

ABPL90010 Advanced Construction Technology

Credit Points:	12.50														
Level:	9 (Graduate/Postgraduate)														
Dates & Locations:	This subject is not offered in 2014. This subject will run in semester 2 from 2015 onwards.														
Time Commitment:	Contact Hours: 4 hours of lectures/seminars/tutorials and site visits per week Total Time Commitment: 150 hours														
Prerequisites:	Admission into one of the following courses MC-CONMG2Y Master of Construction Management (200 points) MC-CONMG3Y Master of Construction Management (300 points) PLUS all of														
	<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
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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:	None														
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 2014</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	ABPL40005 Advanced Construction	Not offered 2014	12.50						
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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:	Environments and Design Student Centre Ground Floor, Baldwin Spencer (building 113) <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)														
Subject Overview:	Topics are selected from and may include: <ul style="list-style-type: none"> # The rehabilitation and recycling of existing buildings # Concrete repair and protection covering investigation techniques and repair methods # Anchorage into concrete # Strengthening of existing structures including carbon fibre strengthening # Prefabricated buildings # Facade construction and materials including performance and detailing, and structural glazing systems [UGH] 														

	<ul style="list-style-type: none"> # High performance concrete including construction of superflat concrete ground slabs, fibre reinforcement technology and new generation admixtures # Geopolymer concrete # Ultra high performance concrete and marine structures # Asbestos audits and safe removal # Hybrid construction systems # High rise construction systems
Learning Outcomes:	<p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # Link structural design concepts and relate these to current construction practices; # Communicate construction solutions by means of sketches and drawings; # Propose and evaluate alternative construction systems.
Assessment:	<p>Group assignment equivalent to 1000 words per group member (groups of two students) (20%) due in week 5, focussing on a real world scenario requiring preliminary structural design solutions and construction detailing via sketches. Involves construction sequences and OH&S risk assessment and management. Group assignment equivalent to 1000 words per group member (groups of two students) (20%) due in week 9, involving an investigative site report covering a range of concrete defects and appropriate repair techniques. Selection of suitable place and equipment requirements. Three hour examination equivalent to 3000 words during the examination period (60%) demonstrating an ability to work independently and resolve technical solutions to a wide range of construction and structural systems problems, being able to evaluate alternative and hybrid construction techniques and to present solutions using detailed annotated diagrams. 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:	<p>On completion of this subject students should have developed the following skills and capabilities:</p> <ul style="list-style-type: none"> # Able 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; # Critically analyse and resolve construction related problems.
Related Majors/Minors/Specialisations:	<p>Building Building Systems and Trade Specialties Corporate Management Cost Management Project Management Research and Development</p>