

Bachelor of Engineering (Honours) [Embedded] (Mechanical Engineering) – Bachelor of Information Technology

Useful study planning/enrolment resources:

- [Subject Search](#)
- [Academic Calendars](#)
- [Class Registration](#)
- [Enrolment Resources](#)

The information in the study planner is current at the time of creation may be subject to future change.

Attention International Student visa holders: To remain compliant with your enrolments requirements as a Student visa holder you are required to enrol in at least one On-Campus, Multi-Modal or WIL subject offering in each compulsory study period and you cannot enrol in more than one third (33%) of your total course load through online or distance learning. To complete your course within your CoE duration students must maintain sufficient subject enrolment.

If there are only Online subject offerings for you to select in a compulsory study period, contact enrolments@jcu.edu.au urgently for enrolment advice.

The College of Science and Engineering will be offering some subjects in Block 1 and Block 2 (see the [Academic Calendar](#) for Block 1 and 2 dates). International students must maintain enrolment in subjects across the whole Trimester 1 period (January – April) and can do this by enrolling in a combination of TR1, Block 1 and/or Block 2 subjects.

| | TRIMESTER 1 | TRIMESTER 2 | TRIMESTER 3 |
|-------------|---|--|--|
| 2025 | EG1000:03 Engineering 1 | EG1011:03 Statics and Dynamics <i>PREREQ: Allow concurrent enrolment in PH1005</i> | EG1010:03 Process Engineering |
| | EG1002:03 Computing and Sensors | MA1000:03 Mathematical Foundations <i>PREREQ: MA1020 or MA0020 or Maths B or Maths C</i> | EG1012:03 Electric Circuits |
| | MA1020:03 Mathematical Methods OR Select 3 credit points of any undergraduate subjects | PH1005:03 Newtonian Physics <i>PREREQ: Maths B or MA1020 or MA0020 or MA1000 or MA1008 OR admission to 116209, 116409 or 116309. Allow concurrent for MA1000 and MA1008</i> | MA1003:03 Mathematical Techniques <i>PREREQ: MA1000 or MA1011</i> |

*Recommended studying all EG Level 1 subjects in 1st year as this provides the required knowledge to determine your major pathway (for a total of 9 subjects this year) This choice also allows for a lighter 7-subject load in your final year when completing your thesis.

| | TRIMESTER 1 | TRIMESTER 2 | TRIMESTER 3 |
|-------------|--|--|---|
| 2026 | MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i> | Major CP1407:03 Introductory Machine Learning and Data Science | CP1403:03 Design Thinking I |
| | CP1402:03 Internet Fundamentals | Major EG2010:03 Materials Science and Engineering | CP1404:03 Programming II <i>PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201</i> |
| | Major CS2001:03 Engineering Strength of Materials <i>PREREQ: EG1011</i> | | Major ME2525:03 Machine Element Design <i>PREREQ: CS2001</i> |

| | TRIMESTER 1 | TRIMESTER 2 | TRIMESTER 3 |
|-------------|---|--|---|
| 2027 | Select 3 credit points of subjects from List 1 | Major ME3515:03 Advanced Manufacturing Engineering <i>PREREQ: ME2525 and EG2010</i> | Major EG2008:03 Fluid Mechanics <i>PREREQ: MA2000 and EG1011</i> |
| | Select 3 credit points of subjects from List 2 | Select 3 credit points of subjects from List 2 | Major ME2521:03 Dynamics of Machine Elements <i>PREREQ: EG1011</i> |
| | | Select 3 credit points of subjects from List 2 | Major ME3525:03 Mechanical Design <i>PREREQ: ME2525</i> |

| | | TRIMESTER 1 | TRIMESTER 2 | TRIMESTER 3 |
|-------------|---|---|---|---|
| 2028 | | CP3407:03 Advanced Software Engineering <i>PREREQ: (CP1404 or CP1804 and 18 credit points of CP subjects) or (CP1404 or CP1804 and admittance to Bachelor of Engineering (course codes 102809 or 116209 or 116309))</i> | Major ME3511:03 Dynamics and Acoustics <i>PREREQ: MA2000 and ME2521</i> | CP2404:03 Database Modelling |
| | | BLOCK 2 (Mar-Apr) | | |
| | | EG3000:03 Introduction to Systems Engineering and Project Management <i>PREREQ: EG1000 and EG1002 and EG1010 and EG1011 and EG1012 and MA1000 and MA1003 and (PH1005 or EG1001) or 36 credit points of subjects</i> | Major ME3512:03 Heat and Mass Transfer <i>PREREQ: MA2000</i> | CP2406:03 Programming III <i>PREREQ: CP1404 or CP1804 or CP1300</i> |
| | | BLOCK 2 (Mar-Apr) | | |
| | Major EG3001:03 Finite Element Analysis <i>PREREQ: EG1002 and EG1011 and MA2000</i> | | | Select 3 credit points of any undergraduate subjects |

| | | Vac work (Dec-Feb) | TRIMESTER 2 | TRIMESTER 3 |
|-------------|--|--|---|--|
| 2029 | | <i>Time available for work placements with engineering employers</i> | EG4011:03 Thesis Part 1 of 2 <i>PREREQ: (72 credit points in 46110 or 102810 or 102809 or 116209) OR (96 credit points in 46210 or 102910 or 102909) OR (96 credit points in 103310 or 112610 or 1112609 or 116309)</i> | EG4012:03 Thesis Part 2 of 2 <i>PREREQ: EG4011</i> |
| | | BLOCK 2 (Mar-Apr) | | |
| | | Major ME4515:03 Advanced Mechanical Engineering Design <i>PREREQ: ME3525</i> | Major EG4013:03 Asset Management, Maintenance and Reliability <i>PREREQ: Completion of 24 credit points</i> | Major EE3600:03 Automatic Control 1 <i>PREREQ: EG1012 and MA2000</i> |
| | | BLOCK 2 (Mar-Apr) | | |
| | Major ME4513:03 Advanced Fluid Mechanics <i>PREREQ: CS3008 or EG2008</i> | | Major ME4522:03 Energy, Conversion and Refrigeration <i>PREREQ: EG2008 or CS3008</i> | |

COURSE HANDBOOK

[Bachelor of Engineering \(Honours\) \[Embedded\] – Bachelor of Information Technology](#)
[Mechanical Engineering Major](#)