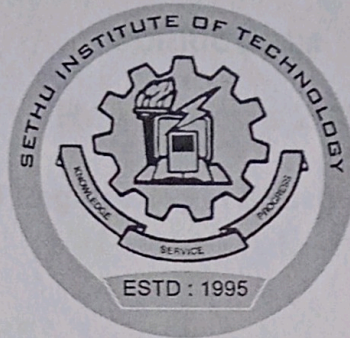


SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115.

(An Autonomous Institution)

DEPARTMENT OF CIVIL ENGINEERING



M.E. STRUCTURAL ENGINEERING

REGULATIONS 2015 – CHOICE BASED CREDIT SYSTEM

REVISED CURRICULUM & SYLLABUS

Approved in the

Academic Council Meeting on 21.07.2017

Chairperson/BOS

Chairperson
Board of Studies
Civil Engineering
Sethu Institute of Technology
Kariapatti - 626 115

Chairman

Academic Council

CHAIRMAN
ACADEMIC COUNCIL
Sethu Institute of Technology
Pulloor, Kariapatti - 625 115

SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

(An Autonomous Institution)

M.E. Degree Programme

CURRICULUM

Regulations 2015

Master of Engineering in Structural Engineering

OVERALL COURSE STRUCTURE

Category	Total No. of Courses	Credits	Percentage
Basic Science	1	4	6
Programme CORE	11	30	43
Programme ELECTIVE	5	15	21
Open Elective	1	3	4
Project Work	2	18	26
TOTAL	22	70	100

COURSE CREDITS – SEMESTER WISE

Branch	I	II	III	IV	TOTAL
Structural Engineering	18	17	20	15	70

Employability Courses

Skill Development Courses

Entrepreneurship Development Courses

Any two or all of the above

LIST OF WINTER COURSES

SI.NO	SUBJECT CODE	SUBJECT NAME	L	T	P	C	WINTER/SUMMER	CATEGORY
1.	15PMA125	Applied Mathematics for Structural Engineering	3	2	0	4	Winter	BS
2.	15PSE102	Concrete Structures	3	0	0	3	Winter	PC
3.	15PSE103	Theory of Elasticity and Plasticity	3	0	0	3	Winter	PC
4.	15PSE104	Stability of Structures	3	0	0	3	Winter	PC
5.	15PSE106	Structural Engineering Laboratory	0	0	4	2	Winter	PC
6.	15PSE301	Structural Dynamics	4	0	0	4	Winter	PC
7.	15PSE302	Experimental Techniques and Instrumentation	3	0	0	3	Winter	PC
8.	15PSE306	Industrial Training	0	0	0	1	Winter	PC
9.	15PSE307	Project Work (Phase I)	0	0	6	3	Winter	PW

LIST OF SUMMER COURSES

SI.NO	SUBJECT CODE	SUBJECT NAME	L	T	P	C	WINTER/SUMMER	CATEGORY
1.	15PSE201	Finite Element Analysis for Structural Engineering	4	0	0	4	Summer	PC
2.	15PSE202	Steel Structures	3	0	0	3	Summer	PC
3.	15PSE203	Design of Prestressed Concrete Structures	3	0	0	3	Summer	PC
4.	15PSE206	Internship	0	0	2	1	Summer	PC
5.	15PSE401	Project Work (Phase II)	0	0	30	15	Summer	PW

LIST OF PROGRAMME ELECTIVES

SL. No	COURSE CODE	COURSE TITLE	L	T	P	C
1.	15PSE501	Analysis and Design of Tall Buildings	3	0	0	3
2.	15PSE502	Forensic Engineering and Rehabilitation of Structures	3	0	0	3
3.	15PSE503	Offshore Structures	3	0	0	3
4.	15PSE504	Optimization of Structures	3	0	0	3
5.	15PSE505	Design of Bridges	3	0	0	3
6.	15PSE506	Mechanics of Composite Materials	3	0	0	3
7.	15PSE507	Advanced Concrete Technology	3	0	0	3
8.	15PSE508	Wind and Cyclone Effects on Structures	3	0	0	3
9.	15PSE509	Design of Sub Structures	3	0	0	3
10.	15PSE510	Computer Aided Analysis and Design	3	0	0	3
11.	15PSE511	Design of Shell and Spatial Structures	3	0	0	3
12.	15PSE512	Design of Steel Concrete Composite Structures	3	0	0	3
13.	15PSE513	Design of Industrial Structures	3	0	0	3
14.	15PSE514	Nonlinear Analysis of Structures	3	0	0	3
15.	15PSE515	Precast and Prefabricated Structures	3	0	0	3
16.	15PSE516	Theory of Plates and Shells	3	0	0	3
17.	15PSE517	Earthquake Analysis and Design of structures	3	0	0	3
18.	15PSE518	Advanced Construction Technology	3	0	0	3
19.	15PSE519	Matrix Methods for Structural Analysis	3	0	0	3
20.	15PSE520	Design of Storage Structures	3	0	0	3
21.	15PSE521	Remote Sensing Techniques and GIS	3	0	0	3
22.	15PSE522	Engineering Fracture Mechanics	3	0	0	3
23.	15PSE523	Durability of Concrete Structures	3	0	0	3
24.	15PSE524	Constitutive Models and modes of failure	3	0	0	3
25.	15PSE525	Smart Materials and Smart Structures	3	0	0	3

LIST OF OPEN ELECTIVES

SL. No	COURSE CODE	COURSE TITLE	L	T	P	C
1.	15PSE601	Research Methodology	3	0	0	3
2.	15PEN602	Pedagogy for Engineering Education	3	0	0	3
3.	15PEN603	Professional Communication Skills	2	0	2	3
4.	15PPE604	Soft Computing	3	0	0	3
5.	15PCD605	Industrial Safety	3	0	0	3
6.	15PCD606	Business Management and Leadership	3	0	0	3
7.	15PCS607	Management Information System	3	0	0	3

SEMESTER I

Course Code	Course Title	L	T	P	C
THEORY					
15PMA125	Applied Mathematics for Structural Engineering	3	2	0	4
15PSE102	Concrete Structures	3	0	0	3
15PSE103	Theory of Elasticity and Plasticity	3	0	0	3
15PSE104	Stability of Structures	3	0	0	3
	Professional Elective I	3	0	0	3
PRACTICAL					
15PSE106	Structural Engineering Laboratory	0	0	4	2
TOTAL		15	2	4	18
Total No. of Credits – 18					

SEMESTER II

Course Code	Course Title	L	T	P	C
THEORY					
15PSE201	Finite Element Analysis for Structural Engineering	4	0	0	4
15PSE202	Steel Structures	3	0	0	3
15PSE203	Design of Prestressed Concrete Structures	3	0	0	3
	Professional Elective II	3	0	0	3
	Professional Elective III	3	0	0	3
PRACTICAL					
15PSE206	Internship	0	0	2	1
TOTAL		16	0	2	17
Total No. of Credits – 17					

SEMESTER III

Course Code	Course Title	L	T	P	C
THEORY					
15PSE301	Structural Dynamics	4	0	0	4
15PSE302	Experimental Techniques and Instrumentation	3	0	0	3
	Professional Elective IV	3	0	0	3
	Professional Elective V	3	0	0	3
	Open Elective I	3	0	0	3
PRACTICAL					
15PSE306	Industrial Training	0	0	0	1
15PSE307	Project Work (Phase I)	0	0	6	3
TOTAL		16	0	6	20
Total No. of Credits – 20					

SEMESTER IV

Course Code	Course Title	L	T	P	C
PRACTICAL					
15PSE401	Project Work (Phase II)	0	0	30	15
TOTAL		0	0	30	15
Total No. of Credits – 15					