



**UNSW**  
SYDNEY

Australia's  
Global  
University

# Built Environment

BENV7504  
Digital Cities



Course Outline – Term 1, 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

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## 2. COURSE DETAILS

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

## Description

This course explores the breadth of data available to urban policymakers, using recently completed and indeed 'live' projects being undertaken within City Futures Research Centre and Built Environment more widely. With the Faculty providing a principal hub in the Australian Urban Research Infrastructure Network (AURIN), students will have access to innovative, nationwide spatial datasets: Australian cities and Sydney in particular will be our laboratory, but international perspectives will be drawn upon. Integral to exploring the application of these data and the techniques to do so, students will be encouraged to critically engage with the politics and power embedded in the emergence of the 'Smart City' and the complexity associated with data access, knowledge production and dissemination.

## Aims

1. enables students to gain further understanding of smart cities and disruptive technologies impacting the city through the investigation of: big data, data privacy, advanced analytics, Internet of Things (IoT), cloud computing, 3D visualization, GIS and digital planning and design tools.
2. provides students with real world case studies of smart city strategies and applications and will provide students with knowledge and skills to critical appraise new and disruptive technologies and how they can be harnessed to plan and design more sustainable, resilience, productive and liveable cities.

## Course Learning Outcomes (CLOs)

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

1. Identify new technologies and how best to use them in the physical design and building of a contemporary city
2. Identify new technologies and how best to use them in the social planning and management of a contemporary city
3. Critique cutting edge public involvement methodologies, techniques and tools and be able to apply them to a real case study
4. Use basic digital technology platforms such as GIS, BIM and 3-D visualisations

## 3. ASSESSMENT

Assessment task	Weight	CLOs Assessed
1. Assessment 1: Progressive Geodesign Assignment (Individual)	35%	2
2. Assessment 2: Mid Term Quiz - Research Question and Initial Design Strategies (Individual)	20%	1, 2, 3
3. Assessment 3 –Design Workshop Presentation (Group)	25%	3, 4
4. Assessment 4 – Discussion Board Activities (Individual)	20%	1, 2, 3, 4

## 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.