



MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

Sponsored by CMR Educational Society

(Affiliated to JNTU, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC – 'A' Grade - ISO 9001:2015 Certified)

Maisammaguda, Dhulapally (Post Via Hakimpet), Secunderabad – 500100, Telangana State, India.

Contact Number: 040-23792146/64634237, E-Mail ID: mrcet2004@gmail.com, website: www.mrcet.ac.in

MASTERS PROGRAMME

DEPARTMENT OF BUSINESS MANAGEMENT(MBA)

ACADEMIC REGULATIONS COURSE STRUCTURE AND SYLLABUS

(Batches Admitted from the Academic Year 2025 - 2026)

Note: The regulations hereunder are subject to amendments as may be made by the Academic Council of the College from time to time. Any or all such amendments will be effective from such date and to such batches of candidates (including those already pursuing the program) as may be decided by the Academic Council.

FOREWORD

The autonomy is conferred on Malla Reddy College of Engineering & Technology (MRCET) by UGC based on its performance as well as future commitment and competency to impart quality education. It is a mark of its ability to function independently in accordance with the set norms of the monitoring bodies like UGC and AICTE. It reflects the confidence of the UGC in the autonomous institution to uphold and maintain standards it expects to deliver on its own behalf and thus awards degrees on behalf of the college. Thus, an autonomous institution is given the freedom to have its own curriculum, examination system and monitoring mechanism, independent of the affiliating University but under its observance.

Malla Reddy College of Engineering & Technology (MRCET) is proud to win the credence of all the above bodies monitoring the quality in education and has gladly accepted the responsibility of sustaining, and also improving upon the values and beliefs for which it has been striving for more than a decade in reaching its present standing in the arena of contemporary technical education. As a follow up, statutory bodies like Academic Council and Boards of Studies are constituted with the guidance of the Governing Body of the College and recommendations of the JNTU Hyderabad to frame the regulations, course structure and syllabi under autonomous status.

The autonomous regulations, course structure and syllabi have been prepared after prolonged and detailed interaction with several experts drawn from academics, industry and research, in accordance with the vision and mission of the college which reflects the mindset of the institution in order to produce quality engineering graduates to the society.

All the faculty, parents and students are requested to go through all the rules and regulations carefully. Any clarifications, if needed, are to be sought at appropriate time and with principal of the college, without presumptions, to avoid unwanted subsequent inconveniences and embarrassments. The Cooperation of all the stake holders is sought for the successful implementation of the autonomous system in the larger interests of the institution and brighter prospects of engineering graduates.

“A thought beyond the horizons of success committed for educational excellence”

PRINCIPAL

PRELIMINARY DEFINITIONS AND NOMENCLATURES

*"Autonomous Institution /College" means an institution/college designated as autonomous institute / college by University Grants Commission (UGC), as per the UGC Autonomous College Statutes.

*"Academic Autonomy" means freedom to a College in all aspects of conducting its academic programs, granted by the University for promoting excellence.

*"Commission" means University Grants Commission.

*"AICTE" means All India Council for Technical Education.

*"University" means the Jawaharlal Nehru Technological University, Hyderabad.

*"College" means Malla Reddy College of Engineering & Technology, Secunderabad unless indicated otherwise by the context.

*"Program" means: Master of Business Administration Degree Program PG Degree Program

*"Branch" means specialization in a program like MBA Degree Program.

*"Course" or "Subject" means a theory or practical subject, identified by its course – number and course-title, which is normally studied in a semester.

*T–Tutorial, P–Practical, D–Drawing, L–Theory, C–Credits



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VISION

- ❖ To establish a pedestal for the integral innovation, team spirit, originality and competence in the students, expose them to face the global challenges and become pioneers of Indian vision of modern society.

MISSION

- ❖ To become a model institution in the fields of Engineering, Technology and Management.
- ❖ To impart holistic education to the students to render them as industry ready engineers.
- ❖ To ensure synchronization of institute ideologies with challenging demands of International Pioneering Organizations.

QUALITY POLICY

- ❖ To implement best practices in Teaching and Learning process for both UG and PG courses meticulously
- ❖ To provide state of art infrastructure and expertise to impart quality education.
- ❖ To groom the students to become intellectually creative and professionally competitive.
- ❖ To channelize the activities and tune them in heights of commitment and sincerity, the requisites to claim the never-ending ladder of **SUCCESS** year after year.

For more information: www.mrcet.ac.in



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VISION of the MBA Department

- ❖ To be an indispensable source in management education which has the zeal to provide the value driven platform for the students to acquire knowledge and power themselves to shoulder higher responsibility in building a strong nation.

MISSION of the MBA Department

- ❖ To promote Quality Management Education and Research in pace with Time & Technology.
- ❖ Integrate Intellectual Capital of Students to get transformed into Vibrant Leaders.

QUALITY POLICY of the MBA Department

- ❖ Identifying and promoting Potentiality of Individuals.
- ❖ Providing the „best in class“ contemporary management education through
 - Promoting effective and teaching learning culture in judicious manner.
 - Inculcating Entrepreneurial skills to the expectations of robust industry.
 - Fostering learning, Creativity and Teamwork.
- ❖ Adherence to Commitment.

Academic Regulations R-25 For MBA (Regular) Degree Course

Academic Regulations of R-25 are applicable for the students of MBA Course from the Academic Year 2025-26 and onwards. The MBA Degree of Malla Reddy College of Engineering & Technology (MRCET), Secunderabad shall be conferred on candidates who are admitted to the program and who fulfill all the requirements for the award of the Degree.

1.0 Eligibility for Admissions

Admission to the above program shall be made subject to eligibility, qualification and specialization as prescribed by the University from time to time.

Admissions shall be made on the basis of merit/rank obtained by the candidates at the qualifying Entrance Test conducted by the University (or) State Government (or) on the basis of any other order of merit as approved by the University, subject to norms as laid down by the State Govt. from time to time.

2.0 Award of MBA Degree

A student shall be declared eligible for the award of the MBA Degree, if he pursues a course of study in not less than two and not more than four academic years.

A student, who fails to fulfill all the academic requirements for the award of the degree within four academic years from the year of his admission, shall forfeit his seat in MBA course.

The student shall register for all 105 credits and secure all the 105 credits.

The minimum instruction days in each semester are 90.

3.0 Course of Study

The following specializations are offered at present for the MBA course of study.

- a. Business Analytics
- b. Finance
- c. Human Resource Management
- d. Marketing

and any other course as approved by the MRCET from time to time.

4.0 Attendance

- 4.1. The programs are offered on a unit basis with each subject being considered a unit.
- 4.2. A student shall be eligible to write University examinations if he acquires a minimum of 75% of attendance in aggregate of all the subjects.
- 4.3. Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester shall be granted by the College Academic Committee.
- 4.4. Shortage of Attendance below 65% in aggregate shall not be condoned.
- 4.5. Students whose shortage of attendance is not condoned in any semester are not eligible to write their end semester examination of that class and their registration shall stand cancelled.
- 4.6. A prescribed fee shall be payable towards Condonation of shortage of attendance.
- 4.7. A student shall not be promoted to the next semester unless he satisfies the attendance requirement of the present semester, as applicable. They may seek readmission into that semester when offered next. If any candidate fulfills the attendance requirement in the present semester, he shall not be eligible for readmission into the same class.
- 4.8. In order to qualify for the award of the MBA Degree, the candidate shall complete all the academic requirements of the subjects, as per the course structure.
- 4.9. A student shall not be promoted to the next semester unless he satisfies the minimum academic requirements of the previous semester.

5.0 Evaluation

- 5.1. The performance of the candidate in each semester shall be evaluated subject-wise, with a maximum of 100 marks for theory and 100 marks for practical's, on the basis of Internal Evaluation and End Semester Examination.
- 5.2. For the theory subjects 60 marks shall be awarded based on the performance in the End Semester Examination and 40 marks shall be awarded based on the Internal Examination Evaluation. The internal evaluation consists of two mid-term examination of 40 marks each covering descriptive paper.
- 5.3. However, any student scoring internal marks less than 40% will be given a chance to write the internal exam once again after he/she re-registering for the concerned subject and paying stipulated fees as per the norms.
- 5.4. The end semesters examination will be conducted for 60 marks with sections, section A for 10 questions carries 10 marks (one mark each) and section B consists of 5 of 10 marks each.
- 5.5. For practical subjects, 60 marks shall be awarded based on the performance in the End Semester Examinations and 40 marks shall be awarded based on the day-to-day performance as Internal Marks.
- 5.6. There shall be one seminar presentation during I Year I & II Semester, II Year I semester and four presentations in II Year II Semester. For seminar, a student under the supervision of a faculty member, shall collect the literature on a topic and critically review the literature and submit it to the department in a report form and shall make an oral presentation before the Departmental Academic Committee consisting of

Head of the Department, Supervisor and two other senior faculty members of the department. For each Seminar there will be only internal evaluation of 100 marks. A candidate has to secure a minimum of 50% of marks to be declared successful.

- 5.7. A candidate shall be deemed to have secured the minimum academic requirement in a subject if he secures a minimum of 40% of marks in the End semester Examination and a minimum aggregate of 50% of the total marks in the End Semester Examination and Internal Examination taken together.
- 5.8. In case the candidate does not secure the minimum academic requirement in any subject, he has to reappear for the End semester Examination in that subject.
- 5.9. A candidate shall be given one chance to re-register for each subject provided the internal marks secured by a candidate are less than 50% and so failed in the end examination. In such case, the candidate must re-register for the subject(s) and secure the required minimum attendance. The candidate's attendance in the re-registered subject(s) shall be calculated separately to decide upon his eligibility for writing the end examination in those subject(s). In the event of the student taking another chance, his internal marks and end examination marks obtained in the previous attempt stand cancelled.
- 5.10. In case the candidate secures less than the required attendance in any subject, he shall not be permitted to write the End Examination in that subject. He shall re-register the subject when next offered.
- 5.11. Laboratory examination must be conducted with two Examiners, one of them being the Laboratory Class Teacher and the second examiner shall be another Laboratory Teacher.

6.0 Evaluation of Project/Dissertation Work

- 6.1. Every candidate shall be required to submit a thesis or dissertation on a topic approved by the Project Review Committee.
- 6.2. A Project Review Committee (PRC) shall be constituted with Principal as Chairperson, Head of the Department offering the MBA program and two other senior faculty members.
- 6.3. Registration of Project Work: A candidate is permitted to register for the project work after satisfying the attendance requirement of all the subjects, both theory and practical.
- 6.4. After satisfying the above a candidate has to submit the Synopsis, in consultation with his project supervisor, the title, objective and plan of action of his project work to the Departmental Academic Committee for approval. Only after obtaining the approval of the Departmental Academic Committee can the student initiate the Project work.
- 6.5. If a candidate wishes to change his supervisor or topic of the project, he can do so with the approval of the Departmental Academic Committee.
- 6.6. However, the Departmental Academic Committee shall examine whether or not the change of topic/supervisor leads to a major change of his initial plans of project proposal. If yes, his date of registration for the project work starts from the date of change of Supervisor or topic as the case may be.
- 6.7. A candidate shall submit his status report in a bound-form in two stages at least with a gap of 3 months between them.

- 6.8. The work on the project shall be initiated at the beginning of the II year and the duration of the project is two semesters. A candidate is permitted to submit Project Thesis only with the approval of PRC not earlier than 40 weeks from the date of registration of the project work. For the approval of PRC the candidate shall submit the draft copy of thesis to the Principal through Head of the Department and make an oral presentation before the PRC.
- 6.9. Three copies of the Project Thesis certified by the supervisor shall be submitted to the College/School/Institute.
- 6.10. The thesis shall be adjudicated by one examiner selected by the University. For this, the Principal of the College shall submit a panel of 5 examiners, eminent in that field, with the help of the guide concerned and head of the department.
- 6.11. If the report of the examiner is not favorable, the candidate shall revise and resubmit the Thesis, in the time frame as decided by the PRC. If the report of the examiner is unfavorable again, the thesis shall be summarily rejected.
- 6.12. If the report of the examiner is favorable, Viva-Voce examination shall be conducted by a board consisting of the Supervisor, Head of the Department and the examiner who adjudicated the Thesis. The Board shall jointly report the candidate's work as one of the following:
 - A. Excellent
 - B. Good
 - C. Satisfactory
 - D. Unsatisfactory
- 6.13. The Head of the Department shall coordinate and make arrangements for the conduct of Viva- Voce examination.
- 6.14. If the report of the Viva-Voce is unsatisfactory, the candidate shall retake the Viva-Voce examination only after three months. If he fails to get a satisfactory report at the second Viva- Voce examination, he will not be eligible for the award of the degree.
- 6.15. In order to encourage practical thinking and application of management knowledge, 6 credits internships/ Field work is mandatory to award the degree.
- 6.16. It is resolved, to conduct project viva-voce examination to each and every student of final semester, regardless the number of subjects holds as backlogs.

7.0 Award of Degree and Class

In assessing the performance of the students in examinations, the usual approach is to award marks based on the examinations conducted at various stages (sessional, mid-term, end-semester etc.,) in a semester. As per UGC Autonomous guidelines, the following system is implemented in awarding the grades and CGPA under the Credit Based Semester System (CBCS).

Letter Grades and Grade Points:

The UGC recommends a 10-point grading system with the following letter grades as given below:

Grades	Points	Marks Secured (%)
O (Outstanding)	10	≥ 85
A+ (Excellent)	9	75 – 84
A (Very Good)	8	65 – 74
B+ (Good)	7	60 – 64
B (Above Average)	6	55 – 59
C (Pass)	5	50 – 54
F (Fail)	0	<50
Ab (Absent)	0	-

A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.

Computation of SGPA and CGPA

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.

$$\text{SGPA } (S_i) = \sum (C_i * G_i) / \sum C_i$$

Where C_i is the number of credits of the i^{th} course and G_i is the grade point scored by the student in the i^{th} course.

The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme,

$$\text{CGPA} = \sum (C_i * S_i) / \sum C_i$$

Where S_i , is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

8.0 Withholding of Results

If the student has not paid the dues, if any, to the Institute or if any case of indiscipline is pending against him, the result of the student will be withheld and he will not be allowed into the next semester. His degree will be withheld in such cases.

9.0 Transitory Regulations

Discontinued, detained, or failed candidates are eligible for admission to two earlier or equivalent subjects at a time as and when offered.

10.0 General

10.1 Wherever the words he, him, his, occur in the regulations, they include she, her, hers.

10.2 The academic regulation should be read as a whole for the purpose of any interpretation.

10.3 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Academic Council of the College is final.

10.4 The College may change or amend the academic regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the Academic Council of the College/Affiliating University.

MALPRACTICES RULES
DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

S. No	Nature of Malpractices/Improper conduct	Punishment
	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester. The Hall Ticket of the candidate is to be cancelled and sent to the University.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate who has been impersonated, shall be cancelled in all the subjects of the examination (including practical's and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester. The candidate is also debarred for two consecutive semesters from class work

		and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Using objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6.	Refuses to obey the orders of the Chief Superintendent/Assistant superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.

	part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	
7.	Leaves the exam hall taking away answer scriptor intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.

10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester examinations.
12	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Academic Council of the College(or) affiliating University for further action towards suitable punishment.	

Malpractices identified by squad or special invigilators will entail punishment to the candidates as per the above guidelines.

Master of Business Administration - R25 Course Structure

Name of the Programme: Master of Business Administration (MBA)

Programme Structure

MBA I YEAR I SEMESTER

Course Code	Subject Titles	L	T/P	C	Max. Marks	
					INT	EXT
R25MBA01	Management and Organisational Behavior	4	-	4	40	60
R25MBA02	Managerial Economics	4	-	4	40	60
R25MBA03	Financial Reporting and Analysis	4	-	4	40	60
R25MBA04	Research Methodology & Statistical Analysis	4	-	4	40	60
R25MBA05	Business Environment & Business Laws	4	-	4	40	60
R25MBA06	Professional Communication Skills	2	-	2	40	60
R25MBA07	<u>Open Elective I:</u>				40	60
	7A. ESG and Sustainability Management					
	7B. Cyber Security					
	7C. Cross Culture Management					
	7D. Banking and Insurance	3	-	3		
R25MBA08	Statistical Data Analysis	-	2	2	40	60
Total		25	2	27	320	480

MBA I YEAR II SEMESTER

Course Code	Subject Titles	L	T/P	C	Max. Marks	
					INT	EXT
R25MBA09	Human Resource Management	4	-	4	40	60
R25MBA10	Financial Management	4	-	4	40	60
R25MBA11	Marketing Management	4	-	4	40	60
R25MBA12	Quantitative Analysis for Business Decisions	4	-	4	40	60
R25MBA13	Data Analytics	4	-	4	40	60
R25MBA14	Entrepreneurship and Design Thinking	4	-	4	40	60
R25MBA15	<u>Open Elective II:</u>					
	15A Project Management					
	15B Business Ethics & Corporate Governance					
	15C International Business					
	15D E-Commerce	3	-	3	40	60
R25MBA16	Start-up/ MSME/ Innovation Development Plan/Sector Specific Report		2	1	100	
Total		27	2	28	380	420

Master of Business Administration - R25 Course Structure

MBA II YEAR I SEMESTER

Course Code	Subject Titles	L	T/P	C	Max. Marks	
					INT	EXT
R25MBA17	AI for Business	4	-	4	40	60
R25MBA18	Logistics & Supply Chain Management	4	-	4	40	60
R25MBA19	Production and Operations Management	4	-	4	40	60
R25MBA20	Elective-I	4	-	4	40	60
R25MBA21	Elective-II	4	-	4	40	60
R25MBA22	Elective-V	4	-	4	40	60
R25MBA23	Data Visualization Lab	1	2	2	40	60
R25MBA24	Internship		2	2	100	
Total		25	2	28	380	420

MBA II YEAR II SEMESTER

Course Code	Subject Titles	L	T/P	C	Max. Marks	
					INT	EXT
R25MBA25	Strategic Management	4	-	4	40	60
R25MBA26	Elective-III	4	-	4	40	60
R25MBA27	Elective-IV	4	-	4	40	60
R25MBA28	Elective-VI	4	-	4	40	60
R25MBA29	Pre-submission Project Seminar	-	2	2	100	-
R25MBA30	Major Project Viva-Voce	-	4	4	-	100
Total		16	6	22	260	340
Grand Total		93	14	105		

Specialization-Wise Elective Courses Offered in the Second Year MBA**BUSINESS ANALYTICS ELECTIVES**

Course Code	Subject Name	L	P	C
R25MBAB1A	Decision Analytics Using R (T)	2	-	2
R25MBAB1B	Decision Analytics Using R (L)	-	4	2
R25MBAB2A	Python Programming (T)	2	-	2
R25MBAB2B	Python Programming (L)	-	4	2
R25MBAB3A	Database Management with SQL (T)	2	-	2
R25MBAB3B	Database Management with SQL (L)	-	4	2
R25MBAB4A	KNIME for Data Analytics (T)	2	-	2
R25MBAB4B	KNIME for Data Analytics (L)	-	4	2
R25MBAB5	Predictive Analytics	4	-	4
R25MBAB6	Data Management and Business Intelligence	4	-	4

FINANCE ELECTIVES

Course Code	Subject Titles	L	P	C
R25MBAF1	Security Analysis and Portfolio Management	4	-	4
R25MBAF2	FinTech	4	-	4
R25MBAF3	Risk Management & Financial Derivatives	4	-	4
R25MBAF4A	Financial Analytics- Theory	2	-	2
R25MBAF4B	Financial Analytics- Lab	-	4	2
R25MBAF5	International Financial Management	4	-	4
R25MBAF6	Strategic Cost and Management Accounting	4	-	4

Master of Business Administration - R25 Course Structure

HR ELECTIVES

Course Code	Subject Name	L	P	C
R25MBAH1	Talent & Performance Management Systems	4	-	4
R25MBAH2	Training & Development	4	-	4
R25MBAH3	International Human Resources Management	4	-	4
R25MBAH4A	HR Analytics- Theory	2	-	2
R25MBAH4B	HR Analytics- Lab		4	2
R25MBAH5	Compensation & Reward Management	4	-	4
R25MBAH6	Diversity and Change Management	4	-	4

MARKETING ELECTIVES

Course Code	Subject Titles	L	P	C
R25MBAM1	Consumer Behavior	4	-	4
R25MBAM2	Services Marketing	4	-	4
R25MBAM3	Integrated Marketing Communications	4	-	4
R25MBAM4A	Marketing Analytics- Theory	2	-	2
R25MBAM4B	Marketing Analytics- Lab		4	2
R25MBAM5	Digital and Social Media Marketing	4	-	4
R25MBAM6	Customer Relationship Management	4	-	4

MBA I YEAR I SEMESTER

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year I Semester****R25MBA01: Management and Organisational Behavior****L-T-P-C****4-0-0-4****SDG 8 (Decent Work and Economic growth) SDG 5 (Gender Equality)****Course Aim/s:**

- To understand the fundamentals underlying the management of an organization.
- To understand the dynamics of organizational behavior.

Learning Outcome/s:

- The students should be able to learn the history of management and the contributions of important management researchers.
- The students can learn how to delegate authority and use power to influence people to get the work done through proper communication and control.
- To understand how employees behave in organizations. Students should be able to correct their individual behavior and group behavior. They will also be able to motivate and lead employees towards achievement of organizational mission and objectives.

Unit-I: Theories of Management

Basics of Management: Importance of Management - Functions of Management - Levels of Management - Scientific Management Theory - Fayol's Fourteen Principles of Management - Bureaucratic Theory - Human Relations Movement - Systems and Contingency Theory.

Unit-II: Planning and Organizing

Planning: Features of Planning - Principles of Planning - Importance of Planning - Forms of Planning - Guidelines for Effective Planning - Steps in Planning Process.

Organizing: Principles of Organizing - Authority - Organizational Design - Job Design - Relation between Authority, Power and Influence.

Unit-III: Leadership and Motivation Theories

Leadership Theories: Great Man Theory - Trait Theory - The Managerial Grid Model - PathGoal theory - Fiedler's Contingency Theory.

Motivational Theories: Maslow's Hierarchy of Needs - Two-factor theory of Motivation - Theory X and Theory Y - McClelland's Need Theory. Communication: Process - Barriers - Guidelines for Effective Communication.

Unit-IV: Organizational Behavior (OB)

Introduction to OB: Elements of OB - Disciplines of OB - Perception Process – Attitudes.

Personality Theories: Extrovert & Introvert - Type-A & Type-B - Sigmund Freud's Psychoanalytic Theory - Stress Management.

Unit-V: Group Behavior

Foundations of Group Behavior: Defining and Classifying Groups - Stages of Group Development - Group Decision Making - Understanding Work Teams - Types of Teams - Creating Effective Teams.

REFERENCE

- Udai Pareek, Sushma Khanna, Organizational Behavior, Oxford Publishing.
- Stephen P. Robbins, Timothy: Organizational Behavior, Pearson.
- Griffin & Moorhead, Organizational Behavior, 10th Edition, Cengage Publishing.
- Robert N. Lussier, Management Fundamentals–Concepts, Applications, Skill Development, Cengage Learning.
- Stephen P. Robbins, Timothy: Organizational Behavior, Pearson.
- L. M. Prasad, Principles and Practices of Management, Revised Edition, Sulthan Chand Publishing

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year I Semester****R25MBA02: Managerial Economics****L-T-P-C
4-0-0-4****SDG 8 (Decent Work and Economic Growth) SDG 9 (Industry, Innovation and Infrastructure)****Course Aim/s:**

- To enable students acquire knowledge to understand the economic environment of an organization.

Learning Outcome:

- The basic economic principles, forecast demand and supply and should be able to estimate cost and understand market structure and pricing practices.

Unit-I: Introduction to Managerial Economics

Introduction: Definition - Nature and Scope - ME as an Inter-disciplinary - Basic Economic Principles - The Concept of Opportunity Cost - Incremental Concept - Scarcity - Marginalism - Equi-Marginalism - Time perspective - Discounting Principle.

Unit-II: Theory of Demand

Demand Analysis: Law of Demand - Movement in Demand Curve - Shift in the Demand Curve.

Elasticity of Demand: Types & Significance of Elasticity of Demand - Measurement Techniques of Price Elasticity.

Forecasting: Demand Forecasting and its Techniques - Consumers Equilibrium - Cardinal Utility Approach - Consumer Surplus.

Unit-III: Production and Cost Analysis

Production Analysis: Production Function - Production Functions with One/Two Variables - Cobb-Douglas Production Function - Marginal Rate of Technical Substitution - Isoquants and Isocosts - Returns to Scale and Returns to Factors - Economies of Scale.

Cost Analysis: Cost concepts - Determinants of Cost - Overall Cost Leadership.

Unit-IV: Market Structure and Pricing Practices

Market Structures: Features and Types of different Competitive Situations - Price-Output Determination in Perfect Competition - Monopoly - Monopolistic Competition and Oligopoly - both the Long Run and Short Run.

Pricing: Pricing Philosophy.

Unit-V: Macro Economics & Business

Macro Economics: Nature - Concept and Measurement of National Income – Classical and Keynesian approaches to Income - Employment and Investment.

Inflation: Types - Causes and Measurement of Inflation - Stagflation.

Trade Cycles: Causes - Policies to Counter Trade Cycles.

REFERENCE

- D. M. Mithani, Managerial Economics, HPH. Yogesh Maheshwari, Managerial Economics, PHI.
- Sumitrapal, Managerial Economics Cases & Concepts, Macmillan.
- H. Kaushal, Managerial Economics, Macmillan. Craig H. Petersen, 'Managerial Economics', Pearson.
- D.N. Dwivedi, Managerial Economics, Vikas.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
I Year I Semester**R25MBA03: Financial Reporting and Analysis****L-T-P-C
4-0-0-4****SDG 8 (Decent Work and Economic Growth) SDG 16 (Peace, Justice and Strong Institutions)****Course Aim/s:**

- To provide the information that is needed for sound economic decision making.
- To provide information about firm's performance to external parties such as investors, creditors, bankers, researchers and Government Agencies.

Learning Outcome/s:

- To prepare, understand, interpret and analyze financial statements with confidence.
- To appreciate and use financial statements as means of business communication.
- To use the analytical techniques and arriving at conclusions from financial information for the purpose of decision making.

Unit-I: Introduction to Accounting**Introduction to Accounting:** Importance – Objectives. GAAP: Accounting Concepts and Conventions.**Accounting System:** Double Entry System - Recording Business Transactions – Classification of Accounts - Accounting Cycle - Users of Accounting Information.**Unit-II: The Accounting Process Overview: Accounting Process.****Books of Original Record:** Journal - Ledger (Problems)- Trial Balance - Classification of Capital and Revenue Expenses (Theory) - Final Accounts with Adjustments (Theory & Problem)- Cash Book and other Subsidiary books (Theory).**Unit-III: Depreciation and Shares and Debentures****Depreciation:** Concept - Methods of Depreciation: their impact on measurement of business Accounting - Straight Line Method - Written down Value Method (Theory & Problems).**Shares and Debentures:** Issue of shares – At par, discount & premium - Forfeiture – Issue & Forfeiture Shares - Issue and Redemption of Debentures. (Theory & Problems).**Unit-IV: Financial Analysis-I****Working Capital:** Statement of Changes in Working Capital, Funds from Operations, Paid Cost and Unpaid Costs. Distinction between Cash Flow and Funds Flow - Preparation and Analysis of Cash Flow Statement of a company (Theory & Problems).**Unit-V: Financial Analysis-II****Financial Statement Analysis:** Analysis and Interpretation of Financial Statements from Investor and Company point of view - Horizontal Analysis and Vertical Analysis of Company (Theory & Problems).**Ratio Analysis** - Liquidity - Leverage - Solvency and Profitability Ratios. (Theory & Problems) Du Pont Chart, Accounting Standards Issued by ICAI, International Financial Reporting Standards (IFRS) (Theory).**REFERENCE**

- Dhanesh K. Khatri, Financial Accounting & Analysis, TMH, New Delhi.
- PK Jain and K. L. Narang, Financial Accounting & Analysis, Kalyani Publications. Narayana Swamy, Financial Accounting & Analysis, PHI.
- V. Rajasekharam, Financial Accounting & Analysis, Pearson Education, New Delhi. Ranjan Kumar Bal, Financial Accounting & Analysis, S. Chand, New Delhi. Maheswari, Financial Accounting, IBH.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year I Semester****R25MBA04: Research Methodology & Statistical Analysis****L-T-P-C
4-0-0-4****SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure)****Course Aim/s:**

- To encourage thinking statistically.
- To develop the abilities to understand and use data.
- To develop expertise in a standard set of statistical and graphical techniques that will be useful in analyzing data, and to learn to apply these techniques in a number of areas of management.

Learning Outcome/s:

- Appreciate that the collection and statistical analysis of data improves business decisions and reduces the risk of implementing solutions that waste resources and effort.
- Select and deploy the correct statistical method for a given data analysis requirement. Achieve a practical level of competence in building statistical models that suit business applications.
- Recognize, develop and distinguish between models for cross-sectional analysis at a single point in time and models for time series analysis at multiple points in time.

Unit-I: Introduction to Research

Introduction to Research: Meaning, Scope, Types of Research, Research Process. Data collection techniques - Questionnaire Design.

Research Design: Research Problem, Purpose of Research Design, Characteristics of Good Research Design, Sampling and its Applications.

Unit-II: Measures of Central Tendency, Dispersion & Skewness

Introduction to Statistics - Measurement of Central Tendency- Mean- Median – Mode;

Measures of Dispersion - Range - Quartile Deviation - Mean Deviation - Standard Deviation and Co-efficient of Variation. Measures of Skewness.

Unit-III: Tabulation and Graphical Presentation of Data

Classification and Tabulation: Univariate - Bivariate - Multivariate Data - Data Classification and Tabulation.

Graphical Presentation of Data: Diagrammatic and Graphical Representation of Data - One Dimensional - Two Dimensional - Three Dimensional Diagrams and Graphs.

Unit-IV: Correlation and Regression Analysis

Correlation Analysis: Introduction: Karl Pearson's Coefficient of Correlation - Spearman's Rank Correlation. Scatter Diagram - Positive and Negative Correlation - Limits for Coefficient of Correlation - Concept of Multiple and Partial Correlation.

Regression Analysis: Concept - Least Square Method - Two Lines of Regression.

Time Series Analysis - Free Hand Curve - Moving Averages- Trend Analysis and Report writing.

Unit-V: Small Sample Tests

Sample Test: t-Distribution - Properties and Applications - Testing for One and Two Means - Paired t-test.

Analysis of Variance: One Way and Two Way ANOVA.

Chi-Square distribution: Test for a specified Population variance - Test for Independence of Attributes.

REFERENCE

- Levin R.I., Rubin S. David, "Statistics for Management", Pearson.
- Beri, "Business Statistics", TMH.
- Gupta S.C, "Fundamentals of Statistics", HPH.
- Amir D. Aczel and Jayavel Sounder Pandian, "Complete Business Statistics", TMH,
- Levine, Stephan, Krehbiel, Berenson - Statistics for Managers using Microsoft Excel, PHI.
- J. K Sharma, "Business Statistics", Pearson.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year I Semester****R25MBA05: Business Environment & Business Laws****L-T-P-C
4-0-0-4****SDG 8 (Decent Work & Economic Growth), SDG16 (Peace, Justice & Strong Institutions)****Course Aim/s:**

- To make students understand different types of business environments they should review before taking managerial decisions.
- To enable students understand legal and regulatory framework for doing business in India.

Learning Outcome/s:

- To understand the issues related to the industrial policy and regulation and their amendments from time to time.
- The knowledge gained by the students on capital markets, GST, FDI, RBI guidelines; trade, EXIM policy and Foreign Exchange Management Act will be useful for them to take decisions to ensure growth and sustainability of the organizations.

Unit-I: Introduction to Business Environment**Macro Environment Analysis:** PESTEL Model.**Industrial Policies:** Industrial Policy of 1991 and recent developments - Fiscal Policy-Monetary Policy.**Latest Union Budget:** Tax Implications - Goods & Services Tax (GST).**Unit-II: India's Trade Policy****Trade Policy:** Policy Changes and Issues - Sector Wise Trade Policies - Recent Developments

- GATT - WTO - Agreements and Implications.

Disinvestment: Meaning and its Policy with regard to Public Sector - Multi-National Companies and FDI.**Unit-III: EXIM Policies & FEMA****EXIM Policy:** India's New EXIM Policy - Legal Framework - Foreign Market entry Strategies.**LPG & FEMA:** Liberalization - Privatization - Globalization and its impact on Indian Economy.**Unit-IV: Introduction to Business Law****Contract and Acts:** Nature of Contract and Essential Elements of Valid Contract - Negotiable Instruments Act (1881) - Promissory Note - Bills of Exchange & Cheque - and their Definitions and Characteristics.**Endorsements:** Meaning and Types - Consumer Protection Act (2019) - Income Tax Act (1961) and Information Technology (IT) Act (2000).**Unit-V: Companies Act-1956****Companies Act:** Steps and Procedure for Incorporation of the Company.**Company Management:** Appointment of Directors - Powers - Duties & Liabilities of Directors.**Resolutions:** Company Meetings – Resolutions - Liquidation of a Company - Latest Amendments - New Regulations in Companies Act (2013).**REFERENCE**

- Justin Paul, Business Environment: Text & Cases, TMH.
- Francis Cherunilam, Business Environment: Text & Cases, HPH.
- K. Aswathappa, Essentials of Business Environment, Himalaya Publication House. RSN Pillai, Bagavathi, Business Law, S. Chand.
- N. D. Kapoor, Mercantile Law, Sultan Chand & Sons, latest edition
- S. S. Gulshan, Mercantile Law, Excel Books, latest edition

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
I Year I Semester**R25MBA06: Professional Communication Skills****L-T-P-C****2-0-0-2****SDG1 (No Poverty) SDG 8 (Decent Work & Economic Growth)****Course Aim/s:**

- To enable students how to improve communication skills.

Learning Outcome/s:

- To develop Writing skills in preparing business letters, report, memos, and proposals.
- To develop Oratory skills through public speaking
- To understand importance of professional attire in corporate environment.
- To get knowledge on various business etiquette and inculcate the etiquette for corporate fit.

Unit-I: Concepts of Communications

Introduction: Definition and Process of Communication - Forms of Verbal and Non-verbal Communication.

Barriers of Communication: Communication Barriers and Overcoming Communication Barriers - Guidelines for Effective Communication.

Business Writing: Direct and Indirect approaches to Business Writing - Five Main Stages of Writing Business Messages.

Exercise: Role Play, Square Talk Activity.

Unit-II: Written Business Communication

External Communication: The Seven C's of Letter writing - Kinds of Business Letters - Business Reports and Proposals - Purpose of Business Reports.

Internal Communication: Format and Principles of Writing Memos - General Warning - Cautions.

Exercise: Preparation of Reports on different issues.

Unit-III: Oral Communication

Public Speaking: Types of Public Speaking - importance of Public Speaking.

Power Point Presentation: Planning the Presentation - Delivering the Presentation - Developing & Displaying Visual Aids - Handling Questions from the Audience.

Listening: Definition - Types of Listening Skills - Features of a Good Listener - Causes and effects of Poor Listening.

Exercise: Elocution and Extempore.

Unit-IV: Behavioral Techniques

Body Language: Facial Expressions - Body Posture - Gestures - Eye Movement - Touch and the use of Personal Space.

Business Attire and Grooming: Different types of Attire - Guidelines for Business Attire.

Exercise: Power of Body Language, Charades.

Unit-V: Etiquettes

Etiquettes: Greeting Etiquette - Corporate Etiquette - Telephone Etiquette - E-mail Etiquette

- Meeting Etiquette - Netiquette - Personal Etiquette - Social Etiquette - Dining Etiquette.

Exercise: Introduction and Art of Conversation, Telephonic Activity.

REFERENCE

- Meenakshi Raman and Prakash Singh, Business Communication, Oxford Lesikar: Basic Business Communication, TMH
- David Irwin: Effective Business Communications, Viva- Thorogood.
- Rajendra Pal, J S Korlaha HI: Essentials of Business Communication: Sultan Chand & Sons, New Delhi.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year I Semester****R25MBA07A: ESG and Sustainability Management****L-T-P-C****3-0-0-3****SDG 12 (Responsible Consumption & Production), SDG 13 (Climate Action), SDG 17 (Partnerships for Goals)****Course Objectives:**

1. To explain the significance and evolution of ESG and sustainability in modern business.
2. To orient on environmental challenges and sustainability strategies.
3. To examine social responsibility and stakeholder engagement strategies.
4. To explain governance principles and ethical practices in organizations.
5. To Integrate ESG strategies and emerging trends with business vision.

Course Outcomes: Students will be able to

1. Understand ESG concepts and sustainability in modern business.
2. Analyze the impact of environmental, social, and governance factors on business performance and stakeholder value.
3. Develop strategies for integrating ESG principles into business operations and decision making.
4. Evaluate global frameworks, standards, and regulations related to ESG and sustainability.
5. Apply governance structures and formulate ethical decision-making frameworks.

Unit-I: Introduction to ESG and Sustainability: The definition and importance of ESG in business; Historical evolution of ESG and sustainability concepts and the rise of ESG in corporate and investor agendas; Key concepts such as sustainability, corporate social responsibility (CSR), and the triple bottom line (people, planet, profit); Global frameworks and standards including the UN Sustainable Development Goals (SDGs), Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and Business Responsibility & Sustainability Reporting (BRSR)

Unit-II: Environmental Management and Climate Strategies: Climate change and its impact on Business operations and strategy, Sustainable practices in manufacturing and operations, Environmental Management Systems (EMS), ISO 14001, Environment Impact assessment (EIA); Resource Management: focusing on water, energy, and waste reduction strategies; The concept of a circular economy: the Ellen MacArthur Foundation, Circular business models and value creation, Life cycle assessment (LCA); Carbon foot-printing and GHG Protocols: measure, report, and reduce greenhouse gas emissions; Scope 1, Scope 2 and Scope 3 emissions; environmental regulations and compliances, such as carbon taxes and emissions trading systems; Renewable energy and their applications, decarbonization, energy transition strategies.

Unit-III: Social sustainability and Stakeholder Management: Social Responsibility and Community Engagement: Pyramid of corporate social responsibility (CSR), Community development and impact, stakeholder engagement, Stakeholder theory, Legitimacy theory; Human rights and ethical labour practices in global supply chains, Modern slavery and child labour prevention, Worker safety and occupational health management; Diversity, Equity, and Inclusion (DEI) in the workplace, Importance of DEI in the workplace and strategies for promoting DEI and gender gap in senior management; Employee wellbeing and development: Employee engagement and retention strategies, Learning/Training and development programs, Mental health and work-life balance initiatives.

Unit-IV: Governance and Ethics: Corporate governance principles; Board composition, diversity and executive

accountability; Anti-corruption, ethical decision-making and leadership in business, whistleblower policies; Data privacy and cybersecurity governance; Corporate disclosure and transparency practices, Stakeholder communication strategies, Greenwashing: Third-party assurance and verification; Risk management and investor perspectives and opportunities.

Unit-V: Strategic ESG and Future Trends: Aligning ESG with corporate mission, vision, and business strategy; Embedding ESG across value chains and decision-making; Technological Innovations in ESG: Utilizing technology to advance ESG goals: data analytics for ESG metrics, blockchain for supply chain transparency, Digital transformation and sustainability: smart grids, IoT for resource efficiency; Future Trends and Challenges: ESG in emerging economy.

Suggested Readings:

1. Kristyn Noeth, The ESG and Sustainability Desk book for Business: A Guide to Policy, Regulation, and Practice , Apress; 1st edition, July 2024
2. Tracy Dathe, Marc Helmold, René Dathe, Isabel Dathe, Implementing Environmental, Social and Governance (ESG) Principles for Sustainable Businesses: A Practical Guide in Sustainability Management (Responsible Leadership and Sustainable Management) Springer International Publishing AG; 1st ed. 2024 edition
3. Crane, A., Matten, D., & Spence, L. Corporate Social Responsibility: Readings and cases in a global context (4th ed.), Routledge.2019
4. Eccles, R. G., & Klimenko, S. The investor revolution: Shareholders are getting serious about sustainability. Harvard Business Review Press, 2019
5. Serafeim, G., Purpose and profit: How business can lift up the world. HarperCollins Leadership.2020
6. O'Connor, B., The ESG investing handbook: Insights and developments in environmental, social and governance investment. Harriman House, 2021.
7. C.V. Baxi and Ajit Prasad, Corporate Social Responsibility: Concepts and Cases – The Indian Experience, Excel Books

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year I Semester

R25MBA07B: Cyber Security

L-T-P-C

3-0-0-3

SDG9 (Industry, Innovation and Infrastructure) SDG 16 (Peace, Justice and Strong Institutions)**Course Objectives:**

- Understand the fundamental principles and objectives of cybersecurity in modern organizations.
- Identify and assess types of cyber threats and understand the role of cyber laws and ethics.
- Evaluate management practices, policies, and control mechanisms for cybersecurity.
- Analyze tools, technologies, and frameworks used in cybersecurity.
- Apply cybersecurity knowledge to current trends and personal practices in digital environments.

Course Outcomes: Students will be able to

- Define and explain key cybersecurity concepts, terminologies, and frameworks.
- Identify and classify cyber threats, threat actors, and legal considerations.
- Apply organizational security practices, controls, and incident response plans.
- Evaluate the effectiveness of cybersecurity technologies and frameworks.
- Formulate strategies to protect data and privacy in evolving tech contexts

UNIT-I: Foundations of Cybersecurity: Introduction to Information Systems, Cyberspace and Cybersecurity, Cybersecurity vs. Information Security. Key Concepts of Cybersecurity: definition, meaning and scope of cybersecurity. Key objectives of cybersecurity: confidentiality, integrity & availability (CIA triad). Essential Security and Privacy Goals. Cybersecurity Vulnerabilities and Challenges, Common Vulnerabilities and Exposures (CVE).

UNIT-II: Cyber Threats, Crimes, and Legal Frameworks: Types of Cybercrime and Threat Actors, Motives of attackers, Cyberattack Tools and Methods, Cyber Kill Chain and Response, National and International Cybersecurity Policies, Cybersecurity Laws and Ethics, Role of Law Enforcement and Cyber Forensics, Cybercrime Investigation and Evidence Handling.

UNIT-III: Cybersecurity Management and Controls: Information Security Governance and Risk Management. Cybersecurity Management Practices, Security Policies, Procedures, and Controls, Security Incident Response and Business Continuity, Data and Application Security. Overview of Technical Controls, Physical and User Access Security, Internet of Things (IoT) Security.

UNIT-IV: Cybersecurity Tools, Technologies, and Emerging Frameworks: Cybersecurity Frameworks and Industry Standards, Cyber Resilience and Human Factor, Cryptography and Digital Signatures, Identity and Access Management (IAM), Antivirus, Email Security, Role of AI, Blockchain, and Quantum Computing in Cybersecurity.\

UNIT-V: Contemporary Applications and Personal Cybersecurity: Personal Cybersecurity Best Practices, Privacy and Data Protection Regulations, Cybersecurity. Emerging Technologies: Web 3.0, 5G, APTs, Secure-by-Design and Supply Chain Security, Ethical Use of Technology and Digital Trust.

Suggested Readings:

- Ajay Singh. Introduction to Cybersecurity: Concepts, Principles, Technologies and Practices. Universities Press (India) Pvt. Ltd. 2023.
- Jocelyn O. Padallan. Cybersecurity. Arceler Press. 2020. (e-book)
- Susan Lincke. Information Security Planning: A Practical Approach. Springer. 2024
- Susanne Chishti and Janob Barberis, The Fintech Book, Wiley
- David L.Shrier and Alex Pentlan, Global Fintech, The MIT Press, 2022.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year I Semester**R25MBA07C: Cross Culture Management****L-T-P-C****3-0-0-3****SDG 9 (Industry, Innovation & Infrastructure), SDG 16 (Peace, Justice and Strong Institutions)****Course Aim/s:**

- The objective of the course is to help students to construct their own coherent, individual perspective of the substance and increase their cultural awareness.
- It focuses on interpersonal approaches between people of different cultures in work settings as opposed to a country specific approach.

Learning Outcome/s:

- The students are able to understand the significance of cross-cultural management, and of the major theoretical and empirical studies which examine the impact of different national cultures on work and employment.
- To know the international management practices and how organizational and national culture impacts upon them: work, motivation, performance appraisal, leadership, cross-cultural communication and decision-making, negotiation and trust, conflict and dispute resolution and corporate social responsibility.

Unit-I: Introduction to Culture

Introduction: Determinants of Culture - Facets of Culture - Levels of Culture - National Cultural Dimensions in the Business Context - The influence of National Culture on Business Culture.

Unit-II: Cultural Dimensions and Dilemmas

Cultural Dimensions: Value Orientations and Dimensions.

Cultural Dilemmas: Reconciling Cultural Dilemmas.

Culture and Styles of Management: Management Tasks and Cultural Values.

Unit-III: Culture and Organizations

Culture vs. Organizations: Culture and Corporate Structures - Culture and Leadership - Culture and Strategy - Cultural Change in Organizations.

Unit-IV: Culture and Communications

Culture vs. Communication: Business Communication across Cultures - Barriers to Inter-cultural Communication - Negotiating Internationally.

Unit-V: Cross Cultural Team Management

Management of Culture: Working with International Teams - Conflicts and Cultural Difference - Understanding and Dealing with Conflicts - Developing Inter-cultural Relationships.

REFERENCE

- Marie-Joelle Browaeys and Roger Price: Understanding CCM, Pearson.
- David C. Thomas: Cross Cultural Management, Sage Publications.
- Nigel Holdon, CCM: Knowledge Management Perspective, Pentice Hall.
- Parissa Haghirian: Multinational and Cross Cultural Management, Routledge.
- Richard Mead: International Management-Cross cultural Dimension, Blackwell.
- Jerome Dumetz, Cross-cultural Management, Create Space Independent Publishing Platform; Student edition, Oakland, USA.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year I Semester

R25MBA07D: Banking and Insurance

L-T-P-C

3-0-0-3

SDG 10 (Reduced Inequalities), SDG 17 (Partnerships for the Goals)**Course Objectives:**

- To understand the fundamentals of banking.
- To understand banking operations and practices.
- To familiarize fundamentals of Insurance.
- To analyze the regulatory frameworks governing banking and insurance
- To explore contemporary risk management practices, technological innovations, and trends transforming the financial services sector.

Course Outcomes: Students will be able to

- Describe how banking started and grew in India, the different types of banks, and the work of RBI and commercial banks.
- Explain how banks work, including opening accounts, payment methods, and checking credit risk.
- Understand what insurance is, how it works, and how policies are issued and claims are handled.
- Understand the rules and regulations for banks and insurance companies, including anti- money laundering and KYC.
- Discuss how banks and insurance companies manage risks and use new technology like fintech, digital wallets, and AI.

Unit-I: Banking: Introduction to Banking, Structure of Indian Banking System, Types of Banks - retail, commercial, cooperative, development banks. Role of Commercial Banks, Banking Sector Reforms and Financial Intermediation.

Unit-II: Banking Operations and practices: Account types, payment systems -NEFT, RTGS, UPI, payment gateways. Types of Loans and Advances, Loan portfolio and credit risk assessment, Non- Performing Assets (NPAs): Causes and Recovery, Priority Sector Lending.

Unit -III: Insurance Fundamentals: Insurance, Advantages, disadvantages, principles, elements of insurance contract, Types of Insurance: Life, General, Health. Policy structure, underwriting process, claims management and customer service in insurance.

Unit -IV: Regulatory framework for Banking and Insurance: Role and functions of RBI, RBI guidelines and monetary policy. Role and functions of IRDAI, IRDAI regulations 2002, Anti-money laundering (AML) measures and KYC norms.

Unit -V: Risk and technology in banking and Insurance: Risk management in banking and insurance, Cyber security concerns in financial services, Role of fintech, digital wallets, insurtech, AI applications, Financial Inclusion and Microfinance, Innovations in banking.

Suggested Readings:

- Neelam C. Gulati, Banking and Insurance, Excel Books, Latest Edition.
- O.P. Agarwal, Banking and Insurance, Himalaya Publishing House, 6e, 2024
- E. Gordon & P.K. Gupta, Banking and Insurance, Himalaya Publishing House, 2023 Edition.
- M.N. Mishra & S.B. Mishra, Principles and Practice of Insurance, S. Chand Publishing, 22nd Edition.
- Michael W. Brandl, Money, Banking, Financial Markets & Institutions, Cengage, 2e, 2025
- Bharati V. Pathak, Indian Financial System, Pearson Education, 5e, 2018.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year I Semester****R25MBA08: Statistical Data Analysis****L-T-P-C
0-0-2-2****SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure)****Course Aim/s:**

- It helps the students to enhance the knowledge in businesses by using analytics as a tool.
- To highlight the importance of application of Statistical tools to Research Problem / Projects.
- To enable the practice of MS- EXCEL / SPSS.
- To demonstrate the management and analysis of data using graphs, tables, worksheets, pivot tables etc.
- To educate students on the significance of data from external Sources.
- To highlight the importance of statistical analysis for better decision making

Learning Outcome/s:

- Understand the importance of the main functions of MS- Excel /SPSS.
- Practice advance Excel Tools for conduction of Data Analysis
- Evaluate Data Analysis using Pivot Tables and Pivot Charts.
- Analyze the Data using Descriptive Statistics
- Conduct various Parametric and Non-parametric Tests using MS Excel / SPSS

Unit – I: Introduction to MS EXCEL

MS – EXCEL: Introduction, Uses, Functions and Features of MS EXCEL. Getting started with Excel, Highlights and Main Functions: Home, Insert, Page Layout, Formulae, Data, Review, View, Add-ins, Using Help Function, Customizing the Quick Access Toolbar.

Unit – II: Creating and Using Templates

Working with Data: Entering, Editing, Copy, Cut, Paste, Paste Special, Formatting Data and Using the Right Mouse Click, Saving, Page Setup, and Printing, Using Headers and Footers, Manipulating Data, Using Data Names and Ranges, Filters and Sort and Validation Lists.

Unit – III: Data from External Sources

Using and Formatting Tables, Basic Formulae and Use of Functions, Data Analysis Using Charts and Graphs, Managing, Inserting, and Copying Worksheets, Securing the Document, Advanced Formulae and Functions, Worksheet Features, Data Analyzing Pivot Tables and Pivot Charts.

Unit – IV: Data Analysis through XL Miner analysis tool pack

Measures of Central Tendency: Mean, Median, Mode. Measures of Dispersion: Variance, Standard Deviation, Coefficient of Variation. Correlation and Regression Lines. t-test, F-test, ANOVA One-way classification, Chi-square Test, Independence of attributes. Time series: Forecasting Method of Least Squares, Moving Average Method. Inference and Discussion of Results.

Unit – V: Data Visualization- through Modern Charts Add-in's

Data Analyzing through modern charts tool- Rounded column chart, column fill gauge, column node gauge, Rounded Bar chart, bar fill gauge, bar node gauge, line dot pie, line circle, area, stacked pie, doughnut, stacked column, stacked rounded column, 100% stacked column, Mekko stacked chart, stacked bar, stacked rounded bar charts.

REFERENCE

- R. Panneerselvam, Business Statistics Using MS Excel, Sage Publications, 2022.
- Glyn Davis, Branko Pecar, Business Statistics Using Excel, Oxford University Press, 2e, 2014.
- D P Apte: Statistical Tools for Managers USING MS EXCEL, Excel, 2012.
- David M Levine, David. F. Stephan & Kathryn A. Szabat, Statistics for Managers –Using MS Excel, PHI, 2015.
- Ajai. S. Gaur, Sanjaya S. Gaur, Statistical Methods for Practice and Research, Response, 2009.

MBA I YEAR II SEMESTER

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year II Semester

R25MBA09: Human Resource Management

L-T-P-C

4-0-0-4

SDG3 (Good Health and Well Being), SDG 5 (Gender Equality), SDG 8 (Decent Work & Economic Growth)**Course Aim/s:**

- To understand various terms in HRM and be able to manage the human resources of an organization effectively and efficiently.

Learning Outcome/s:

- Students should be able to understand the basic HR concepts. They will be able to understand the process of recruitment, selection, performance appraisal, training & development, compensation and employee retention approaches and strategies.

Unit-I: Introduction of HRM

Introduction to HRM-Functions - Objectives.

Job Analysis: Process - Methods of Data Collection - Job Description - Job Specification - Job Design - Techniques

- HRP: Need and Process - HR Information Systems - Trends in HRM - Contemporary Issues.

Unit-II: Recruitment and Selection**The Recruitment Process:** Methods of recruiting - Sources of Recruitment.**Selection Process:** Types of Selection Tests - Basic types of interviews - Errors in Interviews

- Designing and conducting the Effective Interview - Induction - Placement.

Unit-III: Human Resource Development & Compensation**Introduction to Training:** Training Process & Methods - On the Job & off the Job methods -Management Development Methods.**Performance Appraisal:** The Appraisal Process - Appraisal Methods - Potential problems in Performance Appraisal - The Role of Appraisal in Managing Performance - Career Planning and Development.**Compensation:** Objectives - Factors influencing Compensation - Compensation and Motivation - Compensation for special Groups - Job Evaluation and its methods.**Unit-IV: Industrial Relations Management****Industrial Relations:** Nature - Parties to IR - Trade Unions - Factors affecting Unionism.**Industrial Disputes:** Settlement Methods - Collective Bargaining - Grievance Handling Procedure - Labour Legislation in India.**Unit-V: International HRM****IHRM:** Definition - Nature - Scope - Difference between Domestic HRM and IHRM - Global HRM Practices - Approaches to International Recruitment - Factors affecting Expatriate Selection - Cross Cultural Teams and Cultural differences.**REFERENCE**

- Gary Dessler, "Human Resource Management", 12th Edition, Pearson.
- K. Aswathappa, "Human Resource Management, Text and Cases", TMH.
- Dr. Anjali Ghanekar, "Essentials of Human Resource Management", Everest.
- Wayne. F.Cascio, Ranjeet Nambudiri, "Managing Human Resource Management", 8th Edition, TMH.
- S P Rao, "Human resource Management Text and Cases", Excel Books.
- Chris Rowley and Keith Jackson, Human Resource Management, Routledge.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
I Year II Semester**R25MBA10: Financial Management****L-T-P-C****4-0-0-4**

SDG 4 (Quality Education), SDG 8 (Decent Work & Economic Growth), SDG 16 (Peace, Justice & Strong Institutions)

The students need Discounting Table and Annuity tables for the examination

Course Aim/s:

- To give an overview of the problems facing a finance manager in the commercial world.
- It will introduce the concepts and theories of corporate finance that underlie the techniques that are offered as aids for the understanding, evaluation and resolution of financial manager's problems.

Learning Outcome/s:

- Provides support for decision making.
- It enables to monitor their decisions for any potential financial implications and for lessons to be learned from experience and to adapt or react as needed.
- To ensure the availability of timely, relevant and reliable financial and nonfinancial information. FM helps in understanding the use of resources efficiently, effectively and economically.

Unit-I: The Finance Function: Introduction to Finance: Nature and Scope - Finance Function - It's New Role - Goals of Finance Function - Maximizing vs. Satisfying - Profit vs. Wealth vs. Welfare - The Agency Relationship and Costs - Risk-Return Trade Off (Theory). Time Value of Money: Concept - Future Value and Present Value and the Basic Valuation Model (Theory & Problem).

Unit-II: The Investment Decision:

Investment Decisions & Capital Budgeting: Project Generation - Project Evaluation Traditional and Discounting Cash Flow methods - The NPV vs. IRR Debate. (Theory & Problems).

Cost of Capital: Concept and Measurement of Cost of Capital - Debt vs. Equity - Cost of Equity - Preference Shares - Retained Earnings - Weighted Average Cost of Capital and Marginal Cost of Capital - Importance of Cost of Capital in Capital Budgeting Decisions.

Unit-III: Capital Structure Decisions

Capital Structure vs. Financial Structure: Capitalization - Financial Leverage –Operating Leverage and Composite Leverage. (Theory & Problems)

Capital Structure Theories: Net Income Approach - Net Operating-Income Approach, Modigliani Miller Theory and Traditional Theory (Theory & Problems).

Unit-IV: Dividend Decisions

Dividends and Value of the Firm: Types of dividends and Bonus Shares- Relevance of Dividends -The MM Hypothesis - Factors Determining Dividend Policy - Dividends and Valuation of the Firm - The Basic Models.

Dividend Theories: Major Theories centered on the works of GORDON and WALTER. (Theory & Problems)

Unit-V: Management of Current Assets

Working Capital Management: Components of Working Capital - Gross vs. Net Working Capital - Determinants of Working Capital Needs - The Operating Cycle Approach - Planning of Working Capital - Financing of Working Capital through Bank Finance and Trade Credit;

Management of Cash: Basic Strategies for Cash Management - Cash Budget (Problems) - Cash Management Techniques/Processes.

REFERENCE

- IM Pandey, Financial Management, 10th Edition, Vikas.
- M.Y Khan, P K Jain: "Financial Management-Text and Problems", 6th Edition, TMH. Prasanna Chandra, "Financial Management Theory and Practice", 8th Edition, TMH. Shashi K. Gupta, R. K. Sharma, "Financial Management" Kalyani Publishers.
- Rajiv Srivastava, Anil Mishra, Financial Management" Oxford University Press, New Delhi.
- James C Van Horne, Sanjay Dhamija, "Financial Management and Policy" Pearson Education.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year II Semester

R25MBA11: Marketing Management

L-T-P-C

4-0-0-4

SDG 12 (Responsible Consumption and Production), SDG 9 (Industry, Innovation, and Infrastructure)**Course Aim/s:**

- The objective of this course is to introduce students to the concepts, analysis, and activities that comprise marketing management. This course is also foundation for advanced electives in marketing.

Learning Outcome/s:

- They will be able to analyze markets and design customer driven strategies and will be able to communicate the decisions towards business development with superior customer value.

Unit-I: Introduction to Marketing**Introduction:** Importance - Scope of Marketing - Core Marketing Concepts Marketing Environment - Marketing Strategies & Plans.**Market Research (MR):** Definition of MR - MIS - MR Process - MR Online - MR & Ethics - International MR.**Unit-II: Analyzing Marketing Opportunities, Customer Value and Marketing Mix Market****Analysis and Decision Making:** Consumer Decision Making - Creating Customer Value Analyzing Consumer Markets - Consumer Behaviour - Cultural - Social & Personal Factors.**Marketing Mix:** Developing Products & Brands - Product Levels - Classifying Products –Product Range - Line & Mix - PLC - New Product Development.**Unit-III: Designing a Customer Driven Strategy****Market Segmentation:** Segmentation of Consumer Market - Business Market - Requirement for Effective Segmentation - Market Targeting - Evaluating Market Segmentation - Selecting Target Market Segmentation.**Positioning:** Positioning Maps - Positioning Strategy.**Unit-IV: Distribution Decisions, Promotion & Communication Strategies****Distribution Decisions:** Marketing Channels - Channel Intermediates and Functions - Channel Structure - Channel for Consumer Products - Business and Industrial Products - Alternative Channel - Channel Strategy Decisions.**Promotion:** The Promotional Mix - Advertising - Public Relations - Sales Promotion - Personal Selling.**Marketing Communication:** Communication Process - Communication Promotion Mix - Factors affecting the Promotion Mix.**Unit-V: Pricing Theory and Practices & Different Types of Marketing****Pricing:** Importance of Price - Cost Determinant of Price - Mark-up Pricing - Profit Maximization Pricing - Break Even Pricing - Pricing Strategy - Ethics of Pricing Strategy - Product Line Pricing.**Types of Marketing:** Word-of-mouth - Rural Marketing - BOP - Relationship Marketing – Digital Marketing - Social Marketing - Services Marketing - Global marketing.**REFERENCE**

- Philip Kotler, Kevin Lane Keller, Abraham Koshy and Mithleshwar Jha: Marketing Management, 13/e, Pearson Education.
- Ramaswamy Namakumari, "Marketing Management", TMH Edition.
- Paul Baines, Chris fill, Kelly Page, Piyush Sinha, Marketing, Asian Edition, Oxford. Czinkota Kotable "Marketing Management" Indian Edition, Cengage learning.
- S.A.Sherlekar, R.Krishnamoorthy, Marketing Management concept and cases, HPH. Rajendra P.Maheswari, Marketing Management (Text & Cases) an Indian Perspective, IBH.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
I Year II Semester**R25MBA12: Quantitative Analysis for Business Decisions****L-T-P-C****4-0-0-4****SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure)****Course Aim/s:**

- To provide the basic tools of Operations research in solving the management problems using mathematical approach for decision making.

Learning Outcome/s:

- The Course covers origin and application of OR, Linear Programming, Decision Theory, Game theory and PERT & CPM. These concepts help the student in taking decisions for business.

Unit-I: Nature and Scope of Operations Research (OR)

Introduction: Origins of OR - Applications of OR in different Managerial Areas - Defining a Model - Types of Model - Process for Developing an Operations Research Model - Practices - Opportunities and Short Comings of using an OR Model.

Unit-II: Linear Programming Method (LPP)

Linear Programming Method: Structure of LPP - Assumptions of LPP - Application Areas of LPP - Guidelines for Formulation of LPP - Formulation of LPP for different Areas - Solving of LPP by Graphical Method - Extreme Point Method - ISO-cost Profit Method - Simplex Method - Two Phase Method - Big-M Method - Converting Primal LPP to Dual LPP - Limitations of LPP.(Theory & Problems)

Unit-III: Transportation Problem and Assignment Model

Transportation Problem: Mathematical Model of Transportation Problem - Methods for finding Initial feasible solution: Northwest Corner Method - Least Cost Method - Vogel's Approximation Method - Test of Optimality by Modi Method - Variation Transportation -and Problems like Unbalanced Supply and Demand - Degeneracy and its Resolution. (Theory & Problems)

Assignment Model: Hungarian Method for Solving Assignment Problem - Variations of Assignment Problem: Multiple Optimal Solutions - Maximization Case in Assignment Problem - Unbalanced Assignment Problem - Travelling Salesman Problem. (Theory & Problems).

Unit-IV: Game Theory and Decision Theory

Game Theory: Two Person Zero-Sum Games - Pure Strategies - Games with Saddle Point - Mixed Strategies - Rules of Dominance - Solution Methods of Games without Saddle Point: Algebraic - Matrix and Arithmetic Methods. (Theory & Problems)

Decision Theory: Ingredients of Decision Problems. Decision Making: Under Uncertainty - Cost of Uncertainty - Under Risk - Under Perfect Information. (Theory & Problems)

Decision Tree: Construction of Decision Tree.

Unit-V: PERT & CPM

Network Analysis: Drawing Networks - Identifying Critical Path - Probability of Completing the Project within given Time - Project Crashing - Optimum Cost and Optimum Duration. (Theory & Problems)

REFERENCE

- J. K. Sharma, "Operations Research: Theory and applications, 5th Edition, McMillan.
- V. K. Kapoor, "Operations Research: Quantitative Techniques for Management", Sultan Chand & Sons.
- Anand Sharma, "Quantitative Techniques for Decision Making", HPH.
- L C Jhamb, Quantitative Techniques, Everest.
- C.R. Kothari, Quantitative Techniques, Revised edition, Vikas.
- N. D. Vohra, Quantitative Techniques in Management, TMH.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year II Semester****R25MBA13: Data Analytics****L-T-P-C****4-0-0-4****SDG 9 (Industry, Innovation and Infrastructure), SDG 17 Partnerships for the Goals****Course Objectives:**

- To explain the concepts of data analytics.
- To provide an understanding on digital data.
- To impart the knowledge on the data visualization and big data analytics.
- To comprehend the gathering, cleaning and organizing data from various sources.
- To understand the role played by various statistical tools and techniques.

Course Outcomes: Students will be able to:

- To gain a comprehensive understanding of data terminologies and concepts.
- To collect, clean, and preprocess data for analysis.
- To create compelling visual representations of data to aid in decision-making processes. To implement data analytics projects, demonstrating project management skills, team work, and problem-solving abilities.
- To develop proficiency in statistical analysis and apply various techniques to extract meaningful insights from data.

Unit – I: Introduction to Data Analytics

Introduction: Meaning of Data Analytics- Need of Data Analytics- Business Analytics vs. Data Analytics - Categorization of Data Analytical Models. Data Scientist vs. Data Engineer vs. Data Analyst- Role of Data Analyst- Data Analytics in Practice.

Unit – II: Dealing with Digital Data and Data Science

Data: Introduction to Digital Data- Types of Digital Data - Data Collection- Data Preprocessing- Data Preprocessing Elements: Data Quality, Data Cleaning, and Data Integration - Data Reduction-Data Transformation-Data Discretization.

Data Science Project Life Cycle: Business Requirement- Data Acquisition- Data Preparation- Hypothesis and Modeling- Evaluation and Interpretation- Deployment- Operations- Optimization- Applications for Data Science.

Unit – III: Big Data Management and Data Visualization

Introduction to Big Data: Evolution of Big Data concept – Features of Big Data- Big Data Challenges-Big Data Analytics.

Introduction to Data Visualization: Data Visualization concept- Importance of data visualization — Structure of Visualization - Tools for Data visualization- Data Queries-Data Dashboards- Principles of effective Data Dashboards-Applications of Data Dashboards.

Unit – IV: Descriptive Statistical Measures

Overview of using Data: Population and Samples - Measures of location - Measures of Dispersion - Measures of Variability - Measures of Association.

Probability Distribution: Probability Distribution and Data Modeling - Discrete Probability Distribution - Continuous Probability Distribution - Random Sampling from Probability Distribution - Data Modeling and Distribution fitting.

Unit – V: Predictive Analytics

Introduction to predictive Analytics: Karl Pearson Correlation Technique - Multiple Correlation - Spearman's Rank Correlation.

Regression: Simple and Multiple Regression - Regression by the Method of Least Squares - Building Good Regression Models. Regression with Categorical Independent Variables - Linear Discriminate Analysis - One-Way and Two-Way ANOVA.

REFERENCE

- Basics of Data Analytics Richa Mishra, Dr. Nirvikar Katiyar, Apoorv Mishra.
- Data Analytics: Principles, Tools, and Practices, Dr. Gaurav Arora, Chitra Lele, Dr. Munish Jindal.
- Essentials of Business Analytics Cam, Cochran, Ohlmann, Anderson, Sweeney, Williams, Cengage Learning.
- Data Mining Concepts and Techniques, Jiawei Han, Micheline Kamber, Jian Pei.
- Big Data Analytics, Seema Acharya , Subhashini Chellappan.
- Statistical Methods by SP Gupta

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year II Semester

R25MBA14: Entrepreneurship & Design Thinking

L-T-P-C

4-0-0-4

SDG 1 (No Poverty), SDG 8 (Decent Work & Economic Growth), SDG 9 (Industry, Innovation and Infrastructure)

Course Aim/s:

- Inculcate among students, the entrepreneurial competencies including self-confidence, goal setting, planning, information seeking, problem solving and planned risk taking.

Learning Outcome/s:

- It would help students to learn skills that will prepare them from initial development of a business plan, to financing a start-up as well as shape factors such as innovative ideas, identifying market opportunity

Unit-I: Understanding Entrepreneurial Mindset

Introduction: Qualities, Skills, Types of Entrepreneurs, Process Approach, Role of Entrepreneurship in Economic Development.

The Individual Entrepreneurial Mindset & Personality: Stress and the Entrepreneur, Entrepreneurial Competencies.

Unit-II: Strategic Perspectives in Entrepreneurship

Entrepreneur: Strategic Planning, Strategic Position, Business Stabilization, Building the Adaptive Firms. Developing an Effective Business Model, Blue and Red Ocean strategies.

Unit-III: Opportunities and Challenges of Entrepreneurship

Initiatives by the Government of India to Promote Entrepreneurship; Social and Women Entrepreneurship, Sources of Finance, Feasibility Analysis, Industry and Competitor Analysis, The Challenges of New Venture Startups. Evaluation Process. Intellectual Property Protection: Patents, Copyrights, Trademarks and Trade Secrets.

Unit-IV: Design Thinking – An Introduction

Design Thinking: Principles of Design Thinking, Process of Design Thinking, Understanding of the problems, problem analysis, Reformation of the Problem, Empathetic Design Methods.

Unit-V: Prototype, Testing Ideas, Implementing Design Thinking

Creativity: Creativity Process, Creativity Techniques, Business Ideas, Evaluation of Ideas, Kano Methods, Finding gap in the Market Place, Prototype, Lean Startup Method, Visualization, Desirability Testing, Implementing Design Thinking, Agility of Design Thinking.

REFERENCE

- Devayani M. Lal, Design Thinking, Sage Publication, 1e, 2021.
- Ali, J Ahmed, Punita Bhatt, Lain Acton, Entrepreneurship in Developing and Emerging Economies, Sage Publications, 1e, 2019.
- Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, Entrepreneurship, Mc GrawHill Publication, 10e, 2018.
- Bruce R. Barringers/ R. Duane Ireland, Entrepreneurship Successfully Launching New Ventures, 4e, Pearson, 2015.
- D F Kuratko and T V Rao, Entrepreneurship- A South Asian Perspective, Cengage learning, 1e, 2012.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year II Semester

R25MBA15A: Project Management

L-T-P-C

3-0-0-3

SDG 12 (Responsible Consumption & Production), SDG 9 (Industry, Innovation and Infrastructure)**Course Objectives:**

- Describe the key characteristics of projects, outline the stages of the project life cycle, and diverse applications of projects across various sectors.
- Outline the various steps involved in project planning and appraisal.
- To calculate project finance using various project evaluation techniques.
- To know the different Control Mechanisms to manage a project.
- To explain the importance of organizational behaviour in Project Management.

Course Outcomes: Students will be able to

- Understand the key characteristics of projects, outline the stages of the project life cycle, and diverse applications of projects across various sectors.
- Apply project planning principles and conduct comprehensive feasibility studies to appraise project viability.
- Evaluate the financial viability of projects using standard project evaluation techniques and cost analysis.
- Apply tools and methodologies for effective project execution, monitoring, and control, by using agile approaches.
- Interpret the human and organizational factors critical for successful project management.

Unit – I: Introduction: Introduction to Project Management: Project Characteristics, Project Life Cycle, Project Identification, Formulation and Implementation, Project Management in different Sectors: Construction, Services Sector, Public sector and Government Projects. Systems Approach to Project Management.

Unit – II: Project Appraisal: Project Planning, Steps in Project Planning, Scheduling, Project Appraisal, Feasibility Study, Technical, Commercial, Economic, Financial, Management, Social Cost Benefit Analysis, Project Risk Analysis.

Unit – III: Project Finance: Project Cost Estimation, Project Financing, Investment Criteria, Project Evaluation Techniques, Pay Back Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Cash Flows Estimation for New and Replacement Projects, Cost of Capital, Risk Analysis.

Unit – IV: Project Control: Network Diagrams, Network Analysis, Critical Path, Quality Management, Project Execution, Monitoring and Control, Agile Project Management, Scrum, Lean Production and Project Management.

Unit – V: Organizational Behavior in Project Management: Organizational Structure and Integration, Role of Project Manager, Roles in the Project Team, Project Stakeholder Engagement, Leadership in Project Management, Participative Management, Team Building Approach, Conflict Management in Projects, Stress Management.

Suggested Readings:

- Stewart R. Clegg, Torgeir Skyttermoen, Anne Live Vaagasar, Project Management, Sage Publications, 1e, 2021.
- Jeffrey K. Pinto, Project Management, Pearson Education, 5e, 2020.
- Prasanna Chandra, Projects, Planning, Analysis, Selection, Financing, Implementation and Review, Tata McGraw Hill, 9e, 2019.
- Jack Gido, Jim Clements, Rose Baker, Mind Tap for Successful Project Management, Cengage Learning, 7e, 2018

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**I Year II Semester****R25MBA15B: Business Ethics and Corporate Governance****L-T-P-C****3-0-0-3****SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities)****Course Objectives:**

- To enable understanding of the basic concepts of Business Ethics and Corporate Governance in Indian and Global Context.
- To elaborate on various aspects in Professional Ethics.
- To explain Corporate Governance practices followed in Indian corporate. +
- To enlighten students the significance of Company Board and Governance Ratings.
- To explain different aspects of CSR and Business Council for Sustainable Development (BCSD) India.

Course Outcomes: Students will be able to

- Understand the Need for Business Ethics and Corporate Governance in India.
- Apply Knowledge of Established Methodologies of Solving Professional Ethical Issues.
- Learn Codes and Committees in Corporate Governance.
- Understand the Role of Board in Corporate Governance.
- Assess the Stakeholder perspective of Corporate Governance.

Unit – I: Business Ethics in the Changing Environment: Business Ethics, Levels of Business Ethics, Myths about Business Ethics, Stages of Moral Development Kohlberg's Study, Carol Gilligan's Theory, Principles of Ethics.

Unit – II: Professional Ethics: Introduction to Professional Ethics, Ethics in Production and Product Management, Ethics of Marketing Professionals, Ethics in HRM, Ethics of Finance and Accounting Professionals, Ethics of Advertisement, Ethics of Media Reporting, Ethics of Healthcare Services. Ethical Dilemma, Mounting Scandals, Ethical Issues, Preparatory Ethics: Proactive Steps, Cyber Ethics.

Unit – III: Corporate Governance: Introduction to Corporate Governance, Major Corporate Governance Failures, Need for Corporate Governance, Corporate Governance in India, Theories of Corporate Governance: Agency Theory, Stewardship Theory and Stakeholder Theory, Problems of Governance in Companies, Role of Capital Markets, Regulator, Government in Corporate Governance.

Unit – IV: Corporate Governance Codes and Committees: Global Reporting Initiative, OECD Principles, Cadbury Committee Report, Kumara Mangalam Birla Committee Report, Naresh Chandra Committee Report, Narayana Murthy Committee Report, Kotak Committee Report, SEBI Clause 49 Guidelines, Corporate Governance Committees.

Unit – IV: Role of Board: Types of Directors, Functions of the Board, Structure of the Board, Role of the Board in Subcommittees, Audit, Compensation Committee, Role, Duties and Responsibilities of Directors, Conflicts of Interest, Remedial Actions. Governance Ratings, Merits and Demerits of Governance Ratings.

Unit – V: Corporate Social Responsibility (CSR): Models for Implementation of CSR, Scope of CSR, Steps to attain CSR, Business Council for Sustainable Development (BCSD) India, Ethics and Social Responsibility of Business, Social Responsibility and Indian Corporations, CSR as a Business Strategy for Sustainable Development, CSR Committee, Recent Amendments in Companies Act (Sec: 135)

Suggested Readings:

1. O.C. Ferrell, John Fraedrich & Linda Farrel, business Ethics- Ethical Decision making and Case, 13e, Cengage, 2024.
2. C. Fernando, Business Ethics and Corporate Governance, Pearson, 2e, 2018.
3. Jyotsna G B, R C Joshi: Business Ethics and Corporate Governance, TMH, 1e, 2019.
4. C.S.V. Murthy, Business Ethics, Himalaya Publishing House, 1e, 2019.
5. Martin J. Ossewaarde, Introduction to Sustainable Development, sage, 1e, 2018.
6. Christine A. Mallin, Corporate Governance, Oxford University Press, South Asia Edition, 4e, 2016.
7. T.N. Sateesh Kumar, Corporate Governance, Oxford University Press, 2015.
8. Bob Tricker, Corporate Governance Principles, Policies and Practices, Oxford University Press, 2015.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
I Year II Semester**R25MBA15C: International Business****L-T-P-C****3-0-0-3****SDG 12 (Responsible Consumption and Production), SDG 16 (Peace, Justice and Strong Institutions)****Course Aim/s:**

- To enhance the understanding of the dynamics of interactions between individual and the organization.
- To facilitate a clear perspective to diagnose and effectively handle human behaviour issues in Organizations.

Learning Outcome/s:

- To develop greater insight into their own behaviour in interpersonal and group, team, situations;
- Identify international business issues in advanced markets and emerging markets by using both classic and emerging international business theories and concepts.

Unit-I: Introduction to International Business

Basic Concepts: Need for International Business (IB), Drivers of IB, Approaches, Modes, Opportunities and Challenges of IB. Distinction between Domestic and IB.

International Business Environment: Cultural, Political, Social and Technological Environment. Drivers of Globalization.

Unit-II: International Trade Theories

Classical Theories: Mercantilism, Absolute Advantage Theory, Comparative Advantage Theory and Factor Endowment Theory.

Modern Theories: Country Similarity Theory, Product Life Cycle Theory, New Trade Cycle Theory and National Competitive Advantage Theory. India's Foreign Trade, Foreign Direct Investment in India, Balance of Payments.

Unit-III: International Business and Economic Integration

Economic Integration: Levels, Benefits and Challenges of Economic Integration, Free Trade Agreement (FTA), International Trade Policy of India.

Regional Economic Groups: Customs Union, Common Market, Economic Union, European Union, NAFTA, ASEAN, SAARC and G8. Multilateral Trade Agreements: GAAT and WTO.

Unit-IV: Strategy and Structure of International Business

Analysis in IB: Environmental Analysis, Value Chain Analysis, Strategies of IB: Types of Strategies, Strategy Implementation Process, Control and Evaluation, Strategic Alliance: Nature, Benefits, Pitfalls, Scope of Strategic Alliance, Alliance Development Process, Economic Considerations for Strategic Alliances. Organization structure: Choosing an Organizational Design Structure, Issues in Global Organizational Design.

Unit-V: International Business Operations

Issues in International Production: Sourcing and Vertical Integration. Major Activities in International Marketing: Brand Decisions.

Issues in International Financial Management: Forex Market, International Monetary System, International Financial Markets, Export Financing. Issues in International HRM.

REFERENCE

- Charles W.I. Hill and Arun Kumar Jain, International Business, Tata Mc Graw Hill. John D. Daniels and Lee H. Radebaugh, International Business, Pearson Education Asia, New Delhi.
- K. Aswathappa, International Business, Tata Mc Graw Hill.
- Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business, Thomson, Bangalore.
- Aravind V. Phatak, Rabi S. Bhagat and Roger J. Kashlak, International Management, Tata Mc Graw Hill.
- Oded Shenkar and Yaong Luo, International Business, John Wiley Inc, Noida.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

I Year II Semester

R25MBA15D: E-Commerce

L-T-P-C

3-0-0-3

SDG 10 (Reduced Inequalities), SDG 17 (Partnerships for the Goals)**Course Objectives:**

- To understand the evolution of e-commerce and evaluate key success factors shaping the Indian e-commerce market.
- To identify various e-commerce business models and explain the digital infrastructure that supports them.
- To examine the digital payment systems and evaluate the role of logistics in e-commerce success.
- To discuss examples of successful Indian e-commerce companies.
- To explore modern digital marketing techniques and examine opportunities in rural e-commerce.

Course Outcomes: Students will be able to

- Analyze the growth patterns of Indian e-commerce and differentiate between the strategies of Flipkart and Amazon India.
- Compare B2B, B2C, C2C, C2B, and hybrid models and evaluate the impact of technologies like AI, ML, blockchain, and UPI on the Indian e-commerce ecosystem.
- Assess the effectiveness of payment gateways, security mechanisms, and logistics models including 3PL and hyperlocal delivery in the Indian context.
- Share examples of companies that explain their business approaches. Apply strategies like influencer marketing, WhatsApp commerce, and vernacular content to rural and Tier 2/3 markets.
- Understand and Apply regulations to meet Compliances.

Unit – I: Introduction to E-Commerce: Concepts and evolution of e-commerce, Indian e-commerce market landscape and statistics, Key success factors in Indian e-commerce startups, Case study: Flipkart vs Amazon India.

Unit – II: Business Models in E-Commerce and Digital infrastructure: Business Models in E-Commerce B2B, B2C, C2C, C2B, and hybrid models, Marketplace vs inventory, led models, Subscription and freemium models, Case studies: Nykaa, Zomato, Meesho, Digital Infrastructure - Internet and mobile penetration in India, Cloud computing and data centers, Role of AI, ML, blockchain in Indian e-commerce, UPI and India Stack: Driving digital inclusion.

Unit – III: Payment Systems and Fintech, Logistics and Supply Chain Management: Digital wallets, UPI, and payment gateways, online payment mechanism, RBI regulations and guidelines, Security and fraud prevention, Fintech startups and innovations in India. Role of third-party logistics(3PL), Reverse logistics and cash-on-delivery challenges, Hyper local delivery models, Indian Postal Service's role in rural e-commerce.

Unit – IV: E-Marketing & Social Commerce and Rural E-Commerce & Digital India: SEO/SEM, affiliate marketing, influencer marketing, viral and permission marketing. WhatsApp commerce and live selling, Role of regional languages and vernacular content, Case studies: v, Moj, Sharechat, YouTube India. Digital literacy and access challenges, Opportunities in Tier 2, Tier 3 and rural markets, Government initiatives: Digital India, ONDC, Case study: Reliance Jio's disruption.

Unit – V: Legal and Regulatory Framework: Information Technology Act, 2000, Consumer Protection (E-Commerce) Rules, 2020, FDI Policy for e-commerce, Data privacy laws and compliance (DPDP Act), General data protection regulation (GDPR).

Suggested Readings:

1. P.T. Joseph, S.J., E-Commerce: An Indian Perspective, PHI Learning Pvt. Ltd., 7th Edition, 2023.
2. C.S.V. Murthy, E-Commerce: Concepts, Models and Strategies, Himalaya Publishing House, Reprint Edition, 2023.
3. Kenneth C. Laudon, Carol Guercio Traver, E-Commerce: Business, Technology, Society, 18e, Pearson, 2024.
4. Bharat Bhasker, Electronic Commerce: Framework, Technologies and Applications, Tata McGraw Hill Education, 4th Edition (2013).
5. Bajaj and Nag, E-Commerce: The Cutting Edge of Business, Tata McGraw Hill.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
I Year II Semester**R25MBA16: START-UP / MSME / Innovation Development Plan /
Sector Specific Report****L-T-P-C****0-0-1-1**

SDG 1 (No Poverty), SDG 8 (Decent Work & Economic Growth), SDG 9 (Industry, Innovation and Infrastructure)

Course Objectives: To provide students with practical exposure to diverse organizational settings—Start-ups, MSMEs, innovation initiatives, or sector-specific domains—enabling them to apply theoretical knowledge to real-world business problems and strategic decision-making.

Course Outcomes: After completion of the course, students will be able to analyze organizational structures, evaluate functional processes, identify challenges and opportunities, and develop actionable insights or innovative solutions aligned with business goals.

Approach**START-UP:**

1. Company Profile & Founding Journey: Include the start-up's origin story, vision, founding team, funding stages, and current status (incubator, accelerator, market stage).
2. Business Model Analysis: Explain the value proposition, revenue model, customer segments, and go-to-market strategy.
3. Roles & Responsibilities during Internship: Detail your tasks, problem-solving contributions, learning outcomes, and exposure to entrepreneurial challenges.
4. SWOT Analysis & Strategic Recommendations: Analyze strengths, weaknesses, opportunities, and threats, and suggest future strategies for growth/scalability.

MSME (Micro, Small & Medium Enterprise)

1. MSME Background & Operational Context: Provide a brief overview of the company, its size (micro/small/medium), industry type, location, and core operations.
2. Functional Area Observations: Describe the internship role, specific departmental exposure (HR, Marketing, Operations, etc.), and process understanding.
3. Challenges Faced by the MSME: Discuss typical pain points such as resource constraints, market competition, digitization gaps, or financial limitations.
4. Suggestions for Process Improvement: Offer actionable recommendations to improve efficiency, customer reach, or financial performance.

Innovation Development Plan

1. Identification of a Problem Area: Begin by clearly stating the real-world problem or unmet need identified through observation, research, or stakeholder inputs.
2. Ideation & Conceptualization: Outline the innovation idea (product, service, process), how it was developed, and how it addresses the defined problem.
3. Feasibility & Impact Assessment: Assess technical feasibility, market potential, cost-benefit analysis, and possible risks involved.
4. Implementation Roadmap: Provide a plan with milestones, resource requirements, stakeholder involvement, and scalability scope.

Sector-Specific Report

1. Industry Overview: Present a macro-level view of the chosen sector (e.g., BFSI, FMCG, Healthcare, IT, etc.), including size, trends, challenges, and opportunities.
2. Company-Specific Analysis: Highlight the organization's position in the sector, its market share, competitors, and key strategic moves.
3. Internship Learnings & Functional Insights: Reflect on your experience in a functional area and its alignment with sector trends (e.g., digital banking in BFSI).
4. Policy or Regulatory Impacts: Discuss relevant government policies, economic factors, or sector-specific reforms that influence the company's operations.

MBA II YEAR I SEMESTER

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBA17: AI For Business****L-T-P-C****4-0-0-4****SDG 9 (Innovation), SDG 8 (Decent Work & Economic Growth), SDG 16 (Peace, Justice and Strong Institutions)****Course objectives:**

- To introduce students to the basic concepts, goals, and features of Artificial Intelligence (AI) in business.
- To help students understand different types of AI and how AI is implemented in enterprises.
- To explore how AI is used across various business functions like marketing, HR, finance, and supply chain.
- To explain the role of AI agents, robots, and how AI connects with machine learning and data science./
- To discuss the ethical, legal, and regulatory challenges of using AI in business.

Course Outcomes: Students will be able to

- Define AI and describe its uses and importance in business.
- Explain different types of AI and how companies can plan for AI implementation.
- Identify how AI helps improve business areas such as customer service, finance, HR, and operations.
- Understand the use of AI agents, robots, and the link between AI, machine learning, and data science.
- Discuss the ethical and legal issues in AI, including fairness, data privacy, and accountability.

Unit – I: Introduction to Artificial Intelligence: Definition and scope, Evolution of AI in Business, Importance and applications of AI, Foundations of AI, Features of AI, Goals of AI, Managerial view of AI, AI subfields, issues and challenges in AI.

Unit – II: AI Types and Implementation: AI types – Based on capabilities: Narrow AI, General AI, Super AI, Based on functionalities: Reactive Machines, Limit memory -generative AI, virtual assistant and chat bots, responsible AI, Self-aware AI, Generative AI. Role of Data in enterprise AI, a blueprint for enterprise, AI implementation.

Unit – III: AI Application in Business: AI Product Development Lifecycle, Product market Fit, Stages of the AI lifecycle, AI in Customer relationship management, healthcare, Finance, Retail, Agriculture, Education, Supply chain, Sales forecasting, HR Analytics.

Unit – IV: AI Agents & Robots: Autonomous agents, Agentic AI, Robots in used today, Human- machine collaboration, Managing automation with robots. AI & ML – overlaps among AI, ML and Data science.

Unit – V: Ethical and Regulatory aspects in AI: Ethical considerations in AI, AI risk and governance, managing AI /security concerns, bias and fairness in AI systems. AI regulatory frameworks, Data privacy and security, liability and accountability, Intellectual Property in AI.

Suggested Readings:

1. Pavan Kumar Gurazada, Seema Gupta. Artificial Intelligence in Business. Vikas Publishing House. 2025.
2. Rahul De'. AI for Managers. Cengage Learning. 2025.
3. Marily Nika, Building AI-Powered Products-The Essential Guide to AI and Gen AI Product Management, O'Reilly, 2025.
4. Saptarshi Goswami, Amit Kumar Das, Amlan Chakravarti. AI for Everyone – A Beginner's Handbook for AI. Pearson India. 2024.
5. Rahul Dubey. Emerging Technologies for Effective Management. Cengage Learning. 2023.
6. Doug Rose, Artificial Intelligence for Business: What you need to know about Machine Learning and Neural Networks, Pearson, 2021.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBA18: Logistics & Supply Chain Management****L-T-P-C****4-0-0-4****SDG 9 (Industry, Innovation & Infrastructure), SDG 12 (Responsible Consumption & Production), SDG 13 (Climate Action)****Course Aim/s:**

- To understand components, processes of supply chain and logistics also performance drivers.
- To impart knowledge on the various functions of logistics management.
- To educate on designing of the supply chain network.
- To clarify the significance of establishing global supply chain.
- To highlight the role of information technology in supply chain.

Learning Outcome/s:

- Understand the cyclical perspective of logistics and supply chain process.
- Learn about distribution, transportation, warehousing issues & challenges in supply chain. Appreciate the significance of network design in the supply chain.
- Gain knowledge of various models / tools of measuring the Supply Chain Performance.
- Appreciate the role of coordination and technology in supply chain management.

Unit-I: Understanding Supply Chain

Objectives of a Supply Chain - Importance, Stages of Supply Chain, Value Chain Process, Cycle View of Supply Chain Process, Logistics & SCM, Supply Chain Drivers and Obstacles, Best Practices in SCM, Green Supply Chain Management.

Unit-II: Logistics

Functions of Logistics Management, Distribution related Issues and Challenges, Gaining Competitive Advantage through Logistics Management, Transportation: Functions, Costs, and Mode of Transportation Network and Decision, Models, Containerization, Cross Docking, Reverse Logistics.

Outsourcing: Nature and Concept, Third-party Logistics (3PL), Fourth-party Logistics (4PL).

Unit-III: Designing the Supply Chain Network

Designing the Distribution Network, Role of Distribution, Factors Influencing Distribution, Design Options, e-Business and its Impact, Distribution Networks in Practice, Network Design in the Supply Chain, Role of Network, Modeling for Supply Chain.

Unit – IV: Supply Chain Performance

Performance Measurement: Dimension, Tools of Performance Measurement- SCOR Model; Demand Chain Management, Global Supply Chain, Challenges in Establishing Global Supply Chain.

Unit – V: Coordination in a Supply Chain

Importance of Coordination, Bullwhip Effect, Obstacles to Coordination, Building Partnerships and Trust, Continuous Replenishment and Vendor Managed Inventories, Forecasting and Replenishment, Collaborative Planning, Role of Information Technology in Supply Chain, Supply Chain 4.0.

REFERENCE

- IMT Ghaziabad Advanced Supply Chain Management, Sage Publications, 2021.
- Rajat K. Basiya, Integrated Supply Chain Management, Sage Publications, 2020.
- K Sridhara Bhat, Logistics & Supply Chain Management, HPH, 1e, 2017.
- Chopra, Sunil, Meindl, Peter and Kalra, D. V., Supply Chain Management: Strategy, Planning and Operation; Pearson Education, 6e, 2016.
- Altekar, Rahul V, Supply Chain Management: Concepts and Cases; PHI Learning, 1e, 2005.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
II Year I Semester**R25MBA19: Production and Operations Management****L-T-P-C****4-0-0-4****SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)****Course Aim/s:**

To introduce concepts of production and operations management in an organization and expose to analytical methods.

Learning Outcome/s:

The students will be able to understand operations management, product & process design, analysis, plant location, layout, Scheduling and Material Management.

Unit-I: Introduction to Operations Management

Introduction: Functional Subsystems of Organization - Systems Concept of Production- Sustainable Operations Management- Industry 4.0.

Types of Production Systems: Flow Shop - Job Shop - Batch Manufacturing - The Project – Productivity- Line Balancing - World Class Manufacturing.

Unit-II: Product & Process Design and Analysis

Product Design and Analysis: New Product Development - Steps of Product Design- Ergonomics.

Process Planning and Design: Selection of Process - Process Selection Decision - - Responsibilities of Process Planning Engineer - Steps in Process Planning - Process Design - Process Research. Capacity Planning, Value Analysis, Value Engineering, Lean Production System.

Unit-III: Plant Location & Plant Layout

Plant Location: Factors Influencing Plant Location - Single Facility Location Problem - Method of Transformation - Model to Determine X- Coordinates of New Facilities - Model to Determine Y- Coordinate.

Plant Layout: Classification of Layout - Advantages and Limitations of Product Layout, Process Layout, Fixed Layout and Group Technology Layout - Layout Design Procedures.

Unit-IV: Scheduling

Scheduling: Johnson's Problem - Extension of Johnson's rule.

Job Shop Scheduling: Introduction - Types of Schedules - Schedule Generation – Heuristic Procedures - Two Jobs and m Machines Scheduling- Quality Control Concepts.

Unit-V: Materials Management

Integrated Materials Management, Components of Integrated Materials Management, Materials Planning, Inventory Control, Purchase Management, eProcurement, Green Purchasing, Stores Management, EOQ, Models of Inventory - Operation of Inventory Systems, Quantity Discount, Implementation of Purchase Inventory Model.

Incoming Materials Control, Obsolete Surplus and Scrap Management, ABC Analysis, XYZ Analysis, VED Analysis, FSN Analysis, SDE Analysis.

REFERENCE

- Panneerselvam, "Production and Operations Management" PHI. Ajay K Garg, Production and Operations Management, TMH.
- Prof. L.C. Jhamb: Production Operations Management, 18th edition, Everest Publishing House.
- Dipak Kumar Bhattacharyya, Production and Operations Management, Universities Press.
- B. Mahadevan, Operations Management: Theory and Practice, Pearson. Kenneth K. Boyer, Rohit Verma, Operations Management: Cengage Learning

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

II Year I Semester

R25MBAB1 (A&B): Decision Analytics Using R

L-T-P-C
2-0-4-4**Course Aim/s:**

- Understand the role of R in data analysis, decision-making, and business analytics.
- Apply R programming fundamentals, data types, and structures for data handling.
- Develop data manipulation and preprocessing skills using R libraries like dplyr and tidyr.
- Implement statistical methods and hypothesis testing using R for business insights.
- Create and interpret data visualizations and exploratory data analysis (EDA) to support decisions.

Learning Outcome/s:

- Explain the structure, setup, and applications of R in business analytics.
- Perform data import, cleaning, manipulation, and transformation tasks in R.
- Write and execute R scripts with control structures, functions, and libraries.
- Analyze datasets using statistical techniques such as t-test, ANOVA, chi-square, and regression.
- Design and present visualizations and EDA to communicate actionable business insights.

Unit-I: Introduction to the R language: Role of R in Data Analysis & Decision-Making Obtaining and Managing R-Importance of Data Cleaning and Pre-processing-Applications of R in Business Analytics-Marketing, Finance, HR, Supply Chain-Structure of R Environment- Installing and Setting up R & R Studio--Working with R Scripts and Console - Advantages and Disadvantages of using R.

Unit-II: - R Basics: R Programming Fundamentals – Arithmetic Operations - R Data Types and Objects, Classes, Creating and Accessing Objects - Data Structures in R- creation, indexing, merging, sub setting - Data Manipulation: dplyr, tidyr-group_by, summarise, filter, arrange - R Libraries - Working with R.

Unit-III – R Data Handling: Control Structures & Functions in R: Reading and Writing Data- CSV, Excel. Built-in functions, creating user-defined functions - The If Statement. Looping: for, repeat, while – Read & Write Functions.

Unit- IV: Statistics with R: Summarizing Data - Calculating Relative Frequencies - Tabulating Factors and Creating Contingency Tables - Testing Categorical Variables for Independence - Calculating Quantiles of a Dataset - Hypothesis Testing-t-test, chi-square, ANOVA, linear Regression.

Unit V – Visualization & Graphics: Basic Plotting - Manipulating the Plotting Window - Advanced Plotting using Lattice Library - Saving Plots. Business application - Sales trend analysis with line chart- Market share with pie chart- Customer segmentation visualization. Exploratory data Analysis (EDA) basic concepts.

REFERENCE BOOKS

- Crawley, M. J. (2012). The R Book. Wiley.
- Kabacoff, R. (2015). R in Action: Data Analysis and Graphics with R. Manning Publications.
- Matloff, N. (2011). The Art of R Programming: A Tour of Statistical Software Design. No Starch Press.
- Wickham, H., & Grolemund, G. (2016). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. O'Reilly Media.
- Dalgaard, P. (2008). Introductory Statistics with R. Springer.
- Venables, W. N., & Ripley, B. D. (2002). Modern Applied Statistics with S. Springer.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBAB2 (A&B): PYTHON PROGRAMMING****L-T-P-C
2-0-4-4****Course Objectives:**

- Learn the basic concepts and data types of Python Programming.
- Learn the concepts of control structures.
- Learn the concepts of functions and expressions in Python language
- Get introduced to libraries such as NumPy and Panda
- Use matplotlib library for data visualization

Course outcomes: After completion of the course, students will be able to

- Understand the concept of Python language, data types.
- Outline the control structures in python
- Examine the concepts of functions and expressions in Python language
- Assess the fundamental Python libraries for data science- NumPy and Pandas
- Analyze Key Python Libraries for Data Visualization

Unit I: Introduction & Data Types

Introduction, setting a working directory, creating and saving a script file, commenting script files, variable creation, operators, input-output statements, Strings, Lists, Arrays, Tuples, Dictionary, Sets, Range .

Unit II: Control Structures

Conditional statements, looping statements, Module-importing module, packages, composition, exception handling.

Unit III: Functions

Functions: defining and calling a function, types of functions, Fruitful functions, Regular Expressions: Match function, Search function, Matching Vs Searching, Object- oriented programming concepts.

Unit IV: Libraries

NumPy: creating arrays, indexing arrays, array processing, array input and output. Pandas: series, data frames, index objects, data alignment, rank and sort, summary statistics.

Unit V: Python for Visualization

Matplotlib, installing/importing matplotlib, matplotlib architecture, Pyplot, creating simple charts, adding elements to charts, line chart, histogram, bar chart, pie chart, multi panel plot.

Suggested Readings:

- Anita Goel, Python Programming – An Object-Oriented Approach, 1e, Universities Press, 2025
- Wes McKinney, Python for Data Analysis, O'Reilly - Shroff Publishers & Distributors Pvt. Ltd, 2013.
- Fabio Nelli Python Data Analytics, Apress Kenneth A Lambert, Fundamentals of Python, Cengage Learning, 2015
- Davy Cielen, Arno D.B. Meysman, Mohamed Ali, Introducing Data Science: Big Data, Machine Learning and More, Using Python Tools, Manning, 2016.
- Wiley India Bharti Motwani Data Analytics using Python, Wiley India, 2020
- Miller Curtis, Hands-On Data Analysis with NumPy and pandas, Packt Publishing, 2018.
- Mohiuddin Ahmed, Al-Sakib Khan Pathan, Data Analytics Concepts, Techniques, and Applications, Taylor & Francis Group, 2020

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

II Year I Semester

R25MBAB5: Predictive Analytics

L-T-P-C
4-0-0-4**Course Aim/s:**

- To know various predictive data analysis models.
- To understand how to use predictive analytics tools to analyze real-life business problems.
- To provide distinctive knowledge on implementation of simple linear and logistic regression models.
- To understand the basic statistical techniques required for forecasting.

Learning Outcome/s:

- To assess the suitability of Predictive Models for effective business decisions.
- To enable valid and reliable ways to collect, analyze, and visualize data; and utilize data in decision making.
- To enhance skills on Linear and Logistic Regression.
- To apply statistical techniques constructively to make effective business decisions

Unit-I: Simple & Multiple Regression Analysis**Predictive Analytics:** Introduction - Applications in Predictive Analytics - Concept of Association.**Simple Regression Analysis:** Fundamentals of Regression Analysis - Requirements in Regression Model Building - Model Diagnostics - Interpretation of Regression results for Management Decision. Multiple Regression Analysis; Significance of Multiple Regression Analysis-Testing Rule of Multiple Regression Analysis.**Unit-II: Non-linear Regression and Regression Modeling****Non-Linear Regression Analysis:** Types of Non-linear Regression Models - Model Transformation - Difference between Linear and Non-linear Regression Models.**Diagnostics of Regression Modeling:** Model Diagnostics – Multi-collinearity – Autocorrelation.**Unit-III: Dummy Modeling and Panel Data Model****Dummy Modeling:** Dummy Independent Modeling - Linear Probability Model - Logit Model - Probit Model.**Panel Data Model:** Panel Data Models - Fixed Effects Model - Random Effects Model - Forms of Panel Data Models - Applications to use Panel Data Models**Unit-IV: Forecasting and Machine Learning****Time Series Forecasting:** Forecasting Techniques - Measures of Forecast Error - Trend Analysis - Time Series Models - Auto Regressive Model - Applications of Time Series Models.**Machine Learning:** Predictive Analysis under Machine Learning - Model of Artificial Neural Networks (ANN) - Model of Random Forest - Model of Support Vector Machine - Assumptions under Machine Learning.**Unit-V: Data Mining and Simulation****Data Mining:** Data Interpretation - Data Reduction - Classification and Clustering Techniques - Association Rule Mining - Cause and Effect Model.**Simulation:** Monte Carlo Simulation - Discriminant Event Simulation - Application Using Simulation.**REFERENCE**

-
- James R Evans, Business Analytics, Global Edition, Pearson Education
 - U Dinesh Kumar, Business Analytics, Wiley India Pvt. Ltd., New Delhi
 - Thomas W. Miller, Modeling Techniques in Predictive Analytics with Python and R - A Guide to Data Science, Pearson Education
 - Daniel T. Larose and Chantal D. Larose, Data Mining and Predictive Analytics, John Wiley & Sons Inc., New Jersey.
 - Barry Keating, J. Holton Wilson, Shovan Chowdhury and John Galt Solutions Inc., Forecasting and Predictive Analytics with ForecastX, McGraw Hill
 - Purba Halady Rao, Business Analytics: An Application Focus, PHI Learning, New Delhi.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBAF1: Security Analysis & Portfolio Management****L-T-P-C****4-0-0-4****SDG 10 – Reduced Inequalities, SDG 12 – Responsible Consumption and Production****Course Aim/s:**

- To students are able to know the investment alternatives, process and portfolio management

Learning Outcome/s:

- The objective of this course is to provide the conceptual and Practical understanding of Stock markets Equity & Bond Valuation, Cash market and also Mutual funds.

Unit-I: Investment Environment in India

Introduction: Overview of Indian Financial System - Securities Trading in Stock Markets - The Investment Management Process.

Investment Alternatives: Negotiable Securities & Non-negotiable Securities. Primary Market: Types of New Issues- Parties to New Issue & Secondary Market.

Unit-II: Security Analysis

Fundamental Analysis: Economic Analysis, Industry Analysis & Company Analysis- Earnings of the Company, Financial Analysis, Growth in Earnings.

Technical Analysis: Dow Theory, Efficient Market Hypothesis, Random Walk Theory, Support and Resistance Levels, Odd Lot Trading Moving Averages.

Unit-III: Portfolio Analysis

Models and Theories: The Returns and Risks from Investing - Markowitz Portfolio Theory - Mean-Variance Approach.

Portfolio Selection: Efficient Portfolios - The Single Index Model - Capital Asset Pricing Model - Arbitrage Pricing Theory.

Unit-IV: Bond Analysis & Valuation & Management

Bond Analysis: Types of Bonds - Interest Rates - Term Structure of Interest Rates - Measuring Bond Yields - Yield to Maturity - Yield to Call - Holding Period Return.

Bond Pricing Theorems: Bond Duration - Active and Passive Bond Management Strategies - Bond Immunization - Bond Volatility - Bond Convexity.

Unit-V: Mutual Funds & Exchange Traded Funds

Mutual Funds: Types of Mutual Funds Schemes - Structure - NAV (Net Asset Value) - Risk and Return. Performance Evaluation Models: Sharpe Model - Treynor Model - Jensen Model - Fama's Decomposition. Exchanger Traded Funds: Types of ETFs and Trading Process.

REFERENCE

- William. F. Sharpe, Gordon J Alexander & J V Bailey: Fundamentals of Investments, PHI.
- Donald E Fischer, Ronald J Jordan: Security Analysis and Portfolio Management, Pearson.
- Prasanna Chandra, Investment analysis and Portfolio Management, TMH.
- Punithavathi Pandian: Security Analysis and Portfolio Management, Vikas.
- M. Ranganatham, R. Madhumathi, Security Analysis and Portfolio Management, Pearson.
- Kevin, SAPM, PHI.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBAF2: FinTech****L-T-P-C
4-0-0-4****SDG 8 – Economic Growth, SDG 9 – Industry, Innovation, and Infrastructure, SDG 10 – Reduced Inequalities****Course Objectives:**

- To introduce the concept of FinTech and its role in modern finance.
- To explain the technologies used in FinTech like UPI, chatbots, APIs, and blockchain.
- To understand how FinTech is used in banking, lending, and customer services.
- To learn how FinTech works in capital markets, insurance, and property technology.
- To explore the rules, risks, and benefits of FinTech, including cybersecurity and financial inclusion.

Course Outcomes: Students will be able to

- Describe what FinTech is and how it is changing the finance industry.
- Identify key technologies that support FinTech systems.
- Explain how banks and lenders use FinTech to serve customers better.
- Discuss how FinTech is used in capital markets and other sectors like insurance and real estate.
- Recognize the challenges, rules, and social benefits related to FinTech.

Unit – I: Introduction to Fintech: Digital Transformation in Manufacturing and Service Industry, The changing structure of the Financial ecosystem. Fintech and its advantages, Digital India and its role in promoting Fintech. Introduction to India Stack – Unique Identification, Presence Less Verification, eKYC, Digital Signature, Digital Document Repository (DigiLocker), Use of DigiLocker to Expedite Recruitment Process, Cashless Digital Payments, Account Aggregation, Receivables Exchange TReDS, Regulatory Framework

Unit – II: Technology Enablers for FinTech: Digital Payments, Unified Payment Interface (UPI), Payment Gateway, The Instant Mobile Payment System (IMPS), Chatbots - Customer Relationship and Service, Use of Chatbots in P2P Platforms, Chatbots for Guiding Personal Financial Management, Robo Advisors or Algorithm-Based Planners - The Advantages of Robo Advisors, Application Programming Interface (API), Blockchain – key concepts, applications, Distributed ledger technology and Decentralized Finance (DeFi).

Cross Border Trade Using Blockchain, Value Chain of Blockchain, Working of a Business Blockchain, Case Study—Capgemini Solution on AWS Managed Blockchain: From Proof of Concept to Production

Unit – III: FinTech in Banking: Digital Transformation in Banks. Changing Customer Expectations, Fitment of FinTech Companies in Digital Transformation – Core Banking Solutions, Network Banking and Cheque Truncation System, Cards with Chip and Pin, Net banking, Toll Gate Collections, PoS Terminals, Buy Now Pay Later (BNPL), Prepaid Mechanisms FinTech in Lending and Borrowing: Introduction to the Business of Lending - Credit-worthiness of the Borrower, FinTech in Lending Business, Latest Technology Trends in Lending, Case Study—Amazon SMB Lending - Amazon as a FinTech Lender, Case Study—Indifi - How the Platform Works

Unit – IV: FinTech in Capital Markets: Raising Capital, Types of Securities, Important Stakeholders in Capital Markets, The Trade Lifecycle, Clearing, Settlement & Back office Operations – Clearing, Settlement, Asset Servicing, How Technology Supports Capital Market Processes

Other Types of FinTech Companies: Insurtech, PropTech – Case Study—Property Locator App of DBS Bank, TailFin, EnablingTech, RegTech

Unit – V: Fintech Regulations and Challenges, Concerns and Trends in FinTech World: Concerns of FinTech Companies, Challenges Faced by FinTech Companies. Cyber security Sustainable Finance: Sustainable business practices, the role of Fintech in the Society, Green economic growth, Financial Inclusion and the role of Technology.

Suggested Readings:

1. Chandrahauns Chavan and Atul Patankar, Introduction to Fintech, Pearson, 2024
2. Peter Goldfish, A Global guide to Fintech and Future Payment Trends, Routledge, 2023
3. Sanjay Phadke, Fintech Futue The Digital DNA Finance, Sage, 2020
4. Chenjiazi Zhong, Cryptocurrencies and Beyond, Business experts press, LLC, 2025

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
II Year I Semester**R25MBAF5: International Financial Management****L-T-P-C
4-0-0-4****Course Objective:**

- To provide an understanding about MNC Financial Management.
- To elucidate various aspects of Balance of Payments.
- To enlighten on various aspects in Foreign Exchange Market.
- To discuss on the methods of Measuring exchange rate movements.
- To help understand the Asset-Liability Management and International Financing.

Course Outcome:

- Understand recent changes and challenges in International Financial Management.
- Learn Factors affecting International Trade flows
- Learn various aspects about International Stock market.
- Understand the uses of exchange rates.
- Examine the importance of International Financing.

Unit – I: Introduction

An Overview, Importance, Nature and Scope of International Financial Management, Domestic FM Vs. IFM. International Business Methods, Recent Changes and Challenges in International Financial Management.

Unit – II: International Flow of Funds

Balance of Payments (BOP), Fundamentals of BOP, Accounting Components of BOP, Factors affecting International Trade Flows, Agencies that facilitate International Flows. Indian BOP Trends.

International Monetary System: Evolution, Gold Standard, Bretton Woods's System, the Flexible Exchange Rate Regime, Evaluation of Floating Rates, the Current Exchange Rate arrangements, the Economic and Monetary Union (EMU) and Developments.

Unit – III: Foreign Exchange Market

Function and Structure of the Forex Markets, Major Participants, Types of Transactions and Settlements Dates, Foreign Exchange Quotations, Process of Arbitrage, Speculation in the Forward Market.

Currency Futures and Options Markets - Overview of the other markets, Euro Currency Market, Euro Credit Market, Euro Bond Market, International Stock Market.

Unit – IV: Exchange Rates

Measuring Exchange Rate Movements, Factors influencing Exchange Rates. Government influence on Exchange Rates, Exchange Rate Systems. Managing Foreign Exchange Risk. International Arbitrage and Interest Rate Parity.

Relationship between Inflation, Interest Rates and Exchange Rates, Purchasing Power Parity, International Fisher Effect, Fisher Effect, Interest Rate Parity, Expectations Theory.

Unit – V: Asset–liability Management

Foreign Direct Investment: International Capital Budgeting, International Capital Structure and Cost of Capital. International Portfolio Management.

International Financing: Equity, Bond Financing, Parallel Loans, International Cash Management, Accounts Receivable Management, Inventory Management. Payment methods of International Trade.

REFERENCE

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- 2021. P.G. Apte, Sanjeevan Kapshe, International Financial Management, TMH ,8e,2020.
 - Alan C. Shapiro, Multinational Financial Management, John Wiley,11e, 2019.
 - Jeff Madura, International Corporate Management, Cengage, 13e,2016.
 - S. Eun Choel and Risnick Bruce: International Financial Management, TMH, 2012
 - Sharan.V, International Financial Management 6e, PHI, 2014.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBAH1: Talent & Performance Management Systems****L-T-P-C
4-0-0-4****SDG 5 (Gender equality), SDG 8 (Decent Work and Economic Growth)****Course Aim/s:**

- To give an understanding about performance management and reward system linked with performance.

Learning Outcomes/s:

- The students can understand the importance of performance Management, Performance Appraisals, Reward System, and other performance related concepts.

Unit-I: Overview of Performance Management

Introduction: Concept - Evaluation of Performance Management - Importance of Performance Management - Overview of Performance Management System - Purpose of Performance Management - Employee engagement and Performance Management - Planning Performance for Role Clarity - Dimensions of Performance Management - Performance Management Strategic Planning.

Unit-II: Measuring Performance Management System

Measuring Performance: Defining Performance and Choosing a Measurement Approach - Measuring Results and Behaviours' - Gathering Performance Information - Implementing a Performance Management System - Improving Quality of Performance Rating - Performance Review Discussion.

Performance Management Process: Mid Cycle Review Process - End Cycle Review Process.

Unit-III: Performance Planning

Planning: Performance Management and Employee Development - Performance Management Skills - Performance Management Planning and Planning Process - Performance Planning and Role Clarity - PKPAs - Performance Targets - Performance Agreement - Drawing of the Plan - Evaluating the Performance Planning Process.

Unit-IV: Reward Management System

Reward System: Performance management Learning Organizations - Reward Management Objectives - Components of Reward System - Linkage of Performance Management to Rewards and Compensation System - Reward Systems and Legal Issues - Managing Team Performance.

Unit-V: Tools of Performance Management

Tools: Bench Marking - Coaching and mentoring - Competency Mapping - Balance Score Card - Pygmalion Effect.

REFERENCE

-
- Herman Aguinis, "Performance Management" Pearson.
 - Lance A Berger & Dorothy R Berger "The Talent Management Hand Book", TMH.
 - B D Singh, "Performance Management System- a holistic approach" excel Books.
 - Prem Chadha "Performance management" Macmillan.
 - Srinivas K Kandula "Performance Management" PHI.
 - R K Sahu : Performance Management System, Excel.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

II Year I Semester

R25MBAH2: Training and Development

L-T-P-C

4-0-0-4

SDG 5 (Gender Equality), SDG 8 (Decent Work & Economic Growth)

Course Aim/s:

- To enable the students to understand the design of training, implementation and evaluation of training programs in the organization.

Learning Outcomes/s:

- The student after completing the course will be familiar with how to do training need analysis, understand various training methods, design training programs, implement training programs and evaluate effectiveness of training programs.

Unit-I: Training in Organizations

Overview of Training: Introduction to Training, Training vs Development, Training vs education, Training Process Model- Open System Model - Trends in Training - Challenges and Career Opportunities in Training, Principles of Learning in training.

Unit-II: Need Analysis and Training Design

Need Analysis: Concepts, Process, Model, Organizational constraints, Training design- steps in training design, aligning training design with learning process.

Unit-III: Training Methods

Methods: Criteria of Selecting Appropriate Training Methods – Development of Training Methods, On-The-Job Training Methods, Off-The-Job Training Methods- Matching Methods with Outcomes - Lectures and Demonstrations - Games and Simulations, JIT - Computer Based Training (CBT) - e-Learning.

Unit-IV: Implementation & Evaluation of Training

Implementation of Training Program: Approaches to Implementation of Training Program - Development of training - Implementation - Transfer of Training - Major Players in Training & Development.

Evaluation of Training Program: Resistance to Training Evaluation - Types of Evaluation.

Unit-V: Areas of organizational Training

Organizational Training: Orientation Training - Diversity Training - Sexual Harassment Training - Team Training - Cross Cultural Training - Training for Talent Management and Competency Mapping - Training in Emotional Intelligence.

REFERENCE

- Raymond A Noe, Amitabh Deo Kodwani, "Employee Training and Development" McGraw Hill.
- Dr. B. Janakiram, Training & Development, Dreamtech Press
- Dipak Kumar Bhattacharyya, Training and Development: Theories and Applications, SAGE Publications
- P. Nick Blanchard, James W. Thacker, A. Anand Ram, "Effective Training" 4e, Pearson.
- Anjali Ghansekar, Training & Development, Everest.
- Dr. Divya Sharma & Sonia Kaushik, Training and Development, JSR Publishing House LLP

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

II Year I Semester

R25MBAH5: Compensation and Reward Management

L-T-P-C
4-0-0-4

SDG3 (Good Health and Well Being), SDG 5 (Gender Equality), SDG 8 (Decent Work & Economic Growth)

Course Aim/s:

- It enables the student understand the concepts issues and challenges of compensation and reward management.

Learning Outcomes/s:

- The student understands how to design the compensation for various levels of jobs in the organization, designing the compensation for special groups. Government and legal issues in compensation design.

Unit-I: Introduction

Compensation Management: Importance, Types of compensation - Compensation as Retention Strategy - Compensation for Special Groups - 3P Concept in Compensation Management.

Reward Management: Developing Reward Policies - Reward System in Service Organisations- Case Discussion.

Unit-II: Designing Compensation System

Building Compensation System: Building internally consistent Compensation System - Building Market Competitive Compensation System - Integrating Internal Job Structure with External Market Pay Rates - Building Pay Structures that Recognize Individual Contributions

Unit-III: Pay Structures

Pay Structure: Performance Based Pay Structures - Salary Structures - Salary Progression - Methods of Payment in Compensation - Designing Pay Ranges and Bands in Public and Private sectors - Different Types of Pay Structures in India.

Unit-IV: Benefits and Services

Employee Benefits: Classification of Employee Benefits - Employee Benefit Programs (Statutory and Non Statutory) - Designing a Benefit Package - Concept of Voluntary Retirement Scheme (VRS).

Unit-V: Contemporary Strategic Compensation Challenges

International Compensation and Competitive Strategies: Executive Compensation Packages - Compensating the Flexible Workforce - Contingent Employees and Flexible Work Schedules - Compensation for Expatriates and Repatriates - New trends in compensation.

REFERENCE

- George T Milkovich, Jerry M Newman, C S Venkata Ratnam" TMH.
- B D Singh "Compensation and Reward Management" Excel Books.
- Joseph J. Martocchio "Strategic Compensation" Pearson.
- Kanchan Bhatia "Compensation Management" Himalaya.
- Henderson "Compensation Management in a Knowledge Based World", Pearson.
- Michale Armstrong "Employee Reward" University Press.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBAM1: Consumer Behaviour****L-T-P-C****4-0-0-4****SDG 3 (Good Health and Well-being), SDG 5 (Gender Equality), SDG 12 (Responsible Consumption and Production)****Course Aim/s:**

- To study the consumer behaviour concept in order to develop better marketing programs and strategies.

Learning Outcome/s:

- The student will be able to evaluate the effectiveness of various consumer behaviour components such as perception, attitude, decision making, and marketing ethics.

Unit-I: Understanding Consumer Behaviour**Introduction:** Defining Consumer Behaviour - Significance of Studying Consumer Behaviour - Understanding Consumer through Research Process - Consumer Behaviour in a World of Economic Instability - Rural Consumer Behaviour.**Segmentation:** Consumer Segmentation - Targeting and Positioning - Segmentation & Branding - Rural Markets.**Unit-II: Environmental Influences on Consumer Behaviour****Environmental Influences:** Influence of Culture - Sub-culture - Social Class - Social Group -Family and Personality - Cross-Cultural Consumer Behaviour.**Unit-III: Consumer as an Individual****Personality and Self-Concept:** Consumer Motivation - Consumer Perception - Consumer Attitudes and Changing Attitudes - Consumer Learning and Information Processing.**Unit-IV: Consumer Decision Making Processes****Decision Making:** Problem Recognition - Search and Evaluation - Purchasing Processes - PostPurchase Behaviour**Models:** Models of Consumer Decision Making - Consumers and the Diffusion of Innovations.**Unit-V: Consumerism and Ethics****Roots of Consumerism:** Consumer Safety - Consumer Information - Consumer Responsibilities - Marketer Responses to Consumer Issues - Marketing Ethics towards Consumers.**REFERENCE**

- David L. Loudon and Albert J. Della Bitta, Consumer Behaviour, TMH.
- S. Ramesh Kumar, cases in Consumer Behaviour, Pearson.
- Suja R Nair, Consumer Behaviour in Indian perspective, HPH.
- Ramneek Kapoor, N. Namdi O Madichie, Consumer Behaviour, TMH.
- Michael R. Solomon Consumer Behaviour, PHI.
- Ramanuj Majumdar, Consumer Behaviour, PHI.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBAM2: Services Marketing****L-T-P-C
4-0-0-4****SDG 9 – Infrastructure, SDG 11 – Sustainable Cities and Communities, SDG 12 – Responsible Consumption****Course Aim/s:**

- The objective of the course is to provide a deeper insight into the Marketing Management of companies offering Services as product.
- The students are able to learn the concepts on customers and standardising, delivering the quality service in the given market, and also facilitates important concepts of service marketing.

Learning Outcome/s:

- The students will be able to understand the characteristics of services, understand consumer behaviour in services, align service design and standards, delivering service, managing services promises.

Unit-I: Foundations of Service Marketing**Role of Services in Modern Economy:** Service and Technology - Characteristics of Services Compared to Goods - Services Marketing Mix - Staying Focusing on Customer.**GAP Model:** Gap Models of Service Quality - Customer Gap - Provider Gap and Closing Gap.**Unit-II: Focus on the Consumer****Consumer Behaviour in Services:** Consumer Expectations in Service - Consumer Perceptions of Service.**Understanding Consumer Requirements:** Listening to Customers through Research - Building Customer Relationships and Service Recovery.**Unit-III: Aligning Service Design and Standards****Service Innovation and Design Challenges:** Types of Service Innovations - Stages in Service Innovation and Development - Service Blueprinting - High Performance Service Innovations -New Service Development Processes.**Customer Defined Service Standards:** Factors - Types and Development - Physical Evidence and the Services Cape - Customer Service Audit.**Unit-IV: Delivering and Performing Service****Service Delivery:** Employees Roles in Service Delivery - Customers Roles in Service Delivery - Delivering Service through Intermediaries and Electronic Channels - Managing Demand and Capacity.**Unit-V: Managing Service Promises****Integrated Services Marketing Communications:** Need for Coordination - Five Categories of Strategies to Match Service Promises with Delivery.**Pricing of Services:** Three key ways that Service Prices are different for Customers -Approaches to Pricing Services.**REFERENCE**

- Christopher Lovelock, Jochen Wirtz, Jayanta Chatterjee, Services Marketing, Pearson.
- Valarie A. Zeithaml & Mary Jo-Bitner: Services Marketing, Integrating customer focus across the firm, TMH.
- John E. G. Bateson, K. Douglas Hoffman: Services Marketing, Cengage Learning.
- Harsh V. Varma: Services Marketing text and cases, Pearson.
- Vinnie Jauhari, Kirti Dutta: Services- Marketing, Operations and Management, Oxford University Press.
- Govind Apte, Services Marketing, Oxford Press.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBAM5: Digital and Social Media Marketing****L-T-P-C
4-0-0-4****SDG 9 – Infrastructure, SDG 11 – Sustainable Cities and Communities, SDG 12 – Responsible Consumption****Course Aim/s:**

- The objective of this course is to understand the importance of digital marketing, SocialMedia Marketing and their applications.

Learning Outcome/s:

- The Applications of Digital Marketing in the Globalized Market
- Channels of Digital Marketing
- Digital Marketing Plan
- Search Engine Marketing
- On Line Advertising

Unit-I: Understanding Digital Marketing

Introduction to Digital Marketing: Concept - Components - Need and Scope - Benefits - Digital Marketing Platforms and Strategies - Comparison of Marketing and Digital Marketing - Digital Marketing Trends.

Unit-II: Marketing in the Digital Era

Segmentation: Importance of Audience Segmentation - How different segments use Digital Media - Organizational Characteristics - Using Digital Media to Reach - Acquisition and Retention of new customers - Digital Media for Customer Loyalty.

Unit-III: Search Engine Marketing and Online Advertising

Search Engine Marketing: Importance of SEM - Understanding Web Search - Keywords - HTML tags - Inbound Links

Online Advertising: Online Advertising vs. Traditional Advertising - Payment Methods of Online Advertising - CPM (Cost-per-Thousand) and CPC (Cost-per-click) - Display Ads - Choosing a Display Ad Format - Landing Page and its importance.

Unit-IV: Introduction to Social Media Marketing

Social Media Marketing: The Role of Social Media Marketing - Goals and Strategies - Identifying Target Audiences - Social Media Platforms and Social Network Sites - Micro blogging - Video Marketing - Content Marketing - Mobile Marketing on Social Networks - Tools for Managing the Social Media Marketing Effort

Unit-V: Application of Social Media Marketing

Social Media Marketing: Social Networking with Facebook - LinkedIn, Blogging as a social medium - Micro blogging with X - Social Sharing with YouTube - Social Media for Customer Reach - Acquisition and Retention - Measurement of Digital Media - Analyzing Digital Media Performance - Analyzing Website Performance - Analyzing Advertising Performance.

REFERENCE

- Michael Miller, B2B Digital Marketing, 1e, Pearson, 2014.
- Vandana Ahuja, Digital marketing, Oxford University Press 2015.
- Michael R Solomon, Tracy Tuten, Social Media Marketing, Pearson, 1e, 2015.
- Judy Strauss & Raymond Frost, E-Marketing, Pearson, 2016.
- Richard Gay, Alan Charles worth and Rita Esen, Online marketing - A customer led approach, Oxford University Press 2007.
- Arup Varma, Pawan S. Budhwar, Angelo S. De Nisi, Digital Marketing, Wiley, 2016.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year I Semester****R25MBA23: Data Visualization Lab****L-T-P-C****1-0-2-2****SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)****Course Objectives:**

- Understand the principles and best practices of data visualization and visual encoding.
- Apply data pre-processing and exploratory data analysis techniques to structured and unstructured datasets.
- Use visualization tools (e.g., Power BI, Tableau, Excel, Python) to create meaningful visual representations of business data.
- Develop dashboards and visual stories that support data-driven decision-making in business contexts.
- Evaluate visualizations for accuracy, clarity, and ethical communication, aligned with transparency and sustainable reporting standards.

Course Outcomes: Students will be able to

- Demonstrate basic proficiency in data import, cleaning, and visualization tools.
- Generate appropriate charts and plots for univariate, bivariate, and multivariate data.
- Construct interactive dashboards and visual reports for business decision-making.
- Apply ethical visualization techniques by avoiding misleading representations of data
- Interpret and communicate data insights through storytelling using business or SDG datasets.

Unit –I: Introduction to data and visualization

Data, information and knowledge – measurement scales – variable selection – type conversion – statistical model – algorithmic model – history of visualization – gestalt’s principles – seven stages of data visualization – data science process – types of charts – chart selection guide

Unit –II: Understanding visualization and the interface

Best visualization practices – effectiveness of visual encodings – color design principles – Edward Tufte’s design principles – data – ink ratio – minimizing chart junk – minimizing lie factor – connecting to data sources – tables – charts – dashboards – stories

Unit-III: Deployment of Structured data

Visualization of structured data – data dictionary – exploring the data – univariate, bivariate and multivariate analysis and relevant charts – heat maps – dual axis charts – modelling and feature selection.

Unit-IV: Deployment of Unstructured data

Visualization of unstructured data – text data visualization – forms of text data – word cloud – word tree – joint plot – subjectivity and objectivity – visualizing networks – visual storytelling

Unit –V: Dashboards and storytelling

Storytelling frameworks – data storytelling – narrative storytelling – analytical dashboard – misleading charts and graphs – cherry picking data – correlation and causation – Simpson’s paradox – scaling – drill down bias – data discrepancy

Note: Laboratory work can be done using Spreadsheets /Power BI/ Tableau

Suggested Readings:

1. Jonathan Schwabish, Data Visualization in Excel, Routledge
2. Sharada Sringswara, Purvi Tiwari, U. Dinesh Kumar, Data Visualization, Wiley, 2022
3. Mathew O. ward, Georges Grinstein, Daniel Keim, Interactive data Visualization, Routledge, 2015.
4. Seema Acharya, Mastering Data Visualization using Tableau, Wiley, 2024.

MBA II YEAR II SEMESTER

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
II Year II Semester**R25MBA25: Strategic Management****L-T-P-C****4-0-0-4**

SDG 8 (Decent Work & Economic Growth), SDG 9 (Innovation & Infrastructure), SDG 12 (Responsible Consumption)

Course Aim/s:

- To enable the 421'687880;'[[\] develop a holistic perspective about strategic Management of an organization.

Learning Outcome/s:

- To understand how to scan internal and external environment of an organization, understand different types of strategies and structures, strategies of the competitors, turnaround strategies, global strategies and strategic control. With that knowledge they would be able to formulate strategies, change strategies if necessary and implement strategies.

Unit-I: Strategic Inputs

Introduction to Strategic Management: Strategic Management and Competitiveness - Technology and Technology Change - Vision, Mission and Objectives - Strategic Leaders - Strategic Management Process.

The External Environment: Opportunities - Threats - Competition and Competitor Analysis - External Environmental Analysis - Segments of the External Environment – Porter's 5-Force Model.

The Internal Environment: Resource - Capabilities - Competencies and Competitive Advantages. Analyzing Internal Organization: Building Core Competencies - Value Chain Analysis -Outsourcing.

Unit-II: Formulation of Strategic Actions

Business Strategy: Business Level Strategy - Effectively Managing Relationships with Customers - The Purpose of Business Strategy.

Competitive Rivalry and Dynamics: A Model of Competitive Rivalry - Competitor Analysis - Drivers of Competitive actions and responses - Competitive Rivalry and Dynamics, (Case Study).

Unit-III: Corporate level Strategy

Diversification Strategy: Levels of Diversifications and Reasons - Value Creating Diversifications.

Strategic Acquisitions & Restructuring: Popularity of Mergers & Acquisitions Strategies -Problems in Achieving Acquisition Success - Restructuring. (Case Study).

Unit-IV: Global Strategy

International Opportunities: Identifying International Opportunities and International Strategies - Strategic Competitive Outcomes and Risk in an International Environment.

Corporate Implications for Strategy: Strategic Alliances - Corporate Level Cooperative Strategy - Competitive Risk with Cooperative Strategies.

Unit-V: Structure and Controls with Organizations

Organizational Structure and Controls: Evolutionary Patterns of Strategy and Organizational Structure.

Leadership: Leadership Implications for Strategy - Entrepreneurial Implications for Strategy.

REFERENCE

- P. Subba Rao, Business Policy and Strategic Management, HPH.
- V.S.P. Rao, V. Hari Krishna; Strategic Management, Excel Books.
- Azhar Khazmi, Strategic Management & Business Policy, TMH.
- Mason A Carpenter et al."Strategic Management: A dynamic Perspective" Pearson.
- Adrian & Alison" Strategic Management: Theory & Application" Oxford University Press.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year II Semester****R25MBAB3 (A&B): Database Management with SQL****L-T-P-C
2-0-4-4****Course Aim:**

To provide with a foundational understanding of database concepts and SQL. The course aims to develop students' ability to design simple databases, write basic to advanced SQL queries, and understand essential database management principles through a combination of theory and practical exercises.

Learning Outcomes:

After completing this course, students will be able to explain the fundamental concepts of databases and the role of SQL within database management systems. They will be able to Write advanced SQL queries involving joins, aggregation, subqueries, and grouping.

Unit 1: Introduction to Databases and SQL

Introduction to Databases: Importance and Applications of Databases in everyday life. Types of Databases. Introduction to SQL and its role. Installing and setting up a simple database software (e.g., MySQL or SQLite). Basic navigation of a database tool interface. NoSQL databases and their differences with Relational DBMS.

Unit 2: Database Concepts and Data Modeling

Data Models Overview: Introduction to Tables, Create tables-defining data types-Understanding Rows, Columns, Primary Keys, and Foreign Keys. Entity-Relationship Model basics. ER Diagrams-components-Drawing ER diagrams.

Unit 3: Basic SQL Commands

Introduction to SQL statements: Writing queries to create tables, insert data, update records, delete records, and retrieve data with filters and order. Using commands SELECT, INSERT, UPDATE, DELETE in databases. Filtering and sorting data using WHERE, ORDER BY.

Unit 4: Advanced SQL Querying and Table Relations

SQL queries to join multiple tables and perform aggregation: Hands-on grouping and filtering aggregated data. Different types of Joins -INNER, LEFT, RIGHT, Aggregate functions (SUM, COUNT, AVG), GROUP BY, HAVING clauses, basics of subqueries. Stored Procedures: Functions and advantages.

Unit 5: Database Management and Security Basics

Database normalization concepts: Applying simple normalization to design tables. Introduction to indexing and keys. Basic database security: user roles, permissions, and data integrity. Threats to Database Management. New Versions of SQL-Comparison of different SQLs -Artificial Intelligence in SQL. Database backup and recovery.

Reference

- Sayak Ghosh, Fundamentals of SQL, IP Innovative Publication, 1st Edition (2022)
- Pranab Kumar Das Gupta and P. Radha Krishna, Database Management System Oracle SQL and PL/SQL, PHI Learning, 2nd Edition (2012)
- Ramesh Bangia, Learning SQL, Wiley India, 1st Edition (2025)
- Ivan Bayross, Sql,PL/SQL, The Programming Language of Oracle, BPB Publications
- Alan Beaulieu, Learning SQL, O'Reilly Media (3rd Edition)

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year II Semester****R25MBAB4 (A&B): KNIME for Data Analytics****L-T-P-C
2-0-4-4****Course Aim/s:**

To help students in understanding how the managers use business analytics for managerial decision making.

Learning Outcome/s:

The students will be familiar with the practices of analyzing and reporting the business data useful for the insights of business growth and development.

Chapter I: Introduction to KNIME Analytics Platform: KNIME Installation Process – Need – Importance; User Interface, File, Edit, View, Help, Data sources, Access, Reading various Files, Industrial usage of KNIME Regarding HR, Marketing, Finance, Production and Operations, Logistics and Supply Chain, Limitations.

Chapter II: Nodes: Description Nodes Connectivity, Ports, Dealing with IO Node- Reading, Writing Nodes; Data Manipulation Node- Row, Column Nodes ; View Node-Visual Nodes; Analytics node- Mining Node, Statistical Node; D B Node, Other Data Type – Text Processing Node; KNIME Lab NodeRow Filter and Splitter Nodes; Work Flow control Node; Reporting Node- Report to PDF Node.

Chapter III: Data Blending and Filtering Joins and its types: Column- Appender, Column filter, Rename, Combine, Column sort, Merger; Rule based row filtration, Date and Time row filter; Row: Duplicate Row, Row Sorting, Group sorting; Pivoting, Unpivoting, Identifying the missing values, cell split.

Chapter IV: Data Conversion and Data Analysis Methods: Cell Split by position, Column Aggregator; Type Conversion; Math formula and Rule Engine, String Manipulation. Data Analysis Methods: Support Vector Machines (SVM); K-Nearest Neighbor's (KNN); Logistic Regression, Random Forest, Tree Ensemble; Comparative Model Analysis on SVM, KNN, LR.

Chapter V: Data Visualization and Data Driven Decision Making: Pie Chart, Bar Chart, Pivot Tables; importing and exporting of KNIME workflows; Data-Driven Decision Making: Decision Rule framing; Deriving Decisional Tree, Analysis for Data-Driven Decision Making (DDDM).

REFERENCE

- 21 Analytics Insights for Data Science written by Chat GPT & Michael Berthold.
- From Excel to KNIME written by Kathrin Melcher.
- KNIME Beginner's Luck Written by Satoru Hayasaka & Rosaria Silipo
- Just KNIME It Written by Aline Bessa & Victor Palacios
- Explainable AI: Interpreting Machine Learning with XAI Written by Keerthan Shetty & Paolo Tamagnini

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year II Semester****R25MBAB6: Data Management & Business Intelligence****L-T-P-C
4-0-0-4****Course Aim/s:**

- To provide the basic knowledge of data warehousing and data mining its practical applications under professional criteria for managing, selecting, and appraising data.

Learning Outcome/s:

- The students will use and assess data collections, repositories, and services in the context of business and industry.

Unit-I: Overview of Data Management**Introduction:** Data Management at Individual and Organizational Levels**Organizational Memory:** Components and Technologies - Data Base File-Oriented Systems - Data Base Model Systems - Hierarchical Network Model Systems - Relational Database Systems**Database Systems:** Hardware - Software - Data - People and Relationship of the four System Components.**Unit-II: Data Management in the Organizations****Data Management:** Three-Level Data Base Architecture - Data Sharing Between Functional Units and Between Different Levels of Users and Different Locations in the Organization – Basics of SQL, Features and importance.**Unit-III: Knowledge of Data Warehousing****Data Warehousing:** Concepts - Implementation of Data Warehousing - Administration of Data Warehouse - Recent Trends and Security Issues in Data Warehousing - Planning and Monitoring Business Performance Management - Techniques and Methodologies in Business Performance Management - Performance Scorecards and Dashboards.**Unit-IV: Understanding Business Intelligence****Business Intelligence:** Concept - Definition - and Architecture of Business Intelligence - Different Styles of Business Intelligence - The Cyclic Process of Intelligence Creation - The Value of Business Intelligence - Key Performance Indicators and Performance Metrics for Business Intelligence.**Unit-V: Business Intelligence Implementation****Business Intelligence Systems:** Integration of Business Intelligence and Connecting Business Intelligence Systems - Legal Issues - Privacy - Ethics in Managing Business Intelligence Systems - Social Networking and Business Intelligence.**REFERENCE**

- Richard T Watson, Data Management Data Bases and Organizations, Wiley, India.
- Berson Smith, Data Warehousing, Data Mining 7 OLAP, TMH.
- Marakas, Modern Data Warehousing, Mining, and Visualization Core Concepts, Pearson.
- Efraim Turban et al., Business Intelligence, Pearson Education.
- David Loshin, Business Intelligence, Elsevier.
- Rajiv Sabherwal, Business Intelligence, Wiley Publications.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
II Year II Semester R25MBAF3: Risk Management & Financial Derivatives

L-T-P-C
4-0-0-4

SDG 8 – Economic Growth, SDG 11 – Sustainable Cities, SDG 13 – Climate Action

Course Aim/s:

- To make students efficient in the area of Derivatives, giving them the knowledge of basics in Derivatives, Future Markets, Option Strategies, etc.

Learning Outcome/s:

- The students will understand the basic difference between stock market and derivatives market.
- To understand the various types of derivatives and their calculation procedures.

Unit-I: Introduction to Derivatives: Introduction, Development and Growth of Derivative Markets - Types of Derivatives Fundamental Linkages between Spot & Derivative Markets - The Role of Derivatives Market- Uses & Misuses.

Commodity Exchanges: Role - Functions - Trading - National and Regional Exchanges.

Unit-II: Future and Forward Market

Structure of Forward and Future Markets: Mechanics of Future Markets - Hedging Strategies Using Futures - Determination of Forward and Future Prices.

Types of Futures: Interest rate Futures - Currency Futures and Forwards.

Unit-III: Options

Options Market: Distinguish between Options and Futures - Structure of Options Market - Principles of Option Pricing.

Option Pricing Models: The Binomial Model - The Black-Scholes Merton Model.

Unit-IV: Option Strategies

Strategies: Basic Strategies - Advanced Strategies - Trading with Options - Hedging with Options - Currency Options

Unit-V: Swaps

SWAP: Concept - Nature - Features - Evolution of Swap Market.

Major Types of Swaps: Interest Rate Swaps - Currency Swaps - Commodity Swaps - Equity Index Swaps - Credit Risk in Swaps - Credit Swaps.

Managing Risk: Using Swaps to Manage Risk - Pricing and Valuing Swaps.

REFERENCE

- Punithavathy Pandian: Security Analysis & Portfolio Management, Vikas.
- John C Hull: Options, Futures and other derivatives, Pearson.
- M. Ranganatham & R. Madhumathi : Derivatives and Risk Management, Pearson
- S. L. Gupta: Financial Derivatives, PHI.
- Dubofsky, Miller: Derivatives Valuations and Risk Management, Oxford.
- Don M. Chance, Robert Brooks: Derivatives and Risk Management Basic, Cengage.
- Sundaram Das, Derivatives – Principles and Practice, McGraw Hill.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year II Semester****R25MBAF4 (A&B): Financial Analytics****L-T-P-C
2-0-4-4****SDG 9 – Industry and Innovation, SDG 11 – Sustainable Cities, SDG 13 – Climate Action****Course Objective:**

- To enable understanding of various aspects in Financial Analytics.
- To help understand time value money, risk and return aspects.
- To impart knowledge of various capital budgeting techniques.
- To elucidate various aspects of Equity Valuation.
- To enlighten on the aspects of Bond Valuation.

Course Outcome:

- Understand techniques of financial statements.
- Learn the relevance of time value money.
- Learn various aspects of capital budgeting.
- Understand industry, technical and economic analysis.
- Learn duration of bond and immunization strategies.

Unit – I: Techniques of Financial Statement

Horizontal, Vertical Analysis, Trend Analysis, Ratio Analysis, Liquidity, Profitability, Solvency and Turnover Ratio, Valuation of Ratios, Statement of Cash Flow, Classification of Cash Flow.

Computing Net Cash Flow: Operating, Investing and Financing Activities. Reporting and Interpretation using Spreadsheet.

Unit – II: Time Value of Money & Risk and Return

Time Value of Money: Future Value: Simple, Compound Interest and Annuity, Present Value: Discounted, Annuity, Equated Loan Amortization, Perpetuity using Spreadsheets.

Risk and Return: Holding Period Returns, Arithmetic Mean vs Geometric Mean, Risk: Standard Deviation, Coefficient of Variation, Beta, Covariance of Stock.

Unit – III: Capital Budgeting Techniques

Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Decision Tree, Cash Flow in Capital Budgeting, Cost of Capital.

Advance Capital Budgeting Techniques, Adjusted Present Value Approach, Competing Project Risk using Spreadsheets.

Unit – IV: Equity Valuation

Calculation of Portfolio Mean and Variance, Capital Asset Pricing Model (CAPM), Variance: Covariance Matrix, Estimating Beta and Security Market Line.

Industry Analysis, Economic Analysis and Technical Analysis in Stock, Real Option in Capital Budgeting.

Unit – V: Bond Valuation

Bond Duration, Duration of Bond with Uneven Payments, Immunization Strategies, Modeling the Term Structure. Calculating Expecting Bond Return in a Single and Multi-period Framework, Semi-annual Transition Matrix, Computation of Bond Beta.

REFERENCE

- Sheeba Kapil, Financial Valuation and Modeling, Wiley, 1e, 2022.
- R. Narayanaswamy, Financial Accounting-Managerial Perspective, PHI, 7e, 2022.
- Timothy Mayes, Financial Analysis with MS Excel, Cengage, 7e, 2013.
- N R Parasuraman, Financial Management-step by step approach, Cengage, 1e, 2014.
- Simon Bennings, Financial Modeling-Using Excel, MIT Press, Cambridge, 3e
- Vijay Gupta, Financial Analysis using Excel, VJ Books Inc, Canada.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year II Semester****R25MBAF6: Strategic Cost and Management Accounting****L-T-P-C
4-0-0-4****SDG 4 (Quality Education)****Course Objectives:**

- To provide understanding of various aspects in strategic cost and management accounting.
- To elucidate the role of cost accounting for better managerial decision making.
- To impart knowledge of various aspects in CVP and ABC analysis.
- To discuss in detail various aspects in budget and budgetary control.
- To help understand the variances and their importance in cost accounting.

Course Outcomes: Students will be able to

- Understand the cost analysis and control.
- Learn the relevance of unit, job, process costing for strategic decisions.
- Learn various aspects of activity-based management.
- Understand the role of types of budgets and the budgeting process in non-profit organizations.
- Identify the need for establishing cost standards.

Unit – I: Introduction to Cost and Management Accounting, Cost Analysis and Control:

Management Accounting Vs. Cost Accounting Vs. Financial Accounting, Role of Accounting Information Planning and Control, Strategic Decisions and the Management Accountant. Enhancing the value of Management Accounting Systems. Cost Concepts and Managerial use of Classification of Costs, Cost Analysis and Control: Direct and Indirect Expenses, Allocation and Apportionment of Overheads, Calculation of Machine Hour rate.

Unit – II: Costing for Decision making: Unit Costing, Job Costing, Cost Sheet and Tender and Process Costing and their Variants, Treatment of Normal Losses and Abnormal Losses, Inter-process Profits, Costing for By-products and Equivalent Production. Application of Managerial Costing for Control, Profit Planning, Closing down of a Plant, Dropping a Product line, Charging General and Specific Fixed Costs, Fixation of Selling Price, Make or Buy Decisions, Key or Limiting Factor. Selection of Suitable Product Mix, Desired level of Profits, Diversification of Products, Closing down or Suspending activities,

UNIT – III: Cost-Volume-Profit (CVP) Analysis and Activity-Based Costing (ABC): Essentials of CVP Analysis. The Breakeven Point using Equation Method, Contribution Margin Method and Graph Method. Target Operating Income. Target Net Income and Income Taxes. Breakeven Analysis for Decision making. Margin of Safety. Application of BEP for various Business Problems. CVP analysis in Service and Nonprofit Organizations. Activity Based Cost (ABC) Systems: Comparison of Traditional and Activity Based Cost Systems. Emergence of ABC Systems. Activity Hierarchies. Tracing Costs to Activities, Tracing Costs from Activities to Products, Customer Profitability, Process Efficiency. Activity Based Management. ABC Systems in Service Organizations. The Technological Edge of using ABC Systems.

Unit – IV: Budgetary Control: Budget, Budgetary Control, Steps in Budgetary Control, Flexible Budget, Different Types of Budgets: Sales Budget, Cash Budget, Production Budget, Performance Budgets and Computerized Budgeting. Activity Based Budgeting. Budgeting Process in Non-Profit Organizations. Zero Based Budgeting. Criticisms of Budgeting. An Introduction to Cost Audit and Managerial Audit

UNIT – V: Standard Costing and Variance Analysis: Standard Costing – Establishing cost standards, Standard Cost and Standard Costing, Standard Costing Vs Budgetary Control, Standard Costing Vs Estimated Cost, Standard Costing and Marginal Costing, Analysis of Variance, Material Variance, Labour Variance and Sales Variance. Reconciling Budgeted Profit and Actual Profit. Standard Absorption Costing. Volume Efficiency and Capacity Variance.

Suggested Readings:

- S. P. Jain and K. L. Narang, Cost and Management Accounting, Kalyani Publishers, New Delhi, 6e, 2019.
- James Jiambalvo, Managerial Accounting, John Wiley & Sons, Inc. New Delhi, 7e, 2019.
- M. Y. Khan, P. K. Jain, Management Accounting: Theory and Problems, TMH, New Delhi, 7e 2017.
- Horngre, Data, Foster, Cost Accounting: A Managerial Emphasis. Pearson Education, 16e, 2017.
- Hansen Mowen, Cost and Management Accounting & Control, Thompson Publications, 5e, 2012.
- Colin Drury, Cost and Management Accounting, Cengage Learning, 8e, 2015.
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MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year II Semester****R25MBAH3: International Human Resource Management****L-T-P-C
4-0-0-4****SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth)****Course Aim/s:**

- To gain the knowledge and awareness of IHRM activities and also employment practices across countries.

Learning Outcomes/s:

- To understand various approaches of International HR policies and practices and develop an in-depth knowledge and intricacies involved in managing employees across the globe.

Unit-I: Introduction to IHRM

Introduction: Definition - Nature - Scope - Differences between International and Domestic HRM - Model of International HRM.

Over view of International HR activities: HR planning - Recruitment - Selection - Training and Development - Performance Management - Remuneration - Employee Relations.

International Adjustment: Stages and dimensions - Concept of Expatriation and Repatriation - Issues in IHRM.

Unit-II: International Recruitment and Selection

Approaches to International Recruitment: Ethnocentric - Polycentric - Geocentric - Region-centric.

Selection Process: Factors effecting Expatriate Selection Process - Technical Ability - Cross-Cultural Suitability - Individual Adjustments and Family Adjustments - Orientation.

Unit-III: Global Training and Development

Expatriate Training: Pre-Departure Training - Components of effective Pre-Departure Training - Cultural Awareness - Preliminary Visits - Language Training - Practical Assistance and Job Related factors - Post-arrival and Integrative Training.

International Compensation Management: Objectives - Factors Involved and Components of International Compensation Package.

Unit-IV: Performance Management in International Organization

Basic Components of International Performance Management.

Multinational Performance Management: Major Constraints.

Performance of Expatriates: Variables affecting Expatriates Performance - Criteria Used for Performance Appraisal of International Employees.

Unit-V: Special Issues in IHRM

Cultural Aspects of IHRM: Cross Cultural differences in the Workplace - Developing Intercultural Relationships - Cultural Sensitivity - Cross Convergence - Women Expatriates and their Problems - Exit Policy and Practices - Ethical Issues in HRM - IHRM Trends and Future Challenges - IHRM Practices - USA, UK, Japan and India-A comparative Study.

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MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**II Year II Semester****R25MBAH4 (A&B): HR Analytics****L-T-P-C
2-0-4-4****SDG 9 – Industry and Innovation, SDG 11 – Sustainable Cities, SDG 13 – Climate Action****Course Objectives:**

- To provide an overview of evolution of HRM and its journey towards Analytics and highlight the need, concepts and scope of HR Analytics linked with business outcomes.
- To elucidate the methods of capturing, examining & purifying data and to introduce the aspect of HR Metrics in the context of HR Analytics.
- To impart knowledge of conduction of HR Analytics for key HR Processes using MS Excel.

Course Outcomes:

- Gain an understanding of the relevance of HR Analytics in the current business scenario.
- Have an understanding of the models of conducting HR Analytics and understanding of the methods of capturing, examining & purifying data for conduction of HR Analytics.

Unit – I: Introduction to HR Analytics

History of Different HRM Perspectives, Transition from HRM to HCM and Gaining Sustainable Advantage through HCM. HR Analytics and Changing Role of HR Professionals. Importance and Scope of HR Analytics. Significance of HR Analytics, Benefits of HR Analytics. Levels of Analysis and Conducting analytics. Key Influencers of HR Analytics Process. Big Data Era in HR Analytics, HR Analytics – Linkage to Business Outcomes.

Unit – II: Understanding HR Analytics

Conducting HR/Workforce Analytics: Models of HR Analytics, How to Conduct HR Analytics. Understanding HR Data: Importance of Data, Types and Scales of Data; Methods of Capturing Data, Data Examination & Purification. Understanding various HR Metrics from the perspective of HR Analytics.

Unit – III: Analytics for Key HR Processes Using MS Excel

HR Analytics for Recruitment & Selection, Training & Development, Performance Appraisal, Talent Management, Employee Engagement, Compensation Management and Expatriate Management.

Unit – IV: Descriptive Analytics

Overview of Select Tools for Conduction HR Analytics: MS Excel, R, Tableau, Power BI, Python, SPSS & PSPP. Descriptive Analytics in HR: HR Dashboards using MS Excel, Slicing and Dicing of HR Data using MS Excel Pivot Table Applications, Data Visualization for Key HR processes.

Unit – V: Predictive & Prescriptive HR Analytics

Predictive HR Analytics: Correlation, Linear and Multiple Regression, Factor Analysis and Cluster Analysis, Comparison of Means and Analysis of Variance for Manpower Demographics, Employee Satisfaction, Training Effectiveness etc. Prescriptive HR Analytics, Predictive vs Prescriptive HR Analytics, Future of HR Analytics.

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MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
II Year II Semester**R25MBAH6: Diversity and Change Management****L-T-P-C
4-0-0-4****SDG 4 – Quality Education, SDG 5 – Gender Equality, SDG 16 – Strong Institutions****Course Aim/s:**

- Managing the challenges of an increasingly diverse workforce and also to see the change management.

Learning Outcomes/s:

- Students will be able to understand the individual and organizational perspectives of diversity also they are able to learn the primary and secondary dimensions of diversity in business organizations.

Unit-I: Foundations of Diversity Learning

Introduction to Diversity: Concept - Individual Perspectives of Diversity - Organizational Diversity - Nature and Scope of Diversity - Impact of Diversity in Organizations.

Cultural Diversity: Introduction - Impact of Cultural Diversity Issues and Work Life Balance on Organizations.

Unit-II: Primary and Secondary Dimensions of Diversity

Primary Dimensions: Race - Ethnicity - Age - Gender - Physical - Mental Challenges.

Secondary Dimensions: Social Class - Religion - Appearance - Language - Communication challenges - Differences between Primary and Secondary Dimensions of Diversity - Organizational Strategies for Managing Diversity.

Unit-III: Organizational Design and Change

Organisational Change: Strategic Level Change - Group and Team Level Change - Individual Level Change - Organizational Structure - Organizational Culture and Management of Change - Resistance to Change - Organizational Learning - Power - Politics and Organizational Change - Ethics and Managing Change.

Unit-IV: Employee Relations and Managing Change

Employee Relations: Concept - Employee Relations and Management of change.

Managing Change: Systematic Approach to Management of Change - Technological Change - Evaluating and Promoting Change - Building Employee Relations for Effective Management of Change.

Unit-V: Communicating the Change

Importance of Communication in Change Management: Communicating during the Change Period and Process - Developing Feedback Mechanism and Skills.

Organisational Change Behaviour: Aspects of Leader - Rejoice the Abilities of Followers - Gap and Mapping the Change.

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 - Bernard Burnes, Managing Change, 5th Edition, Prentice Hall Publications.
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 - Carol P. Harvey and M. June Allard, Understanding and Managing Diversity: Readings, Cases and Exercises, Pearson Publications Ltd.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

II Year II Semester

R25MBAM3: Integrated Marketing Communications

**L-T-P-C
4-0-0-4**

SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action)

Course Aim/s:

- The students are able to understand the principles and practices of marketing communications along with role of sales function used by mentors.

Learning Outcome/s:

- The student will understand the prospects of promotional mix along with maintenance of sales force, preparing and execution of sales budget.

Unit-I: Understanding Integrated Marketing Communication

Understanding Marketing Communication: Integrated Marketing Communication - Integrated Marketing Communication as an Integral part of Marketing - Understanding Consumer Behaviour - Understanding the Communication Process - Communication Mix.

Unit-II: Marketing Communication Mix

Creative Execution in Advertising: Execution on Online and Television - Getting that 'Big Idea' of Creativity - Direct Marketing - Personal Public Relations - Mobile Advertising - Word of Mouth - Village Farmers - Out of Home Media - World Wide Web Communications.

Unit-III: Regulation, Social and Ethical Aspects of Advertising and Promotion

Federal Regulation of Advertising: Regulations of Advertising and Promotion in India - Regulation of other Promotional Areas

Ethical and Social Aspects: Social and Ethical Criticisms of Advertising - Ethical Aspects of Advertising - Truth in Advertising - Advertising to Children - Advertising Controversial Products - Social Aspects of Advertising.

Unit-IV: Sales Planning and Budgeting

Forecasting: Sales Forecasting Methods

Budgeting: Sales Budgeting Process - Methods used for Deciding Sales Budget

Quotas: Types of Quotas - Quota Setting Procedure

Planning: Reasons for Establishing or Revising Sales Territories - Routing and Scheduling Sales Persons - Market Cost Analysis

Unit-V: Sales Force Management

Managing Sales Force: Recruitment and Selection of the Sales Force - Training the Sales Force - Sales Force Motivation - Sales Force Compensation - Sales Force Control and Evaluation.

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- Jaishri Jethwaney, Shruthi Jain, Advertising Management, Oxford.
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- Richard R Still, Edward W Cundiff, Norman A P Govoni, Sales and Distribution Management, Pearson.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
II Year II Semester**R25MBAM4 (A&B): Marketing Analytics****L-T-P-C
2-0-4-4****`0****SDG 9 – Industry and Innovation, SDG 11 – Sustainable Cities, SDG 13 – Climate Action****Course Objectives:**

- To provide an understanding of Fundamentals of Marketing Analytics
- To elaborate on the scope of MS Excel for conduction of Marketing Analytics,
- To highlight the importance of Management of Customer Expectations through Marketing Analytics,
- To orient on the usage of Marketing Analytics for Product Pricing and
- To impart knowledge on Market Segmentation methods and Advertising using Marketing Analytics.

Course Outcomes: Students will be able to

- Learn the Concepts of Marketing Analytics and their relevance in business,
- Use MS Excel to deal with Marketing Data at basic level,
- Appreciate Customer's journey through Product Selection Process and Customer Lifetime Value,
- Conduct Analysis in Determining the Pricing Strategies and
- Understand the Process of Optimizing Clusters and Measure the Effectiveness of Promotion.

Unit – I: Introduction to Marketing Analytics

Definition, Need and Scope of Marketing Analytics, Marketing Analytics Vs Marketing Research, Levels in Marketing Analytics, Adoption and Application of Marketing Analytics, Marketing Analytics and Business Intelligence. MS Excel as a Tool for conduction of Marketing Analytics. Using MS Excel to Organize and Summarize Marketing Data: Creation of Pivot Tables and Organizing Data (Theory).

UNIT – II: Summarizing Marketing Data

Summarizing Revenue Data: Month-wise and Product-wise. Slicing & Dicing of Data: Pareto Principle, Report Filters and Slicers. Demographic Analysis: Analyzing Sales Data by Age, Gender, Income and Location, Construction of Crosstabs of Two Demographic Variables. Using GETPIVOT Function for Pulling Data. Adding Data Labels and Data Tables (Theory).

UNIT – III: Customer Analytics

Customer Journey Mapping and the Process of Mapping (How to). Metrics for Tracking Customer Experience: Customer Feedback Metrics & Behavior Derived Customer Metrics. Customer Persona, Building a Customer Persona and its Benefits, Customer Lifetime Value (CLV). Calculating Customer Lifetime Value: Creating the Basic Customer Value Template (Theory).

Unit – IV: Pricing Analytics

Pricing, Goals of Pricing, Price Elasticity, Estimating Linear and Power Demand Curves, Using Excel Solver to Optimize Price. Price Bundling, Bundling Prices to Extract Consumer Surplus, Mixed Bundling, Using Evolutionary Solver to Find Optimal Bundle Prices. Price Skimming (Theory).

Unit – V: Segmentation & Promotion Analytics

Segmentation Analytics: Cluster Analysis and its Applications, Location-wise Clustering, Using Solver to find Optimal Clusters. Using Conjoint Analysis to Segment a Market, Using Decision Trees for Segmenting the Market. Promotion Analytics: Promotions and Types of Promotions, Discounting & Types of Discounting. Measuring the Effectiveness of Advertising: The Adstock Model, Pay per Click Advertising (Theory).

REFERENCE

-
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 - Chuck Hermann, Ken Burbary, Digital Marketing Analytics, Que Publishing, 2e, 2018.
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MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

II Year II Semester

R25MBAM6: Customer Relationship Management

L-T-P-C

4-0-0-4

SDG 9 – Industry and Innovation, SDG 11 – Sustainable Cities, SDG 13 – Climate Action

Course Aim/s:

- It provides students, the knowledge of the fundamental aspects of developing and managing CRM, the tools used in retention of customers also adds to effective course frame.

Learning Outcome/s:

- The student will develop skill set to work on CRM framework, tools and various approaches to retain customers in the market.

Unit-I: Customer Relationship Management

Introduction: Meaning and Definition of CRM - Importance of CRM - Concept and Growth of Relationship Marketing - Scope of Relationship Marketing - Concept of Lifetime Customer and Customer Loyalty - Benefits and Difficulties of CRM.

Unit-II: Building Customer Relationship

Building CRM: Process - Bonding Zero Customer Defections - CRM Framework - MarketShare vs. Share of Customers - Life Time Value of Customers.

Unit-III: CRM Process and Implementation

Process and Implementation: Customer Development Process - Customer Retention - Customer Satisfaction - Importance of Customer Retention - Customer Retention Strategies - Customer Life Time Value - Types of Relationship Management - CRM Process for B2B Markets.

Unit-IV: Technological Support in CRM

Technological Applications in CRM: Types of Technological Applications in CRM - Customer Databases and Information Systems.

Database Marketing Strategies: CRM Software Solutions for B2C and B2B Markets - Accounting Systems for Customer Acquisition and Retention Costs - Customer Loyalty and Profitability through Technology.

Unit-V: E-CRM - Emerging Trend in CRM

E-CRM: Importance of e-CRM in Service Marketing - Challenges involved in Formulating and Implementing e-CRM Strategies - e-CRM Architecture and its Components - Five engines of e-CRM - Evolution of e-Customer and e-Marketing - e-CRM for Personalized Services.

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