

SCHEME AND SYLLABUS FOR M.TECH (FULL TIME) DEGREE COURSE

in

CIVIL ENGINEERING (2015 Scheme)
(Specialization: Structural Engineering and Construction Management)
(Faculty of Engineering)

At

ALAPPUZHA / PATHANAMTHITTA CLUSTER

of the

KERALA TECHNOLOGICAL UNIVERSITY



M.Tech (Full Time) Degree Course in
CIVIL ENGINEERING
(Specialization: Structural Engineering and Construction Management)
SCHEME

SEMESTER I

<i>Exam Slot</i>	<i>Course Code</i>	<i>Course Title</i>	<i>L-T-P</i>	<i>Internal Marks</i>	<i>End Semester Exam</i>		<i>Credits</i>
					<i>Marks</i>	<i>Duration (Hrs)</i>	
A	03CE 6001	Structural Dynamics	4-0-0	40	60	3	4
B	03CE6011	Advanced Theory and Design of Reinforced Concrete Structures	4-0-0	40	60	3	4
C	03CE6021	Theory of Elasticity	4-0-0	40	60	3	4
D	03CE 6071	Construction management and planning	3-0-0	40	60	3	3
E		Elective I	3-0-0	40	60	3	3
S	03 RM 6001	Research Methodology	1-1-0	100			2
T	03CE 6901	Seminar I	0-0-2	100			2
U	03CE 6811	Structural Engineering Lab	0-0-2	100			1
	TOTAL		19-1-4	500	300		23

ELECTIVE I

Course Code	Course	Slot
03 CE 6081	Advanced Design of Steel Structures	E
03 CE 6091	Shoring, scaffolding and formwork	E
03 CE 6101	Advanced Analysis of Structures	E

SEMESTER II

<i>Exam Slot</i>	<i>Course Code</i>	<i>Course Title</i>	<i>L-T-P</i>	<i>Internal Marks</i>	<i>End Semester Exam</i>		<i>Credits</i>
					<i>Marks</i>	<i>Duration (Hrs)</i>	
A	03CE 6002	Finite Element Method	4-0-0	40	60	3	4
B	03CE 6012	Advanced Design of Earthquake Resistant Structures	3-0-0	40	60	3	3
C	03 CE 6092	Project Formulation and Appraisal	3-0-0	40	60	3	3
D		Elective II	3-0-0	40	60	3	3
E		Elective III	3-0-0	40	60	3	3
V	03 CE 6902	Mini Project	0-0-4	100			2
U	03 CE 6812	Dynamic Response Lab	0-0-2	100			1
	TOTAL		16-0-6	400	300		19

ELECTIVE II

Course Code	Course	Slot
03 CE 6032	Advanced Prestress Concrete Design	D
03 CE 6122	Theory of Plates and Shells	D
03 CE 6052	Structural Optimization	D

ELECTIVE III

Course Code	Course	Slot
03 CE 6102	Structural Stability	E
03 CE 6112	Tall Building Structures	E
03 CE 6082	Design of Bridges	E

SEMESTER III

<i>Exam Slot</i>	<i>Course code</i>	<i>Course Title</i>	<i>L-T-P</i>	<i>Internal Marks</i>	<i>End Semester Exam</i>		<i>Credits</i>
					<i>Marks</i>	<i>Duration (Hrs)</i>	
A		Elective IV	3-0-0	40	60	3	3
B		Elective V	3-0-0	40	60	3	3
	03 CE 7903	Seminar II	0-0-2	100			2
	03 CE 7913	Project Phase I	0-0-8	50			6
	TOTAL		6-0-10	230	120		14
<i>Total credits for semester III</i>							14

ELECTIVE IV

Course Code	Course	Slot
03 CE 7063	Design of Steel Concrete Composite Structures	A
03 CE 7073	Strength and Behaviour of Structural Materials	A
03 CE 7083	Structural Design of Foundations	A

ELECTIVE V

Course Code	Course	Slot
03 CE 7093	Management Quality and Safety in Construction	B
03 CE 7103	Construction Methods and Equipments	B
03 CE 7113	Construction Productivity Improvement	B

SEMESTER IV

<i>Exam Slot</i>	<i>Course code</i>	<i>Course Title</i>	<i>L-T-P</i>	<i>Internal Marks</i>	<i>End Semester Exam Marks Duration (Hrs)</i>		<i>Credits</i>
A	03CE 7914	Project Phase II	0-0-21	70	30		12
<i>Total credits for Semester IV</i>							<i>12</i>

	<i>Credits</i>
<i>Grand total credits (Semester I to IV)</i>	68