

CVEN90062 Building Information Modeling

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 48 hours Total Time Commitment: 200 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
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>
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Subject Overview:	<p>In the past few years, the Architecture Engineering and Construction (AEC) industry has observed the evolution of simple 2D drafting programs into integrated Building Information Modelling (BIM) based on 3D spatial technologies. In this subject, students will learn how BIM is used to model, store and visualise architectural, structural, and facilities components of an infrastructure in 3D. Students will also learn how adding time and cost information to BIM allows AEC to foster collaboration in designing infrastructures, minimize the risk of construction errors and optimise the maintenance of them.</p> <p>The subject is of particular relevance to students wishing to establish a career in civil engineering, property management, surveying, spatial information and urban planning but is also relevant to a range of disciplines where 3D building information should be considered.</p>
Learning Outcomes:	<ol style="list-style-type: none"> 1 Explain the function of BIM in the Architecture, Engineering and Construction industry 2 Apply BIM in designing, visualising and maintaining components of infrastructures 3 Analyse how collaborative techniques in BIM increase productivity and reduce the risk of construction and usage errors 4 Design infrastructures and plan for their construction and maintenance using BIM
Assessment:	<p>Assignment 1, 1000 word report on the role of BIM in AEC (20-25 hours); group submission involving 20-25 hours work; associated with Intended Learning Outcome (ILO) 1; due Week 3 (10%) Assignment 2, 1500 word report and a BIM file on Designing and Communicating a Building using BIM; group submission involving 30-35 hours work; associated with ILOs 2 and 3; due mid-semester (20%) Assignment 3, 1000 word report on peer review of Assignment 3 in Week 8; individual submission involving 20-25 hours work; associated with ILOs 2 and 3; due mid to late-semester (10%) Assignment 4, 2000 word report and a BIM file on designing and analysing an infrastructure using BIM; involving 40-45 hours work; associated with ILO 4; due Week 11 (30%) 1.5 hours examination; associated with ILOs 1 to 4; held in the examination period at the end of semester (30%)</p>

Prescribed Texts:	TBC
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"> # Ability to undertake problem identification, formulation and solution; # Ability to communicate effectively, with the engineering team and with the community at large; # Ability to manage information and documentation.
Related Course(s):	Master of Engineering Management Master of Engineering Project Management Master of Engineering Structures
Related Majors/Minors/Specialisations:	MIT Spatial Specialisation Master of Engineering (Civil) Master of Engineering (Mechanical) Master of Engineering (Spatial) Master of Engineering (Structural)