Ramgarhia Polytechnic College, Phagwara

Civil Engineering Department

Head of Department:	Er. Gurcharan Singh
Name of the Faculty:	Er.Charandeepsingh
Discipline:	Civil Engineering Department
Semester:	5th
Subject:	MINOR PROJECT WORK
Lesson Plan Duration:	16 Weeks

RATIONALE

Minor project work aims at exposing the students to field practices, size and scale of

operations and work culture at works sites. For this purpose, students during middle of

course, are required to be sent at different work sites where some construction activities

are in progress or some operations are going on.

Learning Outcomes

After undergoing the subject, students will be able to:

- Apply concepts, principles and practices taught in the classroom in solving field problems.

PO → CO ⬇	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	✓						✓

Syllabus

PRACTICAL	Details
1.	Survey of a village approach road, drawings of L-section and x-sections
2.	Estimation of white washing and distempering in hostel building

3.	Preparation of detailed estimate with drawings of septic tank for 30-40 users
4.	Plumbing work and installation of PVC over-head water tank on a toilet block and then prepare report
5.	Construction of different components of a building
6.	Identification of water-supply fittings and replacement of defective fittings and then prepare report.
7.	Construction of a pipe/slab culvert

8	Ferro-cement construction techniques a) Low cost housing b) New construction materials
9	Study and preparation of models of hydraulic pumps.

Delivery/Instructional Methodologies

Sr.No.	Description
1.	Chalk and Talk
2.	PowerPoint Presentation

Assessment Methodologies

Sr. No.	Description	Type
1.	Student Assignment	Direct
2.	Test	Direct
3.	Board Examination	Direct
4.	Student Feedback	Direct

Gaps in the syllabus - to meet industry/profession requirements

S.NO.	DESCRIPTION	PROPOSED ACTIONS	PO MAPPING
	N/A	N/A	N/A

Topics beyond syllabus/advanced topics

Units	Details	Hours
N/A	N/A	N/A

Web Source References

Sr. No.	URL
1.	https://nptel.ac.in/

Lesson Plan

Week	Practical Day	

1st	1 to 4	Introduction
2nd	5 to 8	Grouping
3rd	9 to 12	Topic Discussion

4th	13 to 16	Topic Selection

5th	17 to 20	Planning (Execution of plans)

6th	21 to 24	Presentation

7th	25 to 28	Project work (Phase-1)
8th	29 to 32	Project work (Phase-2)
9th	33 to 36	Project work (Phase-3)

10th	37 to 40	Project work (Phase-4)
11th	41 to 44	Project work (Phase-5)

12th	45 to 48	Project work (Phase-6)
13th	49 to 52	Submission of file
14th	53 to 56	Presentation
15th	57 to 60	Presentation

16th	61 to 64	Viva
16th	61 to 64	Viva

NBA has defined the following seven POs for an Engineering diploma graduate:

i)   **Basic and Discipline specific knowledge**: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.

ii) **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.

iii**)** **Design/ development of solutions**: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.

iv) **Engineering Tools, Experimentation and Testing**: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.

v) **Engineering practices for society, sustainability and environment**: Apply appropriate technology in context of society, sustainability, environment and ethical practices.

vi) **Project Management**: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.

vii) **Life-long learning**: Ability to analyze individual needs and engage in updating in the context of technological changes.

Program Specific Outcomes (PSOs)

PSOs are a statement that describes what students are expected to know and be able to do in a specialized area of discipline upon graduation from a program. Program may specify 2-4 program specific outcomes, if required.

These are the statements, which are specific to the particular 11 program. They are beyond POs. Program Curriculum and other activities during the program must help in the achievement of PSOs along with POs.