



Semester – V

Subject Name: PROJECT - I

Subject Code: 09CI1505

Diploma Branches in which this subject is offered: Civil Engineering

Objective: Objectives of introducing this subject at 3rd year level in Diploma Civil Engineering are:

The project work included in the curriculum to encourage the students to solve the real life existing or future problems in the field of Civil Engineering by applying the fundamental concepts, techniques, knowledge and skills which they have acquired during academics.

The project also comprises of literature review and analysis which led the Students to familiarize with recent trends in the field of civil works. By providing cost effective feasible/practical solutions for the assigned problems through their creative ideas, the students can develop their thinking ability, Knowledge, Skills and Imagination power that is required for the same with keeping in mind engineering ethics and values such as wealth, pleasure, honesty, morality and human values.

Credits Earned: 3

Course Outcomes:

On the completion of the project work, student will be able to:

1. Identify and solve real life problems for betterment of the society.
2. Collect and analyse the relevant data for detail report presentation
3. Design and implement the various civil engineering projects by referring Indian standard codes, Handbooks, Special Publications and Research papers.
4. Apply the integrated knowledge and skills of different subjects to prepare working drawing schemes, physical and prototype models, project report and policies.
5. Work independently as a project leader as well as member of the team.

Teaching and Examination Scheme

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/ Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE	IA	CSE	Viva	Term work	
0	0	6	3	NA	NA	NA	50	50	100



Proposed Project Guidelines:

During the semesters, the group of students will have to write and submit the report in the formats specified by Marwadi University which includes the summary of project work carried out, the readings, calculations, photographs of project work, detail estimate of the project, results and answers in numerical or graphical form, and a discussion of the results, answers and conclusions along with the reference and source that you have referred.

The format may include following contents as a proposed guideline, but should be strictly include all essential contents mentioned below.

- 1.) Project completion certificate
- 2.) Acknowledgements
- 3.) Index
- 4.) Table of Contents
- 5.) List of Figures
- 6.) Chapter-1 Introduction, Problem Identification and Definition, Aims and Objectives, Study area if required, Scope of the project
- 7.) Chapter-2 Literature Review/Survey along with Brief summary report
- 8.) Chapter-3 Methodology
- 9.) Chapter- 4 Data Collection
- 10.) Chapter- 5 Data Analysis
- 11.) Chapter- 6 Result Discussion and Conclusions
- 12.) Chapter- 7 Statement of Limitations and Future scope
- 13.) Source /Reference
- 14.) Appendix which includes photographs of the project and all the relevant data for the project

Suggested Project area:

The students in group will select a topic and collect detailed information on that topic. The students must have to submit the project report along with the presentation. Presentation and project work report will be assessed internally by the faculty members. The suggested project areas are given below for your reference.

- Marwadi University campus improvement / Development
- Soil stabilization
- Planning for water treatment plant scheme
- Water supply project
- Concrete Mix Design
- Advance technology in surveying
- Foundation and structural analysis/design
- Technology up-gradation in rural areas i.e. Village improvement
- Structural Audit of existing building



- Environmental pollution control
- Application of software in civil engineering industry
- Solid waste management
- Reuse, Recycling, Refabricating and Replacements of plastic products with advance civil engineering materials
- Hospital and Industrial wastes disposal
- Non-conventional Energy resources and its applications in civil field
- Irrigation project
- Highway failure and their Maintenance
- Use of Nano Technology in addition to concrete technology
- Foot over bridge, Sky walk and Fly over bridges
- Road intersection planning for urban roads for traffic congested area
- Parking problem
- Housing colony project
- Geotextile & Their Application
- Traffic Monitoring System
- Highway safety For Civil Engineering Projects
- Town planning & Village planning by using latest software such as GIS, GPS, RS, and AutoCAD etc.
- Slum clearance
- Advance construction techniques
- Entrepreneurship Development
- Collaboration of different engineering branches with Civil engineering for societal development
- Any topic which is relevant to the recent development, trends and technologies In civil engineering field

Useful links:

- 1.) <https://ndl.iitkgp.ac.in/>
- 2.) <http://smartcities.gov.in/content/innerpage/list-of-projects.php>
- 3.) <https://library.marwadieducation.edu.in/UsefulWebs.aspx>
- 4.) <https://secmol.org/about/eco-friendly-living/renewable-energy/>
- 5.) <http://www.enggroom.com/Civil/DiplomaProjectIdeas.php>
- 6.) <https://www.pinterest.com/pin/85075880440805648/>
- 7.) <https://shaktifoundation.in/work/energy-efficiency/>
- 8.) <http://www.modares.ac.ir/uploads/Agr.Oth.Lib.17.pdf>
- 9.) <https://www.youtube.com/watch?v=cT-UrjqGQYY&t=2860s>