

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Engeneering Geology
Course number	GEOL4224
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - Introduce basic geology and the principles of site investigation
2 - Introduce the fundamentals of the engineering properties of Earth materials
3 - Educate and train through teaching, research, and service the critical thinking and communication skills necessary to help solve engineering problems and design engineering systems within the context of the natural earth

Intended Learning Outcomes

Knowledge and Understanding	* Gain knowledge and understanding of geology, and apply this knowledge to engineering projects such as dams, landfills, rock quarries, roads, tunnels and slopes
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Course Contents

1 - Different types of rocks
2 - Engineering properties of the rocks
3 - Geological structures and engineering geology
4 - Ground water condition and supply
5 - Description and behavior of soil and rocks
6 - Geological materials used in construction
7 - Basic principle of rock mechanics
8 - Geology and construction (Tunnels and dams)
9 - Principle and stages of site investigations

Teaching and Learning Methods

1 - LCD

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
Two Midterm exams	First month and second month of the semester	45
Attendance	During the semester	5
Final exam	End of the semester	50

Books and References

Course note	Engineering Geology: Lecture Notes
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