



## School of Civil and Environmental Engineering

Term 1, 2020

# CVEN9611 (SHORT COURSE)



### COURSE DETAILS

<b>Units of Credit</b>	6
<b>Contact hours</b>	6 day short course, 9am – 5pm each day, 26 - 28 February and 2 - 4 March 2019
<b>Class location</b>	CE 501, Civil Engineering Building (H20) - Wednesdays 26 February and 4 March CE 701, Civil Engineering Building (H20) – 27 & 28 February and 2 March

**Field trip Tuesday 3<sup>rd</sup> March**

<b>Course Coordinator and Lecturer</b>	Dr Stefan Felder email: <a href="mailto:s.felder@unsw.edu.au">s.felder@unsw.edu.au</a> office: Water Research Laboratory/Room CE 303 phone: 8071 9861 (Water Research Laboratory) or 9385 5898 (UNSW)
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**Lecturer**

cycle, specifically focusing on impacts of urban development on stormwater quantity and quality. The course covers the management of urban stormwater including re-use and groundwater interaction; design of stormwater quantity and quality management structures including detention basins, retention basins, infiltration basins, gross pollutant traps, sedimentation basins, biofilters and constructed wetlands.

The assumed knowledge for this course is undergraduate Civil and Environmental hydrology, fluid mechanics and hydraulics. Students who do not have this assumed knowledge should have completed CVEN9625 Fundamentals of Water Engineering. If you have concerns about your background knowledge, please contact the course coordinator.

## HANDBOOK DESCRIPTION

See link to virtual handbook:

<http://www.handbook.unsw.edu.au/postgraduate/courses/2020/CVEN9611.html>

## OBJECTIVES

The objectives of the course are:

1. To provide an overview of urban hydrology and stormwater management. Included in the course are an introduction to human impact on the hydrological cycle, anthropogenic influences on the quantity and quality of stormwater runoff from urban catchments and case studies in urban stormwater management. Application of the continuity, energy and momentum principles of the analysis of flows in different scenarios.
2. To characterise the most important types of stormwater infrastructure used in urban drainage systems. Methods for their design as well as current issues in stormwater management are presented and discussed.





<b>Time and Day</b>	<b>Topic</b>	<b>Lecturer</b>	<b>Assessments/ Notes</b>
9:00 - 12:30	Design of conveyance infrastructure	SF	
12:30 - 13:30	Lunch		
13:30 - 17:00			

**ASSESSMENT OVERVIEW**

<b>Item</b>	<b>Weighting</b>	<b>Learning outcomes assessed</b>	<b>Assessment Criteria</b>	<b>Due date</b>	<b>Deadline for absolute fail</b>	<b>Marks returned</b>
Assignment 1 Online Pre-task (Hydrological modelling)	5%	1,2	This online pre-task will help you to review the concepts required to complete Assignment 1	Monday 9 <sup>th</sup> March Week 4	Friday 13 <sup>th</sup> March	



## **RELEVANT RESOURCES**

There is no textbook for this course but a number of recommended reference books for this course are indicated below -



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