

KERALA TECHNOLOGICAL UNIVERSITY



**SCHEME AND SYLLABUS
FOR
M. Tech. DEGREE PROGRAMME
IN
CIVIL ENGINEERING
WITH SPECIALIZATION**

**STRUCTURAL ENGINEERING &
CONSTRUCTION MANAGEMENT**

CLUSTER 05 (ERNAKULAM II)

KERALA TECHNOLOGICAL UNIVERSITY

CET Campus, Thiruvananthapuram

Kerala, India -695016

(2015 ADMISSION ONWARDS)

KERALA TECHNOLOGICAL UNIVERSITY

SCHEME AND SYLLABUS FOR M. Tech. DEGREE PROGRAMME

Branch: CIVIL ENGINEERING

Specialization: STRUCTURAL ENGINEERING &

CONSTRUCTION MANAGEMENT

SEMESTER - I

Exam Slot.	Course No.	Subject	Hrs / Week			Internal Marks	End Semester Exam. valuation Scheme (Marks)		Credits
			L	T	P		Marks	Duration (Hrs)	
A	05CE 6101	Advanced Design of Concrete Structures	3	1	0	40	60	3	4
B	05CE 6103	Theory of Elasticity	3	1	0	40	60	3	4
C	05CE 6105	Construction Planning, Scheduling and Control	3	1	0	40	60	3	4
D	05CE 6107	Construction Management & Engineering Economics	2	1	0	40	60	3	3
E	05CE 611x	Elective - I	2	1	0	40	60	3	3
	05CE6177	Research Methodology	1	1	0	100	0	0	2
	05CE 6191	Structural Engineering Design Studio	0	0	2	100	0	0	1
Total			14	6	2				21

Elective-I	
05CE 6111	Prestressed Concrete
05CE 6113	Modern Construction Materials
05CE 6115	Structural Dynamics

SEMESTER -II

Exam Slot.	Course No.	Subject	Hrs / Week			Internal Marks	End Semester Exam. valuation Scheme (Marks)		Credits
			L	T	P		Marks	Duration (Hrs)	
A	05CE 6102	Finite Element Analysis	3	1	0	40	60	3	4
B	05CE 6104	Advanced Concrete Technology	2	1	0	40	60	3	3
C	05CE6106	Project Planning and Implementation	2	1	0	40	60	3	3
D	05CE 612x	Elective II	2	1	0	40	60	3	3
E	05CE 613x	Elective - III	2	1	0	40	60	3	3
	05CE 6166	Seminar - I	0	0	2	100	0	0	2
	05CE 6188	Mini Project	0	0	4	100	0	0	2
	05CE 6192	Computer Application Lab	0	0	2	100	0	0	1
Total			11	5	8				21

Elective-II		Elective-III	
05CE 6122	Earthquake Resistant Design of Structures	05CE6132	Bridge Engineering
05CE 6124	Theory of Plates and Shells	05CE6134	Advanced Foundation Design
05CE 6126	Construction Personnel Management	05CE6136	Structural Optimization

SEMESTER – III

Exam Slot.	Course No.	Subject	Hrs / Week			Internal Marks	End Semester Exam. valuation Scheme (Marks)		Credits
			L	T	P		Marks	Duration (Hrs)	
A	05CE 714x	Elective IV	2	1	0	40	60	3	3
B	05CE 715x	Elective V	2	1	0	40	60	3	3
	05CE 7167	Seminar-II	0	0	2	100	0	0	2
	05CE 7187	Project (Phase 1)	0	0	8	50	0	0	6
Total			4	2	10				14

Elective-IV		Elective-V	
05CE 7141	Structural Stability	05CE 7151	Numerical Methods in Structural Engineering
05CE 7143	Advanced Theory of Concrete Structures	05CE 7153	Construction Project Management
05CE 7145	Maintenance & Rehabilitation of Structures	05CE 7155	Remote Sensing and Geographic Information System

SEMESTER – IV

Exam Slot.	Course No.	Subject	Hrs / Week			Internal Marks	End Semester Exam. valuation Scheme (Marks)		Credits
			L	T	P		Marks	Duration (Hrs)	
	05CE 7188	Project (Phase II)	0	0	21	70	30	0	12
Total			0	0	21	100			12

Total:68