ABPL90293 Commercial Construction

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: 36 hours: 2 x 2 hour lectures per week; 1 x 1 hour tutorial/seminar per week Total Time Commitment: 170 hours
Prerequisites:	Admission into one of the following courses: MC-CM Master of Construction Management MC-CONMG3Y Master of Construction Management (300 points) **PLUS**

Subject	Study Period Commencement:	Credit Points:
ABPL90292 Construction of Buildings	Semester 1	12.50
ABPL90324 Materials and Structures	Semester 1	12.50

Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	702-672 Concrete Structures and Construction 702-677 Structures and Construction Systems
Core Participation Requirements:	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. 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
Coordinator:	Mr Omid Touranisama
Contact:	Subject Coordinator email: **omid.touranisama@unimelb.edu.au (mailto:omid.touranisama@unimelb.edu.au)** The Eastern Precinct (building 138) (between Doug McDonell 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:	Commercial construction relates to high, medium or low rise office or apartment buildings, hospitals and institutional buildings, shopping centres and sporting facilities. Each project has characteristic structural forms and resultant methods of construction. Structural design concepts for steel and reinforced concrete are analysed and their influence on construction methods assessed. The topics covered include the interpretation of steel and reinforced concrete drawings and specifications, steel and reinforced concrete framed buildings, industrial ground

	slabs, basement construction and site retention methods, piling systems and construction methods to suit various geotechnical conditions, composite construction, tilt slab construction methods, precast concrete building systems and hybrid construction systems.
Learning Outcomes:	This subject will introduce the design concepts for steel and reinforced concrete structures and is intended for students who enrol in the Master of Construction Management without a background in construction. Upon completion of the subject, the student should be able to: # appreciate the factors affecting the choice of structural system, the choice of construction materials, and the construction process for commercial buildings; # understand the roles and responsibilities of the designers, builders and other parties involved in the design and construction of a commercial building; # read and interpret construction drawings; # communicate construction solutions by means of sketches and drawings; # and propose and evaluate alternative construction systems.
Assessment:	Assignment 1 (20%) equivalent to 1000 words due in Week 5, on the design and proposed construction method for a concrete structural system; Assignment 2 (20%) equivalent to 1000 words due in Week 9, on the design and proposed construction system for either a steel portal frame, industrial ground slab, precast or post-tensioned system; One 3-hour exam (60%) scheduled in the examination period, focusing on reinforced concrete design and the various structural systems covered in the subject. Hurdle requirement: A minimum mark of 40% must be achieved in the examination in order to pass the subject.
Prescribed Texts:	A coursework reader will be provided.
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:	Upon completion of this subject, students should have developed the following skills and capabilities: # problem solving skills; # analytical skills; # communication skills.
Related Course(s):	Master of Construction Management
Related Majors/Minors/ Specialisations:	300 point Master of Construction Management