

ABPL90345 Digital Techniques for Urban Designers 1

Credit Points:	12.50								
Level:	9 (Graduate/Postgraduate)								
Dates & Locations:	This subject is not offered in 2014.								
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 120 hours								
Prerequisites:	None								
Corequisites:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ABPL90342 Digital Cities Studio</td> <td>Not offered 2014</td> <td>25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	ABPL90342 Digital Cities Studio	Not offered 2014	25
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ABPL90342 Digital Cities Studio	Not offered 2014	25							
Recommended Background Knowledge:	Knowledge of Rhino and 3ds Max desirable								
Non Allowed Subjects:	None								
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p>								
Contact:	<p>Environments and Design Student Centre Ground Floor, Baldwin Spencer (building 113)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Web: http://edsc.unimelb.edu.au/ (http://edsc.unimelb.edu.au/) Email: edsc-enquiries@unimelb.edu.au (mailto:edsc-enquiries@unimelb.edu.au)</p>								
Subject Overview:	<p>This subject offers a conceptual overview and hands-on introduction to research and applications in digital technologies in spatial design. The course will involve modelling and interacting with complex urban sites focusing on modelling difficult terrains, both existing conditions and topographical manipulation. Students will investigate biomorphic/organic form-making and representation techniques utilising procedural modelling using 3ds Max as well as plug-in and script use. Through investigating rapidly emerging digital modelling technologies, students will learn time-saving modelling, how to manage complex files, and how to move information between ranges of software. The subject will be supported by a number of industry leaders specialising in contemporary professional applications of digital techniques, enabling the subject to approach design and analysis at the urban scale from differing perspectives. This can include: pedestrian planning; lighting, acoustics and fire engineering; design and analysis of low-energy buildings; 3D real-time representation of data; relation of commercial software and structural analysis; parametric design; and provision of flexible GIS-based solutions via interactive mobile applications.</p>								
Learning Outcomes:	<p>On completion of the subject students should have developed:</p> <ul style="list-style-type: none"> # knowledge of the impact of digital technology on theoretical issues in spatial design; # critical awareness of the relationship between representation and spatial design with an emphasis on digital design environments; # skills in the use of computational design and digital technologies. 								

Assessment:	Workshop One (agent-based people simulation) - 20% Workshop Two (urban wind and lighting) - 20% Workshop Three (city modelling, 3D realtime) - 20% Workshop Four (urban design and data representation) - 20% Workshop Five (parametric design) - 20%
Prescribed Texts:	Available on Digital Cities website
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<ul style="list-style-type: none"> # Critical thinking and analysis # Information gathering and critical synthesis # Comprehension of complex concepts and the ability to express them lucidly in design work # Methods of documentation and presentation.