

Annexure: 1 MODULE WISE COURSE CONTENT AND OUTCOME

TABLE: MODULE WISE COURSE CONTENT AND OUTCOME				
S I. N O	Module Name	Module Content	Module Learning Outcome	Duration (Hrs)
1	Introduction to Soil Mechanics	Overview of soil properties, classification, and key concepts.	Understand foundational principles of soil mechanics.	10
2	Software for Soil Mechanics	Hands-on training with tools like PLAXIS or GeoStudio for soil analysis.	Gain proficiency in using software for geotechnical analysis.	15
3	Real-World Geotechnical Problems	Application of software to solve real-world soil stability and foundation problems.	Develop solutions for complex geotechnical challenges.	15
4	Project Workshop	Integration of all skills into a final project.	Apply all concepts in a real-world scenario.	5

ANNEXURE: 2 Industry Use Cases/Final Projects

1. Classify soil types using sample datasets.
2. Analyze slope stability using PLAXIS software.
3. Design a foundation system for a building.
4. Present geotechnical analysis results.
5. Prepare and manage soil analysis reports.
6. Mock interviews with geotechnical scenarios.

TABLE: LIST OF INDUSTRY USE CASES (PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOMES)	
S.NO	Final Projects
1	Analyze slope stability for a given site using software and recommend solutions.
2	Design a foundation system for a commercial building using geotechnical software.
3	Model soil settlement behavior for a dam construction project.

ANNEXURE :3 Assessment Rubrics

TABLE: COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 70)				
ASSESSMENT CRITERIA	FAIR (50%-64%)	GOOD (65%-79%)	EXCELLENT (80%-100%)	WEIGHTAGE (MARKS)
Practical Skills Proficiency	Basic skills with limited accuracy	Competent with minor errors	Outstanding with perfect execution	20
Technical Knowledge	Minimal understanding	Sufficient knowledge application	Exceptional understanding and application	10
Project Execution	Basic project with minimal effort	Comprehensive with minor gaps	Innovative and flawless execution	30
Communication and Reporting	Basic clarity	Clear and adequate presentation	Professional and precise presentation	10