



# School of Civil and Environmental Engineering

Term 2, 2020

## CVEN4051

### THESIS B (SAGE Stream)

#### COURSE DETAILS

<b>Units of Credit</b>	6	
<b>Contact hours</b>	4 hours per week	
<b>Class</b>	Monday, 13:00 – 15:00	Online
<b>Workshop</b>	Monday, 15:00 – 17:00	Online
<b>Course Coordinator</b>	Robert Holdom	
<b>SAGE Stream Coordinator and Lecturer</b>	Jinling Wang email: jinling.wang@unsw.edu.au office: CE413 phone: x54203	

#### INFORMATION ABOUT THE COURSE

This course is the second of two parts and is undertaken after the completion of CVEN4050 Thesis A, usually in the proceeding Term. The Thesis involves formulating the designs for and solution to open-ended civil and/or environmental, or **surveying and geospatial engineering** (SAGE) problems. The problems will be drawn from industry and will be multi-disciplinary involving application of material learnt throughout the undergraduate program and will require creative thought. The course will include the preparation of relevant professional documents. Part B involves the satisfactory preparation and submission an individual thesis addressing the well-justified project plan.

In Term 2, 2020, the Thesis B theme topic in the surveying and geospatial engineering stream will be: “**Smart Sensing and Geospatial Mapping for Construction Automation**”, while any suggested topics from students may also be considered. In Term 2, 2020, special measures should be taken to follow the social distancing rules in all the activities in this course.

#### HANDBOOK DESCRIPTION

See link to virtual handbook:

<https://www.handbook.unsw.edu.au/undergraduate/courses/2020/CVEN4051>

#### OBJECTIVES

The objectives of this course - Thesis B (SAGE stream) -

of smart sensors for positioning and mapping technologies for construction automation or other engineering applications.

The aim is to involve you in management aspects of field work, for positioning, 3D reality capture, and mapping





## COURSE PROGRAM

(The time slots for field work, data collection and experiments as well as any other changes will be notified in the class and at the course website).

### Term 2, 2020

<b>Week No.</b>	<b>Starting Date</b>	<b>Monday: 1:00pm-3:00pm Lecture Topics</b>	<b>Monday: 3:00pm-5:00pm Workshops</b>	<b>Assignment Due</b>
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## ASSESSMENT

Assessment for this course includes:

<b>Assessment Items</b>	<b>Length</b>	<b>Weight</b>	<b>Learning outcomes (LO) assessed</b>	<b>Due date*</b>	<b>Deadline for absolute fail*</b>	<b>Marks returned</b>
Literature Review Report (Individual)	6-8 <i>pages</i>	15%	LO: 1, 4, 5			



