

FACULTY OF ENGINEERING & TECHNOLOGY

Effective from Academic Batch: 2022-23

Programme: Bachelor of Technology (Artificial Intelligence (AI) and Data Science)

Semester: III

Course Code: 202003402

Course Title: Fundamentals of Economics and Business Management

Course Group: Humanities and Social Science

Course Objectives: To facilitate students in understanding the fundamental concepts and principles of business management; need for setting the objectives, the basic roles, skills, functions of management, basic concepts of economics with major emphasis on demand and supply and to make them aware about the essential factors of production, various types of costs along with break-even analysis and market structure.

Teaching & Examination Scheme:

Contact hours per week			Course Credits	Examination Marks (Maximum / Passing)				Total		
Lecture	Tutorial	Practical		Theory		J/V/P*				
				Internal	External	Internal	External			
3	0	0	3	50 / 18	50 / 17	NA	NA	100 / 35		

* J: Jury; V: Viva; P: Practical

Detailed Syllabus:

Sr.	Contents	Hours
1	Nature of Organization: Aim of organization, Need for corporate objectives, Types of business organization	02
2	Introduction to Management: Definitions, Management & Administration, levels, skill, types and roles of managers, Management concepts: Scientific Management Theory, Classical Organization Theory, Management Science Approach, Introduction to modern management theories: systems Approach, Contingency Theory, Management by Objectives(MBO), Functions of Management: Planning, Organizing, Staffing, Directing, Controlling, Coordinating	07
3	Human Resource Management: Recruitment & Selection, Appraisal of employees; Theories of Motivation: Maslow's theory of Hierarchy of needs and McGregor's theory X and Y, Introduction to Corporate Social Responsibility; Ethics	03
4	Financial Management: Need for monetary control, financial accounting- balance sheet, profit and loss account, ratio analysis; Management accounting: costing, marginal costing, depreciation	07



5	Introduction to Marketing management: Marketing Mix, concepts of marketing, demand forecasting and its qualitative methods, market segmentation	03
6	Production Management: Organization of manufacturing- Job production, batch production, flow production, group technology; Production planning & control: Planning, routing, scheduling, dispatching, expediting, inspection; Plant location and plant layout	06
7	Introduction to TQM, ISO9000, Six Sigma: Basic concept, principle, brief methodology	04
8	Introduction to Economics: Definitions, foundation stones of economics, types of goods; Difference between Microeconomics & Macroeconomics; Theory of Demand & Supply: meaning, determinants, law of demand, law of supply, equilibrium between demand & supply; Elasticity: elasticity of demand, price elasticity, income elasticity, cross elasticity	06
9	Theory of Production: Meaning, factors of production (meaning & characteristics of land, labour, capital & entrepreneur); Cost: meaning, short run & long run cost, fixed cost, variable cost, total cost, average cost, marginal cost, opportunity cost; Break even analysis; meaning, explanation, numerical	05
10	Markets: Meaning, types of markets & their characteristics (Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly)	02
Total		45

List of Practicals / Tutorials: NA

Reference Books:

1	Management in Engineering – Principles and Practice, by Gail Freeman-Bell & James Balkwill, Prentice Hall India Publication
2	Fundamentals of Management: Essential Concepts and Applications, Pearson Education, Robbins S.P. and Decenzo David A.
3	Engineering Management, By A. K. Gupta, S. Chand Publication
4	Fundamentals of Business Organization & Management by Y K Bhushan, S. Chand & Sons, New Delhi
5	Modern Economic Theory, By Dr. K. K. Dewett & M. H. Navalur, S. Chand Publication
6	Principles of Economics, By N. Gregory Mankiw, Thomson- South Western Publication
7	Management by Stoner, J., Pearson Education

Supplementary learning Material:

1	Lecture Note
2	NPTEL: https://nptel.ac.in/courses/110/105/110105067/
3	NPTEL: https://nptel.ac.in/courses/110/105/110105123/

Pedagogy:

- Direct classroom teaching
- Audio Visual presentations/demonstrations

- Assignments/Quiz
- Continuous assessment
- Interactive methods
- Seminar/Poster Presentation
- Industrial/ Field visits
- Course Projects

Suggested Specification table with Marks (Theory) (Revised Bloom's Taxonomy):

Distribution of Theory Marks in %						R: Remembering; U: Understanding; A: Applying; N: Analyzing; E: Evaluating; C: Creating
R	U	A	N	E	C	
20%	40%	20%	20%	-	-	

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcomes (CO):

Sr.	Course Outcome Statements	%weightage
CO-1	To understand the Working Principles and Applications of Non Traditional Manufacturing Processes.	45
CO-2	To get familiar with MEMS and its Applications.	15
CO-3	To understand various Rapid Prototyping Processes & its applications in various fields.	25
CO-4	To have proper insight for Composite Materials, Manufacturing Techniques & its Applications in Industries.	15

Curriculum Revision:

Version:	2.0
Drafted on (Month-Year):	June-2022
Last Reviewed on (Month-Year):	-
Next Review on (Month-Year):	June-2025