UNSW SYDNEY | Australia's Global University

Built Environment

BENV7550
Smart Cities and Urban Informatics Major Project

Course Outline – Term 1 & 2, 2020

Disclaimer

Information within this document is subject to change. The full and most accurate course outline will be available in Moodle closer to the start of the term in which the course is offered.

1. COURSE STAFF

Course Contact	Prof Christopher Pettit
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2. COURSE DETAILS

Credit Points	6 units of credit (uoc)
Workload	Approx. 150 hours including class contact hours, weekly individual and group online learning activities, readings, class preparation, and assessment activities.
Teaching Times and Location	Find details in timetable http://www.timetable.unsw.edu.au

Description

The Smart Cities and Urban Informatics Project represents the culmination of studies in the Smart Cities and Urban Informatics. Students will work closely with the Director of the Program to develop a proposal. Projects which tap into current 'live' projects, building upon existing partnerships internationally through the PLuS Alliance and with industry and government organisations including Department of Planning and Environment, the Greater Sydney Commission, Urban Growth, Sydney Water, and the Department of Finance, Services and Innovation, along with partnerships with local councils including the City of Sydney, Randwick City Council and Parramatta., will be encouraged. This might take the form of a discrete element or task within its ongoing strategic development or implementation, or a more general critical analysis of the Smart City agenda. The major project report can take the form of a research thesis or a practice-oriented report. Each student will be assigned a supervisor, and it is expected that many students will also benefit from engagement with industry partners. The final thesis/report will be 10-12,000 words long. Where partners have been directly involved, students will be encouraged to provide a short debrief to the relevant organisations. The production of the thesis will explore and provide new insights into one or more of the challenges facing cities through the integration of research and/or practical insight.

Aims

The aims for this course are for students to:

1. gain experience in conducting an independent research project, in the process gaining insight into how research relates to smart cities agenda through the application of urban informatics tools and techniques.
2. position knowledge and skills gained in previous MSCUI courses, individual education and professional experience in a rigorous research framework.

Course Learning Outcomes (CLOs)

At the successful completion of this course, you will be able to:

1. Identify the role of research and its contribution to future work in the field of smart cities and urban informatics.
2. Apply critical and analytical thinking to a significant challenge facing our cities.
3. Critically review existing literature, and available data, tools and techniques a means of refining the research question(s) and supporting data driven methodology.
4. Produce a research thesis or practice-research led project which is underpinned through the application of digital data and technological.

3. ASSESSMENT

Assessment task	Weight	CLOs Assessed
1. Interim progress research presentation	10%	1, 2, 3
2. Research presentation (final)	10%	1, 2, 3, 4
3. Final thesis	80%	1, 2, 3
4. Participation and engagement	0%	1, 2, 3

4. COURSE IMPROVEMENT AND FEEDBACK

Feedback from students is an integral part of improving courses and teaching approaches. One of the primary mechanisms of feedback is myExperience, which we strongly urge all students to complete at the end of term. Course convenors use the feedback to make ongoing improvements to the course. This is communicated in Moodle in the myFeedback Matters page.