

# ABPL90010 Advanced Construction Technology

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| <b>Credit Points:</b>                    | 12.50   |                                   |                       |
| <b>Level:</b>                            | 9 (Graduate/Postgraduate)   |                                   |                       |
| <b>Dates &amp; Locations:</b>            | 2012, Parkville<br>This subject commences in the following study period/s:<br>Semester 1, Parkville - Taught on campus.   |                                   |                       |
| <b>Time Commitment:</b>                  | Contact Hours: 4 hours of lectures/seminars/tutorials and site visits per week Total Time Commitment: 150 hours   |                                   |                       |
| <b>Prerequisites:</b>                    | Admission to the 200-point Master of Construction Management OR admission to the 300-point Master of Construction Management and completion of all of the following subjects:   |                                   |                       |
|  | <b>Subject</b>  | <b>Study Period Commencement:</b> | <b>Credit Points:</b> |
|  | ABPL90292 Construction of Buildings   | Semester 1                        | 12.50                 |
|  | ABPL90293 Commercial Construction   | Semester 2                        | 12.50                 |
|  | ABPL90324 Materials and Structures  | Semester 1                        | 12.50                 |
| <b>Corequisites:</b>                     | None  |                                   |                       |
| <b>Recommended Background Knowledge:</b> | None  |                                   |                       |
| <b>Non Allowed Subjects:</b>             | <b>Subject</b>  | <b>Study Period Commencement:</b> | <b>Credit Points:</b> |
|  | ABPL40005 Advanced Construction   | Not offered 2012                  | 12.50                 |
| <b>Core Participation Requirements:</b>  | For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a> |                                   |                       |
| <b>Coordinator:</b>                      | Assoc Prof Peter Ashford  |                                   |                       |
| <b>Contact:</b>                          | <b>Environments and Design Student Centre</b><br>Ground Floor, Baldwin Spencer (building 113)<br><i>Enquiries</i><br>Phone: 13 MELB (13 6352)<br>Website: <a href="http://www.msd.unimelb.edu.au">http://www.msd.unimelb.edu.au</a> ( <a href="http://www.msd.unimelb.edu.au/">http://www.msd.unimelb.edu.au/</a> )   |                                   |                       |
| <b>Subject Overview:</b>                 | Topics are selected from and may include: <ul style="list-style-type: none"> <li># The rehabilitation and recycling of existing buildings</li> <li># Concrete repair and protection covering investigation techniques and repair methods</li> <li># Strengthening of existing structures</li> <li># The development, form and structural behaviour of spatial structures including space frames, cable supported and tension membranes with an emphasis on buildability and construction detailing</li> <li># Facade construction including architectural, performance and detailing, and structural and mullionless glazing systems [UGH]</li> </ul>       |                                   |                       |

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|   | <ul style="list-style-type: none"> <li># High performance concrete including construction of superflat concrete ground slabs, fibre reinforcement technology and admixtures</li> <li># Ultra high performance concrete and marine structures</li> </ul>  |
| <b>Objectives:</b>                            | <p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> <li># Link structural design concepts and relate these to current construction practices</li> <li># Communicate construction solutions by means of sketches and drawings</li> <li># Propose and evaluate alternative construction systems</li> </ul>     |
| <b>Assessment:</b>                            | <p>One 3-hour examination (70%) Written and drawn assignments equivalent to not more than 2000 words (30%) Regardless of assignment results, a minimum grade of 40% must be achieved in the examination in order to pass the subject.</p>  |
| <b>Prescribed Texts:</b>                      | None specified   |
| <b>Breadth Options:</b>                       | This subject is not available as a breadth subject.  |
| <b>Fees Information:</b>                      | Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>  |
| <b>Generic Skills:</b>                        | <p>On completion of this subject students should have developed the following skills and capabilities:</p> <ul style="list-style-type: none"> <li># Research and analyse new construction methods and new products;</li> <li># Participate effectively as a team member;</li> <li># Critically analyse and resolve construction related problems.</li> </ul> |
| <b>Related Majors/Minors/Specialisations:</b> | <p>Building<br/> Building Systems and Trade Specialties<br/> Corporate Management<br/> Cost Management<br/> Project Management<br/> Research and Development</p>   |