

ABPL90010 Advanced Construction Technology

Credit Points:	12.5														
Level:	9 (Graduate/Postgraduate)														
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.														
Time Commitment:	Contact Hours: 3 hours of lectures/seminars/tutorials and site visits per week Total Time Commitment: 170 hours														
Prerequisites:	Admission into (MC-CONMG2Y, MCCM-200EP) Master of Construction Management (200 points) OR Admission into one of the following courses: MC-CONMG3Y Master of Construction Management (300 points) MC-CM Master of Construction Management PLUS all of the following subjects:														
	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ABPL90292 Construction of Buildings</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>ABPL90293 Commercial Construction</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>ABPL90324 Materials and Structures</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	ABPL90292 Construction of Buildings	Semester 1	12.50	ABPL90293 Commercial Construction	Semester 2	12.50	ABPL90324 Materials and Structures	Semester 1	12.50
Subject	Study Period Commencement:	Credit Points:													
ABPL90292 Construction of Buildings	Semester 1	12.50													
ABPL90293 Commercial Construction	Semester 2	12.50													
ABPL90324 Materials and Structures	Semester 1	12.50													
Corequisites:	None														
Recommended Background Knowledge:	Basic technology of primary structural materials (concrete, steel, timber and masonry); Standards practice in commercial construction methods (concrete framing, slabs and reinforcement methods, concrete post-tensioning, load-bearing walls, steel framing and connections); Familiarity with basic concepts of statics of structures.														
Non Allowed Subjects:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ABPL40005 Advanced Construction</td> <td>Not offered 2016</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	ABPL40005 Advanced Construction	Not offered 2016	12.50						
Subject	Study Period Commencement:	Credit Points:													
ABPL40005 Advanced Construction	Not offered 2016	12.50													
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>														
Coordinator:	Mr Giorgio Marfella														
Contact:	Email: giorgio.marfella@unimelb.edu.au (mailto:giorgio.marfella@unimelb.edu.au) The Eastern Precinct (building 138) (between Doug McDonnell building and Eastern Resource Centre) Enquiries: Current Student: http://ask.unimelb.edu.au/ (http://ask.unimelb.edu.au/)														

	Web: http://msd.unimelb.edu.au/ (http://msd.unimelb.edu.au/)
Subject Overview:	<p>This subject investigates technological topics in building materials, components, systems and methods that normally require input from specialist trades and/or the adaptation of common practice to highly-bespoke design proposals. Focus is given to construction technologies where significant design management efforts in large and complex projects are required from the perspective of a head contractor.</p> <p>The subject content is reviewed each year to reflect emerging practices and challenges that affect the building industry. Topics may include: tall building construction and structural design principles, bespoke facade construction for architectural applications, hybrid construction systems and advanced technologies of manufacturing, fabrication and processes in building materials.</p>
Learning Outcomes:	<p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # To communicate construction solutions by means of technical reports, sketches, diagrams and drawings; # To link complex design intents and relate these to current construction practice; # To propose and evaluate alternative construction systems and methods in response to given building performance requirements; # To appreciate and prepare for the management of innovative practice in the field of construction technology.
Assessment:	<p>Group assignment equivalent to 1000 words per group member (groups of two students) (20%) due in week 5, focussing on a 'design and construct' project scenario (Stage 1). Preliminary construction design assessments and solutions to be reported with technical reports and/or construction methodologies and detailing via sketches and diagrams. Group assignment equivalent to 1000 words per group member (groups of two students) (20%) due in week 10, focussing on a 'design and construct' project scenario (Stage 2). Preliminary construction design assessments and solutions to be reported with technical reports and/or construction methodologies and detailing via sketches via sketches and diagrams. Three hour examination equivalent to 3000 words during the examination period (60%) demonstrating an ability to work independently and resolve technical solutions to construction problems, being able to evaluate alternative solutions via annotated diagrams and demonstrating familiarity and understanding of specialist topics dealt by the lectures. Hurdle requirement: A minimum mark of 40% has to be achieved in the examination in order to pass this Subject.</p>
Prescribed Texts:	None specified
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 demonstrate a high level of technological understanding of the design of buildings and associated construction processes and solutions; # Research and analyse new construction methods and new products; # Participate effectively as a team member in project delivery, including in the early stages of design; # Critically analyse and resolve ad-hoc construction related problems.
Related Majors/Minors/Specialisations:	<p>Building Building Systems and Trade Specialties Corporate Management Cost Management Project Management Research and Development</p>