School of Civil and ECiC eC EC andCn 1 .7 (E)

3, 2021

CVEN4701 PLANNING SUSTAINABLE INFRASTRUCTURE

COURSE DETAILS		
Units of Credit	6	
Contact hours	6 hours per week	
Lecture	Tuesday, 10:00 – 12:00	Online
Workshop	Tuesday, 13:00 – 15:00	Online
	Thursday, 10:00 – 12:00	Online
Course Coordinator and Lecturer	Prof Richard Stuetz email: r.stuetz@unsw.edu.au	
Lecturer	Dr Ruth Fisher email: ruth.fisher@unsw.edu.au Dr Shantanu Chakraborty email: s.chakraborty@unsw.edu.au Dr Baran Yildiz email: baran.yildiz@unsw.edu.au Dr James Hayes email: j.e.hayes@unsw.edu.au Dr Robert Care email: r.care@unsw.edu.au	

INFORMATION ABOUT THE COURSE

This builds on the fundamentals from courses in Years 1, 2, and 3 plus the design of components of various infrastructure covered in:

- CVEN2002 Hydrology and Water Resources Engineering
- CVEN2302 Geotechnical and Structural Engineering
- CVEN2403 Urban Water Engineering
- CVEN2702 Construction Engineering and Management
- CVEN3601 Sustainable Energy Engineering
- CVEN4603 Urban Water Engineering and Water Sensitive Cities
- CVEN4604 Water Resources Engineering
- CVEN4605 Water Treatment
- CVEN4606 Groundwater Engineering
- CVEN4607 Water Quality Modelling
- CVEN4608 Water Resources Systems Modelling
- CVEN4609 Water Resources Planning and Management
- CVEN4610 Water Resources Engineering Design
- CVEN4611 Water Resources Engineering Project
- CVEN4612 Water Resources Engineering Thesis
- CVEN4613 Water Resources Engineering Thesis
- CVEN4614 Water Resources Engineering Thesis

and

- CVEN2402 Transport Engineering and Environmental Sustainability
- DESN2000 Engineering Design and Professional Practice
- CVEN3502 Water and Wastewater Engineering
- CVEN3103 Engineering Operations and Control

For group assessment items, only one submission is allowed to be submitted per group (Your first submission is your final submission). All assessment submissions will be through Moodle and/or Turnitin.

Assessment components, the marks assigned to each task, and the dates of submission are set out below. See assessment details on individual and group assignments.

ASSESSMENT OVERVIEW

	Topic	Length	Weighting	Learning outcomes assessed	Assessment Criteria	Issue date	Due date and submission requirements*	Marks returned
1.	Online Quiz	15 MCQ's	15%	*CLO 1, 2*	Individual online quiz conducted during class (see Moodle for details)	13/09/21	30/09/21 at 10am (Week 3)	Within 1 week
2.	Technical report	10 pages plus Appendix	40%	CLO 2, 3, 4	Individual assessment (see Moodle for details)	13/09/21	14/11/21 at 11:59 PM (Week 10)	Within 4 weeks
3.	Professional Skills Part A: Project Management Report Part B: Professional Development	Report and group interview	15%	CLO 4	Group assessment project management report and interview	13/09/21	19/11/21 at 11:59 PM Group interviews will occur on 23/11/21 (Week 11)**	

RELEVANT RESOURCES

- Sarte, S. Bry; Sustainable Infrastructure. The guide to green engineering and design. John Wiley 2010 (ISBN: 978-0-470-45361-2) (Online version available at the UNSW library)
- Additional materials provided on Moodle.

DATES TO NOTE

Refer to MyUNSW for Important Dates available at:

https://student.unsw.edu.au/dates

PLAGIARISM

Beware! An assignment that includes plagiarised material will receive a 0% Fail, and students who plagiarise may fail the course. Students who plagiarise are also liable to disciplinary action, including exclusion from enrolment.

Plagiarism is the use of another person's work or ideas as if they were your own. When it is necessary or desirable to use other people's material you should adequately acknowledge whose words or ideas they are and where you found them (giving the complete reference details, including page number(s)). The Learning Centre provides further information on what constitutes Plagiarism at:

https://student.unsw.edu.au/plagiarism

ACADEMIC ADVICE

For information about:

- Notes on assessments and plagiarism;
- Special Considerations: student.unsw.edu.au/special-consideration
- General and Program-specific questions: The Nucleus: Student Hub
- Year Managers and Grievance Officer of Teaching and Learning Committee, and
- CEVSOC/SURVSOC/CEPCA

Refer to Academic Advice on the School website available at:

https://intranet.civeng.unsw.edu.au/key-staff-to-contact-during-your-studies-at-unsw

Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	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