

**Classes**      ~~Monday~~      0900 – 11:00 Numeris      ~~online~~  
~~Wednesday~~      1400 – 1600 ~~Sits~~      ~~online~~

**Workshops**      1-hour Numeris      ~~For details~~ , see ~~our enrolment~~ ~~materials~~ .  
1-hour ~~Sits~~

**Course  
Coordinators**

variances and means. Regression. ANOVA. Numerical solution of linear and non-linear equations;

16 June Week 3	Special random variables	1.4, 1.5, 1.6, 2.4, see Maple TA/Mobius	Tute/Lab
23 June Week 4	Sampling distributions and the Central Limit Theorem	5.5-6, Lectures on Maple TA/Mobius	Tute/Lab
30 June Week 5	Confidence intervals for means and proportions	7.1-4, see Maple TA/Mobius	Tute/Lab
7 July T16 Tn			

	<ul style="list-style-type: none"> <li>• Practice solving set problems</li> <li>• Ask questions</li> </ul>
<b>Assessments</b>	<ul style="list-style-type: none"> <li>• Demonstrate your knowledge and skills</li> <li>• Demonstrate higher understanding and problem solving</li> </ul>
<b>Laboratory Work</b>	<ul style="list-style-type: none"> <li>• Hands-on work, to set studies in context</li> </ul>

<b>EXPECTED LEARNING OUTCOMES</b>
-----------------------------------

This course is designed to address the learning outcomes below and the corresponding Engineers Australia Stage 1 Competency Standards for Professional Engineers as shown. The full list of Stage 1 Competency Standards may be found in Appendix A.

Table 5. After successfully completing this course, you should be able to:

<b>Learning Outcome</b>	<b>EA Stage 1 Competencies</b>
1. Apply the fundamentals of Numerical Methods and Statistics to Engineering problems in the fields of Civil and Environmental Engineering and Surveying and Geospatial Engineering and have practice with the as neact for23.04 0.48 12.f-0.009-13.6 (i)-13.6 e7a .9 (-.2	

There will be a small amount of assessable computer lab work. This will be marked promptly, and students given their results via Moodle.

At least one assessment plus feedback will be completed before the census date of 27 June, 2021. There is no group work assessment in this course.

<b>PENALTIES</b>
------------------

Late work will be penalised at the rate of 10% per day after the due time and date have expired.

## ASSESSMENT OVERVIEW

Table 6.

**Item**



Refer to Academic Advice on the School website available at:

<https://www.engineering.unsw.edu.au/civil-engineering/student-resources/policies-procedures-and-forms/academic-advice>

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

*Stage 1 Competencies for Professional Engineers*

	<b>Program Intended Learning Outcomes</b>
<b>PE1: Knowledge and Skill Base</b>	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
<b>PE2: Engineering Application Ability</b>	PE2.1 Application of established engineering methods to complex problem solving
	PE2.2 Fluent application of engineering techniques, tools and resources
	PE2.3 Application of systematic engineering synthesis and design processes
	PE2.4 Application of systematic approaches to the conduct and management of engineering projects
<b>PE3: Professional and Personal Attributes</b>	PE3.1 Ethical conduct and professional accountability
	PE3.2 Effective oral and written communication (professional and lay domains)
	PE3.3 Creative, innovative and pro-active demeanour
	PE3.4 Professional use and management of information
	PE3.5 Orderly management of self, and professional conduct
	PE3.6 Effective team membership and team leadership