Bachelor of Engineering (Civil) | 2022

### Year 1

#### Autumn
- ENGG105 Engineering Design for Sustainability
- ENGG102 Fundamentals of Engineering Mechanics
- MATH141 Fundamentals of Engineering Mathematics
- ENGG103 Materials in Design
- ENGG100 Engineering Analysis and Computing

#### Spring
- ENGG104 Electrical Systems
- MATH142 Essential of Engineering Mathematics
- PHYS143 Physics for Engineers
- MATH283 Advanced Engineering Mathematics and Statistics

### Year 2

#### Autumn
- ENGG251 Mechanics of Solids
- CHEM103 Chemistry for Engineers
- CIVL311 Structural Design 1
- ENGG252 Fluid Mechanics
- CIVL245 Construction Materials

#### Spring
- EESC252 Geology for Engineers
- MATH283 Advanced Engineering Mathematics and Statistics
- CIVL272 Surveying
- CIVL201 Computer Modelling in CE
- CIVL352 Structures 1

### Year 3

#### Autumn
- CIVL314 Structural Design 2
- CIVL322 Hydraulics and Hydrology
- CIVL361 Geomechanics
- CIVL394 Construction
- ENGG461 Managing Projects

#### Spring
- CIVL458 Fundamentals of Construction Management
- ENGG462 Principles of Foundation Engineering
- CVEA444 Multidisciplinary Engineering Design
- Elective-1
- Elective-2

### Year 4

#### Autumn
- ENGG454 Professional Experience (0 cp)
- CME498/456
- Elective-1
- Elective-3

#### Spring
- Elective-4

All students must complete ENGG454 Professional Experience (0 cp)

For students in CVEA498/456: Any 2 electives from List A and 2 electives from List A or B

For students in CVEA499: Any 1 elective from List A and 2 electives from List A or B
List A Electives

- AENG200  History of Architectural Design
- AENG201  Architectural Engineering Design 1: Net Zero Energy Houses
- CSCI291  Programming for Engineers
- CIVL491  Applied Finite Element Analysis for Civil Engineers
- CIVL489  Sustainable Road & Transport Engineering
- CIVL454  Structures 2
- CIVL463  Applied Geotechnical Engineering
- ENVE220  Water Quality and Ecological Engineering
- ENVE221  Air and Noise Pollution Control Engineering
- ENVE311  Pollution Control and Cleaner Production
- ENVE320  Environmental Engineering Design for Sustainability
- ENVE377  Membrane Science and Technology
- ENVE420  Water Resources Engineering
- ENVE410  Site Remediation Engineering
- ENGG433  Financial Management for Engineers
- ENGG439  Engineering Logistics and Operations Management
- ENGG440  Strategic Management of Engineering
- ENGG472  Humanitarian Engineering
- MINE211  Surface Mining Methods
- MECH426  Storage, Flow and Mechanical Conveying of Bulk Solids
- ENGG210  Building Physics and Building Services
- ENGG310  Building Information Modelling for Engineers
- AENG301  Architectural Engineering Design 2
- CMEA234  Computer Applications for the Workplace
- HUMA272  Humanitarian Studies
- MECH372  Solids Handling and Process Engineering

or other approved Engineering Electives

List B Electives

List B electives are common to all majors for the Bachelor of Engineering (Hons) and listed here Elective B list

Students can do a minor by completing 24 CP from any other engineering discipline. Please refer to

https://courses.uow.edu.au/courses/current/1856
Bachelor of Engineering (with Civil Engineering Minor)

Mining, Environmental, Materials or Mechanical Engineering and other majors can graduate with Civil Engineering minor on completion of the following recommended civil engineering subjects in lieu of List A and List B electives. A minor in Civil Engineering may help in securing jobs in the civil engineering industry.

BE(Hons) Civil, Environmental, Materials or Mechanical Engineering major 168 cp

Year 1
48 Credit points (cp) common core

Year 2
48 Credit points (cp) major offerings

Years 3 and 4
72 Credit points (cp) major offerings

Approved civil minor replacing 24 cp List A and B electives

At least 6cp from this list
- CIVL201 Computer Modelling in Civil Engineering
- CIVL245 Construction Materials
- CIVL272 Surveying

12 to 18 cp from the following to ensure students complete 24 cp
(note some subjects have pre and co-requisites).
- CIVL352Structures 1
- CIVL361Geomechanics
- CIVL311 Structural Design 1
- CIVL322 Hydraulics and Hydrology
- CIVL394 Construction
- CIVL458 Fundamentals of Construction Management
- CIVL462 Principles of Foundation Engineering
- CIVL491 Applied Finite Element Analysis for Civil Engineers
- ENVE420 Water Resources Engineering