



Faculty of Engineering

School of Minerals and Energy Resources Engineering

Undergraduate Course Outline

MINE1010

Mineral Resources Engineering

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1. INFORMATION ABOUT THE COURSE

Course Code:	MINE1010	Term:	T2, 2020	Level:	UG	Units/Credits	6 UOC
Course Name:	Mineral Resources Engineering						

1.1. Course Description

You woke up

- <https://www.bhp.com/>
- <https://www.rocktechnology.sandvik/en/>
- <http://www.riotinto.com/>

3.5. Report writing guide

The School has a report writing guide (RWG) available for all students taking mining engineering courses. View this website to download a copy of the guide:

https://www.engineering.unsw.edu.au/minerals-energy-resources/sites/mine/files/publications/MEA_ReportWritingGuide_eBook_2018ed.pdf

The RWG is also available through the Moodle website of this course.

4. COURSE CONTENT AND LEARNING ACTIVITIES

4.1. Course contents

Over a period of 10 weeks, this course covers the following topics:

- Importance of the mineral resources for Australia and society
- The Australian minerals industry
- Geology
- Surface mining methods
- Underground mining methods
- Geomechanics
- Mine ventilation
- Health and safety
- Extractive metallurgy
- Sustainable mining
- Social license
- Use of technologies in mining
- Mineral economics
- Employability

4.2. Learning Activities Summary

This online course is divided into 10 weeks.

UNSW Week	Week starts	Content / Activities	Important dates
0	26/05	Getting started <i>Survey the Moodle environment for the course; Get familiar with the resources available (e.g. MEA report writing guide)</i>	<ul style="list-style-type: none"> • Mining around you (A0) (in W1) <i>Complete the pre-lecture activity and submit by Monday 01/06 12.05pm.</i>
1	01/06	Complete week 1 (online lectures) <i>A general introduction on the minerals industry and its importance</i>	<ul style="list-style-type: none"> • Tutorial (collaborate) <i>Discussion about the course and meeting your teammates.</i> • Team project starts (A1) <i>Look at the requirements; develop a strategy; entry point for prices</i>
2	08/06	Complete week 2 (online lectures) <i>Learn about the earth and formation of mineral deposits, which we can exploit</i>	<ul style="list-style-type: none"> • Team project (A1.1) <i>Submit preliminary report</i> • Quiz (A2.1) <i>Group Aluminium: write questions</i> <i>Group Brass: answer questions</i>
3	15/06	Complete week 3 (online lectures) <i>different surface mining methods</i>	<ul style="list-style-type: none"> • Workshop (collaborate) • Quiz (A2.2) <i>Group Aluminium: answer questions</i> <i>Group Brass: write questions</i>
4	22/06	Complete week 4 (online lecture) <i>different underground mining methods</i>	<ul style="list-style-type: none"> • Quiz (A2.3) <i>Group Aluminium: write questions</i> <i>Group Brass: answer questions</i>
5	29/06	Complete week 5 (online lecture) <i>Mining can be hazardous. Have a close look at safety in mining. Also included is mine ventilation.</i>	<ul style="list-style-type: none"> • Tutorial (collaborate) • Application Exercise (Alaef*q350.78 2

UNSW Week	Week starts	Content / Activities	Important dates
			<i>Group Aluminium: write questions</i> <i>Group Brass: answer questions</i>
6	06/07	Non-teaching week	

7 13/07 Complete week 7 (online lecture)
Mine geomechanics is closely associated with rock competency and thus mining methods

- Tutorial (collabotate)

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5. COURSE ASSESSMENT

5.1. Assessment Summary

The assessment tasks will be based on the components outlined below:

- Mining around you (A0.0)
- Team project (A1.1 A1.2)
- Quiz (A2.1)

6. ASSESSMENT CRITERIA

The assessment criteria provide a framework for you to assess your own work before formally submitting major assignments to your course convenor. Your course convenor will be using this framework to assess your work and as a way to assess whether you have met the listed learning outcomes and the graduate attributes for your program. We ask that you do not use the assessment

7. STUDYING A UG COURSE IN THE SCHOOL OF MINERALS AND ENERGY RESOURCES ENGINEERING AT UNSW

7.1. How We Contact You

7.5. Assignment Submissions

The School has developed a guideline to help you when submitting a course assignment. Please take a closer look at all these details on our website: <https://www.engineering.unsw.edu.au/minerals-energy-resources/assignment-submission-policy>

We encourage you to retain a copy of every assignment submitted for assessment for your own record either in hardcopy or electronic form. On a rare occasion, assignments may be mislaid and we may contact you to re-submit your assignment.

All assessable materials must have a cover sheet attached.

7.6. Late Submission of an Assignment

Full marks for an assignment are only possible when an assignment is received by the due date. In fairness to those students who do meet the assignment due date and time, deductions will apply to submissions made after this time. Details on deductions that are automatically applied to late submissions are available on our webpage: <https://www.engineering.unsw.edu.au/minerals-energy-resources/late-submissions>

We understand that at times you may not be able to submit an assignment on time, and the School will accommodate any fair and reasonable extension. We would recommend you review the UNSW Special Consideration guidelines see following section.

In the case of late submission of a report (if applicable check specific assessment tasks), penalty marks will be applied at the following rate if submitted after the due date: 10% per week (or part thereof) up to a maximum of 20% per assignment. If submitted more than 2 weeks late, the assignment will be marked as 'Not Submitted'.

We also encourage all students to share any feedback they have any time during the course if you have a concern, please contact us immediately.