INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad -500 043

COMPUTER SCIENCE ENGINEERING

COURSE DESCRIPTOR

Course Title	BUSINESS ECONOMICS AND FINANCIAL ANALYSIS				
Course Code	AHSB14				
Programme	B.Tech				
Semester	III	IT | CSE			
Course Type	Core				
Regulation	IARE - R18				
Course Structure	**Theory**			**Practical**	
	Lectures	**Tutorials**	**Credits**	**Laboratory**	**Credits**
	3	-	3	-	-
Chief Coordinator	Ms G. Joseph Mary, Assistant Professor, MBA				
Course Faculty	Dr. E. Sunitha, Associate Professor, MBA Ms S. Lakshmi , Assistant Professor,MBA Ms G. Joseph Mary, Assistant Professor, MBA				

I. COURSE OVERVIEW

The present course is designed in such a way that it gives an overview of concepts of Economics. Managerial Economics enables students to understand micro environment in which markets operate how price determination is done under different kinds of competitions. Financial Analysis gives clear idea about concepts, conventions and accounting procedures along with introducing students to fundamentals of ratio analysis and interpretation of financial statements. Break Even Analysis is very helpful to the Business Concern for Decision Making, controlling and forward Strategic Planning. Ratio analysis gives an idea about financial forecasting, financial planning, controlling the business and decision making.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	
-	-	-	- -	

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Business Economics and Financial Analysis	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✗	Chalk & Talk	✔	Quiz	✔	Assignments	✗	MOOCs
✔	LCD / PPT	✔	Seminars	✗	Mini Project	✔	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE): The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into five units and each unit carries equal weight age in terms of marks distribution. The question paper pattern is as follows. Two full questions with "either" or "choice" will be drawn from each unit. Each question carries 14 marks. There could be a maximum of two sub divisions in a question.

The emphasis on the questions is broadly based on the following criteria:

50 %	To test the objectiveness of the concept.
50 %	To test the analytical skill of the concept OR to test the application skill of the concept.

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 1), with 20 marks for Continuous Internal Examination (CIE), 05 marks for Quiz and 05 marks for Alternative Assessment Tool (AAT).

Table 1: Assessment pattern for CIA

Component	Theory			Total Marks
Type of Assessment	CIE Exam	Quiz	AAT	
CIA Marks	20	05	05	30

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 20 marks of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Quiz - Online Examination

Two Quiz exams shall be online examination consisting of 25 multiple choice questions and are to be answered by choosing the correct answer from a given set of choices (commonly four). Such a question paper shall be useful in testing of knowledge, skills, application, analysis, evaluation and understanding of the students. Marks shall be awarded considering the average of two quiz examinations for every course.

Alternative Assessment Tool (AAT)

This AAT enables faculty to design own assessment patterns during the CIA. The AAT converts the classroom into an effective learning centre. The AAT may include tutorial hours/classes, seminars, assignments, term paper, open ended experiments, METE (Modeling and Experimental Tools in Engineering), five minutes video, MOOCs etc.

VI. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes (POs)		Strength	Proficiency assessed by
PO 2	**Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.	1	Seminars
PO 8	**Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	1	Guest lectures
PO 9	**Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	3	Seminars
PO 11	**Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.	3	Presentation on real-world problems

3 = High; 2 = Medium; 1 = Low

VII. HOW PROGRAM SPECIFIC OUTCOMES ARE ASSESSED:

	Program Specific Outcomes (PSOs)	Strength	Proficiency assessed by
PSO 1	**Professional Skills:** The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer	---	----
PSO 2	**Problem-Solving Skills:** The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.	---	---
PSO 3	**Successful Career and Entrepreneurship:** The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and a zest for higher studies.	2	Guest lectures

3 = High; 2 = Medium; 1 = Low

VIII. COURSE OBJECTIVES :

The course should enable the students to:	
I	Understand the concepts of managerial economics and financial analysis for optimal decision making in business environment.
II	Analyze the market dynamics namely demand, elasticity of demand and pricing in different market structures
III	Gain the knowledge on the production theories and cost analysis while dealing with the production and factors of production.
IV	Study the various pricing methods which are adopted in attracting the potential customers for the different commodities.

IX. COURSE OUTCOMES (COs):

COs	Course Outcome	CLOs	Course Learning Outcome
CO 1	Understand microeconomic factors in related to demand analysis and its forecasting	CLO 1	Describe the economic activities performed by the businessmen in the business for profit earning.
		CLO 2	Understand the significance of demand, its analysis, measurement of demand and its forecasting.
CO 2	Apply the theory of production function and Cost concepts to determine the Break Even Analysis.	CLO 3	Write the production function through Different Combination of variable inputs with Economies of Scale
		CLO 4	Analyze the Different cost concepts and determine the significance of Break Even Analysis
CO 3	Remember different market structures, pricing strategies and different forms business organization	CLO 5	Design and implement different structures of market covering how price is determined under different market structures
		CLO 6	Analyze different forms of business organizations existing in the modern business.

COs	Course Outcome	CLOs	Course Learning Outcome
CO 4	Determine the investment decisions of organizations by applying capital budgeting methods and Strategies.	CLO 7	Describe the allocation and sources of capital which plays a vital role in a business organization.
		CLO 8	Demonstrate the concept of capital budgeting and allocations of the resources through capital budgeting methods
CO 5	Interpret the financial statement by using Fundamental accounting concepts and Ratio analysis.	CLO 9	Interpret the financial position of business by applying accounting concepts and conventions.
		CLO 10	Apply the ratio Analysis to assess the operating efficiency and profitability of business.

X. COURSE LEARNING OUTCOMES (CLOs):

CLO Code	CLO's	At the end of the course, the student will have the ability to:	PO's Mapped	Strength of Mapping
AHSB14.01	CLO 1	Describe the economic activities performed by the businessmen in the business for profit earning.	PO 11	3
AHSB14.02	CLO 2	Understand the significance of demand, its analysis, measurement of demand and its forecasting.	PO 2	1
AHSB14.03	CLO 3	Write the production function through Different Combination of variable inputs with Economies of Scale	PO 8	1
AHSB14.04	CLO 4	Analyze the Different cost concepts and determine the significance of Break Even Analysis	PO 2	1
AHSB14.05	CLO 5	Design and implement different structures of market covering how price is determined under different market structures	PO 8	1
AHSB14.06	CLO 6	Analyze different forms of business organizations existing in the modern business.	PO 8	1
AHSB14.07	CLO 7	Describe the allocation and sources of capital which plays a vital role in a business organization.	PO 9, PO11	3
AHSB14.08	CLO 8	Demonstrate the concept of capital budgeting and allocations of the resources through capital budgeting methods	PO 2, PO11	2
AHSB14.09	CLO 9	Interpret the financial position of business by applying accounting concepts and conventions.	PO 2	1
AHSB14.10	CLO 10	Apply the ratio Analysis to assess the operating efficiency and profitability of business.	PO2,PO 11	3

3 = High; 2 = Medium; 1 = Low

XI. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcomes (COs)	Program Outcomes (POs)				
	PO 2	PO 8	PO 9	PO11	PSO3
CO 1	1			3	
CO 2	1	1			2
CO 3		1			2
CO 4	1		3	3	2
CO 5	1			3	

3 = High; 2 = Medium; 1 = Low

XII. MAPPING COURSE LEARNING OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

(CLOs)	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CLO1											3				
CLO2		1													
CLO3								1							
CLO4		1													2
CLO5								1							2
CLO6								1							2
CLO7									3		3				2
CLO8		1									3				
CLO9		1													
CLO10		1									3				

3 = High; 2 = Medium; 1 = Low

XIII. ASSESSMENT METHODOLOGIES – DIRECT

CIE Exams	PO 2, PO8, PO 9, PO11 PSO3	SEE Exams	PO 2, PO8, PO 9, PO11 PSO3	Assignments	-	Seminars	PO9
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XIV. ASSESSMENT METHODOLOGIES - INDIRECT

✔	Early Semester Feedback	✔	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XV. SYLLABUS

MODULE-I	INTRODUCTION & DEMAND ANALYSIS
Introduction to Business Economics: Definition, Nature and Scope of Managerial Economics – Demand Analysis: Demand Determinants, Law of Demand and its exceptions. Elasticity of Demand: Definition, Types, Measurement and Significance of Elasticity of Demand. Demand Forecasting, Factors governing demand forecasting, methods of demand forecasting	

MODULE -II	PRODUCTION & COST ANALYSIS
Theory of Production and Cost Analysis: Production Function – Iso-quants and Iso-costs, MRTS, Least Cost Combination of Inputs, Cobb-Douglas Production function, Laws of Returns, Internal and External Economies of Scale. Cost Analysis: Cost concepts ; Break-even analysis, Determination of Break – Even point (Simple Problems) , Managerial Significance of BEA.	

MODULE -III	MARKETS & NEW ECONOMIC ENVIRONMENT

Market structures: Types of competition, Features of perfect competition, Monopoly and monopolistic competition. Price determination& Price Statistics: Price Output determination in case of perfect competition and monopoly.

Features and evaluation of different forms of Business organization: Sole proprietorship, partnership, Joint Stock Company, public enterprises and their types.

MODULE -IV	CAPITAL BUDGETING

Capital and its significance, types of capital, estimation of fixed and working capital requirements, methods and sources of raising capital- Trading Forecast, Capital budget, Cash Budget. Features of capital budgeting proposals, methods of capital budgeting – payback method, Accounting rate of return (ARR), Net Present Value Method (simple problems).

MODULE -V	INTRODUCTION TO FINANCIAL ACCOUNTING AND FINANCIAL ANALYSIS

Financial accounting objectives, functions, importance; Accounting concepts and accounting conventions - double-entry book keeping, journal, ledger, trial balance; Final accounts: Trading account, profit and loss account and balance sheet with simple adjustments; Financial analysis: Analysis and interpretation of liquidity ratios, activity ratios, capital structure ratios and profitability ratios (simple problems), Du Pont chart.

Text Books:

1. Aryasri, "Managerial Economics and Financial Analysis", TMH publications, 4 th Edition, 2012.
2. M. Kasi Reddy, Saraswathi, "Managerial Economics and Financial Analysis", PHI Publications, New Delhi, 2 nd Edition, 2012.
3. Varshney, Maheswari, "Managerial Economics", Sultan Chand Publications, 11th Edition, 2009.

Reference Books:

1. D.N. Dwivedi, "Managerial Economics", Vikas Publication House Pvt.Ltd, 2nd Edition, 2012.
2. S.N. Maheshwari & S.K.Maheshwari, "Financial Accounting", Vikas Publication House Pvt.Ltd, 4th Edition, 2012.
3. R.Narayana Swamy, "Financial Accounting- A managerial Perspective", Pearson publications, 1 st Indian Reprint Edition, 2012.

XVI. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Learning Outcomes (CLOs)	Reference
1 - 2	Explain about managerial economics according to the business	CLO 1	T1- 1.3-1.8 R1-1.5-1.7
3 - 4	Describe about demand analysis, the Law of Demand and Demand Function.	CLO 2	T1-2.2-2.11 R1-3.3-3.20
5 - 6	Understand elasticity of the demand of the product, different types, Measurement of Elasticity of Demand and Factors influencing on Elasticity of Demand.	CLO 2	T1-3.3-3.20 R1- 5.29-6.8
7	State different methods of Demand Forecasting and the factors governing Demand Forecasting.	CLO 2	T1-4.6-4.19
8 - 9	Demonstrate the Production function, features of Iso-Quants and Iso-Costs, different types of Internal Economies, External Economies and Law of Returns.	CLO 3	T1- 5.3-5.18 R1- 5.29-6.8
10 - 12	Different types of Internal Economies, External Economies ad Law of Returns with appropriate examples.	CLO 4	T1- 5.3-5.18
13 - 14	Illustrate different types of costs	CLO 4	T1- 5.29-6.8
15 - 16	Explain the Significance and Limitations of Break-Even Analysis	CLO 4	T1- 7.13-7.14
17 -18	Calculate Break-Even Point (Simple Problems)	CLO 4	T1- 7.1-7.12

Lecture No	Topics to be covered	Course Learning Outcomes (CLOs)	Reference
19 - 20	Illustrate the features, price-output determination under Perfect Competition, Monopoly and Monopolistic competition Markets.	CLO 5	T1- 8.4-8.16 R2- 5.29-6.8
21 -23	Demonstrate the Objectives, Policies and Methods of Pricing Strategies and Price Methods.	CLO 5	T1- 8.21-8.25
24 - 25	Describe Features of business, Definitions of Various forms of Business Units.	CLO 6	T1-9.3-9.15
26 - 29	State the Merits & Demerits of Different types of Public Enterprises and Changing Business Environment to Post Liberalization Scenario.	CLO 6	T1- 9.2-10.23 R1- 8.21-8.25
30 - 31	Explain the significance and classification of capital, Methods and Sources of Raising Finance.	CLO 7	T1- 9.2-10.23
32 - 33	Demonstrate the concept of capital budgeting and allocations of the resources through capital budgeting methods and compute simple problems.	CLO 8	T1- 11.3-11.5 R2- 12.3-12.5
33 - 37	Illustrate the Significance of Financial Accounting, Double Entry, Accounts, Accounting Concepts and Conventions	CLO 9	T1-12.1-12.26
38- 41	Explain the meaning, advantages and Limitations of the Journal, Ledger and Trial Balance and Final Accounts and Solve simple Problems.	CLO 9	T1-13.4-13.15 R2- 11.3-11.5
42 - 43	Describe Meaning, Definitions and Limitations of Ratio Analysis	CLO 10	T1-13.4-13.15 R2- 11.7-11.8
44 - 45	Compute different types of Financial Ratios (Problems)	CLO 10	T1-13.5-13.68

XVII. GAPS IN THE SYLLABUS - TO MEET INDUSTRY / PROFESSION REQUIREMENTS:

S. No	Description	Proposed actions	Relevance with PO's	Relevance with PSO's
1	Introduction of macro economy concepts for understanding of global economics.	Guest lectures	PO 11	PSO 3
2	Incorporate investment decisions through working capital management.	NPTEL	PO 02	PSO 3

Prepared by:
Ms G. Joseph Mary, Assistant Professor, MBA.   **HOD, CSE**