Academic Course Description

BHARATH UNIVERSITY
Faculty of Engineering and Technology
Department of Electrical and Electronics Engineering

BBA004 ENGINEERING ECONOMICS AND FINANCIAL ACCOUNTING
SeventhSemester (OddSemester)

Course (catalog) description

To know about engineering economics and cost analysis

Compulsory/Elective course: Elective for EEE students

Credit & Contact hours : 3 and 45 hours

Course Coordinator : Dr.R.Ramamorthy

Instructors : Ms.Venkatswari

Name of the instructor	Class handling	Office location	Office phone	Email (domain:@ bharathuniv.ac.in	Consultation
Ms.Venkatswari	Final year EEE	KS 304	04422290125	Praveenkumar.mba@bharathuniv.ac.in	12.30 PM-1.30 PM

Relationship to other courses:

Pre –requisites **:** Professional Course

Syllabus Contents

UNIT I INTRODUCTION 9

Introduction –Economics Theories And Scope –Demand And Supply Analysis –Determinants of Demand – Law Of Demand – Elasticity Of Demand – Demand Forecasting –Demand Sensitivity –Price ,Income ,Gross ,Advertisement –Law Of Supply –Elasticity Of Supply –Cost Concepts –Types –Cost Curves –Short Run And Long Run –Break Even Analysis –Pricing Concepts –Types ,Price –Determinations.

UNIT II DEMAND & SUPPLY ANALYSIS 9

Concepts–Firm, Industry, Market, Market power, Market Conduct, Market Performance. Market Structure-Types-Perfect Monopoly, Monopolistic and Oligopoly Competition. Manufacturing Practices-Diversification, Vertical and Horizontal Integration, Merger.

UNIT III PRODUCTION AND COST ANALYSIS 9

National Income: Concepts and Measurements –GNP, NNP- Methods of Measuring National Income-Inflation and Deflation, Unemployment.

Money and Banking: Value of Money-Banking-Commercial Banks and Its Function. New Economic Environment: Economic Systems –Economic Liberalization, Privatization and Globalization

UNIT IV PRICING 9

Introduction, Scope, Objectives, Basic Financial Concepts – Time Value Of Money And Method Of Appraising Project Profitability – Rate of Return –Pay Back Period – Percent Value, NPV Comparison – Cost – Benefit Analysis. Source of Finance – Internal And External –Long Term And Short Term – Securities, Debentures/ Bonds, Shares, Financial Institutions.

UNIT V FINANCIAL ACCOUNTING 9

Accounting System-Financial Statement – Types- Ledger, Cash Flow Statement Profit And Loss Account, Balance Sheet, Ratios/ Financial Analysis- Liquidity Leverage Activity, Profitability, Trends Analysis.

Reference Books:

R1. Maheshwari S N "Management Accounting and Financial Accounting", S.ChandAndCompany.

R2. D N Drivedi, "Managerial Economics ", Vikas Publishing House.1980

Professional component

General	-	0%
Basic Sciences	-	0%
Engineering sciences & Technical arts	-	0%
Professional subject	-	0%
Open Elective	-	100%

Test Schedule

S. No.	Test	Tentative Date	Portions	Duration
1	Cycle Test-1	August 1st week	Session 1 to 14	2 Periods
2	Cycle Test-2	September 2nd week	Session 15 to 28	2 Periods
3	Model Test	October 2nd week	Session 1 to 45	3 Hrs
4	University Examination	TBA	All sessions / Units	3 Hrs.

Mapping of Instructional Objectives with Program Outcome

To know about engineering economics and cost analysis	Correlates to program outcome		
	H	**M**	**L**
1.To learn about introduction to economics	c	g,m	
2.To learn about value engineering	e.l	h	
3.To learn about cash flow.	b	f,i	
4.To learn about economics of sampling and Replacement and Maintenance	g	l	
5.To learn about depreciation and Evaluation of public alternatives	i	a	

H: high correlation, M: medium correlation, L: low correlation

Draft Lecture Schedule

S.NO	Topics	Problem solving (Yes/No)	Text / Chapter
UNIT I	**INTRODUCTION**		
1.	Introduction	Yes	R1,R2
2.	Economics Theories And Scope	Yes	
3.	Demand And Supply Analysis	Yes	
4.	Determinants ofDemand-Law Of Demand-Elasticity Of Demand	Yes	
5.	Demand Forecasting- Demand Sensitivity- Price ,Income ,Gross ,Advertisement	Yes	
6.	Law Of Supply –Elasticity Of Supply	Yes	
7.	Cost Concepts-Types –Cost Curves	Yes	
8.	Short Run And Long Run –Break Even Analysis	Yes	
9.	Pricing Concepts –Types ,Price –Determinations.	Yes	
UNIT II	**DEMAND & SUPPLY ANALYSIS**		
10.	Concepts–Firm	Yes	R1,R2
11.	Market, Market power, Market Conduct	Yes	
12.	Market Performance. MarketStructure	Yes	
13.	Types-Perfect Monopoly	Yes	
14.	Monopolistic and Oligopoly Competition	Yes	
15.	ManufacturingPractices	Yes	
16.	Diversification	Yes	
17.	Vertical and Horizontal Integration	Yes	
18.	Merger	Yes	
UNIT III	**PRODUCTION AND COST ANALYSIS**		
19.	National Income: Concepts and Measurements	Yes	R1,R2
20.	GNP, NNP- Methods of Measuring NationalIncome	Yes	
21.	Inflation and Deflation, Unemployment	Yes	
22.	Money and Banking: Value of Money-Banking	Yes	
23.	Commercial Banks and Its Function	Yes	
24.	New Economic Environment: Economic Systems	Yes	
25.	Economic Liberalization	Yes	
26.	Privatization	Yes	
27.	Globalization	Yes	

UNIT IV	**PRICING**		
28.	Introduction, Scope, Objectives	Yes	R1,R2
29.	Basic Financial Concepts	Yes	
30.	Time Value Of Money And MethodOf Appraising Project Profitability	Yes	
31.	Rate of Return	Yes	
32.	Pay Back Period – Percent Value	Yes	
33.	Percent Value, NPV comparison	Yes	
34.	Cost – Benefit Analysis. Source of Finance	Yes	
35.	Internal And External-Long Term and Short term	Yes	
36.	Securities, Debentures/ Bonds, Shares, Financial Institutions	Yes	
UNIT V	**FINANCIAL ACCOUNTING**		
37.	Accounting System	Yes	R1,R2
38.	Financial Statement	Yes	
39.	Types- Ledger, Cash Flow Statement	Yes	
40.	Profit And Loss Accounts	Yes	
41.	Balance Sheet, Ratios/ Financial Analysis	Yes	
42.	Balance Sheet, Ratios/ Financial Analysis	Yes	
43.	Liquidity Leverage Activity,	Yes	
44.	Liquidity Leverage Activity,	Yes	
45.	Profitability, Trends Analysis.	Yes	

Teaching Strategies

The teaching in this course aims at establishing a good fundamental understanding of the areas covered using:

- Formal face-to-face lectures
- Tutorials, which allow for exercises in problem solving and allow time for students to resolve problems in understanding of lecture material.
- Laboratory sessions, which support the formal lecture material and also provide the student with practical construction, measurement and debugging skills.
- Small periodic quizzes, to enable you to assess your understanding of the concepts.

Evaluation Strategies

Cycle Test – I	-	5%
Cycle Test – II	-	5%
Model Test	-	10%
Assignment	-	5%
Attendance	-	5%
Final exam	-	70%

Prepared by: **Dated :**

Dr.R.Ramamorthy

Addendum

ABET Outcomes expected of graduates of B.Tech / EEE / program by the time that they graduate:

a) An ability to apply knowledge of mathematics, science, and engineering fundamentals.
b) An ability to identify, formulate, and solve engineering problems.
c) An ability to design a system, component, or process to meet the desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
d) An ability to design and conduct experiments, as well as to analyze and interpret data.
e) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
f) An ability to apply reasoning informed by the knowledge of contemporary issues.
g) An ability to broaden the education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
h) An ability to understand professional and ethical responsibility and apply them in engineering practices.
i) An ability to function on multidisciplinary teams.
j) An ability to communicate effectively with the engineering community and with society at large.
k) An ability in understanding of the engineering and management principles and apply them in project and finance management as a leader and a member in a team.
l) An ability to recognize the need for, and an ability to engage in life-long learning.

Program Educational Objectives

PEO1: PREPARATION
Electrical Engineering Graduates are in position with the knowledge of Basic Sciences in general and Electrical Engineering in particular so as to impart the necessary skill to analyze and synthesize electrical circuits, algorithms and complex apparatus.

PEO2: CORE COMPETENCE
Electrical Engineering Graduates have competence to provide technical knowledge, skill and also to identify, comprehend and solve problems in industry, research and academics related to power, information and electronics hardware.

PEO3: PROFESSIONALISM
Electrical Engineering Graduates are successfully work in various Industrial and Government organizations, both at the National and International level, with professional competence and ethical administrative acumen so as to be able to handle critical situations and meet deadlines.

PEO4: SKILL

Electrical Engineering Graduates have better opportunity to become a future researchers/ scientists with good communication skills so that they may be both good team-members and leaders with innovative ideas for a sustainable development.

PEO5: ETHICS

Electrical Engineering Graduates are framed to improve their technical and intellectual capabilities through life-long learning process with ethical feeling so as to become good teachers, either in a class or to juniors in industry.

Course Teacher	Signature
Ms.Venkatswari	

Course Coordinator
(Dr.R.Ramamorthy)

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