

# School of Minerals and Energy Resources Engineering Term 2, 2021 Course Outline MINE2610 Mining Services (Surveying)

COURSE DETAILS		
Units of Credit	6	
Contact hours	5 hours per week (average)	
Class	Tuesday, 9:00 11:00am	EEG23, Online via Moodle BB collaborate
	Wednesday, 14:00 16:00pm	EEG23, Online via Moodle BB collaborate
Workshop	Thursday, 9:00 11:00	CE G1
Course Coordinator and Lecturer	Craig Roberts, Binghao Li 1	
	Dr Zheyuan Du email: Zheyuan.du@geos.org.au	

office: Please first contact via email or on Moodle forum

# **DELIVERY MODE TERM 2, 2021**

This version of the course profile is dated 29/05/2021 5:14 PM.

Lectures

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Online mode

Fieldwork	Three compulsory on-campus practicals are scheduled this term.	
Assessment	Due to the smaller class size, a mid-term exam and a final exam will be run in class.	
My teaching	I have taught this course in this mode for many years (with improvements each year). Whilst this	

event that a student misses a field practical.

**Private Study** 

Review lecture material and textbook

	levelling and terrain representation, area and volume calculations, traversing and construction set out.	
4.	Understand the theory behind the various surveying and geospatial techniques presented in this course and be able to critically assess the quality of geospatial data.	PE1.1, PE1.2, PE3.1

For each hour of contact it is expected that you will put in at least 1.5 hours of private study.

# ASSESSMENT

#### Field practicals:

The field practicals are designed to be conducted by a student group in a prescribed location on campus at a set time.

*Objectives and learning outcomes:* The student will learn about survey design, time management, meeting time constraints, producing results in the field, logistics, field preparation, concise report writing and field note taking, producing results to tolerance despite conditions, working safely and in accordance with WHS.

#### Assessment Criteria for mid-session test

*Comments:* The mid-session test will be multiple choice and test all material up to and including week 5 (but not the traverse lecture material). Prac 1 & 2, Wkp 1 & 2 and lectures 1 7 are included. There are no past papers for the mid-session test. All the material is already tested in workshops, practicals, lectures & quizzes

#### **RELEVANT RESOURCES**

Lecture Material (check the course website):

#### http://moodle.telt.unsw.edu.au

The Powerpoint lecture slides and other documents are available for download as PDF files at the course website.

Lectures can also be viewed as Echo/ BBCU recordings. Recordings of some workshop questions provided.

Text and Reference Books

#### Text book:

Uren, J & Price, WF. "Surveying for Engineers", 5th edition, 2010

(available in bookshop compulsory to purchase for B Eng(Surveying) and Dual award (3776) students only. Optional for other students)

#### Reference book:

- Uren, J & Price, WF. "Surveying for Engineers", 4th edition, 2006
- Schofield, W. "Engineering Surveying", 4th edition, 1993

# ACADEMIC ADVICE

For information about:

Notes on assessments and plagiarism;

Special Considerations: <a href="mailto:student.unsw.edu.au/special-consideration">student.unsw.edu.au/special-consideration</a>;

General and Program-specific questidest (THe Nucleus: Student Hub

### Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
O .	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
E1: Knowledg Ind Skill Base	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
<b>•</b> "	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
g ty	PE2.1 Application of established engineering methods to complex problem solving
ineerin on Abili	PE2.2 Fluent application of engineering techniques, tools and resources
E2: Eng plicatic	PE2.3 Application of systematic engineering synthesis and design processes
PE	PE2.4 Application of systematic approaches to the conduct and management of engineering projects