

Course Information	
Course title	Rock Mechanics
Semester	114-2
Designated for	COLLEGE OF ENGINEERING GRADUATE INSTITUTE OF CIVIL ENGINEERING, GEOTECHNICAL ENGINEERING DIVISION
Instructor	MENG-CHIA WENG
Curriculum Number	CIE5034
Curriculum Identity Number	521EU3270
Class	
Credits	3.0
Full/Half Yr.	Half
Required/ Elective	Elective
Time	Tuesday 2,3,4(9:10~12:10)
Remarks	Restriction: within this department (including students taking minor and dual degree program) The upper limit of the number of students: 40.
Course introduction video	
Table of Core Capabilities and Curriculum Planning	Table of Core Capabilities and Curriculum Planning
Course Syllabus	
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Course Description	Introduction Introduction to Continuum Mechanics Mechanical Properties of intact rocks Mechanical Properties of rock joints Mechanical Properties of rock mass In situ Stresses

	Rock hydraulics Stereopgraphic Projection
Course Objective	Enable the students to know the essential behavior and theories of Rock Mechanics. The strength, deformability of rock, rock mass, rock joints. Application to rock engineering.
Course Requirement	1. Home work 30%, Midterm 35%, Final exam 35%. 2. Home work submitted after 17:20 on due day will be regarded as late submission and the grade will be multiplied by 0.8, after 1 week multiplied by 0.5, and so forth.
Student Workload (Expected weekly study hours before and/or after class)	
Office Hours	Mon. 15:00~17:00
Designated reading	
References	<p>References</p> <ol style="list-style-type: none"> 1. Vutukuri, Lama, Salujo (1974), Handbooks on Mechanical Properties of Rocks. 2. Hoek and Brown (1980), Underground Excavation in Rock. 3. Hoek, Kaiser and Bawden (1995), Support of Underground Excavations in Hard Rock. 4. Brady and Brown (1993), Rock Mechanics for Underground Mining. 5. Jaeger and Cook (1979), Fundamentals of Rock Mechanics, 3 ed. 6. Jaeger, Cook and Zimmerman (2007), Fundamentals of Rock Mechanics, 4 ed. 7. Hudson and Harrison (1997), Engineering Rock Mechanics - An Introduction to the Principles, Pergamon. 8. Ramamurthy, Sharma, Gupta, Baweja Editors(2010), Manual on Rock Mechanics. 9. Hoek and Bray, Rock Slope Engineering, 3 ed. 10. Wyllie and Mah, Rock Slope Engineering, 4 ed. 11. ISRM, ISRM suggested test methods for rock characterization, testing and monitoring: 1974~2006. 12. ISRM, ISRM suggested test methods for rock characterization, testing and monitoring: 2007~2014. 13. Muller ed. (1974), Rock Mechaics. (Course and lectures, No. 165) 14. Franklin and Dusseault (1989), Rock Engineering. 15. Franklin and Dusseault (1991), Rock Engineering and Applications. 16. Singhal and Gupta (1999), Applied Hydrogeology of Fractured Rocks, 2 ed. 17. Others specified in lecture notes
Grading	

1. NTU has not set an upper limit on the percentage of A+ grades.
2. NTU uses a letter grade system for assessment. The grade percentage ranges and the single-subject grade conversion table in the NATIONAL TAIWAN UNIVERSITY Regulations Governing Academic Grading are for reference only. Instructors may adjust the percentage ranges according to the grade definitions. For more information, see [the Assessment for Learning Section](#).

Adjustment methods
for students

Teaching methods	Assisted by video
Assignment submission methods	Extension of the deadline for submitting assignments
Exam methods	
Others	Negotiated by both teachers and students

Progress

Week

Date

Topic

No data