



**ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES
RAJAMPET**
(An Autonomous Institution)

ACADEMIC REGULATIONS (R22), COURSE STRUCTURE AND SYLLABI
For the students admitted to
**M.B.A (BUSINESS ANALYTICS)., Regular Two Year Degree Programme from the
Academic Year 2022-23**

VISION AND MISSION OF THE INSTITUTION

Vision

We impart futuristic technical education and instil high patterns of discipline through our dedicated staff who set global standards, making our students technologically superior and ethically strong, who in turn shall improve the quality of life of the human race.

Mission

Our mission is to educate students from the local and rural areas and from other states so that they become enlightened individuals, improving the living standards of their families, industry and society. We provide individual attention, world-class quality of Technical education and take care of character building.

**ACADEMIC RULES AND REGULATIONS OF TWO YEAR
M.B.A (BUSINESS ANALYTICS) REGULAR DEGREE PROGRAMME**

APPLICABLE FOR THE STUDENT BATCHES ADMITTED FROM THE ACADEMIC YEAR 2022-23

CONTENTS

1. Preamble
2. Application and Commencement
3. Programmes offered by the Institute
4. Eligibility for Admission
5. Medium of Instruction
6. M.B.A. (Business Analytics) Programme Structure
7. Courses and Credit Structure
 - 7.1 Types of Courses:
 - 7.1.1 Foundation Courses
 - 7.1.2 Professional Core Courses
 - 7.1.3 Professional Core Electives
8. Evaluation Process
 - 8.1 Internal Evaluation
 - 8.1.1 Theory Internal Examinations
 - 8.1.2 Laboratory Internal Examinations
 - 8.1.3 Personality Development Programme
 - 8.2 External Evaluation
 - 8.2.1 Theory End Examinations
 - 8.2.2 Laboratory End Examinations
 - 8.2.3 Supplementary Theory /Lab End Examinations
 - 8.2.4 Revaluation and Recounting
 - 8.2.5 Challenge Evaluation
9. Project Evaluation
- 10 Attendance Requirements and Detention Policy
11. Minimum Academic Requirements and Award of The Degree
12. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)
13. Transcripts
14. Transitory Regulations
15. Minimum Instruction Days for a Semester
16. Student Transfers
17. Announcement of Results
18. General Instructions

1. PREAMBLE

Annamacharya Institute of Technology and Sciences (Autonomous), Rajampet, relentlessly aims to achieve academic excellence by implementing new initiatives in teaching-learning and evaluation processes. Based on the directions of the University Grants Commission (UGC), New Delhi, All India Council for Technical Education (AICTE), New Delhi and Jawaharlal Nehru Technological University Anantapur (JNTUA) Anantapuramu, the institute is developed the curriculum for Master of Business Administration (MBA) (Business Analytics) course to match the needs, expectations, and skillsets of students of the region, in the post-graduate programme offered from the academic year 2022-23.

2. APPLICATION AND COMMENCEMENT

- The regulations are quite comprehensive and include definitions of key terms, semester system, credit system, grading system and other relevant details.
- The regulations detailed herein shall apply to all the regular post-graduate programme offered by the Institute.
- The regulations shall be applicable and come into force to the student batches admitted from the academic year 2022-23
- The Institute may revise, amend or change the regulations, scheme of examinations and syllabi, from time to time, if found necessary and on approval by the Academic Council of the Institute, keeping the recommendations of the Board of Studies in view.
- Any or all such amendments shall be effective from such date and to such batches of students including those already undergoing the programme, as may be approved through Academic Council of the Institute.
- These regulations shall be called R22 Regulations.

3. PROGRAMMES OFFERED BY THE INSTITUTE

The following M.B.A (Business Analytics) programme is offered by the Institute from 2022-23.

SNo	Name of the Program	Programme Code
1	Master of Business Administration	E0
2	Master of Business Administration (Business Analytics)	E1

4. ELIGIBILITY FOR ADMISSION

The eligibility criteria for admission into the MBA (Business Analytics) Post Graduate programme offered at AITS shall be as prescribed by the Government of Andhra Pradesh. The criteria are given below:

- Admission to the above programmes shall be made subject to the eligibility and qualifications as

prescribed from time to time.

- **Regular Entry Scheme:** Candidates for admission to the first semester of the four semester MBA (Business Analytics) degree programme must have a B.A / B.Sc / B.Com / B.Tech at graduation level.
- Admissions shall be made on the basis of Rank earned by the candidate in the relevant ICET examination / merit rank obtained by the qualifying candidate in the entrance test (ICET) conducted by the Government of Andhra Pradesh for MCA, MBA and MBA (Business Analytics) programmes or as decided by APSCHE subject to the reservations as prescribed by the university / State Government / on the basis of any other order of merit as decided by APSCHE from time to time
- Seats in each programme in the Institute are classified into two categories i.e., **Category – A** and **Category – B** as per the GOs of Andhra Pradesh.

Category – A Seats

These seats shall be filled through counselling as per the rank secured by a candidate in the Common Entrance Test (ICET) conducted by the Government of Andhra Pradesh and as per other admission criteria laid down in the GOs.

Category – B Seats

These seats shall be filled by the Institute as per the GOs issued by the Government of Andhra Pradesh from time to time

5. MEDIUM OF INSTRUCTION

The medium of instruction shall be **English** for all the courses including their content delivery and examinations, seminars, presentations and project evaluation as prescribed in the programme curriculum.

6. M.B.A (Business Analytics) PROGRAMME STRUCTURE

The structure of the M.B.A (Business Analytics) Programme on offer at AITS are based on the **Choice Based Credit System (CBCS)** as defined by the UGC and the curriculum / course structure in line with AICTE.

Semester Scheme

- The **M.B.A** (Business Analytics) Programme offered at AITS follow **semester scheme** pattern.
- The duration of a **M.B.A** (Business Analytics) Programme shall be of 2 **academic** years.
- Each academic year shall have **2 semesters** i.e., odd and even semesters and shall be counted as first semester, second semester, and so on up to four semester.
- Each semester shall consist of **16 weeks** of academic work including internal examinations.
- Each semester is structured to provide credits totalling to **102 credits** for the entire M.B.A. (Business Analytics) Programme.

- Each semester shall have **Continuous Internal Evaluation (CIE)** and **Semester End Examination (SEE)** for both Theory and Lab courses.
- A student after securing admission into a 2 year M.B.A (Business Analytics) Programme at AITS shall pursue and acquire the M.B.A. (Business Analytics) Degree in a **minimum period of Two academic years i.e., 4 semesters** and a **maximum period of Four academic years i.e., 8 semesters** starting from the date of commencement of 1 year 1 semester, failing which the student shall forfeit the seat in **M.B.A. (Business Analytics)** Programme.

7. COURSES AND CREDIT STRUCTURE

Credit: A credit is a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (Lecture/Tutorial) or two hours of practical work/field work/project per week.

Academic Year: Two consecutive (one odd + one even) semesters constitute one academic year.

Choice Based Credit System (CBCS): CBCS provides choice for students to select from the prescribed courses.

Each course is assigned certain number of credits based on following criterion

Type of Class	Semester	
	Periods per Week	Credits
Theory (Lecture/Tutorial)	01	01
	02	02
	03	03
	04	04
Practical	02	01
	03	1.5
	04	02
Project Work	-	06

Every course of the M.B.A. (Business Analytics) programme shall be offered by a specific section / department. The

unique codes of the section / department offering the courses are given in the Table.

Course offering Department	Code
Basic Science Courses	C
Humanities Courses	
Master of Business Administration	E0
Master of Business Administration (Business Administration)	E1
Master of Computer Applications	F

M.B.A (Business Analytics) Programme of study shall be designed to have theory and laboratory courses. In addition, a student shall carry out project work and seminar courses as prescribed in the curriculum of the Programme.

7.1 Types of Courses

Type of courses	Course category	Code	Range of credits
Basic Sciences & Humanities courses	Humanities	HS	02
	Basic Sciences	BS	08
	Computer Applications	F	08
Core Courses	Professional Core	PC	53
	Professional Electives	PE	24
	Personality Development Programme	PDP	01
	Project work	PW	06
Total Credits			102

7.1.1 Foundation Courses

Basic Science Courses and Humanities courses are termed as Foundation Courses and are mostly offered at I Year – I and II Semesters.

7.1.2 Professional Core Courses

Professional Core Course is to be completed by all students of respective programme before they can move on to the next semester.

7.1.3 Professional Core Electives

University Grants Commission has come up with the Choice Based Credit System (CBCS) in which the students have a choice to choose from the prescribed courses, which are referred as Professional elective courses.

Students have to register for a total of 6 professional core electives courses (PE-1 to PE-6) from the list of track-wise professional elective course as prescribed in the course structure of the programme. The following points are considered for a Professional Elective Course.

- The selection of course based on the choice for students shall be on 'first come first serve' through on line and off line registration.
- The Head of the department or concerned shall decide, whether or not to offer such course keeping

in view the resources available in the department offering the course.

8. EVALUATION PROCESS

The performance of a student in each semester shall be evaluated course-wise with a maximum of 100 marks for both Theory and Lab Courses.

- For a Theory course, the distribution shall be 40 marks for Internal Evaluation and 60 marks for End-Examinations. The distribution is detailed in 8.1.1.
- For a Lab course, the distribution shall be 40 marks for Internal Evaluation and 60 marks End-Examinations. The distribution is detailed in 8.1.2
- For a Personality Development Programme (PDP) shall be evaluated for 100 Marks, the evaluation procedure is detailed in 8.1.3
- For the project work, the evaluation procedure is detailed in 9.0

8.1 Internal Evaluation

8.1.1 Theory Internal Examinations

For a Theory Course, 40 marks are allotted for Internal Evaluation. Two mid-term examinations (Theory Internal Examinations) shall be conducted for a Theory Course during a semester and they shall be evaluated for 40 marks. First midterm examination shall be conducted as per the syllabus of I & II units. The second midterm examination shall be conducted as per the syllabus of III, IV and V units.

The question paper shall be of subjective type in which four questions with an internal choice are to be answered. 80 % weightage for the best performance and 20 % for other shall be considered.

For Example:

Marks obtained in I mid-term examination: 19

Marks obtained in II mid-term examination: 10

Final Internal Marks: $(19 \times 0.8) + (10 \times 0.2) = 17.2$

If the student is absent for any one midterm examination, the final internal marks shall be arrived at by considering 80% weightage to the marks secured by the student in the appeared examination and zero to the other.

For Example:

Marks obtained in first mid: 0 (Absent); Marks obtained in second mid: 18

Final Internal Marks: $(18 \times 0.8) + (0 \times 0.2) = 14.4$

8.1.2 Laboratory Internal Examinations

For Lab Course, there shall be a continuous internal evaluation during the semester for 40 marks. Out of the 40 marks, day-to-day performance of the student in the laboratory shall be evaluated for 20 marks by the concerned laboratory teacher based on experimental correctness/record/viva. Two Lab Internal

examinations shall be conducted for 20 marks by the concerned teacher. Performance of one best out of two tests to be considered.

8.1.3 Personality Development Programme (PDP)

The Personality Development Programme will be evaluated out of 100 marks (40 marks for Record, and 60 marks for presentation and question and answers). The students will give their presentations before the department committee comprised of senior faculty members of Finance, HR and Marketing specialization with HOD being the chairman of committee.

8.2 External Evaluation

8.2.1 Theory End Examinations

As specified in 8.0, Theory End Evaluation is done for 60 marks. End examination of theory subjects shall be conducted at the end of semester. There shall be Regular and Supplementary End Examinations. Theory End Examination shall be conducted for 60 marks and is of 3 hours duration. The question paper shall be of subjective type with 5 questions, one question from each unit, with internal choice. All questions carry equal marks of 12 each.

8.2.2 Laboratory End Examinations

As specified in 8.0, Lab End Evaluation is done for 60 marks, in the form a Lab End Examination that shall be conducted for 3 hours in respective Laboratory. Each lab course will have its own evaluation procedure and weightage.

8.2.3 Supplementary Theory/Laboratory End Examinations

- Supplementary examination shall be conducted along with regular Semester End Examinations.
- During Semester End Examinations of even semester, supplementary examinations of odd semester shall be conducted and during semester end examinations of odd semester, supplementary examinations of even semester shall be conducted.
- The same schedule is applicable to Supplementary Lab End Examinations. Supplementary examination shall be conducted along with the next batch of students or separately.
- In case of seminars and comprehensive viva-voce examinations, supplementary seminar / comprehensive viva-voce will be conducted along with the next batch of students. If the next batch of students is not available, a separate supplementary examination will be conducted.

8.2.4 Revaluation and Recounting

Students may visit Examination Section Webpage for Norms and Procedures for Revaluation and Recounting of Answer Scripts.

- The students who wishes to apply for Revaluation/Recounting of his/her answer-books(s) must submit his/her application on the prescribed form together with the requisite fee to the Controller of

Examinations before expiry of 15 days excluding the date of the declaration of his/her examination result. Application not received in the prescribed form or by the due date or without the requisite fee shall be rejected.

- After Recounting / Revaluation, records are updated with changes if any and the student will be issued a revised memorandum of marks. If there are no changes, the student shall be intimated the same through a notice.
- No Revaluation / Recounting for Laboratory Examination.
- The students are informed to be more careful in furnishing the information while applying for Recounting / Revaluation. The applications with insufficient information will be summarily rejected and the student has to forfeit the amount paid in this connection.

8.2.5 Challenge Evaluation

- Applications are invited from the students, who wish to apply for Challenge Valuation in the subjects of the M.B.A (Business Analytics) Regular and Supplementary examinations
- The student will apply for Challenge valuation in a specified application and should be routed through the HOD concerned.
- The students who have applied for the revaluation for a paper(s) of an examination are only eligible for the Challenge Valuation of that paper(s) of that examination.
- A Fee of Rs. 10000/- (Ten Thousand Rupees Only) for each paper is to be paid within the last date for challenge valuation.
- A Xerox copy of the answer script will be provided to the student on receipt of the payment of fee and date and time of the valuation will be informed to the student, so that valuation will be done in the presence of the teacher attended in support of the student nominated by the HOD concerned.
- The HOD concerned will nominate a teacher of the concerned subject to observe the valuation in support of the student. This will be done on the request of the student.
- If the marks obtained in the challenge valuation are more than or equal to 15% of the maximum marks with respect to the original marks obtained in the first valuation, then the marks obtained in the Challenge valuation will be awarded to the student and the institute will pay back Rs 9,000 (Nine thousands rupees only) to the student. If the student status changes from fail to pass, an amount of Rs. 5000 will be refunded to the student. Otherwise there will not be any change in the result of the student and original marks will be retained and the student will forfeit the fee paid.
- No Challenge valuation for Laboratory Examination

9.0 PROJECT EVALUATION

Every student shall be required to submit thesis/dissertation after taking up a topic approved by the Departmental Committee

- The Departmental Committee (DC) consisting of HOD, Project supervisor and two internal senior experts shall monitor the progress of the project work. A Project Review Committee (PRC) shall be constituted with Principal as a Chair person, Heads of the Departments of the program and two other senior faculty members, as members of PRC. PRC will come into action when DC is not able to resolve the issues.
- Registration of project work: A student is permitted to register for the project work after satisfying the attendance requirements of all the courses (theory, practical and seminars).
- After satisfying above point, a student has to submit in consultation with his supervisor, the title, objective plan of action of his project work to the DC for approval. Only after obtaining the approval of DC, the student can initiate the project work.
- The work on the project shall be initiated in the penultimate semester and continued in the final semester. The student can submit project thesis with the approval of DC after 16 weeks from the date of registration at the earliest but not later than 6 Months from the date of registration for the project work. Extension of time within the total permissible limit for completing the programme is to be obtained from the Head of the Institute.
- The internal evaluation shall be made by the DC to grade, on the basis of two seminars presented by the student on the topic of his project.
- The student must submit the status of thesis/dissertation only after passing all the prescribed subjects such as theory, practical's, seminar and project internal evaluation.
- A Student has to prepare four copies of the thesis/dissertation certified in the prescribed format by the supervisor and HOD. Out of which three copies shall be submitted in the examination section.
- For carrying out project work, a total of 100 marks will be awarded, out of which 60 marks shall be awarded by a Board consisting of Supervisor, HOD and external Examiner, based on the project evaluation and viva-voce examination. Remaining 40 marks shall be awarded based on internal evaluation out of which 20 marks shall be awarded by the supervisor and the remaining 20 marks shall be awarded by DC, based on two seminars given by the student on his/her project. Head of the Department shall coordinate and make arrangements for the conduct of viva-voce.
- If the report of the viva-voce is failure, the student will retake the viva-voce examination after three months. If he/she fails to get a satisfactory report at the second viva-voce examination, he/she will not be eligible for the award of the degree.

10. ATTENDANCE REQUIREMENTS AND DETENTION POLICY

- A student shall maintain a minimum required attendance of 75% in AGGREGATE.
- Shortage of attendance up to 10% i.e., attendance between 65% to 75% in aggregate, may be condoned by the Institute Academic Committee based on the rules prescribed by the Academic Council of the Institute from time to time.
- A stipulated fee shall be payable towards condonation of shortage of attendance.
- Shortage of attendance below 65% shall in no case be condoned. A stipulated fee shall be payable towards condonation of shortage of attendance to the Institute as per following slab system
 - 1stSlab:** Less than 75% attendance but equal to or greater than 70% a normal condonation fee can be collected from the student.
 - 2ndSlab:** Less than 70% but equal to or greater than 65%, double the condonation fee can be collected from the student.
- Students whose shortage of attendance is not condoned OR who have not paid the stipulated fee OR who have not cleared any other due to the Institute in any semester are not eligible to write the Semester End Examination (SEE).
- Students, who do not meet the minimum required attendance of 65% in a semester, shall be detained in that semester and their registration for that semester shall stand cancelled. They shall not be promoted to the next semester.
- Students detained in a semester shall seek re-admission into that semester as and when offered.
- Academic regulations applicable to the semester in which re-admission is sought shall be applicable to the re-admitted student.
- In case, there are any professional electives and / or the same may also be re-registered, if offered. However, if those electives are not offered in the later semesters, then alternate electives may be chosen from the same set of elective courses offered under that category.

Any student against whom any disciplinary action is pending shall not be permitted to attend semester end examination (SEE) in that semester.

11. Minimum Academic Requirements and Award of the Degree

The following Academic Requirements have to be satisfied in addition to the attendance requirements mentioned in section 10.

11.1 A student shall be deemed to have satisfied the minimum academic requirements and earn the credits for each theory , practical and seminar, if he secures

- A minimum of 40 % marks for each theory course in the Semester End Examination (SEE), and
- A minimum of 50 % marks for each theory course considering both CIE and SEE taken together.

11.2 A student shall be deemed to have satisfied the minimum academic requirements and earn the credits allotted to seminar courses, if he secures

- A minimum of 50 % marks for a seminar in the Continuous Internal Evaluation (CIE)

11.3 A student shall be treated as failed, if he

- Does not submit a report of a seminar OR
- Does not make a presentation of the same before the evaluation committee as per the schedule, or
- Secures less than 50 % marks in evaluation.

11.4 If a student fails to secure a pass grade in a particular course, it is mandatory that he/she shall register and re-appear for the examination in that course during the next semester when SEE is conducted in that course. It is mandatory that he should continue to register and re-appear for the examination till he secures a pass grade.

11.5 A student detained in a SEMESTER due to shortage of attendance, may be re-admitted when the same semester in the next academic year for fulfillment of academic requirements.

11.6 Academic regulations applicable to the semester in which re-admission is sought shall be applicable to the re-admitted student.

11.7 A student shall be given one chance to re-register, after completion of the course work, for each course, provided the internal marks (CIE) secured by a student are less than 50% and he has failed in the SEE. In such a case, a student may re-register for the course(s) with prior permission and secure the minimum required attendance. Attendance in the re-registered course(s) shall be calculated separately to become eligible to write the semester end examination (SEE) in the re-registered course(s).

11.8 Re-registration is allowed only in those cases where the student doesn't have any course(s) yet to pass other than the re-registration course(s) where the CIE marks are less than 50%. However, in the case of re-registration of course(s) by a student, academic regulations applicable at the time of student admission in the programme shall be applicable.

11.9 In the event of re-registration, the internal evaluation marks as well as the End Semester Examinations marks secured in the previous attempt (s) for those subjects stand cancelled.

11.10 For each subject re-registered, the student has to pay a fee equivalent to one third of the semester tuition fee

11.11 A student shall register and put up minimum academic requirement of all 102 credits and earn all 102 credits for the award of M.B.A (Business Analytics) Degree

11.12 Students who fail to earn 102 credits as indicated in the course structure within four academic years from the year of their admission shall forfeit their seat in M.B.A (Business Analytics) course and their admission shall stand cancelled.

12. SEMESTER GRADE POINT AVERAGE (SGPA) AND CUMULATIVE GRADE POINT AVERAGE (CGPA)

The performances of students in each of the courses in the Programme are expressed in terms of letter grades based on an absolute grading system. We use 10-point grading system with letter grades. They are given in the following table.

Marks Obtained	Letter Grade	Description	Grade Points (GP)
≥90	A+	Outstanding	10
≥80 and ≤89.99	A	Excellent	9
≥70 and ≤79.99	B	Very Good	8
≥60 and ≤69.99	C	Good	7
≥50 and ≤59.99	D	Pass	6
< 50	F	Fail	--
Absent in the exam(s)	AB	Absent	--

A student is eligible for the award of the M.B.A. (Business Analytics) Degree with the class as mentioned in the following table

CGPA	Class
≥7.5	First class with Distinction
≥6.5 and <7.5	First Class
≥5.5 and <6.5	Second Class
≥5.0 and <5.5	Pass

12.1 Computation of SGPA

The performance of each student at the end of each semester shall be indicated in terms of SGPA. The SGPA shall be calculated as follows:

$$SGPA = \frac{\text{Total earned weighted grade points in a semester}}{\text{Total credits in a semester}}$$

$$SGPA = \frac{\sum_{i=1}^p C_i \cdot G_i}{\sum_{i=1}^p C_i}$$

Where

C_i = Number of credits allotted to a particular course 'i'

G_i = Grade point corresponding to the letter grade awarded to the course i

$i = 1, 2, \dots, p$ represent the number of courses in a particular semester.

Note: SGPA is calculated and awarded to those students who pass all the courses in a semester.

12.2 Computation of CGPA

The performance of a student shall be obtained by calculating Cumulative Grade Point Average (CGPA), which is weighted average of the grade points obtained on all courses during the course of study

$$CGPA = \frac{\text{Total earned weighted grade points for the entire programme}}{\text{Total credits for the entire program}}$$

$$CGPA = \frac{\sum_{j=1}^m C_j \cdot G_j}{\sum_{j=1}^m C_j}$$

Where

C_j = Number of credits allotted to a particular semester 'j'

G_j = Grade point corresponding to the letter grade awarded to the semester j

$j = 1, 2, \dots, m$ represent the number of semester of the entire programme.

12.3 Grade Card

The grade card issued shall contain the following

- The credits for each course offered in that semester
- The letter grade and grade point awarded in each course
- The SGPA and CGPA
- Total number of credits earned by the student up to the end of that semester

Example: - Computation /calculation of SGPA

Course name	Credits (C)	Letter grade	Grade point (GP)	Credit point (CP=C*GP)
Course 1	4	A	9	4x9=36
Course 2	3	S	10	3*10=30
Course 3	2.5	S	10	2.5*10=25
Course 4	1.5	C	6	1.5*6=9
Course 5	1	D	5	1*5=5
Total	12			105

Therefore, SGPA = $\frac{105}{12}$ 8.75

Example Illustration of CGPA

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5
Credit: 20	Credit : 20	Credit : 22	Credit: 23	Credit : 22
SGPA : 8.75	SGPA : 8.25	SGPA : 7.89	SGPA : 8.21	SGPA : 7.86

$$\text{Thus, CGPA} = \frac{20 \times 8.75 + 20 \times 8.25 + 22 \times 7.89 + 23 \times 8.21 + 22 \times 7.86}{107} = 8.34$$

Similarly, compute CGPA obtained at the end of 6th semester shall be the final CGPA secured by the student for the entire programme.

12.4 Conversion of SGPA into percentage

In case of a specific query by students/employers regarding Semester Grade Point Average (SGPA)/ Cumulative Grade Point Average (CGPA) into percentage, the following formulae will be adopted for notional conversion of CGPA into percentage.

$$\text{Percentage} = 9.5 * \text{CGPA}$$

13. TRANSCRIPTS

After successful completion of the entire programme of study, a transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued, if required, after payment of requisite fee. Partial transcript will also be issued up to any point of study to a student on request.

14. TRANSITORY REGULATIONS

Discontinued, detained, or failed candidates are eligible for readmission as and when the semester is offered after fulfilment of academic regulations. Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered, subject to Section 11 and they will follow the academic regulations into which they are readmitted. Students who are permitted to avail gap year shall be eligible for re-joining into the succeeding year of their M.B.A (Business Analytics) from the date of commencement of class work, subject to Section 11 and they will follow the academic regulations into which they are readmitted.

15. MINIMUM INSTRUCTION DAYS FOR A SEMESTER

The minimum instruction days for each semester shall be 16 weeks.

16. STUDENT TRANSFERS

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh and the affiliating University from time to time.

17. ANNOUNCEMENT OF RESULTS

- Results review committee comprising of University nominee, Principal, Dean Academics, Chairman of various boards of studies, Controller of Examinations and Deputy Controller of Examinations will monitor the results and gives the permission for announcement of results.
- After review meeting results are loaded in to Institution website from which students can access their results by entering Hall Ticket number. And also results in form of hard copy are available with respective Heads of the departments.

18. GENERAL INSTRUCTIONS:

- The academic regulations should be read as a whole for purpose of any interpretation.
- Malpractices rules-nature and punishments are appended.
- Where the words "he", "him", "his", occur in the regulations, they also include "she", "her", "hers", respectively.
- In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal / Governing body is final.
- Any legal issues are to be resolved in Rajampet Jurisdiction.
- The Institute may change or amend the academic regulations or syllabi at any time and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the Institute.

APPENDIX I: Rules for Disciplinary Action for Malpractices / Improper Conduct in Examinations**Malpractices identified by squad or special invigilators or invigilators**

Punishments shall be given to the students as per the above guidelines. The case is to be referred to the malpractice committee.

Malpractice committee

1. The Principal, Chairman
2. Dean, Academics, Member
3. Invigilator, Member
4. Subject expert, Member
5. Head of the Department, M.B.A (Business Analytics)
6. Controller of Examinations, Member Secretary

Note:

Whenever the performance of a student is cancelled in any subject/subjects due to Malpractice, he has to register for End Examinations in that subject/subjects consequently and has to fill all the norms required for the award of Degree.

	Nature of Malpractices/Improper conduct	Punishment
	<i>If the candidate:</i>	
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 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/year. 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 for four 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. 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/year. The candidate is also debarred for four consecutive semesters from class work and all University examinations, if his involvement is established.

ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES RAJAMPET

		Otherwise, the candidate is 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 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/year. 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.	Uses 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 only.
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 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.	In case of student 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/year. If the candidate physically assaults the invigilator/officer-in-charge of the Examinations, then the candidate is also debarred and forfeits his/her seat. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7.	Leaves the exam hall taking away answer script or 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/year. 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.

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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/year. The candidate is also debarred and forfeits the seat.
9.	If students of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in nay malpractice or improper conduct mentioned in class 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/year. The candidate is also debarred and forfeits the seat. Person (s) who does 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/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject only or in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester / year examinations, depending on the recommendation of the committee.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 12 shall be reported to the University for further action to award suitable punishment.	

BASIC COURSE STRUCTURE FOR MBA (BUSINESS ANALYTICS)

Semester I (First year)

SNo.	Category	Course Code	Course Title	Hours per week			Credits
				L	T	P	C
1	PCC	22CE111T	Management and Organization Behaviour	4	0	0	4
2	PCC	22CE112T	Business & Legal Environment	4	0	0	4
3	PCC	22CE113T	Managerial Economics	4	0	0	4
4	PCC	22CE114T	Introduction to Business Analytics	4	0	0	4
5	PCC	22CE115T	Accounting for Managers	4	0	1	4
6	BSC	22CC11T	Business Statistics	4	0	1	4
7	PCC	22CE116P	Personality Development Programme	0	0	2	1
Lab Courses							
8	FC	22CE117L	Computer Applications Lab	0	0	4	2
Total credits							27
Category				Credits			
Management Professional Courses				21			
Basic Science Courses				04			
Computer Application				02			
Total Credits				27			

Semester II (First year)

SNo.	Category	Course Code	Course Title	Hours per week			Credits
				L	T	P	C
1	PCC	22CE121T	Human Resource Management	4	0	0	4
2	PCC	22CE122T	Financial Management	4	0	0	4
3	PCC	22CE123T	Marketing Management	4	0	0	4
4	BSC	22CE1224T	Operation Research	4	0	0	4
5	FC	22CE125T	Data Mining using -R	4	0	0	4
6	PCC	22CE126T	Research Methodology	4	0	0	4
Lab Courses							
7	PCC	22CE126L	Business Analytics -Lab	0	0	3	1.5
8	HSC	22CC22L	Business communication-Lab	0	0	3	1.5
Total credits							27

Category	Credits
Management Professional Courses	21
Basic Science Courses	04
Humanities and Social Sciences	02
Total Credits	27

Semester III (Second year)

SNo.	Category	Course Code	Course Title	Hours per week			Credits
				L	T	P	C
1	PCC	22CE131T	Strategic Management	4	0	0	4
2	PCC	22CE132T	Visual Analytics for Managers	4	0	0	4
3	PCC	22CE133T	Analytics for Marketing	4	0	0	4
4	PCC	22CE134T	Analytics for Finance	4	0	0	4
5	PPC	22CE135T	Human Capital Analytics	4	0	0	4
6	PCC	22CE136T	Analytics for Operational Decisions	4	0	0	4
7	FC	22CE137L	Business Analytics using -R /Python/spread sheet modeling	4	0	0	2
Total credits							26
Category			Credits				
Professional Core Courses			08				
Professional Elective Courses			16				
computer application -lab			02				
Total Credits			26				

Semester IV (Second year)

SNo.	Category	Course Code	Course Title	Hours per week			Credits
				L	T	P	C
1	PCC	22CE141T	Supply chain management Analytics	4	0	0	4
2	PCC	22CE142T	Social media and web Analytics	4	0	0	4
3	PCC	22CE143T	Big Data Analytics and using AIML	4	0	0	4
4	PCC	22CE144T	E-Governance and cyber laws	4	0	0	4
5	Project	22CE145P	Comprehensive Project Work	0	0	0	6
Total credits							22
Category			Credits				
Professional Core Courses			08				
Professional Elective Courses			08				
PROJECT WORK			06				
Total Credits			22				

Unit 5 CONTROLLING AND ORGANISATIONAL DYNAMICS

12

Concepts of Control – Controlling Methods and Techniques – Basic Control Process – Concept and Importance of Organizational Culture – Concept of Organizational Change & Resistance to Change.

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand reasons for Resistance to Change in the organization (L2)
- Identify strategies for planned change in the organization (L1)

Prescribed Textbooks:

1. Robbins S.P, Management PHI.
2. Robbins S.P, Organizational Behavior, PHI.

Reference Books:

1. Stoner. J., Freeman, Management, PHI
2. Luthans F., Organizational Behaviour, TMH.
3. Koontz, Weirich, Management, TMH.
4. Griffin & Moorhead, Organizational Behavior.

Course Outcomes:

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

Blooms Level
of Learning

- | | |
|---|----|
| 1. Demonstrate the roles, skills and functions of management. | L2 |
| 2 Apply various principles and practices of management in solve organizational problems | L3 |
| 3. Identify different cultures and diversity in the workplace | L1 |
| 4. To learn the basic concepts of Organizational Behavior and its applications in contemporary organizations | L2 |
| 5. To understand how individual, groups and structure have impacts on the organizational effectiveness and efficiency | L2 |

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE111T.1	1	1	-	-	1	-	-	-
22CE111T.2	2	-	2	-	2	-	2	-
22CE111T.3	-	1	-	-	-	3	3	3
22CE111T.4	2	-	2	-	-	-	-	1
22CE111T.5	-	1	-	1	-	-	-	2

Title of the Course **BUSINESS AND LEGAL ENVIRONMENT**
Category PCC
Course Code 22CE112T

Year I MBA
Semester I Semester
Branch MBA (Business analytics)

Lecture Hours	Tutorial Hours	Practice Hours	Credits
4	0	0	4

Course Objectives:

- To improve student ability to recognize business opportunities.
- To improve ability to recognize and manage legal risks in business decision-making.

Unit 1 INTRODUCTION TO BUSINESS ENVIRONMENT 10

Meaning of Business, Nature and Significance of Business Environment, Introduction to Economic Environment, Perspectives on the Economic Problem, Industry policy of 1991 and Recent Development, Policy on FDI in Indian.

Learning Outcomes: At the end of the unit, the student will be able to:

- Able to understand the components of business environment. (L2)
- Identify impact of economic and other environment on business operations. (L1)

Unit 2 FISCAL POLICY AND MONETARY POLICY 12

Public Revenues, Public Expenditure, Public Debt, Development Activities Financed by Public Expenditure, Monetary Policy, Demand for Supply of Money, Objectives of Monetary and Credit Policy, Recent Trends, Role of Finance Commission.

Learning Outcomes: At the end of the unit, the student will be able to:

- Explain the effects of fiscal policy on the economic decision of business operations. (L2)
- Describe how monetary policy work in India and financial information is utilized in business. (L1)

Unit 3 LAW OF CONTRACT 14

Definition of Law, Need, Classification and Sources of Business Law, Law of Contract, 1872 (Part-I): Nature of Contract and Essential Elements of Valid Contract, Offer and Acceptance, Law of Contract, 1872 (Part-II): Consideration, Capacity to Contract and Free Consent, Legality of Object.

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the importance of contract in business transactions. (L2)
- Acquire the Knowledge of Indian Contract Act 1872. (L1)

Unit 4 COMPANY LAW 12

Companies Act, 1956 (Part-I): Kinds of Companies, Formulation of Companies, Incorporation, Company Documents – Company Act, 1956 (Part-II): Company Management, Directors, Company Meetings, Resolutions, Auditors, and Modes of Winding-up of a Company.

Learning Outcomes: At the end of the unit, the student will be able to:

- To understand the different kinds of companies and formation, incorporation of company (L2)
- To acquire in-depth knowledge about legal aspects of Companies Act 1956. (L1)

Unit 5 INTRODUCTION OF CYBER LAWS AND IPR

12

Scope and Application of IT Act, 2000 – Digital Signature – e-governance – Penalties and Adjudication – Cyber Regulations Appellate Tribunals – Duties of Subscribers – Introduction of IPR – Copy Rights – Trademarks – Patent Act

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the concept of intellectual property rights and its kinds. (L2)
- Familiarized with cyber-crimes and penal provisions under Information Technology Act 2000. (L1)

Prescribed Textbooks:

1. Balachandran V., Legal Aspects of Business, Tata McGraw Hill, 2012
- 2..A Manual of Business Laws, S.N. Maheshwari &Maheshwari, Himalaya

Reference Books:

1. P. P. S. Gogna, Mercantile Law, S. Chand & Co. Ltd., India, Fourth Edition, 2008.
2. Dr. Vinod, K. Singhania, Direct Taxes Planning and Management, 2008.
3. Richard Stim, Intellectual Property-Copy Rights, Trade Marks, and Patents, Cengage Learning, 2008.
4. Mercantile Law, N.D. Kapoor, Sultan Chand & Sons
5. Mercantile Law, S.S. Gulshan, 3/e, Excel Books,
6. Business Law, Mathur, Tata McGraw-Hill.
7. Legal Aspects of Business, Ravinder Kumar, Cengage.

Course Outcomes:

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

Blooms Level of Learning

- | | |
|--|----|
| 1. Understand linkage between business and environmental factors | L2 |
| 2. Apply industrial policy guidelines for business operations. | L3 |
| 3. Draft commercial contract under contract law. | L1 |
| 4. Able to understand company law provisions relating to incorporation and | L2 |
| 5. Administration of companies in India. | L2 |
| 6. Identify the importance of IPR and cyber security, and their protection | L1 |

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE112T.1	1	1	-	-	1	-	-	-
22CE112T.2	2	-	-	-	2	-	2	-
22CE112T.3	-	3	-	-	-	3	3	3
22CE112T.4	2	-	-	-	-	-	-	1
22CE112T.5	-	-	-	3	-	-	-	2

Title of the Course **MANAGERIAL ECONOMICS**
 Category PCC
 Course Code 22CE113T

Year I MBA
 Semester I Semester
 Branch MBA (Business analytics)

Lecture Hours	Tutorial Hours	Practice Hours	Credits
4	0	0	4

Course Objectives:

- The main objective of this course is to understand the basic economic principles of production and exchange essential tools in making business decisions in today's global economy.

Unit 1 10
INTRODUCTION

Nature and Scope of Managerial Economics – Objectives of the Firm – Traditional Theory – Sales and Revenue Maximizing Theories – Managerial Theories and Behavioral Theories – Profit Maximization Vs Wealth Maximization

Learning Outcomes: At the end of the unit, the student will be able to:

- Understanding the basic concepts of managerial economics. (L2)
- Understanding the reason for existence of firms. (L2)

Unit 2 8
DEMAND ANALYSIS

Demand-Meaning – Determinations of Demand – Demand Function – Law of Demand – Elasticity of Demand – Price, Income, Cross and Promotional or Advertising Elasticity of Demand – Managerial Uses of Elasticity of Demand – Demand Forecasting – Demand Forecasting Methods for Existing and New Products

Learning Outcomes: At the end of the unit, the student will be able to:

- Basic concepts of Demand, Supply and Equilibrium and their determinants. (L1)
- Apply the concepts of price, cross and income elasticity. (L3)

Unit 3 12
PRODUCTION ANALYSIS

Production Function – Law of Variable Proportions – Iso-quant and Iso-costs Curves – Least Cost Combination and Returns to Scale – Economies of Large Scale – Cobb-Douglas Production Function and Constant Elasticity of Substitution.

Learning Outcomes: At the end of the unit, the student will be able to:

- Understanding and estimating production function. (L2)
- Finding out optimal combinations of inputs. (L1)

Unit 4 12
MARKET ANALYSIS

Price and Output Determination under Perfect and Imperfect Competition – Profit: Meaning and Profit Theories – Profit Planning – Measurement.

Learning Outcomes: At the end of the unit, the student will be able to:

- To understand the different kinds of companies and formation, incorporation of company. (L2)
- To acquire in-depth knowledge about legal aspects of Companies Act 1956. (L1)

Unit 5 12
NATIONAL INCOME AND BUSINESS CYCLE

National Income: An Indicator of Economic Activity, the Parameters that Influence Level of Economic Activity – Business Cycle: Characteristics, Phases of Business Cycle – General Factors causing Swings in Business Activity

III Effects of Business Cycle – Measures to Control Business Cycle – Government Policy for Controlling Inflation and Recession

Learning Outcomes: At the end of the unit, the student will be able to:

- To know Varies Level of Economic Activity. (L1)
- To Understanding the Phases of Business Cycle and its impacts. (L2)

Prescribed Textbooks:

1. Economics for Managers, Hirschey, Thomson, 2007.
2. Gupta: Managerial Economics TMH 2009.

Reference Books:

1. Managerial Economics, 4th Edition, Craig Peterson.
2. Managerial Economics—A Problem Solving Approach, Froeb: Thomson, 2007.
3. Managerial Economics Analysis, Problems, Cases, Mehta P.L., Sultan Chand and Sons, New Delhi, 2001.
4. Managerial Economics, Pearson Education, James Pappas and Engene Brigham: New Delhi, 2006.
5. Managerial Economics, Suma Damodaran, Oxford, 2007.
6. Management accounting, M.E. Thukaram Rao, New Age International Publishers, New Delhi.
Cost Accounting Principles and Practices, S P Jain & K L Narang 17th Revised Edition, Kalyani Publishers

Course Outcomes:

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

Blooms Level
of Learning

1. Understand the basic economic principles, forecast demand and supply.
2. Measure cost related output
3. Understand market structure and pricing practices, market economy and national income
4. To understand the inflation and recession.
5. Analyze real world business problems systematic theoretical framework

L1
L2
L2
L2
L4

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE113T.1	-	-	-	2	-	-	-	-
22CE113T.2	-	-	-	-	2	3	-	-
22CE113T.3	-	-	-	3	-	-	-	-
22CE113T.4	3	2	-	-	-	-	3	-
22CE113T.5	2	-	-	-	-	2	-	-

Title of the Course **INTRODUCTION TO BUSINESS ANALYTICS**
Category PCC
Course Code 22CE114T

Year I MBA
Semester I Semester
Branch MBA (Business analytics)

Lecture Hours	Tutorial Hours	Practice Hours	Credits
4	0	0	4

Course Objectives:

- Understanding the Role of Business Analyst and Data Science in business
- To understand the basic concept of machine learning
- Understanding the basic concept of data management and data mining techniques
- Understanding the basic concept of Data Science Project Life Cycle.
- To understand the application of business analysis

Unit 1 10

INTRODUCTION TO BUSINESS ANALYTICS

Introduction: Define business analytics, Historical Overview of business analysis, Difference between business analytics and Data analytics, Data Scientist, Data Engineer vs. Business Analyst, Career in Business Analytics, Data science, Importance of Data Science, Applications for data science, Role of and responsibility of Data Science.

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the basics of business analysis and Data Science (L2)
- Reflect upon the basics of BA (L2)

Unit 2 **BUSINESS ANALYTICS MODELS AND TYPES OF BA** 10

Models in Business analytics, Overview of Descriptive Statistics Predictive Analytics; trend lines and Regression Analysis, Forecasting Techniques, Simulation a Risk Analysis Policy, Recent Trends, Role of Finance Commission.

Learning Outcomes: At the end of the unit, the student will be able to:

- To apply various analytics in business operations (L2)
- To understand and forecasts the techniques of Business analytics (L1)

Unit 3 **DATA MANAGEMENT** 10

Data: Data Collection, Data Management, Big Data Management, Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Visualization, Data Classification Data Science. Linear Optimization, Linear Optimization, nonlinear Optimization and Decision Analysis.

Learning Outcomes: At the end of the unit, the student will be able to:

- To know the Sources and Types of Data. (L3)
- Apply Linear Optimization in BA. (L2)

Unit 4 **DATA MINING** 10

Introduction to Data Mining, The origins of Data Mining, Data Mining Tasks, OLAP and Multidimensional data analysis, Basic concept of Association Analysis and Cluster Analysis

Learning Outcomes: At the end of the unit, the student will be able to:

- To understand the data mining, OLAP significance in BA. (L1)
- Utilize the Cluster analysis in BA. (L2)

Unit 5 BA DEPLOYMENT STRATEGY

14

Analytics Eco-system and Linkages of Business Analytics

Business Roles, Analytics Ecosystem Placing Analytics, Capabilities in the Organization Analytics, Team Skills and Capacity Link Between Strategy and BA Deployment Strategy and BA Scenarios

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the institutional support in India. (L2)
- To know different ways of entrepreneurship. (L1)

Prescribed Textbooks:

1. Essentials of Business Analytics: An Introduction to the methodology and its application, Bhimasankaram Pochiraju, Sridhar Seshadri, Springer
2. Introduction to Data Science, Laura Igual, Santi Seguí, Springer

Reference Books:

1. Introduction to Data Mining, Pang-Ning Tan, Michael Steinbach, Vipin Kumar, Pearson Education India
2. An Introduction to Business Analytics, Ger Kole, Lulu.com, 2019

Course Outcomes:

- | | |
|---|--------------------------|
| • At the end of the course, the student will be able to | Blooms Level of Learning |
| • Understand the basics of business analysis and Data Science | L2 |
| • Understand data management and handling and Data Science Project Life Cycle | L3 |
| • Understand the application of business analysis in different domain | L2 |
| • Apply managerial knowledge in building BA capability in the organization | L4 |
| • Understand the application of business analysis | L2 |

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE114T.1	3	2	-	-	-	-	-	-
22CE114T.2	3	-	-	-	3	-	-	-
22CE114T.3	-	-	-	-	-	3	-	3
22CE114T.4	-	-	-	-	-	3	-	3
22CE114T.5	3	-	-	3	-	-	-	-

- Ability to read, interpret and analyze financial statements; combine financial analysis with other information to assess the financial performance and position of a company; (L3)
- Understand and apply course concepts to analyze common business management decisions such as pricing and outsourcing decisions from a financial perspective. (L2)

Unit 5 RATIO ANALYSIS

12

Significance of Ratio Analysis – Limitations – Liquidity, Activity, Capital Structure and Profitability Ratios – Du Pont Chart (Theory & Simple Problems).

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the major types of accounting ratios; (L2)
- Identify financial performance through accounting ratios. (L1)

Prescribed Textbooks:

1. Accounting for Managers, M E Thukaram Rao, New Age International Publishers.
2. Accounting for Managers, Made Gowda, Himalaya, 2009.
3. Financial Accounting Theory and Analysis: Text and Cases, Richard G. Schroeder, Myrtlew Clark, Jack M. Cathey, John Wiley and Sons, 2010.

Reference Books:

1. Financial Accounting for Business Managers, Asish K. Bhattacharyya, PHI,2009.
2. Financial Accounting Management: An Analytical Perspective, Ambrish Gupta, Pearson Education-2009.
3. Accounting for Management, Vijaya Kumar, TMH, 2009.
4. Financial Accounting, Dr. S.N. Maheshwari and Dr. S.K. Maheshwari, Vikas Publishing House Pvt. Ltd., 2007.
5. Financial Accounting, Weygandt, Kieso, Kimmel, 4/e, Wiley India Edition, 2006.
6. Accounting and Financial Management, T.S. Reddy & Y. Hari Prasad Reddy, Margham Publications.

Course Outcomes:

- | | |
|--|--------------------------|
| • At the end of the course, the student will be able to | Blooms Level of Learning |
| • Understand financial statements of corporate entities | L2 |
| • Analyses of basic accounting conceptual framework. | L4 |
| • Understand the concept of accounting cycle | L2 |
| • Determine financial statements | L2 |
| • Apply ratio analysis to interpret the values in financial statements in a clear and comparative way. | L3 |

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE115T.1	3	2	-	-	-	-	-	-
22CE115T .2	1	2	-	-	-	-	-	-
22CE115T .3	-	-	-	-	-	-	-	-
22CE115T .4	2	2	-	-	-	-	-	-
22CE115T .5	3	-	-	-	2	-	-	-

Learning Outcomes: At the end of the unit, the student will be able to:

- Identify correlation between given variables. (L2)
- Articulates dependent and independent variables. (L3)

Unit 5 TIME SERIES ANALYSIS

12

Components – Models of Time Series: Additive, Multiplicative and Mixed models – Trend analysis: Free Hand Curve, Semi Averages, Moving Averages, Least Square Methods.

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the models of tie series.(L2)
- Find the future trend values.(L1)

Prescribed Textbooks:

1. Statistical Methods, Gupta S.P., S. Chand. 2008 (42 Revised Edition).
2. Business Statistics, Gupta S.C & Indra Gupta, Himalaya Publishing House, Mumbai.

Reference Books:

1. Complete Business Statistics, Amir D. Aezel, Jayavel, TMH, 2008.
2. Statistics for Management, Lerin, Pearson Company, New Delhi.
3. Business Statistics for Contemporary Decision Making, Black Ken, New Age Publishers, New Delhi.
4. Statistics for Business and Economics, Anderson, Sweeney, William, 9/e, Thomson Publishers, 2007

Course Outcomes:

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

Blooms Level
of Learning

- | | |
|---|----|
| • Define statistics and memorize functions and applications of statistics. | L1 |
| • Describe the diagrammatic and graphical form of frequency distribution of data. | L2 |
| • Interpret the results of measure of central tendency and dispersion. | L2 |
| • Interpret the association of characteristics and through correlation and regression analysis. | L3 |
| • Memorize the concept of Time series analysis and its applications. | L1 |

CO-PO Mapping:

CO	P01	P02	P03	P04	P05	P06	P07	P08
22CC11T.1	-	2	-	2	-	1	-	2
22CC11T.2	2	2	-	-	-	-	2	-
22CC11T.3	3	-	-	-	-	2	-	-
22CC11T.4	-	2	-	-	-	-	2	-
22CC11T.5	2	2	-	2	-	2	-	-

- Get familiarize with the statistical analysis software using SPSS package (L2).

10

Unit 5 DATA ANALYSIS WITH STATISTICAL TOOLS (SPSS)

Graphical and Diagrammatic Representation of Data – Measures of Central Tendency Measures of Dispersion – Skewness& Kurtosis – Index numbers – Correlation & Simple Regression using SPSS

Learning Outcomes: At the end of the unit, the student will be able to:

- Perform data presentation using tables and graphics using SPSS package (L4)
- Understand statistical analysis using SPSS package (L2).

Prescribed Textbooks:

1. Introduction to Computers and Communications-Sixth Edition-Tata McGraw Hill.
2. Introduction to Information Technology, V. Rajaraman, Prentice Hall India,
3. Doing Data Analysis with SPSS 16.0, Carver,3/e, Cengage, 2009
4. SPSS for Windows Step by Step, George,6/e, Pearson Education, 2009
5. 2007 Microsoft Office System Step-by- Step, Coxetall, First Edition, PHI, 2007.
6. Microsoft Office Excel 2007 Data Analysis and Business Modeling, Winston, First Edition, Prentice Hall India, 2007.
- 7 .Microsoft Office Access 2007 Step-by-Step, Lambet, Lambert III &Preperneau, First Edition, Prentice Hall India, 2007

Reference Books:

1. Business Data Analysis Using Excel, David Whigam, First Edition, Oxford University Press, 2007.
2. Nandhni, Implementing Tally9: Comprehensive guide for Tally 9&8.1 BPB publications 2010.
3. Ndhani, Tally, ERP, BPB Publications 2010.
4. Data Base Management Systems, ISRD, Tata – McGraw Hill 2009.

Course Outcomes:

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

Blooms Level of Learning

- Explain computer systems and their origin and history, and their applications in the field of business management. L2
- Develop documents using MS Word processor and process information using MS Excel spreadsheets L2
- Design effective presentations through MS PowerPoint and perform database management using MS Access L3
- Interpret the association of characteristics and through correlation and regression analysis. State the use of Tally and SPSS and their application in data analysis. L3
- Perform statistical analysis and develop information reporting through tables and graphics using SPSS package. L2

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE118L.1	-	-	-	-	-	-	3	-
22CE118L.2	-	-	-	-	-	-	3	-
22CE118L.3	-	-	-	-	-	-	3	-
22CE118L.4	-	-	-	-	-	-	3	-
22CE118L.5	-	-	-	-	-	3	-	-

Title of the Course PERSONALITY DEVELOPMENT PROGRAMME– I
Category PCC
Course Code 22CE117P

Year I MBA
Semester I Semester
Branch MBA (Business analytics)

Lecture Hours	Tutorial Hours	Practice Hours	Credits
0	0	3	0

Course Objectives:

- The aim of conducting personality development programme is to explore the inherent potentials of the students and make them aware of their strengths and weaknesses.

Activity areas:

Following activity areas for the current semester are proposed below. The in-charge of the programme is instructed to keep in view the broad framework provided in previous pages while conducting following activities.

- ❖ Goal setting
- ❖ Listening
- ❖ Reading
- ❖ Presentation skills
- ❖ Etiquettes & manners
- ❖ Successful presentations
- ❖ Group discussions
- ❖ Written skills
- ❖ Memory development Programme
- ❖ Time management

Learning Outcomes: At the end of the All activities, the student will be able to:

- Describe and nurture a deep understanding of personal goal setting (L1)
- Understand and practice etiquettes and manners in personal and professional life (L2)
- Adapt Listening, reading, written skills. (L3)
- Understand memory development techniques (L2)
- Prepare PowerPoint presentations and improve presentation skills (L3)
- Participate in group discussions (L3)
- Employ time management skills (L3)

Prescribed Textbooks:

1. Developing Management Skills – David A. Whetten& Kim S. Cameron, 7/e, PHI, 2007.
2. More Games Trainers play – ScannelNewstrom, TMH.
3. Developing Communication Skill – Krishna Mohan &MeeraBanerji, MacMillan.

Reference Books:

1. Basic Managerial Skills for All – EH McGrath, 6/e, PHI.
2. Creativity, Innovation and Quality – Paul E. Plsek, PHI.
3. Human Skills – Creating the Future – Frenandez, Pattanayak, UpinderDhar&Ravishanker, HPH.
4. Effective Training – Blanchard Thacker, 3/e, PHI.
5. Sales Games and Activities for Trainers – Gary B. Connar& John A. Woods, TMH.
6. Team Games for Trainers – Nileos, TMH.
7. Public Speaking – Michael Osborn &Suganne Osborn, 6/e, Biztantra.
8. Body Language – Hedwig Lewis, Response Books.

Course Outcomes:

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

1. Understand importance of self-awareness and potential development
2. Apply good communication skills
3. Possess problem solving and creative abilities
4. Identify ethical, cultural and responsive personality
5. Use employability skills for the industry and also fostering managerial skills.

Blooms Level of Learning

- L2
L3
L3
L1
L3

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE117P.1	-	-	2	-	-	-	-	2
22CE117P.2	-	-	-	2	1	-	-	-
22CE117P.3	-	3	-	-	-	-	1	-
22CE117P.4	-	-	2	3	-	-	-	-
22CE117P.5	-	1	-	-	-	2	-	-

Unit 5 CONTEMPORARY ISSUES IN HRM

10

Knowledge Management – Participative Management – Employee Retention –Work-Life Balance – Talent Management – Learning Organizations - Ethical Issues in HRM.

Learning Outcomes: At the end of the unit, the student will be able to:

- Helps to manage personnel and professional life.(L2)
- Retains knowledge regarding ethics to be followed in the organizations. (L3)

Prescribed Textbooks:

1. Human Resource Management, Dessler Gary, 10th Edition, Pearson/Prentice Hall of India 2006.
2. Human Resource Management, R. Wayne Mondy, Robert M. Noe, Pearson
3. Human Resource Management, Aswathappa, 4th Edition, TMH 2006.
4. Personnel and Human Resource Management – Text and Cases, P. Subbarao, Himalaya, 2009.

Reference Books:

1. Human Resource Management, Bohlander, 10th Edition, Thomson 2006.
2. Human Resource Management, Noe A. Raymond, John Hollenbeck, Barry Gerhart and Patrick Wright, Tata McGraw Hill.
3. Human Resource Management A Case Study Approach, Muller Jaico Publishers,2008
4. Human Resource Management, Text and Cases, VSP Rao, Excel Books 2006.

Course Outcomes:

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

Blooms Level of Learning

- | | |
|---|----|
| • Students should be able to understand the basic HR concepts | L2 |
| • Students should be able to devise and conduct the process of recruitment and selection. | L3 |
| • Identify performance appraisal, training & development. | L1 |
| • Analyses employee compensation systems and devise career development strategies. | L4 |
| • Provide an overview of contemporary trends in the field of HRM | L3 |

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE121T.1	3	-	-	-	-	-	-	-
22CE121T .2	-	3	-	-	-	-	-	3
22CE121T .3	-	3	-	-	-	-	2	-
22CE121T .4	-	3	-	-	-	-	3	2
22CE121T .5	-	-	3	-	-	-	-	3

Title of the Course **FINANCIAL MANAGEMENT**
Category PCC
Course Code 22CE122T

Year I MBA
Semester I Semester
Branch MBA (Business analytics)

Lecture Hours	Tutorial Hours	Practice Hours	Credits
4	0	0	4

Course Objectives:

- To provide students with conceptual and practical framework of financial functions.
- To know students with working knowledge about capital budgeting.
- To provide knowledge about capital structure.
- Conceptual and analytical framework of the working capital.
- To provide knowledge about capital structure.
- Conceptual and analytical framework of the working capital.

Unit 1 FINANCIAL MANAGEMENT OVERVIEW 10

Introduction: Meaning and Functions of financial management, Objectives of financial management: Profit maximization and Wealth maximization, Role of the financial manager

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand changing role of the finance manager and position in the management hierarchy. (L2)
- Focus on shareholders wealth maximization principles as on operationally desirable finance decision criteria. (L2)

Unit 2 CAPITAL BUDGETING 15

Investment Decision: Capital Budgeting, Concept and Process, Techniques of capital budgeting: Traditional methods (Payback period, Average Rate of Return), Discounted cash flow techniques (Net Present Value, Internal Rate of Return and Profitability Index), Capital rationing (Theory and Problems)

Learning Outcomes: At the end of the unit, the student will be able to:

- Identify net present value and internal rate of return. (L1)
- Describe the Non- DCF evaluation criteria and importance of investment decisions. (L2)

Unit 3 WORKING CAPITAL MANAGEMENT 15

Management of Working Capital: Concepts- Need for working capital-Operating cycle- Estimation of working capital requirements-Management of cash, Receivables and inventory. (Theory and Problems)

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the need for investing in current assets and elaborate the concept of operating cycle. (L2)
- Focus on the proper mix of short term and long-term financing for current assets. (L2)

Unit 4 CAPITAL STRUCTURE AND COST OF CAPITAL 13

Financing Decision, Capital Structure, Theories of capital structure: NI, NOI, Traditional and MM Theories, EBIT and EPS Analysis, Operating and Financial Leverages, Computation of Leverages, Specific cost of capital, Determination of weighted averages of capital. (Theory and Problems)

Learning Outcomes: At the end of the unit, the student will be able to:

- Know the importance of EBIT-EPS Analysis in establishing optimal capital structure. (L1)
- Know the appropriate combination of operating and financial leverage. (L1)

Unit 5 DIVIDEND DECISION

12

Dividend Decision, Types of dividends, Factors influencing the dividend policy, Theories of dividends: Walter, Gordon and MM Hypothesis (Theory only)

Learning Outcomes: At the end of the unit, the student will be able to:

- Identify the market imperfections that make dividend policy relevant. (L1)
- Know the bird in the hand argument for paying current dividends. (L1)

Prescribed Textbooks:

- 1 Pandey, I.M: Financial Management – Vikas Publishing House, New Delhi.
- 2 Khan and Jain: Financial Management, Tata McGraw Hill, New Delhi.
- 3 Maheswari, S.N.: Financial Management, Sultan Chand and Sons, New Delhi.
- 4 Prasanna Chandra, Financial Management Tata McGraw Hill, New Delhi

Reference Books:

- 1 Financial Accounting for Business Managers, Asish K. Bhattacharyya, PHI,2009.
- 2 Financial Accounting Management: An Analytical Perspective, Ambrish Gupta, Pearson Education-2009.
- 3 Accounting for Management, Vijaya Kumar, TMH, 2009.
- 4 Financial Accounting, Dr. S.N. Maheshwari and Dr. S.K. Maheshwari, Vikas Publishing House Pvt. Ltd., 2007.
- 5 Financial Accounting, Weygandt, Kieso, Kimmel, 4/e, Wiley India Edition, 2006.
- 6 Accounting and Financial Management, T.S. Reddy & Y. Hari Prasad Reddy, Margham Publications.

Course Outcomes:

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

Blooms Level of Learning

- Understand the core concepts and techniques in financial management L2
- Ability to conduct discounted cash flow analysis and estimate a company's cost of capital. L3
- Analyze the risk dimension in decision making. L4
- Ability to allocate funds to the most attractive investment opportunities L2
- Understand the process of a determining firm's optimal cash payout policy L3
- and Analysis of working capital needs of the company

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE122T.1	3	-	-	-	-	-	2	3
22CE122T.2	3	2	-	-	-	-	-	3
22CE122T.3	3	-	-	-	-	-	-	3
22CE122T.4	3	2	-	-	-	-	-	3
22CE122T.5	3	-	-	-	-	-	2	3

the promotion mix; compare and contrast integrated marketing communications with a non-integrated approach to the promotional mix. (L1)

Unit 5 ORGANIZING & CONTROL AND ETHICAL MARKETING 10

Organizing the Marketing Department – Marketing Control & Types of Control – Ethics in Marketing; Common Criticisms of Marketing, Importance of Marketing Ethics, Rules for Ethical Marketing, Ethical Decision Making – Modern Marketing Practices; Green Marketing, Mobile Marketing and Online Marketing

Learning Outcomes: At the end of the unit, the student will be able to:

- Identify various social science elements within marketing ethics and the roles that they play. (L1)
- Apply the basic and advanced techniques for development of social marketing strategies. (L3)

Prescribed Textbooks:

- 1 Marketing Management, Phillip Kotler, Kevin Lane Keller, 12/e, Pearson, 2007
- 2 Marketing Management, Czinkota&Kotabe, 2/e, South Western Cengage Learning, 2008

Reference Books:

- 1 Marketing – The Core, Kerin, Hartley and Rudelius, McGraw Hill, Irwin, 2007.
- 2 Case Studies in Marketing, The Indian Context, Srinivasan, PHI, 2009
- 3 Marketing, Lamb, Hair and McDaniel, 7/e, Thomson Publishers, 2006.
- 4 Marketing – concepts and Cases, Etzel, Walker, Stanton, Pandit, TMH, 2010
- 5 Introduction to Marketing theory and practice, Adrian Palmer, Oxford University Press 2007

Course Outcomes:

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

- Understand the basics of marketing and marketing environment.
- Identify marketing strategies compatible to target market and organizational objectives.
- Apply pricing strategies to achieve organizational objectives.
- Understand promotional programmes based on promotional mix elements.
- Identify contemporary marketing practices and ethical issues driving marketing function and Analysis of working capital needs of the company

Blooms Level
of Learning

L2
L1
L3
L2
L1

CO-PO Mapping:

CO	P01	P02	P03	P04	P05	P06	P07	P08
22CE123T.1	-	-	-	3	-	2	-	-
22CE123T.2	-	-	-	-	-	-	3	2
22CE123T.3	2	3	-	-	-	2	2	-
22CE123T.4	1	2	-	3	-	2	-	-
22CE123T.5	-	-	3	-	-	-	2	-

Title of the Course OPERATION RESEARCH
Category HSC
Course Code 22CC21TT

Year I MBA
Semester I Semester
Branch MBA (Business analytics)

Lecture Hours	Tutorial Hours	Practice Hours	Credits
4	0	0	4

Course Objectives:

- Introduce the use of linear programming for decision making
- Introduce transportation algorithm for making allocation related decisions
- Explain methods for solving Assignment related decisions

- To minimize the cost of waiting without increasing the cost of servicing and understand the game strategies.
- Explain project management methods for managing projects.

Unit 1 INTRODUCTION TO OPERATIONS RESEARCH 10

Origin, Nature, Definitions, Characteristics, Scope and Managerial Applications of Operations Research – Linear Programming Problem: Introduction, Formulation of Linear Programming Problem, Limitations Of L.P, Graphical Solution To L.P.P – Simplex Method – Artificial Variable Techniques

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand the Models and applications of Operations Research. (L2)
- Frame a Linear Programming Problem and find graphical and simplex solutions to the LPP. (L3)
- Solve simple and practical problems of decision making under different business environments. (L3)

Unit 2 TRANSPORTATION MODEL 15

Introduction – Transportation Model: Finding Initial Basic Feasible Solutions, Moving Towards Optimality – Unbalanced Transportation Problems – Transportation Problems with Maximization, Degeneracy

Learning Outcomes: At the end of the unit, the student will be able to:

- Calculate Transportation problems from the verbal description of the real business situations. (L3)
- Use the Transportation methods that are needed to solve optimization of transportation costs. (L3)
- Solve Transportation problems with maximization using appropriate method. (L3)

Unit 3 ASSIGNMENT MODEL 15

Introduction – Mathematical Formulation of The Problem – Solution of An Assignment Problem – Hungarian Algorithm – Multiple Solution – Unbalanced Assignment Problems – Maximization in Assignment Model – Travelling Salesman Problem.

Learning Outcomes: At the end of the unit, the student will be able to:

- Convert Unbalanced Problems into Balanced Assignment Problems (L4)
- Build and Solve Assignment problems using appropriate method (L3)

Unit 4 GAME THEORY 12

Introduction to Theory Of Games – Two-Person Zero-Sum Games – Pure Strategies – Games With Saddle Point – Mixed Strategies – Games Without Saddle Point By Rules Of Dominance – Games Without Saddle Point By Algebraic Method – Graphical Method – Queuing Models: Introduction To Queuing

Theory, Single Server Queuing Models (M/M/1): (∞ /FCFS), (M/M/1): (N/FCFS).

Learning Outcomes: At the end of the unit, the student will be able to:

- Distinguish a game situation from a pure individual's decision problem. (L4)
- Describe Queuing system, models and components. (L1)
- Solve single server Queuing model problems. (L3)
- Explain concepts of players, strategies, payoffs, rationality, equilibrium. (L2)

Unit 5 P.E.R.T & C.P. M

10

Network Drawing – Critical Path Method (CPM) And Project Evolution and Review Technique (PERT) – Probability of Completing the Project Within the Given Time – Optimum Cost and Optimum Duration – Differences Between

P.E.R.T & C.P.M

Learning Outcomes: At the end of the unit, the student will be able to:

Design and draw networks using given information. (L1)

- Understand and analyze Probability of Completing the Project Within the Given Time. (L2)
- To develop the abilities in project evaluation techniques like PERT, CPM etc.,(L2)

Prescribed Textbooks:

1. KantiSwaroop, Gupta P.K. Man Mohan, "Operations Research", Sultan Chand and Sons, 1978
2. Business Research methods, William G. Zikmund,7/e, Cengage, 2008

Reference Books:

1. J K Sharma, Operations Research: Theory and Practice, Macmillan Publishers India Ltd, 5th Edition, 2013
2. FS Hillier and GJ Lieberman, Introduction to Operations Research, TMH, 8/E, 2006.
3. Operations Research / R. Pannerselvam, PHI Publications.
4. Research Methodology, Dipak Kumar, Bhattacharya, Excel Books, 2006
5. JC Pant, Introduction to Optimization: Operations Research, Jain Brothers, New, 6/E, 2004.

Course Outcomes:

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

Blooms Level of Learning

- Understand the importance of Operations Research and LPP L2
- Apply Transportation, Assignment algorithms to business situations.. L3
- Simulate business events for forecasting. L3
- Apply Sequencing algorithms to develop routing plan and job schedules. L2
- Use project management methods to accomplish projects. L2

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CC21TT.1	3	-	-	-	2	-	1	-
22CC21TT.2	1	3	-	-	-	-	2	-
22CC21TT.3	2	1	-	-	-	-	1	-
22CC21TT.4	1	3	-	-	2	-	-	2
22CC21TT.5	3	2	-	1	-	-	2	-

Unit 4 PREDICTIVE ANALYTICS USING R

12

Predictive analytics-Evaluation Metrics, Tree-Based Model, Support Vector Machines, Artificial Neural Networks and deep learning, Model Ensembles, Evaluation- The holdout and random subsampling, cross validation, bootstrap estimates, recommended procedures, reporting and deployment.

Learning Outcomes: At the end of the unit, the student will be able to:

- Understanding of how to formulate predictive analytics using R.(L2)
- Explain concepts of players, strategies, payoffs, rationality, equilibrium. (L2)

Unit 5 TRANSACTIONAL DATASET

10

Transactional Dataset, Apriori Analysis, Generating Filtering Rules,Plotting, Sequential Dataset, Apriori Sequence Analysis, Understanding The Results, Business Cases

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand pattern discovery using R.(L1)
- To develop the abilities in project evaluation techniques.

Prescribed Textbooks:

Data Mining with R: Learning with Case Studies, Luis Torgo, Chapman and Hall/CRC; 2 editions

Reference Books:

1. R Data Mining: Implement data mining techniques through practical use cases and real-world datasets, Andrea Cirillo, Packet Publishing; 1 edition
2. R Data Science Essentials, By Raja B. Koushik, Sharan Kumar Ravindran, Packt Publishing

Course Outcomes:

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

Blooms Level of Learning

- Understanding of data mining and its functions. L2
- Understanding of classification, clustering algorithms L3
- To apply classification and clustering methods applicable to predictive analytics using R L3
- Understanding of how to formulate predictive analytics using R. L2
- Understand pattern discovery using R. L2

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE124T.1	3	2	-	-	-	2	-	-
22CE124T.2	-	-	-	-	-	-	-	-
22CE124T.3	-	2	-	-	-	-	2	-
22CE124T.4	3	1	-	-	-	-	-	-
22CE124T.5	2	3	2	-	2	-	-	2

Unit 5 DATA PRESENTATION AND REPORT WRITING

8

Diagrammatic and Graphical Presentation: Techniques, Merits and Demerits – Report Writing – Types and Layout of Research Reports

Learning Outcomes: At the end of the unit, the student will be able to:

- Identify different type’s research reports and research report layout. (L1)
- To develop the abilities in project evaluation techniques.

Prescribed Textbooks:

1. Business Research Methods, Donald R Cooper and Pamela S Schindler,9/e, Tata McGraw-Hill Publishing Company Limited, New Delhi, 2009
2. Business Research Methods, William G. Zikmund, 7/e, Cengage, 2008.
3. Marketing Research Contemporary Approach, Dr. P. Naryana Reddy, Dr. GVRK Acharyulu, 2/e, Excel Books.
4. Research Methodology – Methods & Techniques, C.R. Kothari, 2/e New Age International, New Delhi. 2008.

Reference Books:

1. Research methods for managers’ 3/e, John Gill & Phil Johnson, Sage Publications.
1. Research Methods for Business–A Skill Building Approach, Uma Sekaran, John Wiley & Sons (Asia) Pvt. Ltd, Singapore, 2003.
2. Methodology and Techniques of Social Science Research, Wilkinson & Bhandarkar, Himalaya Publishing House.
3. An Introduction to Management for Business Analysis, Speegal, M.R., McGraw Hill.
4. Research Methodology in Management, Michael, V.P., Himalaya Publishing House.
5. Research Methodology, Dipak Kumar. Bhattacharya, Excel Books, 2006.

Course Outcomes:

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

- Understand the formulation of research problem and hypothesis in Social Sciences
- Determine sample size appropriate to the research design
- Demonstrate measurement scales and questionnaires
- Memorize the data collection methods in statistical analysis.
- Discuss research reports for managerial decision making.

Blooms Level of Learning
L2
L2
L3
L1
L2

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE125T.1	3	2	-	-	-	2	-	-
22CE125T.2	-	-	-	-	-	-	-	-
22CE125T.3	-	2	-	-	-	-	2	-
22CE125T.4	3	1	-	-	-	-	-	-
22CE125T.5	2	3	2	-	2	-	-	2

Title of the Course **BUSINESS ANALYTICS -LAB**
Category FC
Course Code 22CE126L

Year I MBA
Semester I SEMESTER
Branch MBA (BUSINESS ANALYTICS)

Lecture Hours	Tutorial Hours	Practice Hours	Credits
4	0	0	4

Course Objectives:

- To formulate and analyze sales department data
- To analyze the financial capital budgeting decisions
- To become familiar with the processes, analyze and report human resources data

- Understand and use of accounting packages for analysis of business problems
- Create, Manage and Report the company related information

Unit 1 **INTRODUCTION using MS-Excel**

Storing and retrieving of data of customers, sales, dealers, products and perform trend analysis (Tables, graphs and charts) (using MS-Excel).

Learning Outcomes: At the end of the unit, the student will be able to:

- To formulate and analyze sales department data (L2)
- Define different types of variables and Hypotheses. (L1)

Unit 2 **INVESTMENT ANALYSIS USING MS-EXCEL**

Capital Budgeting decisions, Calculations of NPV, IRR, Profitable Index, preparation of budget, Calculation of cost of capital (using MS-Excel)..

Learning Outcomes: At the end of the unit, the student will be able to:

- Differentiate sampling methods. (L4)
- To analyze the financial capital budgeting decisions (L4)

Unit 3 **CREATE AND MANAGE DATABASE USING MS-EXCEL**

Create and manage the department wise Employees database and Salary Administration (using MS-Excel)..

Learning Outcomes: At the end of the unit, the student will be able to:

- Use scaling techniques and Constructing, Drafting and Refining the Questionnaires. (L3)

- Build and Solve Assignment problems using appropriate method (L3)

Unit 4 **CREATION OF COMPANY**

Creation of company, Preparation of Ledger, Posting Trial Balance, Profit and loss account, Balance sheet (Sole Traders) (Tally ERP).

Learning Outcomes: At the end of the unit, the student will be able to:

- Understand and use of accounting packages for analysis of business problems. (L2)

Unit 5 (MS-Power Point).

Understanding Information Systems, Design of Management information systems and application of MIS (Detailed presentation) (MS-Power Point).

Learning Outcomes: At the end of the unit, the student will be able to:

- Create, Manage and Report the company related information. (L1)

Prescribed Textbooks:

Foundations of Information Technology Course book 9: Windows 7 and MS Office 2007 (With MS Office 2010 Updates)-Sangeeta Panchal, Alka Sabharwal

Reference Books:

1. Ms Office-Sanjay Saxena
2. Ms Office Excel-Frye, PHI publications
3. Ms Office Access- Step by step, PHI publications
4. Reading material on accounting packages
5. SPSS User manual

Course Outcomes:

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

- Management Theories and Practices
- Data-based decision making
- Data-based decision making
- Data-based decision making
- Data-based decision making

Blooms Level
of Learning
L2
L2
L2
L2
L2

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CE126L.1		2	3	-	-	2	-	-
22CE126L.2	-	-	-	-	-	-	-	-
22CE126L.3	-	2	-	-	-	-	2	-
22CE126L.4		1	3	-	-	-	-	-
22CE126L.5	2	3	2	-	2	-	-	2

Title of the Course **MANAGERIAL COMMUNICATION LAB**

Category HSC

Course Code 22CC22L

Year I MBA

Semester I SEMESTER

Branch MBA (BUSINESS ANALYTICS)

Lecture Hours
4

Tutorial Hours
0

Practice Hours
0

Credits
4

Course Objectives:

- To sensitize the learners about language skills by participating in GDs, meetings and business correspondence.
- To help the students confidently and effectively present their ideas in interviews and presentations

The following course content is prescribed for the Executive Communication Skills Lab:

1. Listening Comprehension
2. Oral presentations (prepared and extemporaneous)
3. Situational dialogues – Greeting and Introduction, asking for information and giving directions
4. Business Letters and E-mails
5. Group Discussions
6. Resume Writing, Covering letters
7. Interviews

Prescribed Textbooks:

Lab Manual prepared by Faculty Members of English

1. Business Communication for Managers, Penrose, Rasberry and Myers, Cengage, 2009
2. Basic Business Communication Skills for empowering the internet generation, LesikarFlately, Tata McGraw Hill, 2009
3. Business Communication, Ramachandran KK et al. MacMillan India Ltd., 2009

Reference Books:

Suggested Software:

- It's your Job from Clarity
- Business Writing from Clarity
- Career Lab, Globareana, Hyderabad

Course Outcomes:

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

1. Interpret the things by listening and responding relevantly.
2. Improve their public speaking skills and make presentations confidently.
3. Illustrate themselves in social and professional contexts fluently.
4. Understand Business Letters and E-Mails in Business Correspondence
5. Relate the things efficiently in Group Discussions and Meetings.
6. Identify themselves in preparing Resume effectively by including all the components.
7. Relate the things efficiently during the interview process

Blooms Level of
Learning

L3
L3
L4
L2
L3
L1
L5

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
22CC22L.1	-	3	-	-	-	-	-	-
22CC22L.2	-	3	-	-	-	-	-	-
22CC22L.3	-	-	-	-	-	-	-	3
22CC22L.4	-	-	-	-	-	-	-	3
22CC22L.5	-	3	-	-	-	-	-	-