

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) With Effect from Academic Year 2014-15

Four Semester Course

Semester-I

Sr. No	Subject	Subject Teaching/week			Examination Scheme				Credits				
140		L	Pr	Tu	Total	TH	T	OE	Total mark s	ТН	TW	OE	Total
1	Theory of Elasticity & Plasticity	3	-/	1	4	100	25		125	3	1	-	4
2	Mechanics of	3	-	1	4	100	25		125	3	1	-	4
3	Advanced Design of Concrete Structures	3		1	4	100	25	10	125	3	1	1	4
4	Dynamics Structures	3	1	1	4	100	25		125	3	1	1	4
5	Elective-I	3	-	1	4	100	25	-	125	3	1	,	4
6	Seminar-I	-	-	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) With Effect from Academic Year 2014-15

Four Semester Course

Semester-II

Sr. No	Subject	. T	. Teaching/week			Examination Scheme				Credits			
110		L	Pr	Tu	Total	TH	TW	OE	Total marks	TH	TW	OE	Total
									marks				
7	Theory of	3	-	1	4	100	25	-	125	3	1	-	4
	Plates & Shells		1		5								
8	Finite	3	-//	1	4	100	25	-	125	3	1	-	4
	Element					2	100						
	Method				$=\lambda$		A						
9	Earthquake	3	-	1	4	100	25	-	125	3	1	-	4
	Engineering				1	- 1							
10	Advanced	3	-	1	4	100	25	-	125	3	1	-	4
	Design of		- 11	13		_/\-							
	Steel		- 10			/ \	\						
	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) With Effect from Academic Year 2014-15

Four Semester Course

Semester-III

Sr.	Subject		Teachi	ng Sch	eme		Cre	dits	
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 N 10			
	Seminar* (ISE)				A.T				
3	Dissertation Phase II:	Y	-	7		-	-	3.0	3.0
	Term Work*(ISE)		-7	(A)	1				
4	Dissertation Phase II	-		-	D -1	-	-	6.0	6.0
	Progress Seminar*			I I					
	(ESE)								
	Total	- ()	4*	4*	-	-	13.0	13.0
				7/ \					

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) With Effect from Academic Year 2014-15

Four Semester Course

Semester-IV

Sr.	Subject		Teachi	ng Sch	eme		Cre	dits	
No.		L	T	P	Total	Credits	Credits	Credits	Total
						(L)	(T)	(P)	Credits
1	Dissertation Phase III:	1	-	5*	5*	-	-	4.0	4.0
	Progress Seminar#			/ AA Y					
	(ISE)		9	Sai	9 III	A W 10			
2	Dissertation Phase IV:	-	250		44	1.2	-	6.0	6.0
	Term Work #(ISE)			2					
3	Final Submission of the	-	=-1	(A)	1		-	6.0	6.0
	Dissertation and								
	Viva –Voce (ESE)			1		2 2			
	Total	-	7-	5*	5*		-	16.0	16.0
				_ /\ .					

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



M.E. (CIVIL-STRUCTURES)

Semester – III Choice Based Credit System (CBCS)

14. Dissertation Phase- I

Synopsis Submission Seminar

Teaching scheme:		Assessment scheme:
Contact Hours: 3 hour per week per	student	ISE: 75 marks

Credits: 3

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The student is expected to carry out intensive literature survey for a period of about two months in the field of interest and to select a topic for his/her dissertation in consultation with the faculty advisor assigned. The student shall then submit a report and deliver a seminar on the problem chosen by him/her to the panel of three departmental PG recognized faculty members. It shall be expected that a student justifies the gravity and also the relevance of the problem through his/her seminar. This shall be for the approval of synopsis.

The assessment of Synopsis Submission Seminar shall be done by aforesaid panel of three departmental PG recognized faculty members.



Solapur University, Solapur M.E. (CIVIL- STRUCTURES) Choice Based Credit System (CBCS) Semester – III

15. Dissertation Phase II

Term Work

Credits: 3	Assessment scheme:
	ISE: 100 marks
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Student shall submit a report to the faculty advisor, on the basis of work carried out in accordance with instructions given by faculty advisor, throughout the semester. Dissertation Phase II evaluation consists of term-work evaluation (ISE) based on the efforts put in by the student to carry out his/her work & the results obtained thereof.

The faculty advisor shall complete the assessment of the report and accordingly allocate the marks to the student out of maximum 100 marks.



Solapur University, Solapur M.E. (CIVIL-STRUCTURES) Choice Based Credit System (CBCS) Semester – III

16. Dissertation Phase II

Progress Seminar Presentation

Credits: 6	Assessment scheme: ESE: 200 marks

Progress seminar shall be delivered capturing details of the work done by the student for dissertation. Student shall deliver seminar using modern presentation tools. A hard copy of report shall be submitted to the faculty advisor before delivering the seminar. A PDF copy of the report must be submitted to the faculty advisor along with other details if any.

End Semester Evaluation (ESE) shall consist of presentation of progress seminar on the report submitted by the student, followed by demonstration before a panel three departmental PG recognized faculty members.



M.E. (CIVIL-STRUCTURES) Semester – IV

Choice Based Credit System (CBCS)

17. Dissertation Phase III

Term Work

Progress seminar Presentation and Report

Teaching scheme: Assessment scheme: ISE: 100marks

Contact Hours: 5 hour per week per student

Credits: 4

For all activities related to Phase III, student must interact regularly every week with the faculty advisor. The student who has cleared his/her Phase II evaluation, shall submit a report and present the status of work carried out on the dissertation after 8-10 weeks of Phase II ESE to three departmental PG recognized faculty members.

Progress seminar shall be delivered capturing details of the work done by student for dissertation. Student shall deliver seminar using modern presentation tools. A hard copy of report shall be submitted to the faculty advisor before delivering the seminar. A PDF copy of the report must be submitted to the faculty advisor along with other details if any.

The evaluation will be done by the aforesaid panel of three departmental PG recognized faculty members based on the requirements of completion of dissertation work for the dissertation Phase- III.



M.E. (CIVIL- STRUCTURES)

Semester – IV Choice Based Credit System (CBCS)

18. Dissertation Phase-IV

Term Work

Assessment scheme	Credits: 6
ISE: 200 mark	

After completing the dissertation work to the satisfaction of faculty advisor, the student shall submit the dissertation report to the University in the prescribed format. The final approved dissertation shall be submitted in black bound hard copy along with soft copy on CD/DVD.

The evaluation of dissertation is to be carried out by the faculty advisor as ISE for 200 marks. This evaluation shall be on the basis of the requirements of completion of dissertation work. The faculty advisor shall submit mark list of term work marks, along with the submission of dissertation to university as mentioned in assessment scheme.



M.E. (CIVIL- STRUCTURES)

Semester – IV Choice Based Credit System (CBCS)

19. Dissertation Phase IV

Final Submission of the dissertation and Viva-Voce

Credits: 6	Assessment scheme:
	ESE: 200 marks
•••••	•••••

Open defense of the student on his/her dissertation shall be arranged by the university. This defense shall be in front of the panel of examiners as appointed by university authority. The evaluation will be done by panel of examiners as appointed by university authority.