

VEL TECH MULTI TECH
Dr. RANGARAJAN Dr. SAKUNTHALA
ENGINEERING COLLEGE

(An ISO 9001: 2008 Certified Institution)
(Owned by 'VEL Shree R. Rangarajan
Dr. Sagunthala Rangarajan Educational Academy)

(Approved by AICTE, New Delhi
&
Govt. of Tamil Nadu and affiliated to Anna University)



WEEKLY SCHEDULE
VIII - SEMESTER
2011-2016

4 Year Degree Course in Engineering

CIVIL ENGINEERING

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WEEK DETAILS**YEAR 2016**

S.NO	WEEKS	DATE	
		FROM	TO
1	WEEK 1	18.01.16	23.01.16
2	WEEK 2	25.01.16	30.01.16
3	WEEK 3	01.02.16	06.02.16
4	WEEK 4	08.02.16	13.02.16
5	WEEK 5	15.02.16	20.02.16
6	WEEK 6	22.02.16	27.02.16
7	WEEK 7	29.02.16	05.03.16
8	WEEK 8	07.03.16	12.03.16
9	WEEK 9	16.03.16	20.03.16
10	WEEK 10	22.03.16	26.03.16
11	WEEK 11	27.03.16	02.04.16
12	WEEK 12	03.04.16	09.04.16
13	WEEK 13	11.04.16	16.04.16
14	WEEK 14	18.04.16	23.04.16
15	WEEK 15	25.04.16	30.04.16

VIII SEMESTER

CONTENTS

S. NO	SUBJECTCODE	SUBJECT NAME
01	CE 2451	Engineering Economics And Cost Analysis
02	CE 2045	Prefabricated Structures
03	CE 2071	Repair And Rehabilitation Of Structures

VIII SEMESTER

TEST / EXAM SCHEDULE

SL.NO	SUBJECT CODE	SUBJECT NAME	UNIT TEST I	UNIT TEST II	PRE MODEL EXAM	MODEL EXAM
1	CE 2451	Engineering Economics And Cost Analysis	01.02.16	15.02.16	29.02.06	01.04.16
2	CE 2045	Prefabricated Structures	02.02.16	16.02.16	01.03.16	04.04.16
3	CE 2071	Repair And Rehabilitation Of Structures	03.02.16	17.02.16	02.03.16	06.04.16

**CE 2451 ENGINEERING ECONOMICS AND COST
ANALYSIS**

WEEK-1&2:

UNIT I

Basic Economics

Definition of economics - nature and scope of economic science - nature and scope of managerial economics - basic terms and concepts - goods - utility - value - wealth - factors of production - land - its peculiarities - labour - economies of large and small scale - consumption - wants - its characteristics and classification - law of diminishing marginal utility – relation between economic decision and technical decision

WEEK-2 : UNIT TEST -I

WEEK-3&4:

Demand and Schedule

Demand - demand schedule - demand curve - law of demand - elasticity of demand - types of elasticity - factors determining elasticity - measurement - its significance - supply – supply schedule

WEEK-5&6:

supply curve - law of supply - elasticity of supply - time element in the determination of value - market price and normal price - perfect

competition - monopoly – monopolistic competition.

WEEK-6:UNITTEST-II

WEEK-7:

UNIT III

Organisation

Forms of business -proprietorship -partnership - joint stock company -cooperative organisation - state enterprise -mixed economy -money and banking -banking -

WEEK 8: kinds -commercial banks -central banking functions -control of credit -monetary policy -credit instrument.

WEEK 9: PRE MODEL EXAM

WEEK-10: UNIT IV

Financing

Types of financing -Short term borrowing -Long term borrowing -Internal generation of funds - External commercial borrowings

-Profit and Loss account -Funds flow statement

Types of financing, short term borrowing

WEEK 11&12 :

Assistance from government budgeting support and

international finance corporations -analysis of financial statement –Balance Sheet , Profit and Loss account , Funds flow statement.

WEEK 12: UNIT TEST IV

WEEK 13:

UNIT V

COST AND BREAK EVEN ANALYSES

Types of costing –traditional costing approach - activity base costing -Fixed Cost –variable cost –marginal cost –cost output relationship in the short run and in long run –pricing practice –full cost pricing –marginal cost pricing –going rate pricing –bid pricing –pricing for a rate of return

WEEK 14

appraising project profitability –internal rate of return –pay back period –net present value –cost benefit analysis – feasibility reports – appraisal process – technical feasibility economic feasibility –financial feasibility. Break even analysis - basic assumptions – break even chart –managerial uses of break even analysis

WEEK 15 UNIT TEST V

WEEK - 16 & WEEK - 17

ICD CLASSES & MODEL EXAM

TEXT BOOKS:

1. Dewett K.K. & Varma J.D., Elementary Economic Theory, S Chand & Co., 2006
2. Sharma JC “Construction Management and Accounts” Satya Prakashan, New Delhi.

REFERENCES:

1. Barthwal R.R., Industrial Economics - An Introductory Text Book, New Age
2. Jhingan M.L., Micro Economic Theory, Konark
3. Samuelson P.A., Economics - An Introductory Analysis, McGraw-Hill
4. Adhikary M., Managerial Economics
5. Khan MY and Jain PK “Financial Management” McGraw-Hill Publishing Co., Ltd
6. Varshney RL and Maheshwary KL “Managerial Economics” S Chand and Co

CE 2045 PREFABRICATED STRUCTURES

WEEK-1&2:

UNIT I Introduction

Need for prefabrication – Principles –
Materials – Modular coordination –
Standardization –Systems –Production –
Transportation –Erection

WEEK-2 : UNIT TEST =I

WEEK-3&4:

Prefabricated components

Behaviour of structural components –Large
panel constructions –Construction of roof and

WEEK-5&6:

floor slabs –Wall panels –Columns –Shear walls

WEEK-6:UNITTESTII

WEEK-7:

UNIT III

DESIGN PRINCIPLES

Disuniting of structures- Design of cross
section based on efficiency of material used
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WEEK 8: Problems in design because of joint
flexibility –Allowance for joint deformation.

WEEK 9: PRE MODEL EXAM

WEEK-10: UNIT IV

Joint in structural members Joints for
different structural connections –

WEEK 11&12 :

Dimensions and detailing – Design of expansion

joints

.WEEK 12: UNIT TEST IV

WEEK 13:

UNIT V

Design for abnormal loads – Progressive collapse – Code provisions – Equivalent design loads for considering

WEEK 14

abnormal effects such as earthquakes, cyclones, etc., -Importance of avoidance of progressive collapse

WEEK 15 UNIT TEST V

WEEK - 16 & WEEK - 17

ICD CLASSES & MODEL EXAM

TEXT BOOKS

1. CBRI, Building materials and components, India, 1990
2. Gerostiza C.Z., Hendrikson C. and Rehat D.R., Knowledge based process planning for construction and manufacturing, Academic Press Inc., 1994

REFERENCES

1. Koncz T., Manual of precast concrete construction, Vols. I, II and III, Bauverlag, GMBH, 1971.
2. Structural design manual, Precast concrete connection details, Society for the studies in the use of precast concrete, Netherland Betor Verlag, 1978.

CE 2071 REPAIR AND REHABILITATION OF STRUCTURES

WEEK-1&2:

UNIT-I Maintenance and Repair Strategies

Maintenance, repair and rehabilitation, Facets of Maintenance, importance of Maintenance various aspects of Inspection, Assessment procedure for evaluating a damaged structure, causes of deterioration

WEEK-2 : UNIT TEST -I

WEEK--3&4:

UNIT –II

Serviceability and Durability of Concrete

Quality assurance for concrete construction concrete properties- strength, permeability, thermal properties and cracking

WEEK-5&6:

Effects due to climate, temperature, chemicals,

corrosion – design and construction errors -
Effects of cover thickness and cracking

WEEK-6:UNITTESTII

WEEK-7:

UNIT III MATERIALS FOR REPAIR

Special concretes and mortar, concrete chemicals, special elements for accelerated strength gain,

WEEK 8::

Expansive cement, polymer concrete, sulphur infiltrated concrete, ferro cement, Fibre reinforced concrete

WEEK 9: PRE MODEL EXAM

WEEK-10: UNIT IV

Techniques For Repair and Demolition

Rust eliminators and polymers coating for rebars during repair, foamed concrete, mortar and dry pack, vacuum concrete, Guniting and Shotcrete, Epoxy injection, Mortar repair for cracks, shoring and underpinning.

WEEK 11&12 :

Methods of corrosion protection, corrosion inhibitors, corrosion resistant steels, coatings and cathodic protection. Engineered demolition

techniques for dilapidated structures - case studies

WEEK 12: UNIT TEST IV

WEEK 13:

UNIT V

Repairs, Rehabilitation and Retrofitting of Structures

Repairs to overcome low member strength, Deflection, Cracking, Chemical disruption,

WEEK 14

Weathering corrosion, wear, fire, leakage and marine exposure

WEEK 15 UNIT TEST V

WEEK - 16 & WEEK - 17

ICD CLASSES & MODEL EXAM

TEXT BOOKS

1. Denison Campbell, Allen and Harold Roper, Concrete Structures, Materials, Maintenance and Repair, Longman Scientific and Technical UK, 1991.
2. R.T.Allen and S.C.Edwards, Repair of Concrete Structures, Blakie and Sons, UK, 1987

REFERENCES

1. M.S.Shetty, Concrete Technology - Theory and Practice, S.Chand and Company, New

Delhi, 1992.

2. Santhakumar, A.R., Training Course notes on Damage Assessment and repair in Low Cost Housing , "RHDC-NBO" Anna University, July 1992.

3. Raikar, R.N., Learning from failures - Deficiencies in Design, Construction and Service -

R&D Centre (SDCPL), Raikar Bhavan, Bombay, 1987.

4. N.Palaniappan, Estate Management, Anna Institute of Management, Chennai, 1992.

5. Lakshmipathy, M. etal. Lecture notes of Workshop on "Repairs and Rehabilitation of Structures", 29 - 30th October 1999.s