

INSTITUTE	DIPLOMA STUDIES
PROGRAM	DIPLOMA ENGINEERING (CIVIL ENGINEERING)
SEMESTER	5
COURSE TITLE	PROJECT-I
COURSE CODE	09CI2505
COURSE CREDITS	4

Objective:

- 1 Encourage the students to solve the real life existing or future problems by applying the fundamental concepts, techniques, knowledge and skills.
- 2 Produce the literature review and detail analysis which led the students to familiarize with recent trends in the field of civil works.
- 3 Prepare the students to develop cost effective feasible/practical solutions through creative ideas, thinking ability, knowledge, skills and imagination power with keeping in mind engineering ethics and values such as wealth, pleasure, honesty, morality and human values.

Course Outcomes: After completion of this course, student will be able to:

- 1 Identify, analyse and define the real-life problems in Civil Engineering field.
- 2 Find different solutions to the problems by collecting data and select most appropriate solution using latest practices in Civil Engineering
- 3 Use and integrate knowledge of different courses and data collected to plan simple designs with the help of Indian standard codes, Handbooks, Standard Publications and Research papers.
- 4 Prepare and present report prepared.
- 5 Work independently as a project leader as well as member of the team.

Pre-requisite of course:No prerequisite knowledge required.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	8	0	0	0	50	100
Contents : Unit	Topics						Contact Hours
Total Hours							

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	Project Work The students will select a topic related to any course in the curriculum, design various units involved, prepare and present a report of the work done., The project work will be done by a group of 4-6 students., Following is the list of suggestive areas for selection of project., 1. Campus development 2. Soil stabilization 3. Planning for water treatment plant scheme 4. Water supply project 5. Concrete Mix Design 6. Advance technology in surveying 7. Foundation and structural analysis/design 8. Technology up-gradation in rural areas i.e. Village improvement 9. Structural Audit of existing building 10. Environmental pollution control 11. Application of software in civil engineering industry 12. Solid waste management 13. Reuse, Recycling, Refabricating and Replacements of plastic products with advance civil engineering materials 14. Hospital and Industrial wastes disposal 15. Non-conventional Energy resources and its applications in civil field 16. Irrigation project 17. Highway failure and their Maintenance 18. Use of Nano Technology in addition to concrete technology 19. Foot over bridge, Sky walks and Fly over bridges 20. Road intersection planning for urban roads for traffic congested area 21. Parking problem 22. Housing colony project 23. Geotextile & Their Application 24. Traffic Monitoring System 25. Highway safety For Civil Engineering Projects 26. Town planning & Village planning by using latest software such as GIS, GPS, RS, and AutoCAD etc. 27. Slum clearance 28. Advance construction techniques 29. Entrepreneurship Development 30. Collaboration of different engineering branches with Civil engineering for societal development 31. Any topic which is relevant to the recent development, trends and technologies in civil engineering field	112
Total Hours		112

Textbook :

1 ., ., ., .

References:

1 ., ., ., ., .

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery

Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
20.00	30.00	20.00	20.00	10.00	0.00

Instructional Method:

- 1 The individual students have different aptitudes and strengths. Project work, therefore, should match the strengths of students. For this purpose, students should be asked to identify the type of project work, they would like to execute.
- 2 Students should be allotted a problem of interest to him/her as a major project work.
- 3 It is also essential that the faculty may have a brainstorming session to identify suitable project assignments for their students.
- 4 The project assignment can be individual assignment or a group assignment. There should not be more than 6 students if the project work is given to a group.

Supplementary Resources:

- 1 <https://swayam.gov.in/>
- 2 <https://learning.tcsionhub.in/iDH/India/>