51160 Bachelor of Science and Bachelor of Engineering

Civil Engineering

Note: Available to re-enrolling students only. The 2012 Rules for the Civil Engineering program allows students to combine studies in this program with one of more majors in Science.

Course details
Total points required for this course: 240 - 270 points
Bachelor of Engineering component: 168 - 174 points
Bachelor of Science component: 114 - 120 points

Students must complete the following (as set out in the table below):

- Bachelor of Engineering core units - 36 points;
- all units in Table 6.2.2Ca (Civil Engineering core units) - 102 points (Students enrolled in a Geology major in Science are not required to take CIVL2121 Engineering Geology and Geomechanics);
- one of the following majors: the Civil Engineering major (MJ-ECIVM) or the Offshore Engineering major (MJ-EOFFM) - 30 points;
- a Professional Practicum of at least 12 weeks; and
- a Bachelor of Science component - 114 - 120 points

Please Note: The actual points required for completion of the Bachelor of Engineering component may be reduced to 138 points after cross-crediting, depending on the Science majors completed. Students should consult the equivalent unit chart below for details of units that, if completed in the Bachelor of Science component, can replace specific units in the Bachelor of Engineering component.

The following table is intended as a guide only and should be read in conjunction with the Equivalence Table attached. All units have a value of 6 points unless noted otherwise. Unit availability may be subject to change. For the most up-to-date information, please consult the Timetable at http://www.timetable.uwa.edu.au/
## 51160 Bachelor of Science / Bachelor of Engineering

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Civil Engineering</th>
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<td><strong>YEAR ONE - 48 POINTS</strong></td>
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| MATH1010 Calculus and Linear Algebra  
PHYS1101 Advanced Physics A  
GENG1001 Introduction to Engineering Mechanics  
Science unit | MATH1020 Calculus, Statistics and Probability  
MATE1412 Materials Engineering 1 (replaced by ENSC1002 Material Behaviour from Atoms to Bridges)  
CIVL1110 Engineering Structures (Civil Engineering Major unit)  
Science unit |
| GENG1003 Introduction to Professional Engineering  
MATH2209 Calculus and Probability  
Science unit  
Science unit | GENG1002 Introduction to Electrical & Electronic Engineering  
GENG2140 Modelling and Computer Analysis for Engineers  
MATH2020 Multivariable Calculus and Linear Algebra  
Science unit |
| **YEAR TWO - 48 POINTS** | |
| CIVL2121 Engineering Geology and Geomechanics  
CIVL2150 Surveying and  
ENSC3004 Solid Mechanics (replaces CIVL2110 Statics and Solid Mechanics)  
Science unit | |
| ENSC3008 Structural Analysis (replaces CIVL3110 Structural Analysis)  
CIVL3111 Structural Steel Design  
CIVL3120 Applied Geomechanics  
CIVL3130 Hydraulics II  
Science unit | CIVL3112 Structural Concrete Design  
BE Civil Major unit  
CIVL3150 Project Management & Risk Engineering  
Science unit |
| **YEAR THREE - 48 POINTS** | |
| CIVL4101 Civil Engineering Project Part 1  
BE Civil Major unit  
Science unit  
Science unit | CIVL4102 Civil Engineering Project Part 2  
CIVL4150 Engineering Practice  
Science unit or BE Civil Major unit  
Science unit |
| **YEAR FOUR - 48 POINTS** | |
| **YEAR FIVE - 48 POINTS** | |
| **YEAR SIX - 18 POINTS** | |

### Notes

**Note 1:** MATH1010 and MATH1020 will no longer be offered from 2012 onwards. Students with prerequisite requirements and have completed one of MATH1010 and MATH1020 must take MATH1001 Mathematical Methods 1 and MATH1002 Mathematical Methods 2.

**Note 2:** PHYS1001 Physics for Engineers and Scientists replaces PHYS1101 Advanced Physics. Students who do not have WACE Physics 3A/3B or TEE Physics must take PHYS1030 Physics as a bridging unit before enrolling in PHYS1001 Physics for Engineers and Scientists.

**Note 3:** Offered for the last time in 2011. Students requiring this unit or its equivalent should contact an ECM Faculty Advisor.

**Note 4:** Students who have not completed GENG1003 must take ENSC1001 Engineering Challenges in a Global World.

**Note 5:** Student requiring MINE1160 Introduction to Chemical and Resources Engineering should take CIVL1110 Engineering Structures.

**Note 6:** Students taking Geology major in Science are not required to take this unit.