

Government College of Engineering, Karad				
Second Year (Sem – III) M. Tech. Structural Engineering				
SE2301 : Dissertation Phase I				
Teaching Scheme		Examination Scheme		
Practical	14 Hrs/week	ISE	100	
Total Credits	07	ESE	100	
Course Outcomes (CO):		TOTAL	200	
Student will be able to:				
1. Perform extensive literature survey on the research topic of work.				
2. Identify the problem statement for the research work.				
3. Decide methodology for the research work.				
4. Carry out initial mathematical modeling or experimental set up.				
Course Contents			COs	Hours (56)
The dissertation work is to be carried out individually commences in the Semester III and extends through Semester IV. The topic of dissertation work should be related to the areas of Structural Engineering, Earthquake Engineering, Structural Dynamics, Composite Structures, Smart Materials & Structures etc. Applications of computer as a tool for conceptualization, analysis, optimization, design, simulation of systems, experimental study, etc. are to be encouraged and preferred. The student can work in the Institute or work on field under as per the recommendation by Guide and Head of the Dept., related to Dissertation work.			CO1 2,3,4	
SYNOPSIS APPROVAL The Head of the Department shall appoint a committee comprising of the Guide and two experts to review and approve the synopses.				
Course Contents Hours It shall include the problem definition, literature survey, approaches for handling the problem, finalizing the methodology for the dissertation work and design calculations / experimental design etc. A report of the work shall be submitted at the end of Semester III after approval by the Guide and endorsement of the Head of Department. It will be assessed for term work, by the evaluation committee (*) appointed by the Head of the Department, for appropriateness, sufficiency of contents and offer suggestions if any. (*) Note: The evaluation committee shall consist of the Guide, one senior expert faculty member and the Head of the Department or his/her representative. The term work under this submitted by the student shall include. 1) Work diary maintained by the student and countersigned by his guide/ industrial guide. 2) The content of work diary shall reflect the efforts taken by candidates for (a) Searching the suitable project work and literature review (b) Visits to different factories or organizations. (i) The brief report of feasibility studies carried to come to final conclusion. (j) Rough / free hand sketches/ drawing. (k) Design calculations carried by the student. The student has to make a presentation before departmental committee comprising proposed title, literature review, research gap/ objectives, research plan and expected outcome. It is expected to complete minimum 40 % research work. Evaluation of Dissertation- I will be made as per rubrics.				
List of Submission Project/Dissertation Report				



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Department of Civil Engineering
Govt. College of Engineering, Karad.

Mapping of COs and POs

PO → CO ↓	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	3	3	2	2	3
CO 2	3	3	3	3	2	3
CO 3	3	3	3	2	2	3
CO 4	3	3	3	3	2	3

Assessment Pattern (with revised Bloom's Taxonomy)

Knowledge Level	ISE	ESE
Remember	20	20
Understand	10	10
Apply	10	10
Analyze	10	10
Evaluate	10	10
Create	40	40
TOTAL	100	100



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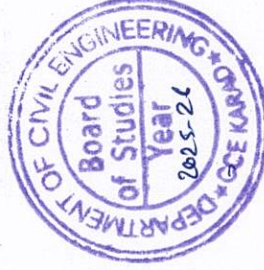
Government College of Engineering, Karad				
Second Year (Sem – IV) M. Tech. Structural Engineering				
CS2302: MOOCs / OPEN COURSE				
Teaching Scheme		Examination Scheme		
Practical	-	ISE	-	
Total Credits	3	ESE	100	
Course Outcomes (CO):		TOTAL	100	
Student will be able to:				
1. Identify self-learning topics.				
2. Explore the survey literature and contact resource persons for the selected topic of research.				
3. Develop oral and written communication skills to present and defend their work in front of technically qualified				
4 Presentation skill ability.				
Course Contents			COs	Hours
Online courses available on digital platform like MOOCs/ NPTEL etc during the academic semester will be reviewed and listed by departmental faculty board before start of every semester. Suitable course for registered candidate will be recommended by Guide and Programme Head considering skill sets and knowledge required for dissertation work of the individual candidate (from the list). It shall have minimum 8-12 week duration, peer graded assignment and examination to award grade by online course offering agency. The report of course completed with copy of Grade Report shall be submitted to the examination section. In case online course is not available, departmental committee will specially design syllabus for course under self-learning mode and guide will conduct end semester examination to award the grade.			CO1, 2,3,4	(32)

Mapping of COs and POs

PO → CO ↓	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	2	3	2	2	3	3
CO 2	2	3	2	3	3	2
CO 3	2	3	2	2	3	2
CO 4	2	3	2	2	3	3

Assessment Pattern (with revised Bloom's Taxonomy)

Knowledge Level	ISE	ESE
Remember	20	20
Understand	10	10
Apply	10	10
Analyze	10	10
Evaluate	10	10
Create	40	40
TOTAL	100	100



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Government College of Engineering, Karad				
Second Year (Sem – IV) M. Tech. Structural Engineering				
SE2401 : Dissertation Phase II				
Teaching Scheme		Examination Scheme		
Practical	32Hrs/week	ISE	100	
Total Credits	16	ESE	200	
Course Outcomes (CO):		TOTAL	300	
Student will be able to:				
1. Study technical reports on the research topic of work.				
2. Carry out detailed mathematical modelling or experimental validation.				
3. Draw inferences from the findings and present conclusion.				
4. Learn presentation skills for technical report.				
	Course Contents			COs Hours
	Dissertation (Phase-II): The candidate shall submit the detailed report as per the synopsis approved, in the prescribed format after approval by the Guide and endorsement by the Head of the Department. It will be assessed for term work by the evaluation committee appointed by the Head of the Department, for completion of the proposed work. (*) Note: The evaluation committee shall consist of the Guide, one senior expert faculty member and the Head of the Department or his/her representative. The dissertation submitted by the student on topic already approved by institute authorities on basis of initial synopsis submitted by the candidate, shall be according to following guide lines. Format of dissertation report: The dissertation work report shall be typed on A4 size bond paper. The total number of minimum pages shall not be less than 60. Figures, graphs, annexure etc be as per the requirement. The report should be written in the standard format. 1. Title sheet 2. Certificate 3. Acknowledgement 4. List of figures, Photographs/Graphs/Tables 5. Abbreviations. 6. Abstract 7. Contents. 8. Text with usual scheme of chapters. 9. Discussion of the results and conclusions Bibliography (the source of illustrative matter be acknowledged clearly at appropriate place IEEE/ASME/Elsevier Format) Deviation of work from approved synopsis is not permitted. Evaluation of Dissertation- II will be made as per rubrics. Dissertation completion certificate from sponsoring industry is necessary. Acceptance letter/ published one research paper in quality journal/ conference is essential. List of Submission Project/Dissertation Report			CO1, 2,3,4 (32)



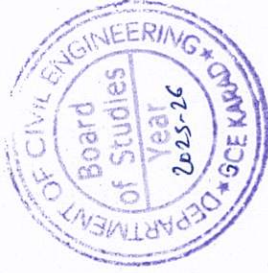
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Mapping of COs and POs

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CO 1	2	3	3	3	3	
CO 2	2	3	3	3	3	
CO 3	2	3	3	3	3	
CO 4	2	3	3	3	3	

Assessment Pattern (with revised Bloom's Taxonomy)

Knowledge Level	ISE	ESE
Remember	20	20
Understand	10	10
Apply	10	10
Analyze	10	10
Evaluate	20	10
Create	30	30
TOTAL	100	200



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