## **BE (Hons) - CIVIL and GEOTECHNICAL ENGINEERING**

Study plan - Dual major

EAIT faculty home: www.eait.uq.edu.au CIVIL home: www.civil.uq.edu.au

		Part A - Compulsory #58					Part B1 - Introductory Electives						Part B0 - Preparatory Electives		
March Semester	1	Engineering design ENGG1100	Engineering mechanics: Statics and Dynamics ENGG1400 March or July Semester	Calculus & Linear algebra 1 MATH1051/1071 March or July Semester	Earth processes and geological materials for engineers ERTH1501	March Semester		Introduction to mining MINE2105		Building construction management & economics REDE1300	Chemistry 1 CHEM1100 March or July Semester	Calculus & linear algebra II MATH2000/2001 March or July Semester	Mathematical foundations MATH1050 March or July Semester	Introductory chemistry CHEM1090	Physical basis of biological systems PHYS1171 March or July Semester
July Semester	2	Engineering modelling and problem solving ENGG1200	Elective	Multivariate calculus & ODE's MATH1052/1072 March or July Semester	Elective	July Semester	Enginering thermomechanics ENGG1500 March or July Semester	Introduction to electrical systems ENGG1300 March or July Semester	Introduction to research - The big issues ENGG1600	Electromagnetism & modern physics PHYS1002 March or July Semester	Introduction to software engineering 1 CSSE1001 March or July Semester				
March Semester	3	Structural mechanics CIVL2330	Probablity statistics and scientific computing CIVL2530	Environmental Issues and Sustainability in Engineering CIVL2135	Traffic flow theory and analysis CIVL2410										
July Semester	4	Introduction to structural design CIVL2340	Fluid mechanics for civil & environmental engineers CIVL2131	Reinforced concrete structures & concrete tech. CIVL2360	Fundamentals of soil mechanics CIVL2210		Part B2 - Advanced electives								
March Semester	5	Structural analysis CIVL3340	Catchment Hydraulics: Open Channel Flow & Design CIVL3140	Mining geomechanics MINE3121 <sup>\$</sup>	Geotechnical engineering CIVL3210	March Semester		Numerical methods in engineering CIVL4250 <sup>#</sup>							
July Semester	6	Structural design CIVL3350	Transportation systems engineering CIVL3420	Catchment hydrology CIVL3141	Hydrogeology ERTH3250	July Semester									
March Semester	7	Civil design 1 CIVL4514	Project CIVL4560 <sup>+</sup> March or July semester	Geotechnical investigating and testing CIVL4270	Mine geotechnical engineering MINE4120	March Semester	Research thesis CIVL4580% #4 units over 2 semesters							Mine waste management and landform design MINE4000	
July Semester	8	Civil design 3 CIVL4516	B1 or B2 Elective	Advanced rock mechanics CIVL4280	Prof. practice & the business environment ENGG4900 March or July Semester	July Semester	Research thesis CIVL4582 <sup>%</sup> #4 units over 2 semesters	Introduction to project management CIVL3510						Structural geology ERTH2004	Advanced soil mechanics CIVL4230

<sup>%</sup> Two semester course (#4 units). CIVL4580 if starting in March semester OR CIVL4582 if starting in July semester

<sup>+</sup> CIVL4580/4582 (Thesis) may be done in lieu of CIVL4560 and an Elective.

<sup>\$</sup> MINE3121 may be done in semester 7 and CIVL4560 in semester 8, if ERTH1501 is done in semester 5

<sup>#</sup> CIVL4250 is not offered in 2018