
Academic Course Description

BHARATH UNIVERSITY
Faculty of Engineering and Technology
Department of Mechanical Engineering
BBA004 - Engineering Economics and Financial Accounting
Seventh Semester, 2015-16 (odd Semester)

Course (catalog) description

To understand the concept of basic engineering mechanism

Compulsory/Elective course : Core Elective-III

Credit & contact hours : 3 & 45

Course Coordinator : Ms.Pavithra

Instructors :

Name of the instructor	Class handling	Office location	Office phone	Email (domain:@bharathuniv.ac.in)	Consultation
Mr. D. RAVI	A Section	JR102		ravivsravi.aero@bharathuni.ac.in	9.00am-9.50 am
Mr.Lenin Rakesh	D Section	JR 112		leninrakesh@bharathuni.ac.in	1.30pm-2.20pm
Mrs. Sucharitha	C and D Section	JR103 And JR104		sucharitha@ bharathuni.ac.in	11.40pm-12.30pm, 2.20pm-3.10pm

Relationship to other courses:

Pre –requisites : Industrial Engineering

Assumed knowledge : To estimate process planing time and cost estimation of a product.

Following courses : Work Study.

Syllabus Contents

UNIT- I ECONOMICS, COST AND PRICING CONCEPTS

9

Economic theories – Demand analysis – Determinants of demand – Demand forecasting – Supply – Actual cost and opportunity cost – Incremental cost and sunk cost – Fixed and variable cost – Marginal costing – Total cost

– Elements of cost – Cost curves – Breakeven point and breakeven chart – Limitations of break even chart – Interpretation of break even chart – Contribution – P/V-ratio, profit-volume ratio or relationship – Price fixation – Pricing policies – Pricing methods.

UNIT –II CONCEPTS ON FIRMS AND MANUFACTURING PRACTICES

9

Firm – Industry – Market – Market structure – Diversification – Vertical integration – Merger – Horizontal integration

UNIT-III NATIONAL INCOME, MONEY AND BANKING, ECONOMIC ENVIRONMENT

9

National income concepts – GNP – NNP – Methods of measuring national income – Inflation – Deflation – Kinds of money – Value of money – Functions of bank – Types of bank – Economic liberalization – Privatization – Globalization

UNIT- IV CONCEPTS OF FINANCIAL MANAGEMENT

9

Financial management – Scope – Objectives – Time value of money – Methods of appraising project profitability – Sources of finance – Working capital and management of working capital

UNIT- V ACCOUNTING SYSTEM, STATEMENT AND FINANCIAL ANALYSIS

9

Accounting system – Systems of book-keeping – Journal – Ledger – Trail balance – Financial statements – Ratio analysis – Types of ratios – Significance – Limitations

Total : 60 Hours**TEXT BOOKS:**

1. Prasanna Chandra, — Financial Management (Theory & Practice) TMH
2. Weston & Brigham, — Essentials of Managerial Finance

REFERENCES:

1. Pandey, I. M., —Financial Management
2. Fundamentals of Financial Management- James C. Van Horne.
3. <http://stanford.edu/dept/MSandE>

Computer usage:**Professional component**

General	-	50%
Basic Sciences	-	50%
Engineering sciences & Technical arts	-	100%
Professional subject	-	100%

Broad area :**Test Schedule**

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

Mapping of Instructional Objectives with Program Outcome

To introduce the process planning concepts to make cost estimation for various products after process planning	Correlates to program outcome		
	H	M	L
1. Evaluate the economic theories, cost concepts and pricing policies	a	f,l,j	g
2. Understand the market structures and integration concepts	c	a,e,d	i
1. Understand the measures of national income, the functions of banks and concepts of 2. globalization	d	a	h
3. Apply the concepts of financial management for project appraisal	e,j	a,e,g	i
4. Understand accounting systems	a	i	b
5. analyze financial statements using ratio analysis	f		

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

Draft Lecture Schedule

S.NO	Topics	Problem solving (Yes/No)	Text / Chapter
1.	Introduction to Economics, Cost And Pricing Concepts	No	Topic1-5 =T-1 and R-2 Topic 6-12= T-2 and R-3
2.	Economic theories	No	
3.	Demand analysis	No	
4.	Determinants of demand	No	
5.	Demand forecasting	No	
6.	Steps involved in manual	No	
7.	Actual cost and opportunity cost	No	
8.	Incremental cost and sunk cost	No	
9.	Breakeven point and breakeven chart	No	
10.	Elements of cost – Cost curves	No	
11.	Interpretation of break even chart	Yes	
12.	P/V-ratio, profit-volume ratio or relationship – Price fixation – Pricing policies – Pricing methods.	Yes	
13.	Firm – Industry	No	
14.	Market	No	
15.	Market structure	No	
16.	Diversification	No	
17.	Vertical integration	No	
18.	Merger	No	
19.	Horizontal integration	No	
20.	Horizontal integration	No	
21.	Introduction to National Income	No	Topic1-5 =T-1 and R-3 Topic 6-12= T-1 and R-1
22.	MONEY AND BANKING	No	
23.	ECONOMIC ENVIRONMENT	No	
24.	National income concepts – GNP – NNP	No	
25.	Methods of measuring national income	No	
26.	Inflation	No	
27.	Deflation – Kinds of money	No	
28.	Value of money – Functions of bank	No	
29.	Types of bank – Economic liberalization	No	
30.	Privatization –Globalization	No	

31.	Introduction to Concepts Of Financial Management	No	Topic1-5 =T-2 and R-3 Topic 6-12= T-1 and R-1
32.	Financial management – Scope– Objectives	No	
33.	Time value of money	No	
34.	Methods of appraising project	No	
35.	profitability	No	
36.	Sources of finance	No	
37.	Working capital	No	
38.	management of working capital	No	
39.	management of working capital	No	
40.	Introduction to Vaccounting System,	No	Topic1-5 =T-1 and R-3 Topic 6-12= T-1 and R-1
41.	STATEMENT AND FINANCIAL ANALYSIS	No	
42.	Accounting system	No	
43.	Systems of book-keeping	No	
44.	Journal – Ledger	No	
45.	Trail balance	No	
46.	Financial statements	No	
47.	Ratioanalysis	No	
48.	Types of ratios	No	
49.	Significance – Limitations	No	

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 / Seminar / Online Test / Quiz	-	5%
Attendance	-	5%
Final exam	-	70%

Prepared by **D RAVI**

Addendum

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

- a) The ability to apply knowledge of mathematics, science, and engineering fundamentals.
- b) The ability to identify, formulate and solve engineering problems.
- c) The 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) The ability to design and conduct experiments, as well as to analyze and interpret data
- e) The ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- f) The ability to apply reasoning informed by the knowledge of contemporary issues.
- g) The ability to broaden the education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- h) The ability to understand professional and ethical responsibility and apply them in engineering practices.
- i) The ability to function on multidisciplinary teams.
- j) The ability to communicate effectively with the engineering community and with society at large.
- k) The 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) The ability to recognize the need for, and an ability to engage in life-long learning.

Program Educational Objectives

PEO1: PREPARATION:

Mechanical Engineering graduates are enthusiastic to provide strong foundation in mathematical, scientific and engineering fundamentals necessary to analyze, formulate and solve engineering problems in the field of Mechanical Engineering.

PEO2: CORE COMPETENCE:

Mechanical Engineering graduates have competence to enhance the skills and experience in defining problems in the field of Mechanical Engineering and Technology design and implement, analyzing the experimental evaluations, and finally making appropriate decisions.

PEO3: PROFESSIONALISM:

Mechanical Engineering graduates made competence to enhance their skills and embrace new thrust areas through self-directed professional development and post-graduate training or education.

PEO4: PROFICIENCY:

Mechanical Engineering graduates became skilled to afford training for developing soft skills such as proficiency in many languages, technical communication, verbal, logical, analytical, comprehension, team building, inter personal relationship, group discussion and leadership skill to become a better professional.

PEO5: ETHICS:

Mechanical Engineering graduates are morally merged to apply the ethical and social aspects of modern Engineering and Technology innovations to the design, development, and usage of new products, machines, gadgets, devices, etc.

Course Teacher	Signature
Mr.D.RAVI	
Mr.Lenin Rakesh	
Mr. Sucharitha	

Course Coordinator
Ms.Pavithra

HOD/MECH