

Academic Course Description

BHARATH UNIVERSITY
Faculty of Engineering and Technology
Department of Electronics and Communication Engineering
**BBA004 - ENGINEERING ECONOMICS AND FINANCIAL
MANAGEMENT**
Fifth Semester 2017-18 (Odd Semester)

Course (catalog) description

Introductory Finance: time value of money, cash flow analysis. Investment evaluation methods: present worth, annual worth and internal rate of return. Depreciation models and asset replacement analysis. The impact of inflation, taxation, uncertainty and risk on investment decisions.

Compulsory/Elective course : Elective for ECE students

Credit & contact hours : 3 & 45

Course Coordinator : Dr S.Fabiolya Kavitha, Professor

Instructors :

Name of the instructor	Class handling	Office location	Office phone	Email (domain:@bharathuniv.ac.in)	Consultation
Dr S.Fabiolya Kavitha	III Year	SA Block			9.00-9.50 AM
Dr.E.KANNIGA	III Year	SA Block		Kanniga.etc@bharathuniv.ac.in	12.45-1.15 PM

Relationship to other courses:

Pre –requisites : Professional courses

Assumed knowledge : Nil

Following courses : -

Syllabus Contents**UNIT I ECONOMICS, COST AND PRICING CONCEPTS****9 HOURS**

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 HOURS**

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

UNIT III NATIONAL INCOME, MONEY AND BANKING, ECONOMIC ENVIRONMENT**9 HOURS**

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 HOURS**

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 HOURS**

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

TOTAL : 45 HOURS**Text book(s) and/or required materials****Text Books:**

T1.Prasanna Chandra, — Financial Management (Theory & Practice) TMH

T2.Weston & Brigham, — Essentials of Managerial Finance

References:

R1.Pandey, I. M., — Financial Management

R2.Fundamentals of Financial Management - James C. Van Horne.

R3. <http://stanford.edu/dept/MSandE>**Computer usage: Nil****Professional component**

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

Broad area : -**Test Schedule**

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

Mapping of Instructional Objectives with Program Outcome

Acquire knowledge of economics to facilitate the process of economic decision making Acquire knowledge on basic financial management aspects. Develop the skills to analyze financial statements	Correlates to program outcome		
	H	M	L
1. Evaluate the economic theories, cost concepts and pricing policies	a	f,j	
2. Understand the market structures and integration concepts	c	a	b,h
3. Understand the measures of national income, the functions of banks and concepts of globalization	a,d,i		
4. Apply the concepts of financial management for project appraisal	e	a,g,k	
5. Understand accounting systems and analyze financial statements using ratio analysis			b
6. Understand the impact of inflation, taxation, depreciation. Financial planning, economic basis for replacement, project scheduling, and legal and regulatory issues are introduced and applied to economic investment and project-management problems.	f		

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

Draft Lecture Schedule

Session	Topics	Problem Solving Yes/No	Text /Chapter
UNIT I ECONOMICS, COST AND PRICING CONCEPTS			
1.	Economic theories – Demand analysis	No	T1/Chapter 1 R1/Chapter 1
2.	Determinants of demand – Demand forecasting – Supply	No	
3.	Actual cost and opportunity cost – Incremental cost and sunk cost	No	
4.	Fixed and variable cost – Marginal costing	Yes	
5.	Total cost – Elements of cost – Cost curve	Yes	
6.	Breakeven point and breakeven chart – Limitations of break even chart	No	
7.	Interpretation of break even chart – Contribution	No	
8.	P/V-ratio, profit-volume ratio or relationship	Yes	
9.	Price fixation – Pricing policies – Pricing methods.	No	
UNIT II CONCEPTS ON FIRMS AND MANUFACTURING PRACTICES			
10.	Concepts on Firm	No	T1/Chapter 2 R2/Chapter 1
11.	Manufacturing Practices	No	
12.	Industry	No	
13.	Market	No	
14.	Market structure	No	
15.	Diversification	No	
16.	Vertical integration	No	
17.	Merger	No	
18.	Horizontal integration	No	
UNIT III NATIONAL INCOME, MONEY AND BANKING, ECONOMIC ENVIRONMENT			
19.	National income concepts	No	T1/Chapter 3 T2/Chapter 1 R2/Chapter 2
20.	GNP – NNP	No	
21.	Methods of measuring national income	No	
22.	Inflation – Deflation	No	
23.	Kinds of money – Value of money	No	
24.	Functions of bank	No	
25.	Types of bank	No	
26.	Economic liberalization – Privatization	No	

27.	Globalization	No	
UNIT IV CONCEPTS OF FINANCIAL MANAGEMENT			
28.	Financial management	No	T1/Chapter 4 T2/Chapter 3 R2/Chapter 5
29.	Financial management Scope	No	
30.	Financial management Objectives	No	
31.	Financial management Objectives Contd...	No	
32.	Time value of money	No	
33.	Methods of appraising project profitability	No	
34.	Sources of finance	No	
35.	Working capital	No	
36.	management of working capital	No	
UNIT V ACCOUNTING SYSTEM, STATEMENT AND FINANCIAL ANALYSIS			
37.	Accounting system	No	T1/Chapter 5 T2/Chapter 5 R3
38.	Systems of book-	No	
39.	keeping Journal	No	
40.	keeping Ledger	No	
41.	Trail balance	No	
42.	Financial statements	No	
43.	Ratio analysis	No	
44.	Types of ratios – Significance	No	
45.	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.
- 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: Dr S.Fabiolya Kavitha, Professor

Dated :

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

- a. An ability to apply knowledge of mathematics, science, and engineering
- b. An ability to design and conduct experiments, as well as to analyze and interpret data
- c. An ability to design a hardware and software system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- d. An ability to function on multidisciplinary teams
- e. An ability to identify, formulate, and solve engineering problems
- f. An understanding of professional and ethical responsibility
- g. An ability to communicate effectively
- h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- i. A recognition of the need for, and an ability to engage in life-long learning
- j. A knowledge of contemporary issues
- k. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Educational Objectives**PEO1: PREPARATION**

Electronics Engineering graduates are provided with a strong foundation to passionately apply the fundamental principles of mathematics, science, and engineering knowledge to solve technical problems and also to combine fundamental knowledge of engineering principles with modern techniques to solve realistic, unstructured problems that arise in the field of Engineering and non-engineering efficiently and cost effectively.

PEO2: CORE COMPETENCE

Electronics engineering graduates have proficiency to enhance the skills and experience to apply their engineering knowledge, critical thinking and problem solving abilities in professional engineering practice for a wide variety of technical applications, including the design and usage of modern tools for improvement in the field of Electronics and Communication Engineering.

PEO3: PROFESSIONALISM

Electronics Engineering Graduates will be expected to pursue life-long learning by successfully participating in post graduate or any other professional program for continuous improvement which is a requisite for a successful engineer to become a leader in the work force or educational sector.

PEO4: SKILL

Electronics Engineering Graduates will become skilled in soft skills such as proficiency in many languages, technical communication, verbal, logical, analytical, comprehension, team building, interpersonal relationship, group discussion and leadership ability to become a better professional.

PEO5: ETHICS

Electronics Engineering Graduates are morally boosted to make decisions that are ethical, safe and environmentally-responsible and also to innovate continuously for societal improvement.

Course Teacher	Signature
Dr S.Fabiolya Kavitha	
Dr.E.KANNIGA	

Course Coordinator

HOD/ECE