

# SOLAPUR UNIVERSITY, SOLAPUR

# **FACULTY OF ENGINEERING & TECHNOLOGY**

# **CIVIL ENGINEERING**

# Syllabus for

M.E. (Civil-Structures) Semester III and IV

Choice Based Credit System Syllabus (w.e.f.2015-16)





# STRUCTURE OF M.E. (CIVIL-STRUCTURES)

Choice Based Credit System Syllabus (w.e.f. 2015-16)

### **Four Semester Course**

# **Semester-I**

	Sr. No	Subject	Teaching/week				<b>Examination Scheme</b>				Credits			
Elasticity & 3 1 4 100 25 - 125 3 1 - 4  Mechanics of 3 1 4 100 25 - 125 3 1 - 4  Advanced 3 1 4 100 25 - 125 3 1 - 4  Begin of Concrete Structures 3 1 4 100 25 - 125 3 1 - 4  Elasticity & 3 1 4 100 25 - 125 3 1 - 4  Elasticity & 3 1 4 100 25 - 125 3 1 - 4  Elasticity & 3 1 4 100 25 - 125 3 1 - 4  Elective-I 3 1 4 100 25 - 125 3 1 - 4  Elective-I 1 1 - 50 - 50 - 2 - 2	140		L	Pr	Tu	Total	TH	T	OE	mark	TH	TW	OE	Total
2       Mechanics of	1	Elasticity &	3	/	1	4	100	25	2	125	3	1	-	4
Design of Concrete Structures         3         -         1         4         100         25         -         125         3         1         -         4           5         Elective-I         3         -         1         4         100         25         -         125         3         1         -         4           6         Seminar-I         -         -         1         1         -         50         -         2         -         2	2	Mechanics	3	-	1	4	100	25		125	3	1	-	4
4       Dynamics Structures       3       -       1       4       100       25       -       125       3       1       -       4         5       Elective-I       3       -       1       4       100       25       -       125       3       1       -       4         6       Seminar-I       -       -       1       1       -       50       -       50       -       2       -       2	3	Design of Concrete	3	_	1	4	100	25		125	3	1	-	4
6 Seminar-I 1 1 - 50 - 50 - 2 - 2	4	Dynamics	3	-	1	4	100	25		125	3	1	-	4
	5	Elective-I	3	-	1	4	100	25	1	125	3	1	-	4
15   -   6   21   500   175   -   675   15   7   -   22	6	Seminar-I	1	-	1	1		50	-	50	-	2	-	2
			15	-	6	21	500	175	-	675	15	7	-	22

Abbreviations: L: Lectures, Pr. Practical, Tu: Tutorial, TH: Theory, TW: Term Work, OE: Oral Exam.

Elective-I: (1) Design of Foundation

- (2) Advances in Concrete Composites
- (3) Structural Optimization



# STRUCTURE OF M.E. (CIVIL-STRUCTURES)

Choice Based Credit System Syllabus (w.e.f. 2015-16)

### **Four Semester Course**

### **Semester-II**

Sr. No	Subject	. Teaching/week				<b>Examination Scheme</b>				Credits			
110		L	Pr	Tu	Total	TH	TW	OE	Total	TH	TW	OE	Total
									marks				
7	Theory of	3	-	1	4	100	25	1	125	3	1	-	4
	Plates & Shells		7										
8	Finite	3	-//	1	4	100	25	-	125	3	1	-	4
	Element			K		2							
	Method				-		A						
9	Earthquake	3	-	1	4	100	25	-	125	3	1	-	4
	Engineering												
10	Advanced	3	-	1	4	100	25	-	125	3	1	-	4
	Design of		- 11	1 4		1							
	Steel		- 10			/ \	\		1.0				
	Structures					/ + / -		//					
11	Elective-Il	3	-lb	_1_	4	100	25	$\overline{\gamma}_{i}$	125	3	1	-	4
12	Seminar-II	-	-	1	1		50		50	1	2	-	2
		15		6	21	500	175	ΠC	675	15	7	-	22

Abbreviations: L: Lectures, Pr. Practical, Tu: Tutorial, TH: Theory, TW: Term Work, OE: Oral Exam.

### Elective II:

- (1) Stability of structures
- (2) Design of R. C. C. Bridges
- (3) Structural reliability
- (4) Design of folded plates and shells



## STRUCTURE OF M.E. (CIVIL-STRUCTURES)

### **Four Semester Course**

#### **Semester-III**

Sr.	Subject		Teachi	ng Sch	eme	Credits				
No.		L	T	P	Total	Credits	Credits	Credits	Total	
						(L)	(T)	(P)	Credits	
1	Lab Practice		-	1*	1*	-	-	1.0	1.0	
2	Dissertation Phase I:	/-	)	3*	3*	-	-	3.0	3.0	
	Synopsis Submission		-	250	9 M	A A U				
	Seminar* (ISE)				A.T					
3	Dissertation Phase II:	Y	-	7		-	-	3.0	3.0	
	Term Work*(ISE)		-7	(A)	1					
4	Dissertation Phase II	-		-	<b>M</b> -1	-	-	6.0	6.0	
	Progress Seminar*			I I		12 1				
	(ESE)									
	Total	- (	)	4*	4*	-	-	13.0	13.0	
				7/1						

#### Note -

# • \* Indicates contact hours per candidate

- For all activities related to dissertation Phase I (synopsis submission seminar and progress seminar) student must interact regularly every week with the advisor.
- Synopsis submission seminar shall cover detailed synopsis of the proposed work. Student shall submit Synopsis of the Dissertation Work only after delivering this seminar.
- Progress seminar shall be delivered capturing details of the work done by student for dissertation
- Student shall deliver all seminars using modern presentation tools. A hard copy of the report shall be submitted to the Department before delivering the seminar. A PDF copy of the report must be submitted to the advisor along with other details if any.
- Lab Practice shall include any of the below activities as recommended by Advisor and student shall submit a report after completion of the activity to Advisor—Software / hardware assignments, learning new software, literature survey, filed work, industrial training etc. related to dissertation work
- Details of modes of assessment of seminar and dissertation shall be as specified in 7(III) of PG Engineering Ordinance of Solapur University, Solapur



### STRUCTURE OF M.E. (CIVIL-STRUCTURES)

### **Four Semester Course**

### **Semester-IV**

Sr.	Subject		Teachi	ng Sch	eme	Credits				
No.			LT		Total	Credits	Credits	Credits	Total	
						(L)	(T)	(P)	Credits	
1	Dissertation Phase III:	1	- T	5*	5*	-	-	4.0	4.0	
	Progress Seminar#			A						
	(ISE)		6	54						
2	Dissertation Phase IV:	-			74	1 2 1	-	6.0	6.0	
	Term Work #(ISE)			2						
3	Final Submission of the	-	3	(A)	1		-	6.0	6.0	
	Dissertation and									
	Viva –Voce (ESE)			1						
	Total	-	7-	5*	5*		-	16.0	16.0	
				$-\Lambda$	-					

### Note -

# • \* Indicates contact hours per candidate

- #- For all activities related to dissertation Phase II student must interact regularly every week with the advisor.
- Progress seminar shall be delivered capturing details of the work done by student for dissertation
- Student shall deliver all seminars using modern presentation tools. A hard copy of the report shall be submitted to the Department before delivering the seminar. A PDF copy of the report must be submitted to the advisor along with other details if any.
- Student must submit a hard copy of Project Report to the department
- Details of modes of assessment of seminar and dissertation shall be as specified in 7(III) of PG Engineering Ordinance of Solapur University, Solapur