



GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING (Autonomous)

Approved by AICTE, New Delhi and Affiliated to JNTU-Kakinada

Re-accredited by NAAC with "A" Grade with a CGPA of 3.47/4.00

Madhurawada, Visakhapatnam - 530 048.

DEPARTMENT OF CIVIL ENGINEERING SCHEME OF COURSE WORK

Course Details:

Course Title:	Reinforced Concrete Detailing Lab		
Course Code:	20CE1121	L T P C:	0 0 3 1.5
Program:	B. Tech.		
Branch:	Civil Engineering		
Semester:	V		
Prerequisites:	Engineering drawing		

COURSE OUTCOMES (COs):

After completion of this course the student would be able to

1	R.C Cantilever beam and slab
2	Two- span R.C continuous beam.
3	Three- span continuous slab and sunken slab.
4	R.C isolated and combined footing
5	Cantilever retaining wall

PROGRAMME OUTCOMES

1. Graduates will be able to apply the knowledge of mathematics, science, engineering fundamentals to solve complex civil engineering problems.
2. Graduates will attain the capability to identify, formulate and analyse problems related to civil engineering and substantiate the conclusions
3. Graduates will be in a position to design solutions for civil engineering problems and design system components and processes that meet the specified needs with appropriate consideration to public health and safety.
4. Graduates will be able to perform analysis and interpretation of data by using research methods such as design of experiments to synthesize the information and to provide valid conclusions.
5. Graduates will be able to select and apply appropriate techniques from the available resources and modern civil engineering and software tools, and will be able to predict and model complex engineering activities with an understanding of the practical limitations.
6. Graduates will be able to carry out their professional practice in civil engineering by appropriately considering and weighing the issues related to society and culture and the

consequent responsibilities.

7. Graduates will be able to understand the impact of the professional engineering solutions on environmental safety and legal issues.
8. Graduates will transform into responsible citizens by resorting to professional ethics and norms of the engineering practice.
9. Graduates will be able to function effectively in individual capacity as well as a member in diverse teams and in multidisciplinary streams.
10. Graduates will be able to communicate fluently on complex engineering activities with the engineering community and society, and will be able to prepare reports and make presentations effectively.
11. Graduates will be able to demonstrate knowledge and understanding of the engineering and management principles and apply the same while managing projects in multidisciplinary environments.
12. Graduates will engage themselves in independent and life-long learning in the broadest context of technological change while continuing professional practice in their specialized areas of civil engineering.

PROGRAMME SPECIFIC OUTCOMES(PSOs):

1. Collect, process and analyse the data from topographic surveys, remote sensing, hydrogeological investigations, geotechnical explorations, and integrate the data for planning of civil engineering infrastructure.
2. Analyse and design of substructures and superstructure for buildings, bridges, irrigation structures and pavements.
3. Estimate, cost evaluation, execution and management of civil engineering projects.

Course Outcome Vs Program Outcomes:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	-	-	-	2	-	-	-	-	-	-	-
CO2	2	-	-	-	2	-	-	-	-	-	-	-
CO3	2	-	-	-	2	-	-	-	-	-	-	-
CO4	2	-	-	-	2	-	-	-	-	-	-	-
CO5	2	-	-	-	2	-	-	-	-	-	-	-

Course Outcome Vs Programme Specific Outcomes:

CO	PSO1	PSO2	PSO3
CO1	3	-	-
CO2	3	-	-
CO3	3	-	-
CO4	3	-	-
CO5	3	-	-

Mapping Levels:

1: Slight (Low), 2: Moderate (Medium), 3: Substantial (High), put -: No Correlation

Assessment Methods:	Day to Day Evaluation / Mid-Test / End Exam
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Teaching-Learning and Evaluation:

Week No.	TOPIC / CONTENTS	Course Outcomes	Sample questions	Teaching-Learning Strategy	Assessment Method & Schedule
1-7	1. Detailing of R.C Cantilever beam and slab 2. Detailing of single span simply supported beam 3. Detailing of two span simply supported R.C continuous beam 4. Detailing of two span fixed R.C continuous beam. 5. Detailing of three span continuous slab. 6. Detailing of Sunken slab cross section .	CO1 to CO4	1. Draw the R.C Cantilever beam and slab with detailing. 2. Draw the R.C simply supported beam with detailing. 3. Draw two span simply supported R.C continuous beam with detailing. 4. Draw two span fixed R.C continuous beam with detailing 5. Draw three span continuous slab with detailing 6. Draw Sunken slab cross section with detailing	<ul style="list-style-type: none"> Lecture Drawing 	Checking Observation note book, Charts correction and Viva
8	MID TEST – I				
9-15	7. Detailing of Isolated footing 8. Detailing of Combined Footing. 9. Detailing of Raft foundation. 10. Detailing of pile cap 11. Detailing of Cantilever retaining wall 12. Prepare Bar Bending schedule and estimate reinforcement.	CO4 to CO5	7. Draw Isolated footing with detailing 8. Draw Combined Footing with detailing. 9. Draw Raft foundation with detailing. 10. Draw pile cap with detailing 11. Draw Cantilever retaining wall with detailing 12. Prepare Bar Bending schedule and estimate reinforcement	<ul style="list-style-type: none"> Lecture Drawing 	Checking Observation note book, Charts correction and Viva
16	MID TEST – II				
17	END EXAM				