Course

Mining Geomechanics

MINE8140  |  6 Units of Credit
Overview

This course is designed to introduce engineers and geologists to the major geomechanics components associated with mining operations, primarily underground: from resource evaluation and mine design to daily operations. The course will cover both coal and metalliferous operations. It is, therefore, ideally suited to engineers or geologists who have an understanding and experience in the mining industry but are seeking to develop more specialist skills in the geomechanics field.

The course content will include the following components:

- Site investigation
- Rock mass classification
- Rock fragmentation
- Mine Design issues
- Caving prediction and control
- Role and application of reinforcement systems
- Geotechnical instrumentation, stress analysis and stability evaluation around complex excavations
- Ground control management and environmental geomechanics.

The course is structured to provide an initial overview of basic principles and terminology plus the major geomechanical properties and behavioural characteristics of rock material. This then leads into the application of these principles to the practical issues of site investigation, excavation design and ground reinforcement. An important component will be an emphasis on the interdependencies between geotechnical parameters and mine design/operational decisions and requirements. The link between geological and engineering disciplines is an important component in successfully managing these dependencies.

The course will be presented through a series of lectures, facilitated discussion sessions and case studies, but will also include practical tutorial sessions and laboratory exercises.
Faculty
Faculty of Engineering

School
School of Minerals & Energy Resources Engineering

Study Level
Postgraduate

Offering Terms
Term 2

Campus
Kensington

Indicative contact hours
4

Timetable
Visit timetable website for details
Course Outline

To access course outline, please visit:

MINE8140 Course Outline
Fees

Commonwealth Supported Students $1170
Domestic Students $4350
International Students $5730

DISCLAIMER
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the fee website.

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty. Fees for courses delivered through UNSW Global are published and charged by UNSW Global and thus appear as "Not Applicable" on this site.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179