



Faculty of Engineering

**School of Minerals and Energy Resources Engineering**

Postgraduate Course Outline

**MINE8440**

**Mining Industry Research Project 1**

**A/Prof Seher Ata**



Course Code: MINE8440 Term: T1, 2020 Level: PG

Note: Permission to enrol in this course requires written evidence of industry support and/or agreement of an academic supervisor in the School. Industry support is essential for research projects that are to be extended for Masters programs that require MINE8455 and/or MINE8690, and is highly recommended for Graduate Diploma programs. Industry support is to include 1 Tc -0lom

## 2 AIMS, LEARNING OUTCOMES AND GRADUATE ATTRIBUTES

The course aims to develop the capability and requisite skills of an engineer to build a foundation of knowledge related to a particular industry-related problem. This foundation provides a basis on which to design a solution that is robust and safe, cost effective and research outcomes that are appropriate to the end-user.

At the conclusion of this course, students should be able to:

1. Define the major issues and benefits associated with a research topic.
2. Conduct library search relevant to the research topic and obtain reference sources from various relevant sources.
3. Produce a literature review encompassing a critique of the current state of knowledge related to the topic and other related information.
4. Develop a project management plan that outlines objectives, definition of tasks, activities and resources needed to achieve that objective, a schedule of activities and significant milestones, and a risk assessment with appropriate management and control measures.
5. Prepare a technical report that is consistent with the requirements and standards of the School of Mining Engineering and relevant professional societies.

### 2.3 Graduate Attributes

This course will contribute to the development of the following Graduate Attributes:

1. appropriate technical knowledge.
2. having advanced problem solving, analysis and synthesis skills with the ability to tolerate ambiguity.
3. awareness of opportunities to add value through engineering and the need for continuous improvement.
4. being able to work and communicate effectively across discipline boundaries.

## 3 REFERENCE RESOURCES

### 3.1 Reference Materials

1. MEA Report Writing Guide for Mining Engineers. P Hagan and P Mort (Mining Education Australia (MEA)). (Latest edition available for download from the School website or a hardcopy version is available from the UNSW Bookshop).
2. Guide to Authors. (Australasian Institute of Mining and Metallurgy: Melbourne) (Available for download from the AusIMM website).
3. The Complete Idiot's Guide to Project Management. G Campbell and S Baker (Alpha: New York) or its equivalent.
4. Style Manual for Authors, Editors and Printers, 2002. 6th edition (John Wiley & Sons)
5. The Research Project – How to Write It, 2000. R Berry, 4th edition (Routledge: London)
6. How to Write a Better Thesis, 2002. D Evans and P Gruba (Melbourne University Press: Melbourne).












x Progress report: Assessment will be made by the student's Project Supervisor.

x Minor Thesis



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

**Criteria**

The assessment criteria are summarised in the following table.

<b>Criteria</b>	<b>Excellent</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Unsatisfactory</b>	<b>Poor</b>	<b>nil</b>				
<b>Abstract</b>	xAbstract is well written and accurately yet concisely captures all the essential aspects of the project objective, methodology, outcomes and issues	xAbstract is reasonably well written and captures most of the essential elements of the project	xAbstract is adequately written and captures most elements though missing some information	xAbstract is poorly written and does not clearly convey information concerning project topic, method, issues and/or outcomes	xAbstract is badly written and/or does not summarise the project topic and its outcomes	xAbstract is missing and/or largely incomplete				
	10	9	8	7	6	5	4	3	2	1
<b>Introduction</b>	xIntroduction provides a clear definition of the aims and objectives and, scope of project clearly identifies the relevance and significance of the project to the industry	xIntroduction provides a good definition of the aims and objectives and scope of project identifies the relevance and significance to industry	xIntroduction satisfactorily outlines the aims and objectives and/or provides a reasonable discussion of relevance and significance to industry	xIncomplete and/or unclear definition of project scope	xProject topic and scope are very unclear and/or confused	xIntroduction is missing and/or largely incomplete				

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<b>Criteria</b>	<b>Excellent</b>	<b>Good</b>	<b>Satisfactory</b>	<b>Unsatisfactory</b>	<b>Poor</b>	<b>nil</b>
<b>Results and analysis</b>	<p>all relevant results are presented in a manner from which meaningful analyses and interpretations are drawn</p> <p>good and creative approach to analysis of results interpreted against the stated objectives of the research</p>	<p>most results are presented in a manner from which meaningful analyses and interpretations are drawn</p> <p>results are interpreted based on established approach relevant to stated objectives of the research</p>	<p>many results are presented in a manner from which meaningful analyses and interpretations are drawn</p> <p>results are not interpreted against the stated objectives of the research.</p>	<p>some results are presented, and</p>		

**Criteria**      **Excellent**      **Good**      **Satisfactory**      **Unsatisfactory**





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At times, the School or your course convenors may need to contact you about your course or your enrolment. Your course convenors will use the email function within Moodle or we will contact you on your @student.unsw.edu.au email address.

We understand that you may have an existing email account and would prefer for your UNSW emails to be redirected to your preferred account. Please see these instructions on how to redirect your UNSW emails: <https://www.it.unsw.edu.au/students/email/index.html>

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We are always ready to assist you with your inquiries. To ensure your question is directed to the correct person, please use the email address below for:

Enrolment or other admin questions regarding your program:  
<https://unswinsight.microsoftcrmpartals.com/web-forms/>

Course inquiries: these should be directed to the Course Convenor.

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UNSW Minerals and Energy Resources Engineering provides blended learning using the on-line Moodle LMS (Learning Management System).

It is essential that you have access to a PC or (o)-3 (83o)-3 ( a)-12dlekc3 (n)5 (v)od t lid ldec-2 (r)4 (i)oorh3 ( P)2

The School has developed a guideline to help you when submitting a course assignment.

We encourage you to retain a copy of every assignment submitted for assessment for your own record either in hardcopy or electronic form.

All assessments must have an assessment cover sheet attached as described previously.

Full marks for an assignment are only possible when an assignment is received by the due date.

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.

You can apply for special consideration through [UNSW Student Central](#) when illness or other circumstances interfere with your assessment performance. Sickness, misadventure or other circumstances beyond your control may:

- x Prevent you from completing a course requirement,
- x Keep you from attending an assessable activity,
- x Stop you submitting assessable work for a course,
- x Significantly affect your performance in assessable work, be it a formal end-of-semester examination, a class test, a laboratory test, a seminar presentation or any other form of assessment.

We ask that you please contact the Course Convenor immediately once you have completed the special consideration application, no later than one week from submission.

More details on special consideration can be found at: [www.student.unsw.edu.au/special-consideration](http://www.student.unsw.edu.au/special-consideration)

For details on UNSW assessment policy, please visit: [www.student.unsw.edu.au/assessment](http://www.student.unsw.edu.au/assessment)

In some instances, your final course result may be withheld and not released on the UNSW planned date. This is indicated by a course grade result of either:

- x WD – which usually indicates you have not completed one or more items of assessment or there is an issue with one or more assignment; or
- x WC – which indicates you have applied for Special Consideration due to illness or misadventure and the course results have not been finalised.

In either event it would be your responsibility to contact the Course Convener as soon as practicable but no later than five (5) days after release of the course result. If you don't contact the convener on time, you may be required to re-submit an assignment or re-sit the final exam and may result in you failing the course. You would also have a NC (course not completed) mark on your transcript and would need to re-enroll in the course.

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The Student Equity and Disabilities Unit (SEADU) aims to provide all students with support and professional advice when circumstances may prevent students from achieving a successful university education. Take a look at their webpage: [www.studentequity.unsw.edu.au/](http://www.studentequity.unsw.edu.au/)

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Your lecturer and the University will expect your submitted assignments are truly your own work. UNSW has very clear guidelines on what plagiarism is and how to avoid it. Plagiarism is using the words or ideas of others and presenting them as your own. Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. The University has adopted an educative approach to plagiarism and has developed a range of resources to support students. All the details on plagiarism, including some useful resources, can be found at [www.student.unsw.edu.au/plagiarism](http://www.student.unsw.edu.au/plagiarism).

All Mining Engineering students are required to complete a student declaration for academic integrity which is outlined in the assignment cover sheets. By signing this declaration, you agree that your work is your own original work.

If you need some additional support with your writing skills, please contact the Learning Centre or view some of the resources on their website: [www.lc.unsw.edu.au/](http://www.lc.unsw.edu.au/). The Learning Centre is designed to help you improve your academic writing and communication skills. Some students use the Centre services because they are finding their assignments a challenge, others because they want to improve an already successful academic performance.

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At the end of each course, all students will have the opportunity to complete a course evaluation form. These anonymous surveys help us understand your views of the course, your lecturers and the course materials. We are continuously improving our courses based on student feedback, and your perspective is valuable.

Feedback is given via <https://student.unsw.edu.au/myexperience> and you will be notified when this is available

