Applications** **9 Hours**

**Dimension Reduction:** Introduction, data summaries, Correlation analysis, Principal Components Analysis, Dimension reduction using Regression model, Classification and regression trees. Measuring performance of classification. Multiple linear regressions - Introduction, Estimating the regression equation and prediction, Variable selection in linear regression. \*Trends.



**Module 5: Cluster Analysis: Techniques and Applications****9 Hours**

Cluster Analysis: Introduction, Measuring Distance between two records, Measuring Distance between Two clusters, Hierarchical and Non- Hierarchical clustering. Association Rule: Introduction, Association rules in Transaction database, Generating candidate rules, and Selecting Strong rules. Discriminate Analysis: Introduction, Distance of an Observation from a class, Fisher’s linear classification functions, and Classification performance.

**Basic Texts**

- Prasad, R. N., & Acharya, S. (2011). Fundamentals of Business Analytics. Wiley, Delhi, India.
- Shmueli, G., Patel, N. R., & Bruce, P. C. (2010). Data Mining for Business Intelligence: Concepts, Techniques, and Applications in Microsoft Office Excel with XLMiner (2nd ed., p. 428). Wiley, Delhi, India.

**Reference Book:**

- Arun K. Pujari(2009), Data Mining Techniques, Third Edition, Universities Press (India) Limited. Hyderabad, India.
- Berson, A., Smith, S. J., & F. (1997). Data warehousing, Data mining and OLAP.Computing Mcgraw-Hill, Delhi,India
- Han, J., &Kamber, M. (2000). Data mining: concepts and techniques .Morgan Kaufmann. Christ,India.

**Other reading material**

- [https://swayam.gov.in/nd2\\_cec20\\_cs12/preview](https://swayam.gov.in/nd2_cec20_cs12/preview)
- <http://ucanalytics.com/blogs/learn-r-12-books-and-online-resources/>
- <https://www.futurelearn.com/courses/data-mining-with-weka>
- <https://docs.rapidminer.com/downloads/RapidMiner-v6-user-manual.pdf>
- <http://ijsetr.org/wp-content/uploads/2015/04/IJSETR-VOL-4-ISSUE-4-816-820.pdf>
- <https://www.ijcait.com/IJCAIT/21/213.p>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Name: **Sustainable Supply Chain Management**

Course Code: **22MBADSE440**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Creating an understanding of the importance of concepts of sustainable supply chain.
- Gaining insights on analytical frameworks and tools in infrastructure and commercial buildings.
- Enabling students to realize the importance of green procurement and inbound logistics.
- Enabling students to develop models on sustainable transportation.
- Evaluating the roles of workforce in implementing sustainability in organizations.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Develop insights on sustainability of a supply chain
CO 2	Analyze factors and measures towards implementing sustainability
CO 3	Construct the importance of green procurement and purchase
CO 4	Compile the advantages of green transportation
CO 5	Identify the role of employees in maintaining sustainability

**Course Contents:**

**Module 1: Sustainable Supply Chains**

**9 Hours**

What is Sustainability, Triple Bottom Line -3 'P' model, drivers and barriers of green supply chain, the political economy of carbon trading-carbon emission, carbon credit, carbon market, carbon tax & policy, controlling mechanism & measures, Sustainable supply chains Green supply chains- Sustainable Processes like Purchasing and materials management, distribution, warehousing -Global thinking on sustainable supply chain-**\*Challenge of going green** – Case studies

**Module 2: Environment Design**

**9 Hours**

Eco design, Life cycle analysis (LCA), & BREEAM and LEED framework for environmental regulation of building towards sustainability, commercial and residential buildings and regulatory / lease arrangements. EMS – environmental management system into commercial building infrastructure -**\*BOMA International Lease Guide**.

**Module 3: Green Purchasing**

**9 Hours**

Green purchasing- role & importance, GP strategies& drivers, green procurement life cycle & supplier management practices, ISO measures on eco/environmental label, GP performance metrics& measurement system.

**Module 4: Sustainable Facility Location and transportation**

**9 Hours**

Role of Facility Location and its importance in sustainability, strategic factors influencing location decisions & network design, location models and analysis methods, "Greening" transportation in the supply chain-transportation with intermodal & multimodal transport modes, Food Miles and controlling factors, Role of international regulatory institutions in 'adoption green transport practices. Environmental enhancements in transport vehicles- Other methods-**\*Sustainability Issues- Examples- Models**

## Module 5: Employee sustainability & Waste Management

9 Hours

Global trends in sustainability- Role of employees in maintaining sustainability. Develop workforce from “green awareness to green commitment”, internal stakeholders for green productivity & performance and transition towards sustainable SCM- \*Employee Empowerment-Methods-Case Studies.

Role of Waste Management – type of waste, waste handling & disposal methods, 3 R’s Waste Management, waste to wealth’ approach.

(\*Self-learning topics are subject to testing)

### Basic Text

- Joseph Sarkis Yijie Dou(2017), Green supply chain management, Routledge edition, New York.
- Charisios Achillas, Dionysis D. Bochtis, Dimitrios Aidonis and Dimitris Folinas (2019), Green supply chain management, Earthscan from Routledge, New York.
- David Grant, Alexander Trautrim & Chee Yew Wong (2015), Sustainable logistics and supply chain management, Kogan Page revised edition, New Delhi.

### Reference Books

- Allan McKinnon, Michael Browne (2010), Green Logistics, Kogan Page, New Delhi.
- Strategy for Sustainability: A Business Manifesto by A. Werbach, 2009, HBP.
- Economics: What Everyone Should Know About Economics and the Environment by R. Stroup, Cato Institute, 2003
- Strategy for Sustainability: A Business Manifesto by A. Werbach, 2009, HBP.

### Other Reading materials

- Using Nature’s Rules to Build Sustainable Profits, G. Unruh, HBP, 2010.
- The Ecology of Commerce: A Declaration of Sustainability by P. Hawken, Harper Paperbacks, IOM 599
- Toward a Sustainable Enterprise by R. Anderson, Peregrinzilla Press, 1999.
- <https://www.signify.com/global/sustainability/sustainable-supply-chain>
- [http://dx.doi.org/10.1787/eco\\_studies-2013-5k421kk9j3vb](http://dx.doi.org/10.1787/eco_studies-2013-5k421kk9j3vb)
- <https://core.ac.uk/download/pdf/82733461.pdf>
- <https://www.researchgate.net/publication/215522571>
- <https://www.signify.com/global/sustainability/sustainable-supply-chain>
- LinkedIn: Learning design for Sustainability
- LinkedIn: Sustainability strategies
- LinkedIn: Waste management
- LinkedIn: Cert Prep: LEED green associate
- LinkedIn: Alternate transportation strategies
- LinkedIn: The Employee’s guide to sustainability
- LinkedIn: Sustainable site design strategies: Rainwater management

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Contemporary Issues in Logistics Management**

Course Code: **22MBADSE441**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Gain knowledge on the Modern Logistic operations and their beneficiary role in procurement and production function.
- Learn to connect the Logistic function as the vital support function for the marketing function in competitive scenario.
- Understand the EXIM logistics and study about various necessary documentation procedures for EXIM logistics.
- Make use of the difference and merits between the 3pl and 4pl service providers.
- Focus on multimodal transportation and its importance in the global environment.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Understand the modern trends and functions in logistics
CO2	Interpret the role of logistics as a weapon along with marketing function in business success
CO3	Elaborate the role of EIM logistics in modern logistics scenario
CO4	Appraise the roles and fit of various logistics service providers
CO5	Develop insights in B2B logistics and current trends

### **Course Contents:**

#### **Module 1: Logistics Operations**

**12 Hours**

Introduction to Logistics Operations-Logistics as a Support/Interface/Enabler of Production function: Logistics as a Support function of Procurement, Vendor Facilitation and Production Logistics as interface function of Demand Forecasting, Global procurement, tracking inward shipments, In-plant distribution and Storage Planning Logistics as an enabler of Just-in-Time (JIT), Kanban (A scheduling system for lean inventory), \*Vendor Managed Inventory (VMI) for Vendors and the firm.

#### **Module 2: Logistics as Marketing Support**

**8 Hours**

Logistics as a Support/Interface/Enabler of Marketing function: Logistics as a Support function of Order Fulfillment, Assembling & Labeling from Multistage points, Consignment convergence/divergence and Delivery- Logistics as an interface of Market forecasting, Stock level management, invoice or sales documentation, picking materials, consolidation, packing, marking, preparing outbound documentation and shipping out by loading into containers-\*Customer facilitation tracking out-bound shipments.

#### **Module 3: EXIM Logistics**

**10 Hours**

EXIM Logistics: Special Aspects of Export logistics: Picking, Packing, Vessel Booking [Less-than Container Load(LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centers, distributors and lastly the retail outlets- Import Logistics: Documents Collection- Valuing- Bonded Warehousing- Customs Formalities- Security & Insurance- Multimodal Transport- UN International convention on MT of Goods- \*Terminal Networks: Types and Roles.

## Module 4: Logistics Service Providers

8 Hours

Logistics Service Providers: 3PL/4PL Services- Differences between 3PL & 4PL: 4PL Common Services for 3PL/4PL: Invoice management, call centers, warehouse/distribution facilities - Carrier management- 4PL Specialties: Implementation Center: Business process analysis/scoping, Development of all activities into an open systems framework- Product/Skill Centers: Supply chain engineering –4PL Value Added services: \*Knowledge Transfer, Business Development and Functional Support.

## Module 5: Business Logistics

7 Hours

Special Logistics: Inter and Multimodal Transport- Industrial Projects Transportation- Trade Fairs and Events Transportation- International Supply Chain Management- Consolidation and Groupage- Logistics of Time Perishable - Logistics of Quality Perishable- Life cycle logistics for Projects/Products- \*GS1 System of world-wide supply-chain standards system.

(\*Self-learning topics are subject to testing)

### Basic Text

- Alan Branch (2009), Global logistics and international logistics, Routledge edition, London.
- Donald Wood, Anthony Barone & Paul Murphy (2002), International logistics, Amacom publications, 2nd edition, New York.
- Dong Song & Photis Panayides (2015), Maritime logistics, Kogan page publication, New Delhi.
- Sak Onkvisit & John J. Shaw (1996) , International Marketing Prentice Hall of India, New Delhi.
- Donald Wood, Anthony Barone & Paul Murphy(2002), International logistics, Amacom publications, 2nd edition, New York.
- Dong Song & Photis Panayides, Maritime logistics (2015), Kogan page publication, New Delhi.
- International Marketing by Sak Onkvisit & John J. Shaw, Prentice Hall of India, New Delhi.

### Reference Books

- Sunil Chopra, Peter Meindl (2016), Supply Chain Management, Pearson Education, New Delhi.
- Bowersox, Closs, Cooper(2019), Supply Chain Logistics Management, McGraw Hill, New Delhi.
- Burt, Dobbler, Starling(2002), World Class Supply Management, TMH Edition, New Delhi.
- Donald Waters (2003) Logistics, Palgrave McMillan Publication, New York.
- Donald, David & Bixby (2002), Supply Chain Logistics Management, McGraw Hill edition, New York.
- Dimitry, Alexander & Jorn (2019), Global Supply Chain and Operations Management, Springer Edition, Switzerland.

### Other Reading Materials

- <https://hbr.org/1977/11/logistics-essential-to-strategy>
- <https://hbr.org/2021/03/its-time-to-rethink-your-global-logistics>
- <https://hbr.org/2020/09/global-supply-chains-in-a-post-pandemic-world>
- <https://www.palgrave.com/in/journal/41278>
- <https://www.logisticsmgmt.com/>
- LinkedIn: Defining logistics
- LinkedIn: Lean logistics
- LinkedIn: Choosing the right transportation method
- LinkedIn: Workplace logistics and communication
- LinkedIn: Planning onsite logistics

**Evaluation Pattern:**

<b>Continuous Evaluation</b>		<b>End Semester Examination</b>	<b>Total</b>
Class Participation : 10 Marks Assessment 1 : 10 Marks Assessment 2 : 10 Marks Assessment 3 : 10 Marks Block End Test : 10 Marks	50 Marks	50 Marks	100 Marks

**SYSTEMS AND OPERATIONS MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

## Course Title: **Distribution Management**

Course Code: **22MBADSE443**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objective:**

- Understand the nature, types and functions of channels in marketing
- Illustrate various methods/measures involved in picking prospective channel members
- Differentiate between various product and pricing strategies according to the nature of channel
- Assess fit of promotional methods with suitable channels
- Develop framework model to evaluate performance of channels

### **Course outcome:**

At the end of the course, learners will be able to:

CO 1	Recognize the importance of structure, types and functions of channels in marketing domain
CO 2	Choose appropriate measures in selection process of prospective channel member
CO 3	Distinguish the product and pricing strategies pertaining to channel structure
CO 4	Select suitable promotional measures to bring the best fit with various channel systems
CO 5	Design a model of performance evaluation framework to measure channel efficiency and effectiveness

### **Course Contents:**

#### **Module 1: Distribution Management**

**10 Hours**

Marketing Channel Concepts: Growing importance of Marketing Channels, The Marketing Channel Defined, Use of the term Channel Manager, The Marketing Channel and Marketing Management Strategy, Channel Strategy versus Logistic management, Flows in Marketing Channels, Distribution through intermediaries, Channel Structure, Ancillary Structure- Marketing Channel System-An Overview of the Channel participants, Producers and Manufacturers, Intermediaries, Facilitating Agencies. Electronic marketing channels, Franchise marketing channels. -Behavioural Processes in Marketing Channels: The Marketing Channels as a Social System, Conflict in the marketing Channel, Power in the Marketing Channel, Role in the marketing Channel, and \*Communication Processes in the Marketing Channel.

#### **Module 2: Designing the Marketing Channel**

**9 Hours**

What is Channel Design, Who Engages in Channel Design, A Paradigm of the Channel Design Decision, the Phases of Channel Design-Channel Member Selection and Channel Design, The Selection Process- finding prospective channel members,\* Applying Selection criteria, securing the Channel members.

#### **Module 3: Product and Pricing Issues in Channel Management**

**9 Hours**

New Product Planning and Channel Management, the Product Life Cycle and Channel Management, Strategic Product Management and Channel Management-. Anatomy of Channel of Channel Pricing Structure, Guidelines for Developing Effective Channel Pricing Strategies, \*Other Issues in Channel Pricing.

#### **Module 4: Promotion in Channel Management**

**9 Hours**

Promotional Strategies and Channel Member Cooperation, Basic Push Promotional Strategies in Marketing channels, "Kinder and Gentler" Push Promotion Strategies in Marketing. Finding out the needs and Problems



of Channel Members, Offering Support to Channel Members, \*Providing Leadership to Motivate Channel Members.

**Module 5: Evaluating Channel Member Performance**

**8 Hours**

Factors Affecting scope and frequency of Evaluations- Performance Evaluation versus Day-to-Day Monitoring, \*Channel Member Performance Audit.

(\*Self-learning topics are subject to testing.)

**Basic Texts**

- Rosenbloom B, (2013). Marketing Channels – A Management View 8th ed. Cengage Learning
- Palmatier W.R, Stern W. L., Adel I., & Ansary El.,(2015). Marketing channels 8th Ed. Pearson

**Reference Books**

- Palmatier W.R, Sivadas E, Stern W. L., Adel I., & Ansary El.,(2020). Marketing channels 9th Ed. Routledge
- Coughlan, Anderson, Stern & Ansary El., (2014). Marketing channels 7th Ed. Pearson
- Still R R, Cuntiff W E, Govoni A P N & Sandeep Puri (2017). Sales and Distribution Management, Pearson India

**Other reading Material:**

- Kenneth Rolnicki (1998). Managing Channel of Distribution, Amacom
- Kotler, P. and Keller, K. (2014) Marketing Management. 15th Edition, Prentice Hall, Saddle River
- Dent Julian (2008). Distribution channels, Kogan Page
- Distribution Channel Planning and Management: Why are they so Important? (Coursera)
- Sales channel management (LinkedIn)
- Logistic Foundation (LinkedIn)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: R and Python for Systems Management

Course Code: **22MBADSE446**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objective:

- Introduce the basic concepts of R
- Understand the Descriptive Analysis using R
- Demonstrate use of Visualization of Data in R
- Introduce Introduction to Python
- Understand Data Aggregation, processing and Group Operations

### Course Outcomes (COs):

At the end of the course, learner will be able to:

CO 1	Discuss the basic concepts of R
CO 2	Demonstrate the Descriptive Analysis using R
CO 3	Demonstrate use of Visualization of Data in R
CO 4	Assess the concepts of Python
CO 5	Describe Data Aggregation, processing and Group Operations

### Course Contents:

#### Module 1: Introduction:

**9 Hours**

Basic Concept in R, Data Structure, Import of Data. Graphic Concept in R: Graphic System, Graphic Parameter Settings, Margin Settings for Figures and Graphics, Multiple Charts, More Complex Assembly and Layout, Font Embedding, Output with cairo pdf, Unicode in figures, Colour settings, R packages and functions related to visualization.

#### Module 2: Descriptive Analysis using R

**9 Hours**

Computing an overall summary of a variable and an entire data frame, summary() function, sapply() function, stat.desc() function, Case of missing values, Descriptive statistics by groups, Simple frequency distribution: one categorical variable, Two-way contingency table: Two categorical variables, Multiway tables: More than two categorical variables.

#### Module 3: Visualization of Data in R

**9 Hours**

Bar Chart Simple, Bar Chart with Multiple Response Questions, Column Chart with two line labeling, Column chart with 45o labeling, Profile Plot, Dot Chart for 3 variables, Pie Chart and Radial Diagram, Chart Tables, Distributions: Histogram overlay, Box Plots for group, Pyramids with multiple colors, Pyramid: emphasis on the outer and inner area, Pyramid with added line, Aggregated Pyramids, Simple Lorenz curve.

#### Module 4-Introduction to Python

**9 Hours**

Jupyter Notebook, Python Functions, Python Types and Sequences, Python More on Strings, Reading and Writing CSV files, Advanced Python Objects, map(), Numpy, Pandas, , Series Data Structure, Querying a Series, The DataFrame Data Structure, DataFrame Indexing and Loading, Querying a DataFrame, Indexing Dataframes, Merging Dataframes

**Module 5: Data Aggregation, processing and Group Operations****9 Hours**

Time Series, Date and Time, Data Types and Tools, Time Series Basics, Date Ranges, Frequencies, and Shifting, Time Zone Handling, Periods and Period Arithmetic, Resampling and Frequency Conversion, Time Series Plotting, Moving Window Functions, Natural Language Processing, Image Processing, Machine Learning K Nearest Neighbors Algorithm for Classification, Clustering (\*Self-learning topics are subject to testing)

**Basic Texts**

1. **Ozdemir, S. (2016). Principles of data science. Packt Publishing Ltd.**
2. **Grus, J. (2019). Data science from scratch: first principles with python. O'Reilly Media.**

**Reference Books**

- Wickham, H., & Grolemund, G. (2016). R for data science: import, tidy, transform, visualize, and model data. " O'Reilly Media, Inc."
- VanderPlas, J. (2016). Python data science handbook: Essential tools for working with data. " O'Reilly Media, Inc."

**Other reading material**

- <https://www.youtube.com/watch?v=MWyGnA5IUug>
- <https://www.linkedin.com/learning/paths/master-r-for-data-science?u=92695330>
- <https://www.linkedin.com/learning/python-for-non-programmers?u=92695330>

**Evaluation Pattern:**

		Continuous Evaluation	End Semester Examination	Total
Class Participation	: 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1	: 10 Marks			
Assessment 2	: 10 Marks			
Assessment 3	: 10 Marks			
Block End Test	: 10 Marks			

# **ENTREPRENEURSHIP & NEW VENTURE CREATION**

**DISCIPLINE SPECIFIC ELECTIVE**

**SEMESTER - IV**

## Course Title: **Family Business Management**

Course Code: **22MBADSE448**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Creating an understanding of Family Business as a different form of business
- Realize the life cycle and ownership development of a family business
- Enabling the students to develop succession planning for the continuation of family business.
- Discussing the framework of family business governance
- Understanding influence of culture and risk management in family firms.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Differentiate family business from other businesses.
CO 2	Recognize the life cycles of family businesses and ownership development.
CO 3	Design the succession planning for the continuation of family business.
CO 4	Demonstrate framework of family business governance
CO 5	Outline influence of culture and risk management in family firms.

### **Course Contents:**

#### **Module 1: Family and small business enterprises.**

**5 Hours**

Family business-uniqueness-objectives-nature, entrepreneurship and small business, trust and commitment in family business, zero- sum dynamics and family culture, \*entrepreneurial integrity and ethics.

#### **Module 2: Getting started with family business.**

**12 Hours**

Startup ideas-types-innovative business ideas, using internal and external analyses to identify business ideas, selecting strategies that capture opportunities, ownership of a family enterprise-responsibilities and relationship between shareholders to the company-priorities-role of the board, ownership structure, \* preparing a business plan.

#### **Module 3: Succession planning in family business enterprises.**

**12 Hours**

Continuing entrepreneurship, rewards and challenges for latter-generation family members, ingredients for responsible leadership, family relations, \*marketing research for the new ventures, succession and continuity-transfer of power, governance and succession, building a management team.

#### **Module 4: Family business governance and family communication.**

**10 Hours**

Governance structure-family owned-controlled business, advisory boards, boards of directors, family meetings, global opportunities for small business, change, adaptation, and innovation for family business, \*Professional management in the entrepreneurial firm.

#### **Module 5: Culture, organization and risk**

**6 Hours**

Family culture, organizational culture, family firms, \*managing risk in the small businesses, maintaining customer relationships.

(\* Self-learning topics and are subject to testing)

**Basic Text:**

- Sudipt Dutta (2013). Family Business in India, Response Books, Sage, Delhi.

**Reference Books:**

- Mirza Yawar Baig (2014). The Business of Family Business; Serene Woods, USA.
- Ernesto J. Poza (2007). Family Business, 2nd ed. South-Western/Thomson Learning.

**Other reading material:**

- Emerald emerging market case studies (EEM CS), Emerald
- Family Business Review (FBR), Sage
- Harvard Business Review (HBR)
- International Journal of Entrepreneurship & Innovation (IJEI), IP Publishing
- Journal of Business Venturing (JBV) - Elsevier
- Journal of Entrepreneurship in Emerging Economies (JEEE), Emerald
- Journal of Family Business Management (JFBM), Emerald
- Journal of Family Business Strategy (JFBS), Elsevier

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Micro, Small and Medium Enterprises in India**

Course Code: **22MBADSE449**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Illustrate the required skills and competencies for starting new entrepreneurship
- Outline the Micro small and medium enterprise and Initiatives for MSMEs
- Identify sources of funds available for starting new businesses in India
- Develop a better understanding of Business Plan
- Acquire the knowledge of MSME schemes in getting initial investments from government for venture creation

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Identify the major schemes of MSME and understand its implication
CO 2	Describe the various funding options given by the government.
CO 3	Explain the funding scheme options for women entrepreneurs
CO 4	Discuss the various functions of DIC and understand about the various initiatives taken by DIC for venture creation
CO 5	Comprehend the various funding sources for business and applying the conceptual knowledge in their own startup idea

**Course Contents:**

**Module 1: Introduction of MSME**

**9 Hours**

Introduction of MSME Act 2006, Ministry of MSME, MSME rules and regulations for Manufacturing Enterprises and service Enterprises (How to Set up new unit, arranging finance, unit development, export promotion), Overview of MSME sector in India, Major Challenges faced by MSME in India.

**Module 2: Major Schemes of MSME**

**9 Hours**

SME Division Schemes, Development Commissioner (DC-MSME) Schemes, National Small Industries Corporation (NSIC) Schemes, ARI Division Schemes, SIDBI Schemes - NABARD Schemes

**Module 3: Government Supports in Funding**

**9 Hours**

Mentoring and Incubation, Central and government Schemes, Women entrepreneurs specific Schemes, Centre for Entrepreneurship Development, Entrepreneurship Development Institute of India, Centre for Innovation Incubation and Entrepreneurship, International Centre for Entrepreneurship and technology

**Module 4: Industries Commissionerate**

**9 Hours**

Overview of Industries Commissionerate, Functions of Industries Commissionerate Activities of Industries Commissionerate, District Industry Centre (DIC), Overview of DICs -Activities of DICs - Functions of DICs Government Initiatives for Ease of Doing Business

## Module 5: Sources of Funds for Business

9 Hours

EXIM Bank (Introduction, Various financial Products and services offered by EXIM Bank), Venture Capital, public/private Bank loans (Working Capital Loan, Corporate Term Loan, Term Loan etc.)

### Text Book:

- Indian Institute of Banking and Finance (2017), Micro, Small and Medium Enterprises in India, 2017th Edition, Taxmann Publications Pvt. Ltd.

### Reference Book:

- Das, K. (2008). Micro, Small and medium enterprises in India: Unfair fare. Ahmedabad: Gujarat Institute of Development Research.

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### Other reading material:

- Annual Report, Coir Board. (2011–2019). Government of India. [http://coirboard.gov.in/?page\\_id=199](http://coirboard.gov.in/?page_id=199) (accessed on 2nd February, 2020)
- Behera, H., & Wahi, G. (2017). How have MSME sector credit and exports fared? (Mint Street Memo No. 13), 1–8.
- <https://rbidocs.rbi.org.in/rdocs/MintStreetMemos/13MSMN17082018.pdf>
- Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance*, 22(6&8), 613–673.
- Cavusgil, S. T. (1984). Differences between exporters based on their degree of internationalization. *Journal of Business Research*, 18(2), 195–208.
- Chugan, P. K., & Singh, S. (2016). Impact of type of export finance on firms, export profitability: A study of industrial clusters in Gujarat, India (pp. 89–96) [Paper presentation]. 18th Annual International Conference on Exceeding the Vision: Innovate, Integrate and Motivate, Global Business and Technology Association. <https://openlearning.aauekpoma.edu.ng/Uploads/Journals/ict-innovation-into-teaching-of-business-education-in-nigerian-universities-pg-400-406.pdf>
- Devidas, T. (1977). Prospects and problems for coir exports. *Foreign Trade Review*, 12(1), 138–158.
- Dhar, S. K. (2014). Micro Small and Medium Enterprises (MSMEs) in India: Its scopes and challenges [Unpublished conference proceedings]. <https://ssrn.com/abstract=2541162> as on 10.11.2019
- Directorate General of Commercial Intelligence and Statistics. (2016). Selected Statistics of Foreign Trade of India.
- FoodandAgricultureOrganisation.(2018).Crops.UnitedNation. <http://www.fao.org/faostat/en/#data/QC>
- Ghouse, G. S. (2014). Export competitiveness of India: The role of MSMEs to play. *International Journal of Management Research & Review*, 4(11), 1069–1084.
- Kumaresan,A.(2009).Coirexports: On the growth path. <http://efy.efymag.com/admin/issuepdf/coir-oct09.pdf>
- Michael, L. (2015). MSME in India: Opportunities and challenges. *European Journal of Commerce and Management Research*, Special Issue 1, 103–106.
- Ministry of Micro, Small and Medium Enterprises. (2007). Annual report 2006–2007. Government of India. <https://msme.gov.in/sites/default/files/ssi-ar-eng-2006-07.pdf>

### Evaluation Pattern:



Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Analytics for Entrepreneurs**

Course Code: **22MBADSE450**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Discussing the basics of business analytics
- Demonstrating the analytical tools in HRM
- Illustrating the analytical tools in marketing
- Employing the analytical tools in Finance
- Identifying analytical tools for different industries

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Demonstrate the importance of business analytics for entrepreneurs
CO 2	Illustrate the marketing analytics techniques for entrepreneurs
CO 3	Appraise the HR analytics for entrepreneurs
CO 4	Demonstrate the Financial analytics techniques
CO 5	Assess the productivity of the product and service industry using analytics

### Course Contents:

#### Module 1: Introduction to Business Analytics

**10 Hours**

Introduction to Business Analytics, Importance of data quality, data mining Process, frequency distribution, measures of central tendency, descriptive Data Summarization. \***Measures of Dispersion – Range, Inter quartile range, Mean deviation, Standard deviation, Variance, Coefficient of Variation, Skewness and Kurtosis**

#### Module 2: Meaning of HR Analytics

**7 Hours**

Meaning of HR Analytics; Evolution of HR Analytics, Levels of Analysis, Conducting HR Analytics, HR Metrics, Types of HR Metrics, Staffing Metrics, Training and Development Metrics, \* **Business Requirement, Data Acquisition, Deployment, Operations, Optimization**

#### Module 3: Importance and use of marketing analytics in different industries

**8 Hours**

Importance and use of marketing analytics in different industries, Introduction of predictive analysis, Sales Analysis and Forecasting, RFM analysis, \***Linear and Non- Linear equations, Applications in business decision-making**

#### Module 4: Time Series Analysis

**10 Hours**

Time Series Analysis - Variations in Time Series, The Importance of Forecasting, Trend Analysis, Exponential smoothing, Moving Average and Weighted moving average, \* **AI Evolution, Statistics Vs Data Mining Vs, Data Analytics Vs, Data Science, Supervised Learning, Unsupervised Learning, Reinforcement Learning**

**Module 5: Analytics for manufacturing and service industry****10 Hours**

Analytics for manufacturing and service industry, Transportation Problems, ABC analysis **\*Probability Theoretical Distributions: Concept and application of Binomial; Poisson and Normal distributions, Bayes Theorem, Addition and Multiplication Law**

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Text:**

- Turban, sharda and Delen (2018). Business Intelligence and Analytics. Pearson
- Winston Wayne (2017). Marketing Analytics, Wiley

**Reference Book:**

- Motwani Bharti (2021). HR Analytics: Practical approach using Python, Wiley
- Business Statistics and Analytics – Panner selvam, Nagesh, Senthilkumar, Cengage Learning, 2018.
- Timothy R. Mayes\_ Todd M. Shank (2014). Financial Analysis with Microsoft Excel-Cengage Learning (2014)
- Operation research, Kalavathy S, Vikas Publishing, 4th Edition

**Other reading material:**

- Andreas C. Müller, Sarah Guido (2016), Introduction to Machine Learning with Python
- A Guide for Data Scientists 1/e, O'Reilly Media

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Managing Sickness & Turnaround Strategies for Entrepreneurs**

Course Code: **22MBADSE451**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives (Cos):**

- Describe the dynamics of the Industrial Sickness
- Examine the reasons and Symptoms for industrial sickness
- Measure the scale of industrial sickness and its impact on economy
- Assess the Government policies on Sickness
- Describe the turnaround strategies adopted by the organizations

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Comprehend the dynamics of Indian industrial sickness
CO2	Design the strategies to overcome industrial sickness
CO3	Demonstrate the impact of industrial sickness on Indian economy
CO4	Examine the Government policies to turnaround the industrial sickness
CO5	Assess the turnaround strategies adopted by the organizations

**Course Contents:**

**Module 1: Introduction to Industrial Sickness**

**9 Hours**

Symptoms and Definition of Sickness, Actual Sickness and Incipient sickness, industrial

**Module 2: Scale and causes of sickness**

**9 Hours**

Scale of sickness in MSMEs and Large industrial sector; Case of Sickness-Internal & External; sickness in the private and public sector; Impact of Sickness on Economy

**Module 3: Government policies on Sickness**

**9 Hours**

Government policies on sick industries since Independence, Sick Industrial Companies Act, 1985; Board of Industrial and Financial Reconstruction (BIFR)

**Module 4: Turn around and Industrial Restructuring**

**9 Hours**

Reforms and industrial restructuring; Financial reforms by states and central government of India; Rehabilitation Schemes, Barriers to restructuring.

**Module 5: Recent trends**

**9 Hours**

Recent trends in Industrial Sickness and successful turnaround strategies adopted by the organizations.

**References:**

- R.K.Panda (2011), Industrial Sickness: A Study of Small Scale Industries , APH Publishing Corporation
- Stewart Gill & R.K Dhawan (2011), Managing Industrial Sickness in State Enterprises, Prestige Books

- Ramakanth (2006), Identification and Rehabilitating of Industrial Sickness, Pointer Publishers
- Kondasani, R. K. R., Panda, R. K., & Basu, R. (2019). Better healthcare setting for better healthcare service quality. International Journal of Quality & Reliability Management.
- Datta, D. K. (2013). Industrial sickness in India–An empirical analysis. IIMB Management Review, 25(2), 104- 114.
- Sahu, P. K. (Ed.). (1990). Industrial Sickness: Concepts, Cases & Remedies. Discovery Publishing House.

**Other reading material:**

- Kondasani, R. K. R., Panda, R. K., & Basu, R. (2019). Better healthcare setting for better healthcare service quality. International Journal of Quality & Reliability Management.
- Datta, D. K. (2013). Industrial sickness in India–An empirical analysis. IIMB Management Review, 25(2), 104-114.
- Sahu, P. K. (Ed.). (1990). Industrial Sickness: Concepts, Cases & Remedies. Discovery Publishing House.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Social Venture Creations**

Course Code: **22MBADSE452**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Discuss the steps involved in the formation of a social venture
- Identify the determinants of sustainability and social enterprises
- Recognize opportunities for successful social venture creation
- Assess the impact of social enterprises on stakeholders using metrics
- Interpret the marketing concepts of social enterprises

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Outline the steps involved in establishing a social enterprise
CO 2	Examine the theoretical frameworks of sustainable venture creation.
CO 3	Illustrate the sustainable opportunities in business.
CO 4	Measure and assess the impact of social enterprises
CO 5	Strengthen the enterprise by identifying the social needs of the people associated with the organization.

### Course Contents:

#### Module 1: Developing Social Ventures

**6 hours**

Social venture-forms, legal steps to start a social enterprise, \*sourcing for funding social enterprises, Oster's six force model.

#### Module 2: Venture creation and sustainability

**10 Hours**

Value creation-social enterprise, sustainability, models-stakeholder-triple bottom line, \*factors affecting sustainable development, sustainable value creation-economy-society-environment-culture, opportunities for new value creation, emerging economies.

#### Module 3: Opportunities for social venture creation

**10 Hours**

Social entrepreneurs, opportunity recognition-social venture, determinants of social venture creation-policy-regulation- consumers-products-idea generation, \*self-help groups and not-for-profit sectors, funding, technology, innovation, sustainability alternatives in business, successful social entrepreneurship initiatives.

#### Module 4: Measuring value creation in social enterprise

**10 Hours**

Social accounting and audit, social return on investment, indices, evaluating the impact of social venture ideas, measuring the social impact of a venture, \*analyzing the attractiveness of social venture opportunities, risk management, business models of social ventures-success stories, \*identify social enterprises in different sectors.

**Module 5: Marketing a social venture****9 Hours**

Social enterprise, social marketing vs marketing, social marketing-principles, social marketing strategies-marketing plan- segmentation-targeting and positioning-market expansion-product development and diversification, community based social marketing, branding, social franchising, \*identify profitable social enterprises.

(\* Self-learning topics and are subject to testing)

**Basic Texts:**

- Roy R. (2011) Entrepreneurship Management, Second edition, Oxford University Press, India.
- Hisrich R., Peters M., & Shepherd, D. (2017), Tenth edition, McGraw-Hill India.

**Reference Books:**

- Doherty, B. Meehan, J. Maureen, R. Foster, G. Rotheroe, N. Mason, C. (2009) Management for Social Enterprise SAGE Publications Ltd, USA.
- Nicholls, A. (2008) Social Entrepreneurship: New Models of Sustainable Social Change, Oxford University Press, India.

**Other reading material**

- Kate Raworth. (2017). Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist, Chelsea Green Publishing
- Marshall, R. S. (2011). Conceptualizing the international for-profit social entrepreneur. Journal of Business Ethics, 98(2), 183-198.
- <http://bvic.in/wp-content/uploads/2017/04/SRS-3.pdf>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Buying an Existing Business**

Course Code: **22MBADSE453**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Enable students to identify the opportunities and modes in buying an existing business
- Introduce students to the acquisition process in buying a business
- Examine the funding and structuring aspects of buying a business
- Comprehend the closing formalities in acquisition of business.
- Discuss the recent trends in buying business.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Illustrate various opportunities and challenges in buying an existing business.
CO 2	Associate the acquisition process in buying an existing business.
CO 3	Examine financial and legal obligations in in buying an existing business.
CO 4	Summarise 'closing deal' in buying an existing business.
CO 5	Design a plan to buy an existing business.

**Course Contents:**

**Module 1: Buying an Existing Business**

**6 Hours**

Opportunity recognition-entrepreneurship through acquisition, Corporate Venturing, \*opportunities and modes of buying an existing business, venture opportunity vs acquisition.

**Module 2: Acquisition Process**

**10 Hours**

Acquisition process-targets, \*evaluating acquisition opportunities, conducting due diligence, financial due diligence, competitive analysis, target valuation methodologies.

**Module 3: Financial and legal aspects of acquisition**

**10 Hours**

Raising capital, \*search fund and fund less models, structuring the new business-legal-financial-tax.

**Module 4: Closing the acquisition deal**

**10 Hours**

Closing the transaction and post-closing integration, acquisition growth strategies, \*transitioning and exiting the acquisition.

**Module 5: Recent Trends in Buying an Existing Business**

**9 Hours**

Role of technology and innovation in buying business, family-owned businesses, \*sectoral trends in buying business, government norms.

**Basic Texts:**

- Peggy, L. (2000). Entrepreneurship. Third edition, Pearson, USA.



- Rabi Narayan Kar & Minakshi (2017) Mergers Acquisitions & Corporate Restructuring - Strategies & Practices, Taxmann Publication Pvt. Ltd.

**Reference Books:**

- Kuratko, D. F., & Hodgetts, R. M. (1995). Entrepreneurship: A contemporary approach. Dryden Press.
- Beech, G., & Thayser, D. (2015). Valuations, Mergers and Acquisitions. OUP Catalogue.
- Reed, S. F., Lajoux, A. R., & Nesvold, H. P. (1989). The Art of M & A: A Merger Acquisition Buyout Guide. Dow Jones-Irwin.

**Other reading material**

- Marks, M. L., & Mirvis, P. H. (2010). Making mergers and acquisitions work: Strategic and psychological preparation. Academy of Management Perspectives, 15(2), 80-92.
- Andersson, U., Johanson, J., & Vahlne, J. E. (2005). Organic acquisitions in the internationalization process of the business firm. MIR: Management International Review, 67-84.
- Family Business Review (FBR), Sage

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Technology Commercialization & Entrepreneurial Innovation**

Course Code: **22MBADSE454**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Comprehend the key concepts and options in technology commercialization.
- Assess technologies for their commercialization potential.
- Outline the steps that a technology goes through in the journey from the laboratory to the marketplace.
- Explore the roles that intellectual property protection and licensing play in the commercialization process.
- Discuss the valuation approaches to technology business entrepreneurship.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Identify the key concepts and options in Technology Commercialization
CO 2	Assess technologies for their Commercialization potential
CO 3	Outline the steps that a technology goes through in the journey from the laboratory to the marketplace
CO 4	Formulate the roles that intellectual property protection and licensing play in the Commercialization process
CO 5	Examine the various valuation approaches to Technology- business entrepreneurship

**Course Contents:**

**Module 1: Technology Commercialization**

**6 Hours**

High technology ventures, **\*recognize and screen technology opportunities**, commercialization process, technology assessment, ideation, customer need assessments, value propositions, organizational development, business model development.

**Module 2: Commercialization strategies**

**10 Hours**

Commercialization, opportunity identification, search/product ideation, problem statement, market research, screen, analyze, and invest in early-stage technology, business incubation, **\*financial and technical due diligence**, financial analysis-income statement-balance sheet, talent and capital, and managing rapid growth, R&D.

**Module 3: Product innovation**

**10 Hours**

Product innovation, market assessment, feasibility studies, coordinating strategy formulation and the identification and evaluation of new product opportunities; planning and organizing the process of development; testing new products and new markets, and commercialization.

**Module 4: Technology business entrepreneurship**

**10 Hours**

Technology business ventures, technology transfer, licensing, inventions, **\*competitive entry – patents, copyrights, trademarks and trade secrets**, product development process, manufacturing/process technologies, time to market, technology-based strategic alliances.

**Module 5: Valuation of technology ventures****9 Hours**

Start-up valuation, financial analysis, financial projection, cash flow analysis, external funding needs, multiple and DCF approach, budgeting techniques-NPV-IRR--payback period.

**Basic Text:**

- Joseph, Touhill (2008). Commercialization of Innovative Technologies, Wiley, USA
- Paramasivan, C & Subramanian,T. Financial Management, New Age International (P) Ltd Publishers(2014)

**Reference Book:**

- Everse, N & Cunningham. J (2014). Technology Entrepreneurship, MacMillan Publishing, USA.

**Other reading material**

- [http://www.uic.osaka-u.ac.jp/old/gtec/cmn/img/G-TEC2014\\_Course\\_Program.pdf](http://www.uic.osaka-u.ac.jp/old/gtec/cmn/img/G-TEC2014_Course_Program.pdf)
- <https://www.coursera.org/learn/valuation-for-startups-project>
- <https://myrbs.business.rutgers.edu/mba/entrepreneurship#22:620:685>
- <https://www.coursehero.com/file/29621422/Syllabusdocx/>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Building Startup Communities**

Course Code: **22MBADSE455**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Understand the required skills and competencies for starting new entrepreneurship.
- Understand the global ecosystems for starting an enterprise.
- Identify the issues and challenges faced by global businesses
- Apply the knowledge of global Silicon Valley ecosystems for venture creations.

**Course Outcomes (COs):**

At the end of the course, learner will be able to:

CO 1	Understand the theoretical frameworks and the significance of Boulder Thesis in the development of startup communities.
CO 2	Examine the attributes of leadership in startup community
CO 3	Determine the characteristics that contribute to the success of startup communities
CO 4	Examine the role of networking and innovation in fostering Startup Communities
CO 5	Identify the challenges and opportunities in Silicon Valley cities.

**Course Contents:**

**Module 1: The Boulder Startup Community**

**8 hours**

Historical Contexts and Frameworks, Development of the Boulder thesis, Significance of boulder thesis, philosophy of inclusivity, engagement of entrepreneurial stack, participation in startup communities, concept of leaders and feeders

**Module 2: Attributes of leadership in startup community**

**10 Hours**

Non-zero game concept, mentorship-driven learning, comprehending the Patriarch Problem and capital generation concerns, establishing short-term commitments, creation of artificial geographic borders, Strategies for Risk aversion.

**Module 3: Thriving startup communities**

**9 Hours**

Fallacies surrounding startup communities, the organization of angel investors, the relevance of local venture capital, emergence of Big Omaha and Iceland community.

**Module 4: Networking and Innovation**

**9 Hours**

Dynamics of startup communities, role of innovation, power of accelerators, Spread of Techstars to Boston and Seattle , accelerators vs incubators, Silicon Flatirons' Networked Approach, corporate innovation initiatives, Contrasts between Entrepreneurs and Government, Action vs policy, strategies used for networking and innovation in startup communities.

**Module 5: Introduction to Silicon Valley ecosystem****9 Hours**

California and Bengaluru entrepreneurial ecosystem, kinds of businesses, role of government, Success factors, Challenges & opportunities

**Reference Books:**

1. Hwang, V. W. (2013). *The Rainforest Blueprint: How to Design Your Own Silicon Valley | Unleash an Ecosystem of Innovation in Your Company*. Organization, or Hometown Paperback–May, 20.
2. Ester, P. (2017). *Innovation and Startups in Silicon Valley. An Ecosystem Approach*. In *Accelerators in silicon valley* (pp. 37-62). Amsterdam University Press.
3. *The Spotify Play: How CEO and Founder Daniel Ek Beat Apple, Google, and Amazon in the Race for Audio Dominance*, Svan Carlsson
4. Adams, S. B. (2020). From orchards to chips: Silicon Valley’s evolving entrepreneurial ecosystem. *Entrepreneurship & Regional Development*, 1-21.
5. Piqué, J. M., Berbegal-Mirabent, J., & Etzkowitz, H. (2020). The role of universities in shaping the evolution of Silicon Valley’s ecosystem of innovation. *Triple Helix*, 1(aop), 1-45.
6. Gobble, M. M. (2014). Charting the innovation ecosystem. *Research-Technology Management*, 57(4), 55-59.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

**AVIATION MANAGEMENT**  
**DISCIPLINE SPECIFIC ELECTIVE**  
**SEMESTER - IV**

Course Title: **Aviation Marketing Management**

Course Code: **22MBADSE456**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Creating an understanding of the application of marketing concepts in the aviation industry.
- Realize how different the marketing function is going to be in the aviation industry.
- Enabling the application of marketing mix to the aviation industry - airlines and airports specifically.
- Equipping students to strategize various marketing activities for the aviation industry
- Enable gain a better understanding of marketing plan for the airports.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Understand the Fundamentals and the Market for Air Transport Services
CO 2	Recognize Marketing Environment – PESTE Analysis, Porter’s Five Forces
CO 3	Adopt techniques in Product Analysis, Pricing and Revenue Management in Aviation sector
CO 4	Examine the Distribution Channel Strategies for Aerospace industry
CO 5	Examine and apply the Marketing plan for Airports

**Course Contents:**

**Module 1: Fundamentals and the Market for Air Transport Services**

**7 Hours**

What is Marketing? Definition; The Marketing Mix\*; Stages in the Application of Marketing Principles to Airline Management; What Business are we in? Who is the Customer? Market Segmentation – Air Passenger Market.

**Module 2: Marketing Environment – PESTE Analysis, Porter’s Five Forces**

**9 Hours**

The Theoretical Basis – PESTE Analysis – Political Factors, Economic Factors, Social Factors, Technological Factors, Environmental Factors; Porter’s Five Forces\* and their Application to the Airline Industry; Strategic Families; Differentiation”, Airlines – The Future; Focus Strategies.

**Module 3: Product Analysis, Pricing and Revenue Management**

**12 Hours**

What is the “Product”? \* The Theory of Product Analysis and its Application to the Airline Industry; Fleet and Schedules- Related Product Features; Customer Service-Related Product Features; Controlling Product Quality; Building Blocks in Airline Pricing Policy; “Uniform” and “Differential” Pricing\*.

**Module 4: Distributing the Product and Brand Management**

**7 Hours**

Distribution Channel Strategies; The Travel Agency Distribution System; Global Distribution Systems (GDSs); Brands and Commodities\*; Brand-Building in the Airline Industry; Brand Strategies; Frequent Flyer Programmes.

**Module 5: Introduction to Airport Marketing and Marketing Plan for Airports****10 Hours**

The Airport Enterprise: Role and Scope of Activity; Competition in Airport Industry\*; The Air Transport Value Chain; Rise of Airport Marketing; Primary Hub, Secondary hub, Regional hub concepts; The Aviation-Related SBU: The Airport Enterprise’s Technical Core Business; New Marketing-Driven Paradigms for the Airport Enterprise’s Aviation-Related Business; September 11 Attacks\*; How to Construct an Airport Marketing Plan.

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

- Stephen Shaw, (2007). Airline Marketing and Management, 6th Edition, Ashgate Publication
- David Jarach (2005). Airport Marketing, Ashgate Publication

**Reference Books**

- Daniel Prather C. Operating, Marketing and Managing an FBO, 3rd Edition; Ashgate publication
- Wells, Alexander T, Chadbourne, Bruce D (2003). General Aviation Marketing and Management Krieger Publishing Co.

**Other Reading Material**

- Publications related to Marketing Strategies at IATA website under economics section.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



## Course Title: **Business Process Design**

Course Code: **22MBADSE457**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Understand the different types of business process and its relevance
- Recognize the process for Business Process Reengineering and the best practices used in the industry
- Explore concepts and philosophy of Business Process Reengineering.
- Learn various BPR and alternate practices like Total Quality Management, Work Study, etc. in the industry.
- Comprehend the role of Information Technology and change management in BPR implementation.
- Interpret BPR implementation and best practices through real-life case discussions.

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Discern the process design significance and its relevance for the aviation and aerospace industry
CO 2	Use business process modelling techniques
CO 3	Use the steps in business process reengineering and its relevance to effectiveness and efficiency
CO 4	Automate business processes through discover, model, analyze, measure, improve, optimize stages
CO 5	Analyze, design and evaluate new business processes for effectiveness and efficiency

### **Course Contents:**

#### **Module 1: Process Management and Strategy-Products, Processes, and Performance** **9 Hours**

Business Process Management – Introduction, overview, relevance; “is this really the best way to do it?” - Owning your processes, managing your processes collaboratively, optimizing your processes, managing processes with automation; Three types of processes every business needs - Management processes, Operational processes, Supporting processes; The anatomy of a process - The problems processes solve, Using processes in business, The importance of good processes, The kinds of disasters that happen without processes; Human intervention to produce the desired result, defined and documented having the baseline for metrics, measurement and improvement.

#### **Module 2: Business Process Analysis** **9 Hours**

What process analysis looks like on a small scale; How to analyze existing business processes; The Process for Optimizing a Process; Note which steps can be automated; Increasing competition and pressure on reduction of costs led to concern over the level of safety provided by airline companies; insufficiently formulated documentation; Description and managing the organizational structure of the enterprise.

#### **Module 3 Business Process Modeling** **9 Hours**

The basic theory of business process mapping; Creating a Process Map from Scratch; Getting started with process mapping; The anatomy of a process map; Optimizing your process models; The process for creating a process map; Approach to business process modelling and notation; The quality of service or product and the relationships that are built with the customers; Case study on improving operational processes

**Module 4: Business Process Reengineering (BPR)**

**9 Hours**

BPR best practices from the expert; The Process for Business Process Reengineering; Identifying and Communicating the Need for Change; Analyze Business Processes; Implement Future State Changes.

**Module 5: Skill development through design of processes for real world business problems.**

**9 Hours**

Developing the required skills through design of process for the real-world business problems in the aviation and aerospace industry.

**Basic Texts**

- R. Radhakrishnan, S. Balasubramanian. (2010). Business Process, Reengineering, Text and Cases. Prentice Hall of India, New Delhi.

**Reference Books**

- Brandall Benjamin & Henshall Adam, 2017, The Complete Guide to Business Process Management, Process St.,USA.
- Chopra, Deshmukh, Mieghem & Zeme. 1999, Managing Business Process Flows,
- Jayanti Natarjan. (2002). Business Process Reengineering. TMH, New Delhi, 3. Kapoor Rajneesh. (2001). BusinessProcess Redesign. Global Business Press, Delhi.

**Other Reading Material**

- Richard Johnson Management, (2001). Processes for Quality Operations. Vision Books.
- Siddiqui Moid & Khwaja R.H. (2010). The Acrobatics of Change, 7th Reprint. Sage Publications India Pvt. Ltd. NewDelhi.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Maintenance, Repair and Overhaul in Aviation**

Course Code: **22MBADSE458**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Recognise the importance of supply chain management in the aviation industry
- Examine the aviation sector purchasing and inventory management
- Develop various strategies to manage supply chain issues in the aviation sector
- Understand the challenges involved in defence supply chain
- Recognise the various aircraft maintenance activities and role of MROs.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Analyse and discern Supply Chain Management of Aviation Industry
CO 2	Evaluate Supply chains in the Aviation Industry
CO 3	Examine purchasing and inventory management
CO 4	Analyse and develop strategy to manage the issues related to Supply Chain in the Defence Sector
CO 5	Examine and formulate MRO operations- Overhauls, Scheduled Maintenance & Repairs

**Course Contents:**

**Module 1: Supply chain Management and Procurement** **9 Hours**

Elements, Evolution, need and effect of Supply Chain Management, Integrated Logistics; Importance, objectives, goals of purchasing, purchasing process, Purchasing and other functions, Type of purchases, Outsourcing, Supplier selection, evaluation and measurement, Just-in Time (JIT) purchasing.

**Module 2: Inventory and Warehousing Management** **9 Hours**

Inventory- Financial impacts, classifications, and models; Warehousing- Rationale, Basic components, functions and productivity.

**Module 3: Defence Purchasing and Logistics** **9 Hours**

Introduction to Defence Purchasing and Logistics Support, Defence Logistics in India, International Collaboration, Logistics support issues in Defence

**Module 4: Maintenance of Aircrafts** **9 Hours**

Types of Maintenance, Airline Cost Structure, Maintenance costs – Direct and Indirect, Factors influencing Maintenance costs, Aircraft Maintenance Supply chain

**Module 5: MRO in Aviation** **9 Hours**

Activities under MRO, Approvals & Authorizations, Risks and responsibilities of MRO, MROs in India

**Basic Texts**

- Hugos Michael H, Essentials of Supply Chain Management, 3rd Edition, Pearsons.

**Reference Books:**

- Richter, Klaus, Walther, Johannes, Supply Chain Integration Challenges in Commercial Aerospace.
- Chopra, Meindl, Kalara, Supply Chain Management, Strategy, Planning and Operation, 6th Edition, Pearsons.

**Other reading material**

- ICAO MRO manuals
- ICAO CAR 145

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Customer Relationship Management in Aviation**

Course Code: **22MBADSE459**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### **Course Objectives:**

- Recognise the importance of customer service in the aviation industry
- Identify the numerous techniques of handling passenger grievances
- Recognise the need for cross cultural awareness
- Understand the role of stress and tough working conditions
- Udentify the latest trends in customer service

### **Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Identify Customer service as a key differentiator in the Aviation Industry
CO 2	Examine the latest trends in Customer Service
CO 3	Appraise the role of cross-cultural awareness in Customer Relationship Management
CO 4	Describe and examine the techniques of handling passenger complaints of an airline
CO 5	Examine the role of stress and pressure in working conditions of Aviation employees

### **Course Contents:**

#### **Module 1: Aviation Customer Service**

**9 Hours**

Customer Service, Airline Industry Challenges, Difference in customer service of a Low Cost Carrier, Customer Service as a Key Differentiator, Operational Excellence, The Customer Centric Culture, Customer acquisition cost, cost of losing a customer, Customer's Expectations of Service, Objectives and benefits of Customer Service.

#### **Module 2: Latest drifts in Customer Service**

**9 Hours**

The Always Connected Customer, Mobile Commerce, The Social Customer, Multi-Channel Customer Service, Customer Relationship Management (CRM), Customer Perception, Communication and its Meaning, Communication Barriers, effective listening, Non-verbal cues of customer service and its importance.

#### **Module 3: Customer Service and Cross-cultural awareness**

**9 Hours**

Customer Contact Techniques, Communication with Customers through Social Media Social System and Tact, Cross Cultural Awareness, The Importance of Self Awareness, Personality – Assertive vs Responsive Behaviors, Characteristics of the Four Social Styles – Social Style and Customer Service, identifying a Customer's Social Service, Flexing Strategies, Cross Cultural Awareness, Culture and Cultural Differences, The Importance of Cross Cultural Awareness

#### **Module 4: Handling Passenger Complaints**

**9 Hours**

Handling Passenger Complaints, Lack of Complaints, developing a Customer Service Strategy, Legitimate vs Illegitimate Complaints, Preventing Complaints, Handling Complaints effectively, The Complaints System, Dealing with Disengagement, Handling Customer Aggression as Airline Employee

**Module 5: Stress and Pressure****9 Hours**

Managing Stress and Pressure, The Difference Between Stress and Pressure, Sources of Stress, Consequences of Stress on Physical Health, Chronic Stress, Burnout Recognizing Stress, Reacting Positively Towards Stress, Reducing Stress, Healthy Workplaces, Coping with Shift Work and Overtime, working in a Unionized Organization, dealing with the Irregular Operations of an Airline, Maintaining a Healthy Back

**Basic Texts**

- Schulz, P. et. al., (2008). Customer Relationship Management: Lufthansa
- Ghose, IMA., (2008). Customer service in the airline industry

**Reference Books:**

- Schmid, Volker., (2005). Customer Relationship Management in the Aviation Industry

**Other reading material**

- IATA- Customer relationship
- MoCA- Passenger Charter

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Air Traffic Management and Navigation**

Course Code: **22MBADSE460**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

**Course Objectives:**

- Understand the various components of Air Traffic Management
- Recognise the various characteristics of aerodromes
- Examine the numerous en-route navigation aids
- Recognise the importance of landings aids and surveillance systems
- Understand and analyse aerodrome data

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO 1	Discuss the need for air navigation services and its importance
CO 2	Identify the numerous en-route navigation aids used
CO 3	Examine the separation standards and practices adopted in air traffic management
CO 4	Differentiate the various surveillance and security systems used in aviation
CO 5	Appraise the physical characteristics of aerodrome and examine the various standards applicable in-flight operations

**Course Contents:**

**Module 1: Air Navigation Services**

**9 Hours**

The Need of Air Navigation Services and its components, Functions and Objectives of Air Traffic Services, Air Traffic control operations and its network, The need for Communication, Navigation and Surveillance

**Module 2: En-route Navigation Aids**

**9 Hours**

Aeronautical Radio Navigation Service, Terrestrial and Satellite Navigation, Direction Finding, Radio range, Non- Directional beacon and Very High Frequency Omni Range, Distance measuring Equipment, Satellite Navigation Systems, Advantages over Terrestrial Navigation systems and need for its augmentation

**Module 3: Air Traffic Management**

**9 Hours**

Air traffic services, Separation standards, expediting traffic, providing advisory and Alert Air Traffic Services, Factors Influencing Air Traffic charges and their collection; Approach and Aerodrome control charges

**Module 4: Landing Aids, Surveillance and Security Systems**

**9 Hours**

Landing Aids in Aviation, Visual Landing Aids, Airport Lighting Systems, Instrument Landing System, categories and components. Ground Controlled Approach and Precision Approach Radar, Air Traffic Surveillance systems, Radars, Automatic Dependent Surveillance  
Airport Security surveillance monitoring System, Need, Components,

**Module 5: Aerodrome Data**

**9 Hours**

Physical Characteristics and Obstacles Restriction Aerodrome Data, Aerodrome Reference Code, Aerodrome Reference Point, Aerodrome Reference Temperature Instrumental Runway, Physical Characteristics, Length of Runway Visual, Visual Aids for Denoting Obstacle Emergency and other Services, Visual Aids for Navigation, Wind Direction Indicator

**Basic Texts**

- Bouman, R., (2005). Fundamentals of Ground Radar

**Reference Books:**

- Nolan, M.S., (2011). Fundamentals of Air Traffic Control
- Delahaye, D (2013). Modeling And Optimization Of Air Traffic
- Arblaster, M., (2018). Air Traffic Management- Economics, Regulation and Governance

**Other reading material**

- ICAO Annexures
- AAI Manuals

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



## Course Title: **Air Cargo Management**

Course Code: **22MBADSE461**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Appreciate the working of an air cargo agency
- Examine the handling of Dangerous Goods on-board an aircraft
- Understand and examine the various types of cargo aircraft
- Appraise the characteristics of aircraft loading and unloading
- Examine the importance and functions of airway bill

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Identify and interpret the working of an air cargo agency.
CO 2	Examine the various types and characteristics of aircraft loading and unloading.
CO 3	Compare the different types of goods carried on an aircraft and examine dangerous goods handling.
CO 4	Interpret the process of air cargo booking and developing an airway bill.
CO 5	Examine prevalent rates and charges pertaining to air cargo and appraise the importance of airway bill and marking

### Course Contents:

#### **Module 1: Introduction and Working of an Air Cargo Agency**

**9 Hours**

The IATA Cargo Agent; The Consolidator (Air Freight Forwarder); Operations, Service Functions; Liability, Geography and IATA 3-Letter codes; IATA Areas and SUB- AREAS; Time Differences; Calculation of Transportation Time; Industry Regulations- FIATA International Federation of Freight Forwarders Association.

#### **Module 2 Aircraft Characteristics & Loading Limitations**

**9 Hours**

Aircraft Structure; Bulk Loading Limitations; ULDS; Commodity Restrictions

#### **Module 3: Handling Facilities**

**9 Hours**

Airports, Aircraft Handling Facilities; Cargo Terminal Facilities, Custom Clearance Process, Cargo Acceptance, Different types of Cargo, Dangerous goods; Live Animals

#### **Module 4: Cargo Booking Procedures & Automations**

**9 Hours**

How to Make a Cargo Booking; Airline Booking Procedures, The OAG Cargo Guide, Functions of the Airway Bill; Completion of the Airway bill, Labeling and Marking

#### **Module 5: Air Cargo Rates, Charges and Airway Bill**

**9 Hours**

The Air Cargo Tariff (TACT); IATA Areas and Sub-areas; Chargeable Weight, Currencies, Rates & Charges; General Rules of Cargo Rates & Charges; Minimum Charges (M), General Cargo Rates (GCR); Specific Commodity Rates (SCR), Class Rates or Commodity Classification Rates; Lower Charge in Higher Weight

Category, Precedence of Rates & Charges; Valuation Charges, Charges Collect Shipments, Disbursement, Other Charges and Fees, Rating Concept within Europe. Completion, Labelling, Marking; Difference between Airway Bill and Bill of Lading

**Basic Texts**

- Pappachan, Joemon., (2020). Introduction to Air Cargo Management: - an illustrative reference material for beginners

**Reference Books:**

- Sales, Micheal., (2016). Air Cargo Management: Air Freight and the Global Supply
- Coyle, John., (2018). Transportation: A global supply chain perspective

**Other reading material**

- ICAO Annexures
- IATA Manuals

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Aviation Revenue Management**

Course Code: **22MBADSE462**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Adapt business processes and models to meet the current challenges facing the industry
- Providing a number of strategies to help increase and maximize revenue
- Use Airline Revenue Promotion and Enhancement
- Using Revenue Management concepts of Airports

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Grasp the concept of Revenue Management in Aviation Industry
CO 2	Affix the Business Models for Revenue Management
CO 3	Examine the techniques to improve revenue for both airline and airport Commercial Management
CO 4	Gauge the Economic viability of Airports & Aerotropolis
CO 5	Design new revenue Business Model for the betterment of aviation industry

### Course Contents:

#### Part-I: Airline Commercial Management

##### Module-01: Airline Commercial Activities- Overview **5 Hours**

Introduction. Airline Non-operational Revenue. Importance of Non-operational Revenue\*. Impact on profitability

##### Module-02: Airline Revenue Promotion and Enhancement **12 Hours**

Promotional programmes - On Board & On Ground. Profitable Business Models\* - Case Studies. Rules and procedures and Management of Frequent flyer programmes. In-flight catering programmes

Part-II: Airport Commercial Management

##### Module-03: Airport Commercial Activities- Overview **6 Hours**

Introduction. Evolution of Airport Commercial Management\*. Economic viability of Airports

##### Module-04: Business Models and their Impact on Profitability **10 Hours**

Airport as a profit center\*. Commercial use of Airport land. Concept of aerotropolis - Case studies

##### Module-05: Revenue Management of Airports **12 Hours**

Identifying the sources of Revenue. Creation of new Commercial Activity\*. Earmarking the facility. Concept of Minimum Reserve price. Duty Free Shops. Concept of Lease and Rentals. Tenders / awards / Management of Contracts. Billings and collection

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

### Basic Texts

- Foundations of Airport Economics and Finance by Hans-Arthur Vogel, 2019 Edition, Elsevier

### Reference Books

- Introduction to Air Transport Economics: From Theory to Applications by Bijan Vasigh, Ken Fleming and Thomas Tacker, Third Edition, 2018, Yaylor and Frances

### Other reading material

- Indigo-airlines-a-case-study
- kingfisher-airlines-a-case-study

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## Course Title: **Aviation Financial Management**

Course Code: **22MBADSE463**

Semester: **4**

Credits: **3**

Hours (LTP): **45 Hours**

### Course Objectives:

- Introducing learners to the concepts of financial management and enabling them to understand how they are applied in aviation decision-making
- Developing skills in data literacy and critical analysis based on aviation business model
- Enabling learners to discern among aviation businesses in terms of their financial performance
- Aiding learners to appraise various financing sources in aviation industry and to be able to judge the best alternative for a particular firm
- Equipping learners with the ability to understand and foresee an airport's larger economic role and comprehensive impact on direct and indirect beneficiaries

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO 1	Interpret the knowledge of management theories and industry practices to understand changes in airport revenue and expenditures in a specific context
CO 2	Access publicly available financial data and relate it to appropriate aspects of an aviation business model
CO 3	Critically compare and contrast the financial performance of competing airline companies
CO 4	Critique and justify the choice between sources of financing available to either an airport and to an airline company
CO 5	Create an Economic Impact Survey for a fictitious Airport in a city of your choice and interpret the various aspects using decision- making and problem-solving tools

### Course Contents:

#### Module 1: Airport Finance

**12 Hours**

Basic aspects of Financial Accounting, Financial Control and Auditing (Internal and external auditing.); Types of airports, Airport Revenue (Traffic & Non-Traffic; Operating, Non-operating & Capital), Airport Operational and Capital expenditure; Basis for Charging Airport facilities\*; Basis for determining the charges for Air traffic facilities and factors Influencing Air Traffic charges\*; Role of IATA/AERA/AAI\*; Aviation policy in India\*

#### Module 2: Financing Airport Infrastructure

**4 Hours**

General relevance of traffic forecasts, segmenting travellers; Traffic forecast techniques; Capital needs of an airport and sources of long-term capital; Economic Impact Surveys – general scope and specific content of economic impact surveys - identifying benefits and challenges, latest developments in aviation industry\*

#### Module3: Financial Plan for an Airport

**9 Hours**

Purpose and content of financial plan; Source of Financing: General, Domestic, Foreign sources, General, Bilateral institutions, Development banks and funds, United sources nation Development Programme, Commercial Source; Rules and Regulations governing import of Aviation Equipment\* Airport Insurance

**Module 4: Airline Finance****13 Hours**

Airline Cost of Capital; Financial Ratio and its importance to performance evaluation – types of ratios, objectives, advantages; inter airline comparison of financial ratios; Cash management and financial planning; Capital Budgeting\*

**Module 5: Aircraft Leasing and Accounting issues****7 Hours**

Sources of internal and external financing of assets; institutions involved in Aircraft Financing; Leasing concepts; Securitization of an Aircraft; Aircraft Insurance\*

(\*These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

- Morrell, P. S. (2021). *Airline finance*. Routledge.
- Lasher, W. R. (2011). *Financial management: A practical approach*. South-Western Cengage Learning.

**Reference Books**

- Bisset, M. (2017). *Aviation Finance & Leasing*.
- Brigham, E. F., & Ehrhardt, M. C. (2016). *Financial management: Theory & practice*. Cengage Learning.
- Jackson, J. (2016). Airline finance. *Air transport management: An international perspective*, 169.
- Vasigh, B. (2014). *Foundations of airline finance: Methodology and practice*. Routledge.
- Koh, A., Brigham, E. F., Ang, S. K., & Ehrhardt, M. C. (2014). Financial management: theory and practice. *Language*, 27(1087p), 25cm.
- Chandra, P. (2011). *Financial management*. Tata McGraw-Hill Education.
- Tretheway, M. W., & Oum, T. H. (1992). *Airline economics: foundations for strategy and policy*.

**Other reading material**

- Dube, K., Nhamo, G., & Chikodzi, D. (2021). COVID-19 pandemic and prospects for recovery of the global aviation industry. *Journal of Air Transport Management*, 92, 102022.
- Rodrigues, N. F. M. E. (2020). *Why is the aviation industry destroying shareholder value?* (Doctoral dissertation).
- Egli, F., & Stünzi, A. (2019). A dynamic climate finance allocation mechanism reflecting the Paris Agreement. *Environmental Research Letters*, 14(11), 114024.
- Karaman, A. S., Kilic, M., & Uyar, A. (2018). Sustainability reporting in the aviation industry: worldwide evidence. *Sustainability Accounting, Management and Policy Journal*.
- Hsu, C. C. (2017). Applying Z-score Models in Aviation Finance Education: A Case Study of Some US Carriers. *International Journal of Education and Social Science*, 4(3), 9-12.
- Keaveny, C., & Murray, S. (2013). Aviation finance and leasing. *Offshore Investment*, 239, 12-14.
- Margo, R. D. (1996). Aspects of insurance in aviation finance. *J. Air L. & Com.*, 62, 423.

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## SKILL ENHANCEMENT COURSES

SL NO	Course Code	Title of the Course	Credit	CA (%)	UE (%)	Semester
1	22MBASEC001	Report Writing and Presentation Skills	2	50	50	Semester I
2	22MBASEC002	Spreadsheets for Business Decision Making	2	50	50	Semester II to IV
3	22MBASEC003	Data Visualization	2	50	50	
4	22MBASEC004	Design Thinking	2	50	50	
5	22MBASEC005	Artificial Intelligence for Business	2	50	50	
6	22MBASEC006	Foundations of Econometrics	2	50	50	
7	22MBASEC007	Negotiation Skills	2	50	50	
8	22MBASEC008	Advanced Spreadsheet modelling for Business	2	50	50	
9	22MBASEC009	Identifying emerging technologies	2	50	50	



# **SYLLABUS**

## **Skill Enhancement Courses**

### **Semester - I**

Course Title: **Report Writing and Presentation Skills**

Course Code: **22MBASEC001**

Semester: **1**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives**

- Examine the importance of effective reports and presentations in business
- Develop effective report writing and presentation skills
- Understanding the tools and techniques of visually appealing presentations

**Course Outcomes (COs):**

CO1	Demonstrate an understanding of the importance of reports and presentation in professional environment
CO2	Create structured reports that are appropriate to the target audience
CO3	Create effective presentations appropriate to the objective
CO4	Employ the tools and techniques for visually appealing and meaningful reports.

**Course Content**

**Module1: Introduction to Report Writing & Presentation**

**8 hours**

Understanding the difference between report writing and other forms of writing; stages in report writing; different types of reports; understanding the audience for reports and presentations.

**Skill Sets:** Understand the nuances of Report Writing, audience analysis.

**Module 2: Structuring the Report**

**8 hours**

Understanding the content and tone for the Title Page, Acknowledgements; Content; Abstract and Executive Summary; Introduction; Methodology; Results or findings; Discussion; Conclusions and recommendations; References and Appendices

**Skill Sets:** Develop insights into the structure of long and short reports.

**Module 3: Structuring your presentation**

**8 hours**

Factors affecting Presentations; Strategy of Presentation; Structure of Presentation; Good delivery of Presentation; Features and advantages of Power Point; Rules of Power Point; adapting the presentation to the audience.

**Skill Sets :** Develop Presentation Skills.

**Module 4: Formatting your Reports and Presentation****6 Hours**

Formatting essentials for reports – numbering of figures, tables, use of footnotes and endnotes; Numbering of sections in the report; Microsoft Word basics; PowerPoint basics; Formatting essentials for Presentations

**Skill Sets :** Interpret conflicts and ethics in functional domains and to understand the ethical dimensions of decision making.

(\* These topics are categorized as 'Self-learning' topics and are subjected to testing)

**Basic Texts**

1. Van Emden, J., & Becker, L. (2016). *Presentation skills for students*. Macmillan International Higher Education.

**Reference Books**

1. Monippally, M. M., & Pawar, B. S. (2008). *Academic writing: A guide for management students and researchers*. SAGE Publications India.

**Other reading material**

<https://www.youtube.com/watch?v=860LrXP3rw>

<https://www.bangor.ac.uk/studyskills/study-guides/writing-reports.php.en>

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

# Semester - II to IV

## Course Title: Spreadsheets for Business Decision Making

Course Code: **22MBASEC002**

Semester:**2**

Credits:**2**

Hours (LTP): **30 Hours**

### Course Objectives:

- Understand basic excel
- Apply tools for data analysis

### Course Outcomes (COs):

At the end of the course, learners will be able to:

CO1	Apply spreadsheet tools to understand data manipulation.
CO2	Demonstrate business models using spreadsheet tools.
CO3	Illustrate MS Excel Practical Lab and functions.
CO4	Analyse large data sets using spreadsheet and modelling tools

### Course Contents:

#### Module 1: Understanding the MS Excel environment

**10 Hours**

MS Excel Practical Lab, Ribbon, QAT, Worksheet; interface of Excel, cursors and their roles, series; conditional formatting, cells, range; formula, references, split windows; values.

**Learning Outcome:** Apply MS Excel Practical Lab tools to datasets.

#### Module 2: Data representation using MS Excel Practical Lab

**7 Hours**

MS Excel Practical Lab, relative and absolute reference, charts and customizing charts.  
Learning Outcome: Solve problems related to reference ranges.

#### Module 3: Data validation

**7 Hours**

Data validation practical, data consistence, value, whole number, decimal, list, date, time, custom values, validation.

**Learning Outcome:** Describe data validation using the functions of MS Excel Practical Lab.

#### Module 4: Analyzing large data sets using MS Excel Practical Lab

**6 Hours**

Apply filter and advanced filter, pivot table, subtotal database function; data analysis.

**Learning Outcome:** Construct summary reports using pivot tables and apply filters for data analysis.

### Basic Text:

1. Walkenbach, J. (2018). The Excel Bible, 1/e. USA: Willey.

### Reference Book:

1. Microsoft Excel 2013: Data Analysis and Business Modeling.

**Other references:**

1. <https://support.office.com/en-us/article/getting-started-with-excel-services-and-excel-web-access-fed3586d-b150-4819-a67e-14529c974387>
2. [https://support.office.com/en-us/article/excel-for-windows-training-9bc05390-e94c-46af-a5b3-d7c22f6990bb?wt.mc\\_id=otc\\_home&ui=en-US&rs=en-US&ad=US](https://support.office.com/en-us/article/excel-for-windows-training-9bc05390-e94c-46af-a5b3-d7c22f6990bb?wt.mc_id=otc_home&ui=en-US&rs=en-US&ad=US)
3. [https://www.hubspot.com/resources?q=excel&\\_ga=2.30839551.1998448527.1559814869-1230591017.1559814869](https://www.hubspot.com/resources?q=excel&_ga=2.30839551.1998448527.1559814869-1230591017.1559814869)

**Evaluation Pattern:**

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks Block			
End Test : 10 Marks			

Course Title: **Data Visualization**

Course Code: **22MBASEC003**

Semester: **2**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Familiarize with the tableau and Power BI environment.
- Create charts using functions to generate data insights.
- Understand data aggregation and calculations for effective analysis.
- Build dashboards and custom spatial plots using spatial data.
- Conduct data visualizations using adhoc analysis.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Illustrate the importance of data visualization
CO2	Demonstrate visualization through different charts
CO3	Interpret the output
CO4	construct dashboard
CO5	Appraise use of Adhoc data analysis

**Course Contents:**

**Module 1: Visual Analytics**

**7 Hours**

Importance of Visual Analytics; Tableau and Power BI Versions and Installation; Sheets and Dashboards; Data Window, Data Types and Aggregation; Visualizations with Row and Column Shelves; View cards to Identify Trends and Outliers; Visual Analytics in Business Applications\*

**Module 2: Advanced Charts and Insights**

**7 Hours**

Chart by Show me, Cross Tab; Maps; Heat Maps; Bar Chart; Stacked Bar Chart; Side by side bars; Line Chart Scatter Plot; Packed Bubble chart; Sorting data; Filter data; Group Dimension; Time Series Analysis; Advanced Combinations Charts: Butterfly Chart, Dual Axis Chart\*.

**Module 3: Calculation to Enhance Data**

**7 Hours**

Aggregation in Charts; Aggregation Types; Calculated Value and Table Calculations; Building Formula using Table Calculation; Customizing Table Calculation; Calculation with Parameters; Standard Map; Tableau geocodes Data; Map Error; Spatial Data; Custom Spatial Plot; Animating Maps; Interactive Dashboards; Generating New Data with Forecasts; Forecasting Options; Quality metrics to tool tips; Export forecasts; Ad-hoc Analysis with Parameters; Basic Parameter Controls;

**Module 4: Visualization with Power BI**

**9 Hours**

Charts and Dashboards in Power BI; Calculations and Adhoc Analysis; Filters and Sorting

## Basic Texts

- Milligan, N.J. (2019). Learning Tableau. Packt.
- Murray, D.G. (2013). Tableau your Data! Fast and Easy Visual Analysis with Tableau Software. Wiley.

## Reference Books

- Jones, B. (2014). Communicating Data with Tableau: Designing, Developing, and Delivering Data Visualizations, O'reilly.
- Chellappan, A. S. (2017). Pro Tableau: A Step-by-Step Guide. Apress.
- Nussbaumer C.K. (2015). Storytelling with Data: A Data Visualization Guide for Business Professionals. Audible Studios.
- Munzner, T. (2014). Visualization Analysis & Design. CRC Press.
- Donabel S. (2018). Tableau 10 Business Intelligence Cookbook. Packt.
- Baldiwn, D. (2019). Mastering Tableau. Packt.
- Knight, D. (2018). Microsoft PowerBI QuickStart Guide: Build dashboards and visualizations to make your data come to life. Packt.

## Other reading material

- Matthew, S., Adebawale, S., Sarhan, M. Cajetan, A., Roy, P. (2016). Data Visualization. International Journal of Engineering Research and Advanced Technology. 12. 2454-6135.
- Olshannikova, E., Ometov, A., Koucheryavy, Y., Olsson, T. (2015). Visualizing Big Data with Augmented and virtual reality: Challenges and Research Agenda. Journal of Big Data. 2:22
- Giri Babu, T., Anjan Babu G. (2016). A Survey on Data Science Technologies & Big Data Analytics. International Journal of Advanced Research in Computer Science and Software Engineering Volume 6(2)
- <https://www.tableau.com/about/blog/2019/10/best-tableau-web-resources-learning-and-iterating>
- <https://public.tableau.com/en-us/s/resources>
- <https://www.tableau.com/learn>

## Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks Block			
End Test : 10 Marks			



Course Title: **Design Thinking**

Course Code **22MBASEC004**

Semester:**2**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Provide students with a working knowledge of the concepts, opportunities and applications of design thinking.
- Demonstrate the role of Design Thinking in generating innovative ideas and creating innovative responses to critical societal issues.
- Engage in collaborative learning processes through Design Thinking to develop a better understanding of the context and domain of Entrepreneurship.
- Prepare students personally and professionally for meaningful entrepreneurship action and engagement to produce desired outcomes.

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Illustrate theoretical frameworks and models in Design Thinking as a human centred approach.
CO2	Develop an entrepreneurial mindset that is creativity and innovation focussed.
CO3	Examine design thinking frameworks and stages of new venture creation.
CO4	Assemble design thinking tools and develop strategies for growth
CO5	Appraise problem solving approaches using design thinking frameworks involved in implementing a project

**Course Contents:**

**Module 1: Introduction to Design Thinking**

**6 Hours**

What is Design Thinking, Human Centered Approach, Key Elements of Design Thinking, How to Apply Design Thinking, Wicked Problems, Ideas, Where do Ideas come from, Ideas Need Linkage. Design Thinking Process.

**Module 2: Innovation and Mindset**

**6 Hours**

Creativity and Innovation, Empathy and Entrepreneurship Mindset, Growth Versus Fixed Mindset, Understanding the Customer, Customer Experience Map, Design Thinking Journey, Desirability, Viability and Feasibility.

**Module 3: Design Thinking Frameworks**

**6 Hours**

Different types of Design Thinking Framework, Stanford School of Design Framework, Empathies, Define, Ideate, Prototype, Testing, Empathy Map, Business Challenges, Design Thinking Solutions, Design Thinking Principles.

**Module 4: Design Thinking Tools**

**6 Hours**

Value proposition Canvas, Feasibility Analysis, Opportunity Analysis Canvas, Business Model Canvas, Lean Canvas, Strategy in Design Thinking, Collaboration, Experimentation, Premises of Design thinking – Integrative Thinking, Ambidextrous Thinking, Non Linear Process.

**Module 5: Design Thinking Problem Solving approach****6 Hours**

Divergent Thinking, Convergent Thinking, Visualisation, Sketching, Visual Alphabet, Problem Solving approach – What Is? What If?, What Was? What Works? Journey Map, Mind Mapping, Story Telling

**References:**

1. Designing for Growth: A Design Thinking Tool Kit for Managers, Jeanne Liedtka and Tim Ogilvie, Columbia Business School, Columbia University Press, 2016.
2. Change by Design, Tim Brown, Harper Collins, 2018.
3. Design Thinking for Strategic Innovation, Idris Mootee, Wiley 2016

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks Block			
End Test : 10 Marks			

Course Title: **Artificial Intelligence for Business**

Course Code: **22MBASEC005**

Semester:2

Credits:2

Hours(LTP): **30Hours**

**Course Objectives:**

- Familiarize with the concept of AI
- Demonstrate awareness and a fundamental understanding of various applications of AI techniques.
- Understand the application of artificial neural network
- Implement the use of NLP in Business

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Illustrate the importance of AI
CO2	Demonstrate Reasoning system for categories
CO3	Illustrate the use of Artificial neural network
CO4	Appraise use of NLP for solving business problems

**Course Contents:**

**Module1 : Introduction**

**8 Hours**

Introduction: What is AI; Foundations of Artificial Intelligence; History of Artificial Intelligence; The state of Art; Intelligent Agents: Agent and Environments; Good Behavior; The Nature of Environments; The Structure of Agents;

**Module 2: Knowledge Representation**

**8 Hours**

Knowledge Representation: Ontological engineering; Categories and object; Action, situations and events; Mental events and mental objects; The internet shopping world; Reasoning system for categories; Reasoning with default information; Truth maintenance system. Application of AI in Business. Applications of computer vision

**Module 3: Neural networks and genetic algorithms for Solving Business Problems**

**8 Hours**

Brief history and Evolution of Neural network, Biological neuron.

Learning: Forms of learning; Inductive learning, Computational learning theory. Case study for solving business application.

**Module 4: Overview and language modeling**

**6 Hours**

Overview: Origins and challenges of NLP-Language and Grammar-Processing Indian Languages- NLP, Text Augmentation, Text Visualization, Applications-Information Retrieval. Business challenges and opportunities to deployment of NLP.

**Basic Texts**

Artificial Intelligence, A Modern Approach, Stuart J. Russell and Peter Norvig, Third Edition, Pearson, 2010  
2. Tanveer Siddiqui, U.S. Tiwary, "Natural Language Processing and Information Retrieval", Oxford University Press, 2008.

Elaine Rich, Kevin Knight: Artificial Intelligence, 3rd Edition, Tata Mc Graw Hill, 2009.

**Reference Books**

Knight, D. (2018). Microsoft Power BI Quick Start Guide: Build dashboards and visualizations to make your data come to life. Packt.

Computer Vision: Algorithms and Applications (CVAA), Richard Szeliski, Springer, 2nd edition, 2020

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Foundation of Econometrics**

Course Code: **22MBASEC006**

Semester:**2** Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives**

- Explain basic econometric concepts with a special focus on the classical linear regression model
- Understand the problems and solutions of econometric techniques.
- Apply the theoretical knowledge of econometric tools on statistical software (SPSS/STATA/EViews)
- Interpret and critically evaluate the results and finding of the econometric model framed based on the secondary data collected.

**At the end of the course, learners will be able to:**

CO1	Examine core econometric analysis with special focus on classical linear regression model
CO2	Identify econometric problems in relation to classical linear regression model
CO3	Outline remedial measures with respect to the econometric problems
CO4	Construct econometric model by applying theoretical knowledge into practice with the help of software.
CO5	Interpret the findings from the econometric models.

**Course Contents:**

**Module 1: Introduction to Econometrics**

**6 Hours**

Econometrics- Meaning, Objective, Methodology; Econometric terminology: variables-dependent and independent variable, stochastic, Origin of term Regression, significance of error term, regression vs correlation, nature and sources of data for econometric analyses: Time series data and Cross Section data, accuracy of data, *measurement scale of variables.* \*

**Module 2: Classical Linear Regression Model (one and Two variable)**

**10 Hours**

**Simple Linear Regression (One Variable):** Assumption of SLR and economic interpretation, **Two variable regression model:** Method of Ordinary Least Square method, Assumption underlying the least square method, Properties of Least square estimator- The Gauss-Markov Theorem, **Classical Linear Regression Model (The three variable model):** Multiple regression analysis- notation, assumption of multiple regression model, interpretation of the result,  $R^2$ , adjusted  $R^2$  Coefficient of determination, Standard error, Method of maximum likelihood. *ANOVA, Chi square, t- test, F-test, Z- test, P value etc.\**

**Module 3: Violations of the Assumptions of the Classical Model**

**10 Hours**

**Multicollinearity:** Sources of multicollinearity, consequences of multicollinearity, detection of multicollinearity and remedial measures. **Autocorrelation:** Reasons for autocorrelation, Detection of autocorrelation problems: graphical and formal method and remedial measures. **Heteroscedasticity-**

reasons of heteroscedasticity, detection of heteroscedasticity, measures- ARCH and GARCH model, **Specification Error**- Sources of specification error, Consequences of specification error and remedial measures. *Hypothesis testing, confidence interval and test of significance etc.\**

**Module 4: The Functional form and Dummy Variables**

**4 Hours**

Functional forms of regression models, Concept of Dummy Variable, Uses of Dummy Variable, Dummy Dependent Variable Model- Linear probability model, Logit Model and Probit Model –**Dependent and independent variable, error term\***

(\* These topics are categorized as ‘Self-learning’ topics and are subjected to testing)

**Basic Texts**

1. Damodar Gujarati and Dawn C Porter (2012). *Basic Econometrics*. 5th Edition, Tata McGraw-Hill Education Publishers Ltd.

**Other reading material**

1. A. Koutsoyiannis (1992). *Theory of Econometrics*. 2nd Edition, Macmillan Publications Ltd.
2. Jeffrey M. Wooldridge, Introduction to Econometrics: A Modern Approach, 5th Edition, Cengage Learning, 2014.

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Negotiation Skills**

**Course Code: 22MBASEC007**

**Semester: 2**

**Credits: 2**

**Hours (L-T-P): 30**

**Course Objectives**

- Creating and understanding of the theory and process of effective negotiations.
- Introducing students to cutting-edge frameworks, concepts and tools being used to negotiate effectively.
- Enabling students to develop technical and diagnostic skills for negotiations.

**Course Outcomes:**

CO1	Define negotiation and Identify steps in preparation of negotiation.
CO2	Use different personality styles and cultures to negotiate effectively.
CO3	Identify principled negotiation and the four steps in the negotiation process.
CO4	Implement bargaining techniques and to move from bargaining to closing.

**Module 1: Introduction to Negotiations**

**6 hours**

Identify the qualities of successful and unsuccessful negotiators; Define negotiation and provide examples of when you have negotiated in and outside work; Identify a negotiation situation you will practice during class; Simple, Two-Party Negotiations & “Negotiator’s Dilemma”

**Module 2: Influence of Personality Types and Culture on Negotiations**

**7 hours**

Benefits of knowing personality styles; Behaviors as well as the strengths/weaknesses of each personality style; Working more effectively with each personality style while negotiating.

Culture types; Choosing a negotiation strategy based on relationship and results; Identifying the differences between “Soft” and “Hard” negotiating; Identify the four steps in the negotiation process.

**Module 3: Preparing for and Communicating during Negotiations**

**10 hours**

Identify fears and “hot buttons “as well as strategies to overcome them; Define your BATNA (best alternative to a negotiation agreement), WATNA (worst alternative to a negotiation agreement), WAP (walk away point) and ZOPA (zone of possible agreement).

Communication in Negotiations: Written, Oral and Body Language; Opening the negotiation, Create a positive first impression, Setting ground rules can influence a negotiation; Exchange of information and bargaining; Handling opposition/ objections/ Handling Disputes

**Module 4 : Closing the Negotiation**

**7 hours**

Moving from bargaining to closing; Closing process; Multiparty Negotiations & Group Negotiations; Winning in Negotiations and Result Analysis

**Reference Books:**

1. Carrell, M. R., & Heavrin, C. (2008). *Negotiating essentials: theory, skills, and practices*. Pearson/Prentice Hall.
2. Udai, P. (2004). *Understanding Organizational Behavior*. Oxford University Press, New Delhi, 57-59.

**Other reading material**

- Malhotra, D., & Bazerman, M. (2007). *Negotiation genius: How to overcome obstacles and achieve brilliant results at the bargaining table and beyond*. Bantam.
- Winning, B. *Beyond Winning: Negotiating to Create Value in Deals and Disputes*.
- Noesner, G. (2018). *Stalling for time: My life as an FBI hostage negotiator*. Random House Trade Paperbacks.
- Fredrik, S. (2011). *Great negotiations. Agreements that changed the modern world*.

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			



Course Title: **Advanced Spreadsheet Modelling for Business**

Course Code: **22MBASEC008**

Semester:**2**

Credits:**2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Attain competence in advanced excel formulas
- Implement data validations in excel based applications for data consistency
- Interpret the summary reports related to business data
- Apply the models for decision making

**Course Outcomes (COs):**

At the end of the course, learners will be able to:

CO1	Examine data efficiently using advanced Excel functions and tools
CO2	Solve different problems using add-ons for modelling in Excel
CO3	Infer solutions for complex problems through Qualitative and Quantitative Techniques
CO4	Develop different models for decision making

**Course Contents:**

**Module 1: Basics of MS Excel**

**8 Hours**

Conditional Formatting; Formula; References; Data Validation; Apply Filter and Advanced Filter; Pivot Table; Subtotal Database Function; Mathematical Functions; Text Function; Date and Time Functions; Lookup Function; Logical Functions; **Match Function; Index Function.** \*

**Module 2: Modelling using Excel Add-ons**

**8 Hours**

Analysis Tool Pack for Statistical Analysis; Solver for Optimization; People Graph for Interactive Storytelling; QR4Office for integrating QR code seamlessly into document ASAP for efficient functionality; Kutool for **Advanced Functions and Tools; and Quantl for Data Sets.** \*

**Module 3: Modelling of Qualitative and Quantitative Techniques**

**6 Hours**

Linear Programming; Goal Programming; Interpreting Reduced Costs; Shadow Price and Deviation Sensitivity Analysis. \*

**Module 4: Applications to Business Environment**

**8 Hours**

Techniques to Develop Models for Manufacturing; e-commerce and Service Industry; Models for Decision Making in Marketing; Supply Chain, and Finance Domain; Usage of Existing Templates, and Creation of **New Templates. Developing Inventory Management Model for Manufacturing/Retail/Hospital/Restaurant** \*

**Basic Text**

Walkenbach, J., Alexander, M., & Kusleika, R. (2018). Microsoft Excel 2019 Bible. Wiley.

Winston, W. L. (2013). Microsoft Excel 2013: Data Analysis and Business Modeling. Microsoft Press.

Anne, P. M. (2016). Exploring Microsoft Office Excel 2016 Comprehensive. Pearson Education (US).

### Other Reference

Fairhurst. (2019). Using Excel for Business and Financial Modelling: A Practical Guide. Wiley.

Harvey, G. (2018). Excel 2019 For Dummies. Wiley.

Scott, A. (2015). Microsoft Excel 2016: Comprehensive. Labyrinth Learning.

### Other reading material

- [www.guru99.com](http://www.guru99.com)
- [www.linkedin.com](http://www.linkedin.com)
- [www.excel-easy.com](http://www.excel-easy.com)
- <https://corporatefinanceinstitute.com/resources/excel/study/>
- <https://corporatefinanceinstitute.com/resources/excel/study/excel-modeling-best-practices/>
- <https://courses.corporatefinanceinstitute.com/courses/free-excel-crash-course-for-finance>

### Evaluation Pattern:

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

Course Title: **Identifying Emerging Technologies**

Course Code: **22MBASEC009**

Semester: **2**

Credits: **2**

Hours (LTP): **30 Hours**

**Course Objectives:**

- Most Organization falls into three disciplines: technology, business alignment, and development. Technology is an important driver of all changes in the business and society. Timely and relevant insights, can bring new ideas to the table and fresh perspectives to the organization's existing knowledge base. It is essential to establish a knowledge-learning mindset within students and help them with skills to stay up-to-date with the latest innovations advancing in different industries. Students need to understand the trends to enable them to chart the right course.

**Course Outcomes (COs):**

At the end of the course, the learner will be able to:

CO 1	Build Competency to showcase to potential employers their mastery of the most current core technology literacy areas.
CO 2	Audit current technology portfolio of select firm and its industry
CO 3	Develop a "never stop learning" attitude that helps to keep everyone open to new information, inventive approaches, and progressive techniques.
CO 4	Synthesize knowledge to identify technology to be adopted, likely to be mainstreamed.

**Course Contents:**

**Module 1: Technology Strategy**

**8 Hours**

A vision of change, shaping technology strategy and corporate versus business strategy

Strategic risk, innovation typology, process and outcome metrics Technology strategy portfolio and measuring (Audit) portfolio success The decision process for managing and driving the portfolio Strategic thinking for the CXO/CTO/CIO.

The impact of technology on society and developing a plan and vision for the future

**Module 2: Immersive Technology**

**6 Hours**

Virtual, augmented, and mixed reality, and explore virtual environments at work, in school, or at home. High-performance computing, bubbles and eco chambers, and IoT hacks. **Discussion of blockchain, artificial intelligence, and machine and deep learning.** Traditional and cloud-based IT infrastructure

**Quantum computing.**

Empowered innovation leadership, fair process and its challenges

Boston CIO Leadership Association (BCLA) and the Mass Technology Leadership Council (MassTLC).

**Module 3: Processes and execution**

**6 Hours**

- Digital disruption: digital transformation strategies
- FinTech innovation: disrupting the financial landscape
- Business analytics: decision making using data
- Building technology ventures
- New product development, marketing and management
- Innovation in the digital age

**Module 4: Skill building in *Technology widgets*****10 Hours**

- Inter-firm collaboration, partner contracting and contract design
- Identify new technologies in the market
- How to Create a customized dashboard or news feed?
- Follow leading thought-leaders on industry
- Explore trending projects or top starred projects
- Sign up for ‘new feature’ alerts and announcement emails from leading technology platforms
- Tools for brainstorming, workshops & getting overview Flipboards, MethodKit Cards etc.

**Basic Texts**

Visualizing Technology, 9th Edition

Debra Geoghan, Bucks County Community College

©2022 Pearson ISBN-13: 9780136926610

**Reference Books:**

- Technology In Action, 17th Edition
- Alan Evans, Montgomery County Community College
- Kendall Martin, Montgomery County Community College
- Mary Anne Poatsy, Montgomery County Community College ©2022 Pearson

**Other reading and skill building material**

- Technology Radar to Identify new technologies in the market. (An opinionated guide to technology frontiers Thoughtworks)
- How to Create a customized dashboard or news feed (apps Panda usepanda.com) or Pocket getpocket.com))
- Thought-leaders on industry
- (publications - TechCrunch <https://techcrunch.com/> and Recode
- Video content from Two Minute Papers <https://techcrunch.com/>
- <https://www.youtube.com/user/keeroyz>, The Verge,
- <https://www.youtube.com/channel/UCddiUEpeqJcYeBxX1IVBKvQand> WIRED
- <https://www.youtube.com/channel/UCftwRNsJfRo08xYE31tkiyw>.
- Trending projects or top starred projects <https://github.com/trending>  
<https://github.com/search?q=stars:%3E1&s=stars&type=Repositories> on github

Continuous Evaluation		End Semester Examination	Total
Class Participation : 10 Marks	50 Marks	50 Marks	100 Marks
Assessment 1 : 10 Marks			
Assessment 2 : 10 Marks			
Assessment 3 : 10 Marks			
Block End Test : 10 Marks			

## FACULTY OF MANAGEMENT STUDIES (MBA)

### CALENDAR OF EVENTS

#### ACADEMIC YEAR 2022 – 2023: 1<sup>st</sup> SEMESTER

SL. No.	DATE	EVENTS
01	25 <sup>th</sup> Jul 2022	Foot Steps
02	01 <sup>st</sup> Aug 2022	Inauguration of MBA Batch 2022 - 24
03	02 <sup>nd</sup> to 08 <sup>th</sup> Aug 2022	Bridge Course
04	05 <sup>th</sup> Aug 2022	Holiday – Varamahalakshmi Vratha
05	09 <sup>th</sup> Aug 2022	Holiday - Muharram
06	10 <sup>th</sup> to 20 <sup>th</sup> Aug 2022	Boot Camp
07	15 <sup>th</sup> Aug 2022	Holiday – Independence Day
09	22 <sup>nd</sup> Aug 2022	Commencement of 1 <sup>st</sup> Semester Classes Starting of the Block 1
10	22 <sup>nd</sup> Aug to 12 <sup>th</sup> Sep 2022	Block 1: Sessions & Continuous Assessment's
11	29 <sup>th</sup> Aug 2022	Holiday – Intervening Holiday
12	30 <sup>th</sup> Aug 2022	Holiday – Swarna Gowri Vratha
13	31 <sup>st</sup> Aug 2022	Holiday – Ganesh Chaturthi
14	13 <sup>th</sup> to 17 <sup>th</sup> Sep 2022	Introduction to PCL, DSE Courses, etc
15	19 <sup>th</sup> Sep to 15 <sup>th</sup> Oct 2022	Block 2: Sessions & Continuous Assessment's
16	03 <sup>rd</sup> Oct 2022	Holiday (Intervening Holiday)
17	04 <sup>th</sup> Oct 2022	Holiday – Mahanavami/ Ayudhapooja
18	05 <sup>th</sup> Oct 2022	Holiday - Vijayadashami
19	17 <sup>th</sup> Oct to 17 <sup>th</sup> Nov 2022	Block 3: Sessions & Continuous Assessment's
20	18 <sup>th</sup> & 19 <sup>th</sup> Oct 2022	Parichay - 2022
21	24 <sup>th</sup> Oct 2022	Holiday – Naraka Chaturdashi
22	25 <sup>th</sup> Oct 2022	Holiday – Holiday (Intervening Holiday)
23	26 <sup>th</sup> Oct 2022	Holiday – Balipadyami Deepavali
24	01 <sup>st</sup> Nov 2022	Holiday – Kannada Rajyothsava
25	11 <sup>th</sup> Nov 2022	Holiday - Kanakadasa Jayanti
26	18 <sup>th</sup> Nov to 10 <sup>th</sup> Dec 2022	Block 4: Sessions & Continuous Assessment's
29	24 <sup>th</sup> Dec to 31 <sup>st</sup> Dec 2022	Winter Break
30	07 <sup>th</sup> Jan 2023	Last Instructional Day
32	11 <sup>th</sup> Jan to 04 <sup>th</sup> Feb 2023	University Examination & Evaluation – 1 <sup>st</sup> Semester
33	06 <sup>th</sup> Feb 2023	Commencement of 2 <sup>nd</sup> Semester classes
34	1 <sup>st</sup> Week of Mar 2023	Announcement of Results for 1 <sup>st</sup> Semester