

## Course Offer Guide

The Course Offer Guide is an integrated tool within the UniSQ Handbook designed to help students plan their studies with confidence. It provides a clear overview of:

- Course availability across the academic year (e.g. Trimester 1, Block 2).
- Delivery mode for each course, whether online, on-campus, or external.
- Campus offerings, showing where each unit is available.

This guide supports informed decision-making by allowing students to explore flexible study options and align their enrolment with personal and academic goals.

### Export Information

Details in this file are accurate as at the date of export/printing and are subject to change during the year and from year to year. This document is provided to enable users to make notes and annotations, as needed.

Contents within the Course Offerings section of this document are a condensed version of the UniSQ Handbook. For detailed information, check <https://handbook-guide.unisq.edu.au/program/2026/BENH>.

Once exported, UniSQ will no longer accept this document as a source-of-truth for curriculum content. Users must check with source systems to confirm the accuracy of data after export.

*Generated: 02 June 2026*

### Sources

- [UniSQ Handbook](#)
- [UniSQ Course Offer Guide](#)
- [UConnect](#)

### Legend

Abbreviations used include:

| Code      | Meaning       | Colour          |
|-----------|---------------|-----------------|
| TR1-TR3   | Trimester 1-3 | -               |
| BL1-BL6   | Block 1-6     | -               |
| YL1-YL3   | Year-long 1-3 | -               |
| RES1-RES8 | Research 1-8  | -               |
| ON        | On-campus     | UniSQ Gold      |
| OL        | Online        | UniSQ Dark Plum |

| Code                 | Meaning                                      | Colour             |
|----------------------|----------------------------------------------|--------------------|
| EXT                  | External                                     | UniSQ Fire Sky red |
| Mixed (e.g. ON / OL) | More than one mode (e.g. On-campus / Online) | UniSQ Soft Pink    |

## BENH - Bachelor of Engineering (Honours)

|                    |                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Program Code       | BENH                                                                                                                        |
| Program Type       | Undergraduate                                                                                                               |
| Credit Points      | 32                                                                                                                          |
| UniSQ Handbook     | <a href="https://handbook-guide.unisq.edu.au/program/2026/BENH">https://handbook-guide.unisq.edu.au/program/2026/BENH</a>   |
| Course Offer Guide | <a href="https://course-offer-guide.unisq.edu.au/2026/BENH.html">https://course-offer-guide.unisq.edu.au/2026/BENH.html</a> |

### Program Rules

The following majors are not available for enrolment in 2026:

- Computer Systems Engineering
- Environmental and Sustainable Resources Engineering
- Instrumentation Control and Automation Engineering
- Power Engineering

**Program structure** The Bachelor of Engineering (Honours) is a 32-unit program consisting of Project Based Learning courses, underpinning Micro-learning Courses and Personal and Professional Development Courses. Students undertake 10 units of core engineering courses, a 14-unit major of study, and 8 units of electives which students can select with approval from the Program Director.

The 8 units of approved electives will be mapped to the Engineers Australia Graduate Capabilities. Students may choose to study a second major of eight units, one or two minors of four units, and/or choose other units of study as their electives. Assistance in selecting electives to meet the Engineers Australia capabilities will be provided to students in the program's professional practice courses.

- One-unit courses involve approximately 150 hours of student work per unit.
- Half-unit courses involve approximately 75 hours of student work per unit.
- Quarter-unit courses involve approximately 40 hours of student work per unit.

**Elective courses** Elective courses are chosen by the student to extend or complement their studies. Students may study electives which form a minor of four units, or other units of study. Recommended minors and other elective courses are listed for each major. Students should note that quota restrictions may preclude their enrolment in particular courses because students enrolling in these courses as part of their core or major studies will be given enrolment priority.

**Space Technology Major:** Students in the following majors can choose the Space Technology major for their 8 units of electives/approved courses:

- Electrical and Electronic Engineering
- Mechanical Engineering
- Mechatronic and Robotic Engineering

The Space Technology major is not accredited by Engineers Australia and the named major will not appear on Graduation documentation.

## Course Offerings

### Core (10 Units)

Complete all of the following core units

| Course                                                                                                                                                                                                                                                                                                                                              | Online      |             |             |             |             |             | Springfield                |                            |                            |             |             |             | Toowoomba                  |                            |                            |             |             |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------------|----------------------------|----------------------------|-------------|-------------|-------------|----------------------------|----------------------------|----------------------------|-------------|-------------|-------------|
|                                                                                                                                                                                                                                                                                                                                                     | T<br>R<br>1 | T<br>R<br>2 | T<br>R<br>3 | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 | T<br>R<br>1                | T<br>R<br>2                | T<br>R<br>3                | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 | T<br>R<br>1                | T<br>R<br>2                | T<br>R<br>3                | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 |
| ENP1101 - Student Engineer Induction<br>0.25 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                               |             |             |             |             |             |             | O<br>N<br>/<br>E<br>X<br>T | E<br>X<br>T<br>/<br>O<br>N | O<br>N<br>/<br>E<br>X<br>T |             |             |             | E<br>X<br>T<br>/<br>O<br>N | E<br>X<br>T<br>/<br>O<br>N | O<br>N<br>/<br>E<br>X<br>T |             |             |             |
| ENP1102 - Student Engineer Portfolio<br>0.25 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                               |             |             |             | O<br>L      | O<br>L      | O<br>L      |                            |                            |                            | O<br>N      | O<br>N      | O<br>N      |                            |                            |                            | O<br>N      | O<br>N      | O<br>N      |
| ENP1001 - Engineering Fundamentals A<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                               | O<br>L      | O<br>L      | O<br>L      |             |             |             | O<br>N                     | O<br>N                     |                            |             |             |             | O<br>N                     | O<br>N                     |                            |             |             |             |
| ENP1002 - Engineering Fundamentals B<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                               | O<br>L      | O<br>L      | O<br>L      |             |             |             | O<br>N                     | O<br>N                     |                            |             |             |             | O<br>N                     | O<br>N                     |                            |             |             |             |
| ENP1111 - Sustainable & Humanitarian<br>Engineering Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENP1001 OR Course DIT1000)  <br>Transition Arrangements: Pre-requisite or Co-<br>requisite: ENG1003 or ENG1004 or ENG1101.<br>Enrolment is not permitted in ENP1111 if<br>ENG2002 has been previously completed |             |             |             |             |             |             | O<br>N                     |                            | O<br>N                     |             |             |             | E<br>X<br>T<br>/<br>O<br>N |                            | O<br>N<br>/<br>E<br>X<br>T |             |             |             |
| ENP1112 - Student Engineer Project<br>(Engineering Workplaces)<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course ENP1002   Transition Arrangements:                                                                                                                                                                            |             |             |             |             |             |             | O<br>N<br>/<br>E<br>X      | E<br>X<br>T<br>/<br>O      |                            |             |             |             | O<br>N<br>/<br>E<br>X      | O<br>N<br>/<br>E<br>X      |                            |             |             |             |

| Course                                                                                                                                                                                                                                                    | Online      |             |             |             |             |             | Springfield |             |             |             |             |             | Toowoomba   |             |                            |                                      |             |             |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------------|--------------------------------------|-------------|-------------|--------|
|                                                                                                                                                                                                                                                           | T<br>R<br>1 | T<br>R<br>2 | T<br>R<br>3 | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 | T<br>R<br>1 | T<br>R<br>2 | T<br>R<br>3 | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 | T<br>R<br>1 | T<br>R<br>2 | T<br>R<br>3                | Y<br>L<br>1                          | Y<br>L<br>2 | Y<br>L<br>3 |        |
| Pre-requisite: ENG1100 or Co-requisite ENP1092                                                                                                                                                                                                            |             |             |             |             |             |             | T           | N           |             |             |             |             | T           | T           |                            |                                      |             |             |        |
| ENM1600 - Engineering Mathematics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course MAT1102                                                                                                                                      | O<br>L      | O<br>L      | O<br>L      |             |             |             | O<br>N      |             |             |             |             |             | O<br>N      |             |                            |                                      |             |             |        |
| ENP2103 - Engineering Affiliate Portfolio<br>0.25 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ENP1102  <br>Course Pre-requisites: (Course ENP1101 OR<br>Course ENG1002 OR Course ENG1003 OR<br>Course ENG1004) |             |             |             | O<br>L      | O<br>L      | O<br>L      |             |             |             | O<br>N      | O<br>N      | O<br>N      |             |             |                            |                                      | O<br>N      | O<br>N      | O<br>N |
| ENP2104 - Engineering Associate Portfolio<br>0.25 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course ENP2103   Transition Arrangements:<br>Enrolment is not permitted in ENP2104 if<br>ENG2909 has been previously completed                  | O<br>L      | O<br>L      | O<br>L      |             |             |             |             | O<br>N      | O<br>N      |             |             |             | O<br>N      | O<br>N      | O<br>N                     |                                      |             |             |        |
| ENP3102 - Engineering Professional<br>Management<br>0.50 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: Course ENG3003  <br>Course Co-requisite: Course ENP3107                                                        | O<br>L      | O<br>L      | O<br>L      |             |             |             |             |             |             |             |             |             |             |             |                            |                                      |             |             |        |
| ENP3103 - Engineering Research Methodology<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ENG4110  <br>Course Pre-requisites: Program BENH                                                            |             |             |             |             |             |             |             |             | O<br>N      |             |             |             | E<br>X<br>T |             | O<br>N<br>/<br>E<br>X<br>T |                                      |             |             |        |
| ENP3107 - Transition to Professional Engineer<br>0.25 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>Course ENP2104                                                                                                                                  | O<br>L      | O<br>L      | O<br>L      |             |             |             | O<br>N      |             |             |             |             |             | O<br>N      |             |                            |                                      |             |             |        |
| ENP4108 - Engineering Professional Portfolio<br>0.25 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course ENP3107 AND Course ENP2103)                                                                                                      |             |             | O<br>L      |             |             |             |             |             | O<br>N      |             |             |             |             |             | O<br>N                     |                                      |             |             |        |
| ENP4111 - Professional Engineer Research<br>Project<br>2.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:                                                                                                                                      |             |             |             |             |             |             |             |             |             | O<br>N      | O<br>N      |             |             |             |                            | E<br>X<br>T<br>/<br>O<br>N<br>/<br>E |             |             |        |

|                                   | Online      |             |             |             |             |             | Springfield |             |             |             |             |             | Toowoomba   |             |             |             |             |             |    |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----|
| Course                            | T<br>R<br>1 | T<br>R<br>2 | T<br>R<br>3 | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 | T<br>R<br>1 | T<br>R<br>2 | T<br>R<br>3 | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 | T<br>R<br>1 | T<br>R<br>2 | T<br>R<br>3 | Y<br>L<br>1 | Y<br>L<br>2 | Y<br>L<br>3 |    |
| (Course ENP3103 AND Program BENH) |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             | ON          | XT |

## Engineering Majors (14 Units)

Select one of the following 14 unit majors

### Agricultural Engineering

#### Core (14 Units)

|                                                                                                                                                                                                                                                                                             | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                      | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| AGC1201 - Agricultural Engineering Foundation A<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600) OR<br>(Course ENP1002 OR Course ENP1091) OR<br>(Program ADNG AND Area of Study AGCMJR)<br>OR (Program BENH AND Area of Study AGCMJRBENH) |        | OL  |     |             |     |     |           | ON  |     |
| AGC1202 - Agricultural Engineering Foundation B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Area of Study AGCMJR OR Area of Study AGCMJRBENH)<br>**Not Offered**                                                                                                   |        |     |     |             |     |     |           |     |     |
| AGC2301 - Topics in Agriculture Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course AGC1201                                                                                                                                                 |        |     | OL  |             |     |     |           |     | ON  |
| AGC2302 - Topics in Agriculture Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course AGC1201                                                                                                                                         | OL     |     |     |             |     |     | ON        |     |     |
| AGC2303 - Agriculture Engineering Intermediate Topics<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC1202 OR Course AGR2202)                                                                                                                                    |        | OL  |     |             |     |     |           | ON  |     |

| Course                                                                                                                                                                                                                                                                                                                                                                                                          | Online |     |     | Springfield |     |     | Toowoomba |          |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|----------|----------|
|                                                                                                                                                                                                                                                                                                                                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2      | TR3      |
| AGC2311 - Agriculture Engineering Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course AGC2301  <br>Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                                                                                                                               |        |     |     |             |     |     | ON / EXT  |          |          |
| AGC2312 - Agriculture Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course AGC2302  <br>Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                                                                                                                       |        |     |     |             |     |     |           | EXT / ON |          |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR Course BME2311 OR Course BME2312 OR Course CVL2311 OR Course CVL2312 OR Course EEE2311 OR Course EEE2312 OR Course ICA2311 OR Course ICA2312 OR Course MCH2311 OR Course MCH2312 OR Course MNG2311 OR Course MNG2312 OR Course MTR2311 OR Course MTR2312) |        |     |     | ON          |     | ON  | ON / EXT  |          | EXT / ON |
| AGC3301 - Agricultural Engineering Advanced A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course AGC2302 AND Course AGC2301)                                                                                                                                                                                                                                                           | OL     |     |     |             |     |     | ON        |          |          |
| AGC3302 - Agricultural Engineering Advanced B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course MTR2303 OR Course AGC2302 OR (Course AGC1202 OR Course AGR2202)                                                                                                                                                                                                                        |        | OL  |     |             |     |     |           | ON       |          |
| AGC3314 - Agriculture Engineering Sustainable Systems Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course AGC3301 AND (Course ENP3102 OR Course ENG3003)  <br>Course Pre-requisites: Course ENP2313                                                                                                                                                          |        |     |     |             |     |     |           | EXT / ON |          |
| AGC3315 - Professional Agriculture Engineer Innovation Project<br>1.00 Unit(s)                                                                                                                                                                                                                                                                                                                                  |        |     |     |             |     |     |           |          | ON / EXT |

| Course                                                                                                                                                                                                                 | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                        | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course AGC3302  <br>Course Pre-requisites: (Course ENP2313 AND<br>Course AGC3302)                                                                 |        |     |     |             |     |     |           |     |     |
| AGC4301 - Professional Agriculture<br>Engineering Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                  |        |     |     |             |     |     |           |     |     |
| ENP4313 - Engineering Professional Team<br>Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR<br>Course EEE4301 OR Course MCH4301 OR<br>Course MTR4301) |        |     | OL  |             |     | ON  |           |     | ON  |

## Agricultural Engineering Recommended Selectives

The following courses are recommended selective units for students completing the Agricultural Engineering major. Students have the flexibility to complete any courses from this list or to select a package of courses organised by theme if they wish to develop depth in a particular area. Students who complete at least four (4) courses from this list whether across different themes or within one theme will satisfy a pre-approved elective package and will not require Program Director approval for their elective choices. The themes are:

### Agricultural Engineering depth electives

Students who are interested in further Agricultural Engineering courses can choose courses from this list

| Course                                                                                                                                                                                                                           | Online |     |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                  | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| AGR4305 - Agricultural Soil Mechanics<br>1.00 Unit(s)<br>No requisites                                                                                                                                                           | OL     |     |     | ON        |     |     |
| ENV4106 - Irrigation Science<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course AGR3304 OR Course AGC3301 OR<br>Course CVL3301) OR (Program MEPR OR<br>Program MENS OR Program GDNS OR<br>Program GCNS) |        | OL  |     |           | ON  |     |
| ENV4107 - Water Resources Engineering<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course AGC3301 OR Course CVL3301) OR<br>(Course ENV3104 OR Course ENV3105) OR                                         |        | OL  |     |           | ON  |     |

|                                                                                                                                                                                                                                                     | Online |     |     | Toowoomba |     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                              | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| (Program MEPR OR Program MENS OR Program GDNS OR Program GCNS)                                                                                                                                                                                      |        |     |     |           |     |     |
| ENV5104 - Advanced Hydraulic Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                               |        | OL  |     |           | ON  |     |
| AGR6305 - Applications of Advanced Technology in Agriculture<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course AGR3305 OR Program MENS OR Program GDNS OR Program GCNS OR Program MSCN OR Course AGC3302 OR Program MEPR) |        |     | OL  |           |     | ON  |

## Engineering Management electives

Students who are interested in Management can choose courses from this list

|                                                                                                                                   | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-----------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                            | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG6104 - Asset Management in an Engineering Environment<br>1.00 Unit(s)<br>No requisites                                         |        | OL  |     |             |     |     |           | ON  |     |
| ENG6205 - Project Management Practice<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                         |        |     |     |             |     |     |           |     |     |
| ENG6207 - Innovation Management and New Product Development<br>1.00 Unit(s)<br>No requisites                                      |        |     | OL  |             |     |     |           |     | ON  |
| ENG6208 - Advanced Engineering Project Management<br>1.00 Unit(s)<br>No requisites                                                | OL     |     |     |             |     |     | ON        |     |     |
| MGT2009 - Emerging Leaders<br>1.00 Unit(s)<br>Requisites Prior to 2024: Anti-requisite:<br>MGT2007 Leadership                     |        | OL  |     |             |     |     |           |     |     |
| MGT2302 - Thinking Like a Leader<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not permitted in MGT2302 if MGT3201 and |        |     | OL  |             |     |     |           |     |     |

| Course                                                                                                                                                                                                                 | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                        | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MGT3004 have been previously completed                                                                                                                                                                                 |        |     |     |             |     |     |           |     |     |
| ACC1202 - Accounting Systems and Processes<br>1.00 Unit(s)<br>Requisites Prior to 2024: Enrolment is not permitted in ACC1202 if ACC1105 has been previously completed                                                 | OL     | OL  | OL  | ON          |     |     |           |     | ON  |
| ACC2201 - Financial Reporting and Analysis A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ACC2102  <br>Course Pre-requisites: (Course ACC1202 OR Course ACC1105) | OL     | OL  |     |             | ON  |     | ON        |     |     |

### Agricultural Engineering breadth electives

Students who are interested in courses relevant to Agricultural Engineering can choose courses from this list

| Course                                                                                                                                                                                                                                                            | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                   | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MAT2100 - Algebra and Calculus II<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ENM2600  <br>Course Pre-requisites: (Course MAT1102 OR Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: MAT1502 |        |     | OL  |             |     |     |           |     |     |
| ENG5105 - Advanced Numerical Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                           |        | OL  | OL  |             |     |     |           | ON  | ON  |
| AGR1104 - Farm Safety and Operations 1<br>0.50 Unit(s)<br>No requisites                                                                                                                                                                                           |        |     |     |             |     |     | ON / EXT  |     |     |
| AGR2104 - Farm Safety and Operations 2<br>0.50 Unit(s)<br>No requisites                                                                                                                                                                                           |        |     |     |             |     |     | EXT       |     |     |
| AGR2008 - Business Principles for Agriculture<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                    |        | OL  |     |             |     |     |           | ON  |     |
| AGR2201 - Animal Production Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                              |        |     |     |             |     |     | EXT / ON  |     |     |

| Course                                                                                                                                                                                                                 | Online |     |     | Springfield |     |     | Toowoomba |          |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|----------|-----|
|                                                                                                                                                                                                                        | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2      | TR3 |
| AGR2202 - Instrumentation and Automation in Agriculture<br>1.00 Unit(s)<br>No requisites                                                                                                                               |        |     |     |             |     |     |           | EXT / ON |     |
| AGR2203 - Animal Nutrition<br>1.00 Unit(s)<br>No requisites                                                                                                                                                            |        |     |     |             |     |     |           | EXT / ON |     |
| AGR2303 - Agronomy<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                    |        |     |     |             |     |     |           | EXT / ON |     |
| AGR3105 - Smart Data Farming<br>1.00 Unit(s)<br>Assumed Knowledge   Course Pre-requisites:<br>Assumed Knowledge: (Course STA1003 AND Course CSC1401 AND Course GIS1402)  <br>Course Pre-requisites: Course AGR3305     |        | OL  |     |             |     |     |           | ON       |     |
| AGR3302 - Sensors and Technology in Animal Production<br>1.00 Unit(s)<br>No requisites                                                                                                                                 |        |     |     |             |     |     |           | EXT / ON |     |
| AGR3304 - Soil Science<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                | OL     |     |     |             |     |     | ON        |          |     |
| GIS1402 - Geographic Information Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                              | OL     |     | OL  | ON          |     |     |           |          |     |
| SVY2104 - Applied Surveying and Computations<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course SVY1104  <br>Course Pre-requisites: (Course SVY1102 OR Course SVY1500) |        | OL  |     |             | ON  |     |           |          |     |
| MCH2302 - Topics in Mechanical Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course MCH1201 OR Course AGC1201 OR Course MTR1202)                               | OL     | OL  | OL  |             |     |     |           | ON       | ON  |
| MEC5100 - Computational Fluid Dynamics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC3107 OR Course MEC4108 OR Course MEC5107 OR Course ENV3104 OR                                    | OL     |     |     |             |     |     |           |          |     |

|                                                                                                                                                                                                                                                            | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                     | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| Course ENV5104 OR Course MCH3302 OR Course CVL3301 OR Course AGC3301) OR (Program MENS OR Program MEPR)                                                                                                                                                    |        |     |     |             |     |     |           |     |     |
| STA1003 - Fundamental Statistics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite: Course STA1004   Requisites Prior to 2024: Enrolment is also not permitted in STA1003 if STA2300 has been previously completed.                          | OL     | OL  | OL  |             | ON  | ON  | ON        | ON  |     |
| STA2100 - Evaluating Information<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                          |        | OL  |     |             |     |     |           |     |     |
| STA2190 - Experimental Design and Analysis<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites: Course Anti-requisite: Course STA3300   Course Pre-requisites: (Course STA1003 OR Course STA1004)                                             |        | OL  |     |             |     |     |           | ON  |     |
| STA2301 - Distribution Theory<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: Course STA1003 OR (Course MAT1102 OR Course ENM1600)   Requisites Prior to 2024: Pre-requisite: (STA2300 or STA1003 or equivalent) and (MAT1102 or ENM1600) |        | OL  |     |             |     |     |           |     |     |
| STA3200 - Multivariate Statistical Methods<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites: Course Anti-requisite: Course STA6100   Course Pre-requisites: (Course STA1003 OR Course STA1004)                                             |        | OL  |     |             |     |     |           |     |     |
| STA3301 - Statistical Models<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: (Course STA1003 OR Course STA1004)   Requisites Prior to 2024: Students that have completed STA2300 meet the pre-requisite requirement.                      |        |     | OL  |             |     |     |           |     |     |

## Biomedical Engineering

### Core (14 Units)

| Course                                                                                                                                                                                                                                                            | Ipswich |     | Online |     | Springfield |     | Toowoomba   |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|--------|-----|-------------|-----|-------------|-------------|
|                                                                                                                                                                                                                                                                   | TR1     | TR3 | TR1    | TR3 | TR1         | TR3 | TR1         | TR3         |
| NSC1501 - Bioscience<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course BIO1203                                                                                                                                                           | ON      | ON  |        |     |             |     | EXT /<br>ON | EXT /<br>ON |
| BME1202 - Biomedical Engineering<br>Foundation B<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600)                                                                                                               |         |     |        | OL  |             |     |             |             |
| BME2301 - Topics in Biomedical Engineering<br>Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600)                                                                                                 |         |     |        | OL  |             |     |             |             |
| BME2311 - Biomedical Engineering Subsystem<br>Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course BME2301  <br>Course Pre-requisites: (Course ENP1111 AND<br>Course ENP1112)<br>**Not Offered**                |         |     |        |     |             |     |             |             |
| BME2302 - Topics in Biomedical Engineering<br>Operations & Maintenance<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course ENM1500 OR Course ENM1600)<br>**Not Offered**                                                                  |         |     |        |     |             |     |             |             |
| BME2312 - Biomedical Engineering Operations<br>& Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course BME2302  <br>Course Pre-requisites: (Course ENP1111 AND<br>Course ENP1112)<br>**Not Offered** |         |     |        |     |             |     |             |             |
| BME2303 - Biomedical Engineering<br>Intermediate Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                       |         |     |        |     |             |     |             |             |
| ENP2313 - Engineering Associate Capstone                                                                                                                                                                                                                          |         |     |        |     | ON          | ON  | ON /        | EXT /       |

|                                                                                                                                                                                                                                                                                                                                                                                             | Ipswich |     | Online |     | Springfield |     | Toowoomba |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|--------|-----|-------------|-----|-----------|-----|
| Course                                                                                                                                                                                                                                                                                                                                                                                      | TR1     | TR3 | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR<br>Course BME2311 OR Course BME2312 OR<br>Course CVL2311 OR Course CVL2312 OR<br>Course EEE2311 OR Course EEE2312 OR<br>Course ICA2311 OR Course ICA2312 OR<br>Course MCH2311 OR Course MCH2312 OR<br>Course MNG2311 OR Course MNG2312 OR<br>Course MTR2311 OR Course MTR2312) |         |     |        |     |             |     | EXT       | ON  |
| BME3301 - Biomedical Engineering Advanced<br>A<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                          |         |     |        |     |             |     |           |     |
| BME3302 - Biomedical Engineering Advanced<br>B<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                          |         |     |        |     |             |     |           |     |
| BME3314 - Biomedical Engineering<br>Sustainable Systems Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENP3102 AND<br>Course BME3301)   Course Pre-requisites:<br>Course ENP2313<br>**Not Offered**                                                                                                                                |         |     |        |     |             |     |           |     |
| BME3315 - Professional Biomedical Engineer<br>Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course BME3302  <br>Course Pre-requisites: Course ENP2313<br>**Not Offered**                                                                                                                                                       |         |     |        |     |             |     |           |     |
| BME4301 - Professional Biomedical<br>Engineering Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                        |         |     |        |     |             |     |           |     |
| ENP4313 - Engineering Professional Team<br>Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR<br>Course EEE4301 OR Course MCH4301 OR                                                                                                                                                                                         |         |     |        | OL  |             | ON  |           | ON  |

|                 | Ipswich |     | Online |     | Springfield |     | Toowoomba |     |
|-----------------|---------|-----|--------|-----|-------------|-----|-----------|-----|
| Course          | TR1     | TR3 | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| Course MTR4301) |         |     |        |     |             |     |           |     |

## Biomedical Engineering Recommended electives

The following courses are recommended selective units for students completing the Biomedical Engineering major. Students have the flexibility to complete any courses from this list or to select a package of courses organised by theme if they wish to develop depth in a particular area. Students who complete at least four (4) courses from this list whether across different themes or within one theme will satisfy a pre-approved elective package and will not require Program Director approval for their elective choices. The themes are:

## Engineering Management electives

Students who are interested in Management can choose courses from this list

|                                                                                                                                                                          | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                   | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG6104 - Asset Management in an Engineering Environment<br>1.00 Unit(s)<br>No requisites                                                                                |        | OL  |     |             |     |     |           | ON  |     |
| ENG6205 - Project Management Practice<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                |        |     |     |             |     |     |           |     |     |
| ENG6207 - Innovation Management and New Product Development<br>1.00 Unit(s)<br>No requisites                                                                             |        |     | OL  |             |     |     |           |     | ON  |
| ENG6208 - Advanced Engineering Project Management<br>1.00 Unit(s)<br>No requisites                                                                                       | OL     |     |     |             |     |     | ON        |     |     |
| MGT2009 - Emerging Leaders<br>1.00 Unit(s)<br>Requisites Prior to 2024: Anti-requisite:<br>MGT2007 Leadership                                                            |        | OL  |     |             |     |     |           |     |     |
| MGT2302 - Thinking Like a Leader<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not permitted in MGT2302 if MGT3201 and MGT3004 have been previously completed |        |     | OL  |             |     |     |           |     |     |
| ACC1202 - Accounting Systems and Processes<br>1.00 Unit(s)<br>Requisites Prior to 2024: Enrolment is not                                                                 | OL     | OL  | OL  | ON          |     |     |           |     | ON  |

| Course                                                                                                                                                                                                                    | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                           | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| permitted in ACC1202 if ACC1105 has been previously completed                                                                                                                                                             |        |     |     |             |     |     |           |     |     |
| ACC2201 - Financial Reporting and Analysis A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ACC2102  <br>Course Pre-requisites: (Course ACC1202 OR<br>Course ACC1105) | OL     | OL  |     |             | ON  |     | ON        |     |     |

## Applications in Human Tissue Engineering

Students can complete any of the courses in this set but need to complete all 4 to study BIO3103

| Course                                                                                                                                                       | Toowoomba |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|
|                                                                                                                                                              | TR1       | TR2      |
| CHE1110 - Chemistry 1<br>1.00 Unit(s)<br>No requisites                                                                                                       | ON / EXT  |          |
| CHE2120 - Chemistry 2<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course CHE1110                                                     |           | ON / EXT |
| BIO2107 - Cell and Molecular Biology 1<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course CHE2120                                    | EXT / ON  |          |
| BIO3103 - Applications in Human Tissue<br>Engineering<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course BIO2107 OR Course BIO2104) |           | EXT      |

## UQ Doctor of Medicine (co-taught by UniSQ): pre-requisite entry requirements

Students can complete any of the courses in this set. Completion of all the courses satisfies the pre-requisite entry requirements for the UQ Doctor of Medicine which is co-taught by UniSQ:

<https://medicine.uq.edu.au/files/65310/MD-Prerequisite-Tables-Domestic.pdf>

| Course                                                                                      | Ipswich |     |     | Toowoomba |     |          |
|---------------------------------------------------------------------------------------------|---------|-----|-----|-----------|-----|----------|
|                                                                                             | TR1     | TR2 | TR3 | TR1       | TR2 | TR3      |
| BIO1108 - Foundations in Human Anatomy and<br>Physiology A<br>1.00 Unit(s)<br>No requisites | ON      |     |     | EXT / ON  |     | EXT / ON |

| Course                                                                                                                                                                                                                                                  | Ipswich |     |     | Toowoomba |          |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|-----------|----------|----------|
|                                                                                                                                                                                                                                                         | TR1     | TR2 | TR3 | TR1       | TR2      | TR3      |
| BIO1208 - Foundations in Human Anatomy and Physiology B<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course BIO1206                                                                                                              |         | ON  |     |           | EXT / ON | ON / EXT |
| CHE1110 - Chemistry 1<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                  |         |     |     | ON / EXT  |          |          |
| CHE2120 - Chemistry 2<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course CHE1110                                                                                                                                                |         |     |     |           | ON / EXT |          |
| BIO2118 - Systems Physiology and Pharmacology<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course BIO1108 AND Course BIO1208)  <br>Transition Arrangements: BIO1203 & BIO1206  <br>Transition pre-requisites: BIO1203 & BIO1206 |         |     |     | EXT / ON  |          |          |
| BIO2107 - Cell and Molecular Biology 1<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course CHE2120                                                                                                                               |         |     |     | EXT / ON  |          |          |
| BIO3207 - Cell and Molecular Biology 2<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course BIO2107                                                                                                                               |         |     |     |           | EXT / ON |          |

## Biomedical Engineering breadth electives

Students who are interested in courses relevant to Biomedical Engineering can choose courses from this list

| Course                                                                                                                                                                                                                                                               | Ipswich |     |     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                      | TR1     | TR2 | TR3 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MAT2100 - Algebra and Calculus II<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ENM2600  <br>Course Pre-requisites: (Course MAT1102 OR<br>Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: MAT1502 |         |     |     |        |     | OL  |             |     |     |           |     |     |

|                                                                                                                                                                                                                                                                                                              | Ipswich     |     |     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----|-----|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                       | TR1         | TR2 | TR3 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG5105 - Advanced Numerical Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                      |             |     |     |        | OL  | OL  |             |     |     |           | ON  | ON  |
| SES2103 - Functional Anatomy<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SES1002 AND (Course BIO1203 AND<br>Course BIO1206) AND (Course BIO1108 AND<br>Course BIO1208)                                                                                                        | ON /<br>EXT |     |     |        |     |     |             |     |     |           |     |     |
| EEE2302 - Topics in Electrical & Electronic<br>Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course EEE1201 AND Course EEE1202) AND<br>(Course MTR2301 AND Course MTR2302)<br>AND (Course CSE1201 AND Course<br>CSE1202)                         |             |     |     | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE2303 - Electrical & Electronic Engineering<br>Intermediate Topics<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course EEE1201 AND Course EEE1202) AND<br>(Course ICA1201 AND Course ICA1202) AND<br>(Course MTR2301 AND Course MTR2302)<br>AND (Course CSE1201 AND Course<br>CSE1202) |             |     |     | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE3301 - Electrical & Electronic Engineering<br>Advanced A<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                 |             |     |     | OL     | OL  |     | ON          |     |     |           |     |     |
| EEE3302 - Electrical & Electronic Engineering<br>Advanced B<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                 |             |     |     | OL     | OL  |     |             |     |     |           |     |     |
| MCH3301 - Mechanical Engineering Advanced<br>A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MCH2302 OR Course MEC2402)                                                                                                                                                        |             |     |     | OL     | OL  |     | ON          |     |     | ON        |     |     |
| MCH3302 - Mechanical Engineering Advanced<br>B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MCH2303 OR Course MEC2106)                                                                                                                                                        |             |     |     | OL     | OL  |     | ON          |     |     | ON        |     |     |
| MCH4301 - Professional Mechanical                                                                                                                                                                                                                                                                            |             |     |     |        |     |     |             |     |     |           |     |     |

|                                                                                                                                                                                                                                                                       | Ipswich |     |     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                | TR1     | TR2 | TR3 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| Engineering Advanced Topics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course MCH3301<br>**Not Offered**                                                                                                                                     |         |     |     |        |     |     |             |     |     |           |     |     |
| MEC4302 - Computational Mechanics in Design<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC2401 AND Course MEC2402)<br>AND (Program GCNS OR Program GDNS OR<br>Program MENS OR Program MEPR) AND<br>Course MCH2302 AND Course BME3302 |         |     |     | OL     |     |     |             |     |     | ON        |     |     |
| MTR2303 - Mechatronic & Robotic Engineering Intermediate Topics<br>1.00 Unit(s)<br>Assumed Knowledge   Course Pre-requisites:<br>Assumed Knowledge: (Course MTR2302 OR<br>Course EEE1202)   Course Pre-requisites:<br>(Course MTR1201 OR Course MCH1202)              |         |     |     | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| MTR3301 - Mechatronic & Robotic Engineering Advanced A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR2303 OR Course EEE2303 OR<br>Course ICA2303)                                                                                    |         |     |     | OL     | OL  |     |             |     |     | ON        |     |     |
| MTR3302 - Mechatronic & Robotic Engineering Advanced B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR2303 OR Course EEE2303 OR<br>Course ICA2303)                                                                                    |         |     |     | OL     | OL  |     |             |     |     |           |     |     |
| MTR4301 - Professional Mechatronic & Robotic Engineering Advanced Topics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR3301 AND Course MTR3302)                                                                                      |         |     |     |        |     | OL  |             |     |     |           |     |     |
| STA1003 - Fundamental Statistics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course STA1004   Requisites Prior to 2024:<br>Enrolment is also not permitted in STA1003 if<br>STA2300 has been previously completed.                            |         |     |     | OL     | OL  | OL  |             | ON  | ON  | ON        | ON  |     |
| STA2100 - Evaluating Information<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                     |         |     |     |        | OL  |     |             |     |     |           |     |     |

|                                                                                                                                                                                                                                                                        | Ipswich |     |     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                 | TR1     | TR2 | TR3 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| STA2190 - Experimental Design and Analysis<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA3300  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                                                |         |     |     |        | OL  |     |             |     |     |           | ON  |     |
| STA2301 - Distribution Theory<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course STA1003 OR (Course MAT1102 OR<br>Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: (STA2300 or STA1003 or<br>equivalent) and (MAT1102 or ENM1600) |         |     |     |        | OL  |     |             |     |     |           |     |     |
| STA3200 - Multivariate Statistical Methods<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA6100  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                                                |         |     |     |        | OL  |     |             |     |     |           |     |     |
| STA3301 - Statistical Models<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course STA1003 OR Course STA1004)  <br>Requisites Prior to 2024: Students that have<br>completed STA2300 meet the pre-requisite<br>requirement.                      |         |     |     |        |     | OL  |             |     |     |           |     |     |

## Civil Engineering

### Core (14 Units)

|                                                                                                                                                                                                                                                                                                                                                                                                                                              | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                                                                                                                                                       | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| CVL1201 - Civil Engineering Foundation A<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)   Course Pre-requisites:<br>(Program ADNG AND Area of Study CVLMJR)<br>AND (Program BENS AND Area of Study<br>CVLMJRBENS) AND (Program BENH AND<br>Area of Study CVLMJRBENH) AND (Program<br>BSED AND Area of Study MAJENGSEED)<br>AND (Program BCNH OR Program BSED) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| CVL1202 - Civil Engineering Foundation B<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:                                                                                                                                                                                                                                                                                                                                        | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                                                                                                                                                                 | Online |     |     | Springfield |          |     | Toowoomba |     |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|----------|-----|-----------|-----|----------|
| Course                                                                                                                                                                                                                                                                                                                                                                                                          | TR1    | TR2 | TR3 | TR1         | TR2      | TR3 | TR1       | TR2 | TR3      |
| (Course ENM1500 OR Course ENM1600 OR Course ENP1001)                                                                                                                                                                                                                                                                                                                                                            |        |     |     |             | ON       |     |           | ON  | ON       |
| CVL2301 - Topics in Civil Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course CVL1201                                                                                                                                                                                                                                                                           | OL     | OL  | OL  |             | ON       |     |           | ON  | ON       |
| CVL2302 - Topics in Civil Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course CVL1201                                                                                                                                                                                                                                                                   | OL     | OL  | OL  |             | ON       |     |           | ON  | ON       |
| CVL2303 - Civil Engineering Intermediate Topics<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course CVL1201                                                                                                                                                                                                                                                                                  | OL     | OL  | OL  |             | ON       |     |           | ON  | ON       |
| CVL2311 - Civil Engineering Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course CVL2301   Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                                                                                                                                        |        |     |     | ON          |          |     | EXT       |     | EXT      |
| CVL2312 - Civil Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course CVL2302   Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                                                                                                                                |        |     |     |             | EXT / ON |     | ON / EXT  |     |          |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR Course BME2311 OR Course BME2312 OR Course CVL2311 OR Course CVL2312 OR Course EEE2311 OR Course EEE2312 OR Course ICA2311 OR Course ICA2312 OR Course MCH2311 OR Course MCH2312 OR Course MNG2311 OR Course MNG2312 OR Course MTR2311 OR Course MTR2312) |        |     |     | ON          |          | ON  | ON / EXT  |     | EXT / ON |
| CVL3301 - Civil Engineering Advanced A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:                                                                                                                                                                                                                                                                                                         | OL     | OL  |     | ON          |          |     | ON        |     |          |

| Course                                                                                                                                                                                                                             | Online |     |     | Springfield |     |     | Toowoomba |     |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|----------|
|                                                                                                                                                                                                                                    | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3      |
| (Course CVL2301 AND Course CVL2302 AND Course CVL2303)                                                                                                                                                                             |        |     |     | ON          |     |     | ON        |     |          |
| CVL3302 - Civil Engineering Advanced B<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: (Course CIV4505 AND Course CIV4506)   Course Co-requisite:<br>(Course CVL2301 AND Course CVL2303) | OL     | OL  |     | ON          |     |     | ON        |     |          |
| CVL3303 - Civil Engineering Advanced C<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course CVL2301 AND Course CVL2303)                                                                                         | OL     | OL  |     | ON          |     |     | ON        | ON  |          |
| CVL3315 - Professional Civil Engineer<br>Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course CVL3301 AND Course CVL3302 AND Course CVL3303)                                                 |        |     |     |             |     | ON  |           |     | EXT / ON |
| CVL4301 - Professional Civil Engineering<br>Advanced Topics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CVL3301 AND Course CVL3302 AND Course CVL3303)<br>**Not Offered**                          |        |     |     |             |     |     |           |     |          |
| ENP4313 - Engineering Professional Team<br>Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR Course EEE4301 OR Course MCH4301 OR Course MTR4301)                   |        |     | OL  |             |     | ON  |           |     | ON       |

## Civil Engineering Recommended Selectives

The following courses are recommended selective units for students completing the Civil Engineering major. Students have the flexibility to complete any courses from this list or to select a package of courses organised by theme if they wish to develop depth in a particular area. Students who complete at least four (4) courses from this list whether across different themes or within one theme will satisfy a pre-approved elective package and will not require Program Director approval for their elective choices. The themes are:

### Civil Engineering depth electives

Students who are interested in further Civil Engineering courses can choose courses from this list

|                                                                                                                                                                                                                                                                                                         | Online |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                  | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| CIV5802 - Advanced Prestressed Concrete<br>1.00 Unit(s)<br>Course Pre-requisites   Curriculum Item<br>Equivalent: Course Pre-requisites: (Course<br>CIV4506 OR Course CVL3302)   Curriculum<br>Item Equivalent: Course CIV6802<br>**Not Offered**                                                       |        |     |     |           |     |     |
| CIV5803 - Mechanics and Technology of Fibre<br>Composites<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CIV4506 OR Course MEC2402 OR<br>Course MEC3203 OR Program MENS OR<br>Program MEPR OR Program GDNS OR<br>Program GCNS OR Course CVL3302)                           | OL     |     |     |           |     |     |
| CIV6801 - Advanced Structural Design<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CIV4508 OR Course CVL4301)                                                                                                                                                             |        |     | OL  |           |     |     |
| ENV4106 - Irrigation Science<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course AGR3304 OR Course AGC3301 OR<br>Course CVL3301) OR (Program MEPR OR<br>Program MENS OR Program GDNS OR<br>Program GCNS)                                                                        |        | OL  |     |           | ON  |     |
| ENV4107 - Water Resources Engineering<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course AGC3301 OR Course CVL3301) OR<br>(Course ENV3104 OR Course ENV3105) OR<br>(Program MEPR OR Program MENS OR<br>Program GDNS OR Program GCNS)                                           |        | OL  |     |           | ON  |     |
| ENV5104 - Advanced Hydraulic Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                   |        | OL  |     |           | ON  |     |
| MEC5100 - Computational Fluid Dynamics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC3107 OR Course MEC4108 OR<br>Course MEC5107 OR Course ENV3104 OR<br>Course ENV5104 OR Course MCH3302 OR<br>Course CVL3301 OR Course AGC3301) OR<br>(Program MENS OR Program MEPR) | OL     |     |     |           |     |     |
| PWI5703 - Advanced Road and Pavement<br>Engineering                                                                                                                                                                                                                                                     |        |     | OL  |           |     |     |

|                                                                                                                                                                             | Online |     |     | Toowoomba |     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                      | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| 1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CIV3703 OR Course CVL3303) OR<br>(Program GCNS OR Program GDNS OR<br>Program MENS OR Program MEPR) |        |     |     |           |     |     |

## Engineering Management electives

Students who are interested in Management can choose courses from this list

|                                                                                                                                                                        | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG6104 - Asset Management in an Engineering Environment<br>1.00 Unit(s)<br>No requisites                                                                              |        | OL  |     |             |     |     |           | ON  |     |
| ENG6205 - Project Management Practice<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                              |        |     |     |             |     |     |           |     |     |
| ENG6207 - Innovation Management and New Product Development<br>1.00 Unit(s)<br>No requisites                                                                           |        |     | OL  |             |     |     |           |     | ON  |
| ENG6208 - Advanced Engineering Project Management<br>1.00 Unit(s)<br>No requisites                                                                                     | OL     |     |     |             |     |     | ON        |     |     |
| CMG2002 - Cost Management: Estimating, Measurement and Cost Control<br>1.00 Unit(s)<br>No requisites                                                                   | OL     |     |     |             |     |     |           |     |     |
| CMG3001 - Building and Construction Procurement<br>1.00 Unit(s)<br>No requisites                                                                                       |        | OL  |     |             |     |     |           |     |     |
| CMG3003 - Building Services: Methods, Materials and Management<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CMG1001 AND Course CMG1002) |        |     | OL  |             |     |     |           |     |     |
| CMG4002 - Integrated Construction Management<br>1.00 Unit(s)                                                                                                           |        | OL  |     |             |     |     |           |     |     |

| Course                                                                                                                                                                                                                    | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                           | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| Course Pre-requisites: Course Pre-requisites:<br>(Course CMG2002 OR Course CMG3003)                                                                                                                                       |        |     |     |             |     |     |           |     |     |
| CMG4003 - Commercial Construction<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CMG1002 OR Course CMG2001 OR<br>Course CMG2002 OR Course CMG3001)                                           | OL     |     |     |             |     |     |           |     |     |
| MGT2009 - Emerging Leaders<br>1.00 Unit(s)<br>Requisites Prior to 2024: Anti-requisite:<br>MGT2007 Leadership                                                                                                             |        | OL  |     |             |     |     |           |     |     |
| MGT2302 - Thinking Like a Leader<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not<br>permitted in MGT2302 if MGT3201 and<br>MGT3004 have been previously completed                                            |        |     | OL  |             |     |     |           |     |     |
| ACC1202 - Accounting Systems and Processes<br>1.00 Unit(s)<br>Requisites Prior to 2024: Enrolment is not<br>permitted in ACC1202 if ACC1105 has been<br>previously completed                                              | OL     | OL  | OL  | ON          |     |     |           |     | ON  |
| ACC2201 - Financial Reporting and Analysis A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ACC2102  <br>Course Pre-requisites: (Course ACC1202 OR<br>Course ACC1105) | OL     | OL  |     |             | ON  |     | ON        |     |     |

## Civil Engineering breadth electives

Students who are interested in courses relevant to Civil Engineering can choose courses from this list

| Course                                                                                                                                                                                                                                                               | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                      | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MAT2100 - Algebra and Calculus II<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ENM2600  <br>Course Pre-requisites: (Course MAT1102 OR<br>Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: MAT1502 |        |     | OL  |             |     |     |           |     |     |
| ENG5105 - Advanced Numerical Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                              |        | OL  | OL  |             |     |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                  | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                           | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| AGR4305 - Agricultural Soil Mechanics<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                           | OL     |     |     |             |     |     | ON        |     |     |
| CSC1401 - Foundation Programming<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                | OL     |     | OL  | ON          |     | ON  | ON        |     | ON  |
| MEC6203 - Advanced Materials Technology<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not permitted in MEC6203 if MEC3203 has been previously completed                                                                                               |        | OL  |     |             |     |     |           | ON  |     |
| SVY1110 - Introduction to Global Navigation Satellite Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                   |        |     | OL  |             |     | ON  |           |     |     |
| SVY2104 - Applied Surveying and Computations<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course SVY1104  <br>Course Pre-requisites: (Course SVY1102 OR Course SVY1500)                                           |        | OL  |     |             | ON  |     |           |     |     |
| STA1003 - Fundamental Statistics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course STA1004   Requisites Prior to 2024:<br>Enrolment is also not permitted in STA1003 if STA2300 has been previously completed.                          | OL     | OL  | OL  |             | ON  | ON  | ON        | ON  |     |
| STA2100 - Evaluating Information<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                |        | OL  |     |             |     |     |           |     |     |
| STA2190 - Experimental Design and Analysis<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA3300  <br>Course Pre-requisites: (Course STA1003 OR Course STA1004)                                             |        | OL  |     |             |     |     |           | ON  |     |
| STA2301 - Distribution Theory<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course STA1003 OR (Course MAT1102 OR Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: (STA2300 or STA1003 or equivalent) and (MAT1102 or ENM1600) |        | OL  |     |             |     |     |           |     |     |

|                                                                                                                                                                                                                                                   | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                            | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| STA3200 - Multivariate Statistical Methods<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA6100  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                           |        | OL  |     |             |     |     |           |     |     |
| STA3301 - Statistical Models<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course STA1003 OR Course STA1004)  <br>Requisites Prior to 2024: Students that have<br>completed STA2300 meet the pre-requisite<br>requirement. |        |     | OL  |             |     |     |           |     |     |

## Computer Systems Engineering

### Core (14 Units)

|                                                                                                                                                                                                                                                                                                                                              | Online |     | Springfield |     | Toowoomba |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|-----|
| Course                                                                                                                                                                                                                                                                                                                                       | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| CSE1201 - Computer Engineering Foundation<br>A<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENM1600 OR Course ENM1500)<br>**Not Offered**                                                                                                                                                                         |        |     |             |     |           |     |
| CSE1202 - Computer Engineering Foundation<br>B<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600)  <br>Transition Arrangements: Students are not<br>permitted to enrol in CSE1202 if they have<br>completed EEE1202 or ICA1202. Seek<br>coordinator advice for enrolment.<br>**Not Offered** |        |     |             |     |           |     |
| CSE2301 - Topics in Engineering Subsystem<br>Design<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                      |        |     |             |     |           |     |
| CSE2302 - Topics in Engineering Operations &<br>Maintenance<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                              |        |     |             |     |           |     |

| Course                                                                                                                                                                                                                                                                                                                                                                                                          | Online |     | Springfield |     | Toowoomba |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|----------|
|                                                                                                                                                                                                                                                                                                                                                                                                                 | TR1    | TR3 | TR1         | TR3 | TR1       | TR3      |
| CSE2303 - Computer Intermediate Engineering Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                          |        |     |             |     |           |          |
| CSE2311 - Engineering Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course CSE2301  <br>Course Pre-requisites: (Course ENP1111 AND Course ENP1112)<br>**Not Offered**                                                                                                                                                                        |        |     |             |     |           |          |
| CSE2312 - Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course CSE2302  <br>Course Pre-requisites: (Course ENP1111 AND Course ENP1112)<br>**Not Offered**                                                                                                                                                                |        |     |             |     |           |          |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR Course BME2311 OR Course BME2312 OR Course CVL2311 OR Course CVL2312 OR Course EEE2311 OR Course EEE2312 OR Course ICA2311 OR Course ICA2312 OR Course MCH2311 OR Course MCH2312 OR Course MNG2311 OR Course MNG2312 OR Course MTR2311 OR Course MTR2312) |        |     | ON          | ON  | ON / EXT  | EXT / ON |
| CSE3301 - Computer Engineering Advanced A<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                                   |        |     |             |     |           |          |
| CSE3302 - Computer Engineering Advanced B<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                                   |        |     |             |     |           |          |
| CSE3314 - Sustainable Systems Engineering Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course CSE3301 AND Course ENP3102)   Course Pre-requisites:                                                                                                                                                                                                          |        |     |             |     |           |          |

| Course                                                                                                                                                                                                                                       | Online |     | Springfield |     | Toowoomba |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|-----|
|                                                                                                                                                                                                                                              | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| (Course ENP2313 AND Course CSE3301 AND Course ENP3102)<br>**Not Offered**                                                                                                                                                                    |        |     |             |     |           |     |
| CSE3315 - Professional Engineer Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course CSE3302  <br>Course Pre-requisites: (Course ENP2313 AND Course CSE3302)<br>**Not Offered** |        |     |             |     |           |     |
| CSE4301 - Professional Computer Engineering Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                              |        |     |             |     |           |     |
| ENP4313 - Engineering Professional Team Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR Course EEE4301 OR Course MCH4301 OR Course MTR4301)                                |        | OL  |             | ON  |           | ON  |

## Electrical and Electronic Engineering

### Core (14 Units)

| Course                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| EEE1201 - Electrical & Electronic Engineering Foundation A<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENM1500 OR Course ENM1600)   Course Pre-requisites:<br>Program ADNG AND Program BENS AND Program BENH AND Program BSED AND (Area of Study EEEMJR OR Area of Study MCHMJR) AND (Area of Study EEEMJRBENS OR Area of Study MCHMJRBENS) AND (Area of Study EEEMJRBENH OR Area of Study MCHMJRBENH) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE1202 - Electrical & Electronic Engineering Foundation B<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:                                                                                                                                                                                                                                                                                                                                 | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                                                          | Online |     |     | Springfield |          |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|----------|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                   | TR1    | TR2 | TR3 | TR1         | TR2      | TR3 | TR1       | TR2 | TR3 |
| Course Co-requisite: (Course ENM1500 OR Course ENM1600)   Course Pre-requisites: Program ADNG AND Program BENS AND Program BENH AND (Area of Study EEEMJR OR Area of Study MCHMJR) AND (Area of Study EEEMJRBENS OR Area of Study MCHMJRBENS) AND (Area of Study EEEMJRBENH OR Area of Study MCHMJRBENH) |        |     |     |             | ON       |     |           | ON  | ON  |
| EEE2301 - Topics in Electrical & Electronic Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite: (Course EEE1201 AND Course EEE1202) AND (Course MTR2301 AND Course MTR2302) AND (Course CSE1201 AND Course CSE1202)                                                | OL     | OL  | OL  |             | ON       |     |           | ON  | ON  |
| EEE2302 - Topics in Electrical & Electronic Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: (Course EEE1201 AND Course EEE1202) AND (Course MTR2301 AND Course MTR2302) AND (Course CSE1201 AND Course CSE1202)                                    | OL     | OL  | OL  |             | ON       |     |           | ON  | ON  |
| EEE2303 - Electrical & Electronic Engineering Intermediate Topics<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite: (Course EEE1201 AND Course EEE1202) AND (Course ICA1201 AND Course ICA1202) AND (Course MTR2301 AND Course MTR2302) AND (Course CSE1201 AND Course CSE1202)               | OL     | OL  | OL  |             | ON       |     |           | ON  | ON  |
| EEE2311 - Electrical and Electronic Engineering Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites: Course Co-requisite: Course EEE2301   Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                |        |     |     | ON          |          |     | EXT       |     | EXT |
| EEE2312 - Electrical and Electronic Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites: Course Co-requisite: Course EEE2302   Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                        |        |     |     |             | EXT / ON |     | EXT       |     |     |

| Course                                                                                                                                                                                                                                                                                                                                                                                                          | Online |     |     | Springfield |     |     | Toowoomba |          |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|----------|----------|
|                                                                                                                                                                                                                                                                                                                                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2      | TR3      |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR Course BME2311 OR Course BME2312 OR Course CVL2311 OR Course CVL2312 OR Course EEE2311 OR Course EEE2312 OR Course ICA2311 OR Course ICA2312 OR Course MCH2311 OR Course MCH2312 OR Course MNG2311 OR Course MNG2312 OR Course MTR2311 OR Course MTR2312) |        |     |     | ON          |     | ON  | ON / EXT  |          | EXT / ON |
| EEE3301 - Electrical & Electronic Engineering Advanced A<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                                                                       | OL     | OL  |     | ON          |     |     |           |          |          |
| EEE3302 - Electrical & Electronic Engineering Advanced B<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                                                                       | OL     | OL  |     |             |     |     |           |          |          |
| EEE3314 - Electrical and Electronic Engineering Sustainable Systems Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course EEE3301 AND (Course ENP3102 OR Course ENG3003)   Course Pre-requisites: Course ENP2313                                                                                                                                               |        |     |     |             | ON  |     |           | EXT / ON |          |
| EEE3315 - Professional Electrical and Electronic Engineer Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course EEE3302   Course Pre-requisites: (Course EEE3302 OR Course ELE3105 OR Course ELE3107 OR Course ELE3305)                                                                                                                             |        |     |     |             |     | ON  |           |          | EXT / ON |
| EEE4301 - Professional Electrical and Electronic Engineering Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                |        |     |     |             |     |     |           |          |          |
| ENP4313 - Engineering Professional Team Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR Course EEE4301 OR Course MCH4301 OR Course MTR4301)                                                                                                                                                                                                   |        |     | OL  |             |     | ON  |           |          | ON       |

## Electrical and Electronic Engineering Recommended Selectives - No credit points

The following courses are recommended selective units for students completing the Electrical and Electronic Engineering major. Students have the flexibility to complete any courses from this list or to select a package of courses organised by theme if they wish to develop depth in a particular area. Students who complete at least four (4) courses from this list whether across different themes or within one theme will satisfy a pre-approved elective package and will not require Program Director approval for their elective choices. The themes are:

### Electrical and Electronic Engineering depth electives

Students who are interested in further Electrical and Electronic Engineering courses can choose courses from this list

|                                                                                                                                                                                                                                          | Online | Toowoomba |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|
| Course                                                                                                                                                                                                                                   | TR1    | TR1       |
| ELE4607 - Advanced Digital Communications<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Program MENS OR Program GDNS OR<br>Program GCNS OR Course EEE1201)  <br>Transition Arrangements: Pre-requisite<br>ELE1301 | OL     |           |
| ELE5001 - Industrial Communications Protocols<br>1.00 Unit(s)<br>No requisites                                                                                                                                                           | OL     | ON        |

### Instrumentation Control and Automation Engineering electives

Students who are interested in Instrumentation Control and Automation Engineering can choose courses from this list

|                                                                                                                                                                                                               | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                        | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ICA2303 - Intermediate Instrumentation Control<br>and Automation Engineering Topics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course EEE2303                                        | OL     |     | OL  |             |     |     |           |     |     |
| ELE4109 - Measurement Science and<br>Instrument Engineering<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                               |        |     |     |             |     |     |           |     |     |
| ELE4506 - Industrial Process Automation<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course ICA2303 OR (Course ELE3105 AND<br>Course MEC2501) OR (Course ELE2101 OR<br>Course ELE2103) |        |     | OL  |             |     |     |           |     |     |

|                                                                                                                                                                                                                                                                                                        | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MCH2303 - Mechanical Engineering<br>Intermediate Topics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course MEC2106                                                                                                                                                             | OL     |     | OL  |             |     |     |           |     | ON  |
| MEC3107 - Thermofluids 2<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course ENM1600 AND (Course MCH2303 OR<br>Course ICA2301 OR Course MEC2106)  <br>Transition Arrangements: Enrolment is not<br>permitted in MEC3107 if MEC2101 or<br>MEC3102 have been previously completed | OL     |     |     |             |     |     |           |     |     |
| MTR2303 - Mechatronic & Robotic Engineering<br>Intermediate Topics<br>1.00 Unit(s)<br>Assumed Knowledge   Course Pre-requisites:<br>Assumed Knowledge: (Course MTR2302 OR<br>Course EEE1202)   Course Pre-requisites:<br>(Course MTR1201 OR Course MCH1202)                                            | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

## Power Engineering electives

Students who are interested in Power Engineering can choose courses from this list

|                                                                                                                                                                                    | Online |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                             | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| ELE4804 - Power Systems Protection<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course EEE1201   Requisites Prior to 2024:<br>ELE1801 Electrical Technology | OL     |     |     |           |     |     |
| ELE4807 - Power Systems Analysis<br>1.00 Unit(s)<br>No requisites                                                                                                                  | OL     |     |     | ON        |     |     |
| ELE5605 - Electro-Magnetic Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                              |        |     | OL  |           |     | ON  |
| ELE5708 - Electricity Supply Systems and<br>Operations<br>1.00 Unit(s)<br>No requisites                                                                                            |        | OL  |     |           | ON  |     |
| MCH2303 - Mechanical Engineering<br>Intermediate Topics<br>1.00 Unit(s)                                                                                                            | OL     |     | OL  |           |     | ON  |

|                                                                                                                                                                                                                                                                                                    | Online |     |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                             | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| Course Anti-requisite: Course Anti-requisite:<br>Course MEC2106                                                                                                                                                                                                                                    |        |     |     |           |     |     |
| MEC4104 - Renewable Energy Technology<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC2106 OR Course MEC3107 OR<br>Course MEC4108 OR Course MEC5107 OR<br>Course MCH2303 OR Course ICA2301) OR<br>(Program GCNS OR Program GDNS OR<br>Program MENS OR Program MEPR) |        | OL  |     |           |     |     |

### Space Technology Major (8 Units)

Students who complete all 8 units (7 core + 1 elective specific to Space Technology because ENP1002 is core to the BENH) are eligible to complete the Space Technology major. Students can choose to complete some of these courses as part of satisfying their elective requirements.

|                                                                                                                                                                     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                              | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| SPT1208 - Introduction to Space Technology<br>1.00 Unit(s)<br>No requisites                                                                                         | OL     |     |     |             |     |     |           |     |     |
| SPT2308 - Topics in Spacecraft Subsystem<br>Design<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course SPT1208 AND Course ENP1002)          |        | OL  |     |             | ON  |     |           | ON  |     |
| AST2202 - Planetary and Exoplanetary Science<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course PHY2208                                     |        |     | OL  |             |     |     |           |     |     |
| SPT2318 - Spacecraft Design Project<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308                                              |        |     | OL  |             |     | ON  |           |     | ON  |
| SPT3308 - Topics in Space Mission Lifecycle<br>and Operations<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308<br>**Not Offered** |        |     |     |             |     |     |           |     |     |
| SPT3309 - Advanced Space Applications<br>1.00 Unit(s)<br>No requisites                                                                                              |        |     |     |             |     |     |           |     |     |

| Course                                                                                         | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| **Not Offered**                                                                                |        |     |     |             |     |     |           |     |     |
| SPT3318 - Space Mission Operations Project<br>1.00 Unit(s)<br>No requisites<br>**Not Offered** |        |     |     |             |     |     |           |     |     |

### Space Technology Electives for Electrical and Electronic Engineering (1 Units)

Students must complete one of these courses as their elective for the Space Technology major

| Course                                                                                                                                                                                                                                   | Online |     | Toowoomba |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----------|-----|
|                                                                                                                                                                                                                                          | TR1    | TR3 | TR1       | TR3 |
| ELE4607 - Advanced Digital Communications<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Program MENS OR Program GDNS OR<br>Program GCNS OR Course EEE1201)  <br>Transition Arrangements: Pre-requisite<br>ELE1301 | OL     |     |           |     |
| ELE5001 - Industrial Communications Protocols<br>1.00 Unit(s)<br>No requisites                                                                                                                                                           | OL     |     | ON        |     |
| ELE5605 - Electro-Magnetic Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                    |        | OL  |           | ON  |

### Engineering Management electives

Students who are interested in Management can choose courses from this list

| Course                                                                                          | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG6104 - Asset Management in an<br>Engineering Environment<br>1.00 Unit(s)<br>No requisites    |        | OL  |     |             |     |     |           | ON  |     |
| ENG6205 - Project Management Practice<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**       |        |     |     |             |     |     |           |     |     |
| ENG6207 - Innovation Management and New<br>Product Development<br>1.00 Unit(s)<br>No requisites |        |     | OL  |             |     |     |           |     | ON  |

|                                                                                                                                                                                                                  | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                           | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG6208 - Advanced Engineering Project Management<br>1.00 Unit(s)<br>No requisites                                                                                                                               | OL     |     |     |             |     |     | ON        |     |     |
| MGT2009 - Emerging Leaders<br>1.00 Unit(s)<br>Requisites Prior to 2024: Anti-requisite: MGT2007 Leadership                                                                                                       |        | OL  |     |             |     |     |           |     |     |
| MGT2302 - Thinking Like a Leader<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not permitted in MGT2302 if MGT3201 and MGT3004 have been previously completed                                         |        |     | OL  |             |     |     |           |     |     |
| ACC1202 - Accounting Systems and Processes<br>1.00 Unit(s)<br>Requisites Prior to 2024: Enrolment is not permitted in ACC1202 if ACC1105 has been previously completed                                           | OL     | OL  | OL  | ON          |     |     |           |     | ON  |
| ACC2201 - Financial Reporting and Analysis A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites: Course Anti-requisite: Course ACC2102   Course Pre-requisites: (Course ACC1202 OR Course ACC1105) | OL     | OL  |     |             | ON  |     | ON        |     |     |

## Electrical and Electronic Engineering breadth electives

Students who are interested in courses relevant to Electrical and Electronic Engineering can choose courses from this list

|                                                                                                                                                                                                                                                 | Ipswich |     |     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                          | TR1     | TR2 | TR3 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG5105 - Advanced Numerical Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                         |         |     |     |        | OL  | OL  |             |     |     |           | ON  | ON  |
| MTR2303 - Mechatronic & Robotic Engineering Intermediate Topics<br>1.00 Unit(s)<br>Assumed Knowledge   Course Pre-requisites: Assumed Knowledge: (Course MTR2302 OR Course EEE1202)   Course Pre-requisites: (Course MTR1201 OR Course MCH1202) |         |     |     | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| MTR3302 - Mechatronic & Robotic Engineering Advanced B<br>1.00 Unit(s)                                                                                                                                                                          |         |     |     | OL     | OL  |     |             |     |     |           |     |     |

|                                                                                                                                                                                                                                            | Ipswich |     |     | Online |     |     | Springfield |     |     | Toowoomba   |     |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|--------|-----|-----|-------------|-----|-----|-------------|-----|-------------|
| Course                                                                                                                                                                                                                                     | TR1     | TR2 | TR3 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1         | TR2 | TR3         |
| Course Pre-requisites: Course Pre-requisites:<br>(Course MTR2303 OR Course EEE2303 OR<br>Course ICA2303)                                                                                                                                   |         |     |     |        |     |     |             |     |     |             |     |             |
| PHY2207 - Optics<br>1.00 Unit(s)<br>Assumed Knowledge   Course Pre-requisites:<br>Assumed Knowledge: Course MAT1102  <br>Course Pre-requisites: (Course PHY1104 AND<br>Course PHY1911)                                                     |         |     |     |        | OL  |     |             |     |     |             |     |             |
| PHY3304 - Photonics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course MAT2100                                                                                                                                     |         |     |     |        |     |     |             |     |     |             |     | EXT         |
| CSC2402 - Programming 3: Object Oriented<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course CSC1401                                                                                                                |         |     |     | OL     |     |     |             |     |     | ON          |     |             |
| CSC3403 - Programming 4: Advanced<br>Paradigms<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CSC2408 OR Course CSC2402)                                                                                      |         |     |     |        |     | OL  |             |     | ON  |             |     | ON          |
| BIO1204 - Introduction to Biomedical Sciences<br>1.00 Unit(s)<br>No requisites                                                                                                                                                             |         |     |     |        |     |     |             |     |     | ON /<br>EXT |     |             |
| NSC1501 - Bioscience<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course BIO1203                                                                                                                                    | ON      |     | ON  |        |     |     |             |     |     | EXT<br>/ ON |     | EXT<br>/ ON |
| STA1003 - Fundamental Statistics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course STA1004   Requisites Prior to 2024:<br>Enrolment is also not permitted in STA1003 if<br>STA2300 has been previously completed. |         |     |     | OL     | OL  | OL  |             | ON  | ON  | ON          | ON  |             |
| STA2100 - Evaluating Information<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                          |         |     |     |        | OL  |     |             |     |     |             |     |             |
| STA2190 - Experimental Design and Analysis<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA3300  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                    |         |     |     |        | OL  |     |             |     |     |             | ON  |             |

|                                                                                                                                                                                                                                                                        | Ipswich |     |     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|-----|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                 | TR1     | TR2 | TR3 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| STA2301 - Distribution Theory<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course STA1003 OR (Course MAT1102 OR<br>Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: (STA2300 or STA1003 or<br>equivalent) and (MAT1102 or ENM1600) |         |     |     |        | OL  |     |             |     |     |           |     |     |
| STA3200 - Multivariate Statistical Methods<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA6100  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                                                |         |     |     |        | OL  |     |             |     |     |           |     |     |
| STA3301 - Statistical Models<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course STA1003 OR Course STA1004)  <br>Requisites Prior to 2024: Students that have<br>completed STA2300 meet the pre-requisite<br>requirement.                      |         |     |     |        |     | OL  |             |     |     |           |     |     |

## Environmental and Sustainable Resources Engineering

### Core (14 Units)

|                                                                                                                                                                                                                                                                                                                                                               | Online |     | Springfield |     | Toowoomba |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|-----|
| Course                                                                                                                                                                                                                                                                                                                                                        | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| ESR1201 - Environmental Engineering<br>Foundation A<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                       |        |     |             |     |           |     |
| ESR1202 - Environmental Engineering<br>Foundation B<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite  <br>Course Pre-requisites: Course Anti-requisite:<br>(Course CHE1110 OR Course ENV2105)  <br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)   Course Pre-requisites:<br>(Course ENM1500 OR Course ENM1600)<br>**Not Offered** |        |     |             |     |           |     |
| ESR2301 - Topics in Environmental<br>Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ESR1201                                                                                                                                                                                      |        |     |             |     |           |     |

| Course                                                                                                                                                                                                                                                                                                                                                                                                                               | Online |     | Springfield |     | Toowoomba |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|----------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | TR1    | TR3 | TR1         | TR3 | TR1       | TR3      |
| Course Pre-requisites: Course ESR1201<br>**Not Offered**                                                                                                                                                                                                                                                                                                                                                                             |        |     |             |     |           |          |
| ESR2302 - Topics in Environmental Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ESR1202  <br>Course Pre-requisites: Course ESR1202<br>**Not Offered**                                                                                                                                                                                          |        |     |             |     |           |          |
| ESR2303 - Intermediate Engineering Environmental Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                                          |        |     |             |     |           |          |
| ESR2311 - Engineering Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ESR2301  <br>Course Pre-requisites: (Course ESR2301 AND<br>Course ENP1111 AND Course ENP1112)<br>**Not Offered**                                                                                                                                                                       |        |     |             |     |           |          |
| ESR2312 - Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course ESR2302 AND Course ESR2302 AND<br>Course ENP1111 AND Course ENP1112)<br>**Not Offered**                                                                                                                                                                                                           |        |     |             |     |           |          |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR<br>Course BME2311 OR Course BME2312 OR<br>Course CVL2311 OR Course CVL2312 OR<br>Course EEE2311 OR Course EEE2312 OR<br>Course ICA2311 OR Course ICA2312 OR<br>Course MCH2311 OR Course MCH2312 OR<br>Course MNG2311 OR Course MNG2312 OR<br>Course MTR2311 OR Course MTR2312) |        |     | ON          | ON  | ON / EXT  | EXT / ON |
| ESR3301 - Environmental Engineering Advanced A<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                                                   |        |     |             |     |           |          |

| Course                                                                                                                                                                                                                                                                              | Online |     | Springfield |     | Toowoomba |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|-----|
|                                                                                                                                                                                                                                                                                     | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| ESR3302 - Environmental Engineering Advanced B<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                  |        |     |             |     |           |     |
| ESR3314 - Sustainable Systems Engineering Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ESR3301 AND Course ENP3102)   Course Pre-requisites:<br>(Course ENP2313 AND Course ESR3301 AND Course ENP3102)<br>**Not Offered** |        |     |             |     |           |     |
| ESR3315 - Professional Engineer Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ESR3302  <br>Course Pre-requisites: (Course ENP2313 AND Course ESR3302)<br>**Not Offered**                                        |        |     |             |     |           |     |
| ESR4301 - Professional Engineering Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                              |        |     |             |     |           |     |
| ENP4313 - Engineering Professional Team Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR Course EEE4301 OR Course MCH4301 OR Course MTR4301)                                                                       |        | OL  |             | ON  |           | ON  |

## Environmental Engineering Recommended Selectives

| Course                                                                                                                                | Online |     | Toowoomba |     |
|---------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----------|-----|
|                                                                                                                                       | TR1    | TR2 | TR1       | TR2 |
| AGR4305 - Agricultural Soil Mechanics<br>1.00 Unit(s)<br>No requisites                                                                | OL     |     | ON        |     |
| ENV4106 - Irrigation Science<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course AGR3304 OR Course AGC3301 OR |        | OL  |           | ON  |

|                                                                                                                                                                                                                                                                                             | Online |     | Toowoomba |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----------|-----|
| Course                                                                                                                                                                                                                                                                                      | TR1    | TR2 | TR1       | TR2 |
| Course CVL3301) OR (Program MEPR OR Program MENS OR Program GDNS OR Program GCNS)                                                                                                                                                                                                           |        |     |           |     |
| ENV5104 - Advanced Hydraulic Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                       |        | OL  |           | ON  |
| MEC5100 - Computational Fluid Dynamics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC3107 OR Course MEC4108 OR Course MEC5107 OR Course ENV3104 OR Course ENV5104 OR Course MCH3302 OR Course CVL3301 OR Course AGC3301) OR (Program MENS OR Program MEPR) | OL     |     |           |     |

## Instrumentation Control and Automation Engineering

### Core (14 Units)

|                                                                                                                                                                                                                                         | Online |     | Springfield |     | Toowoomba |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|-----|
| Course                                                                                                                                                                                                                                  | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| ICA1201 - Automation Engineering Foundation A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: (Course EEE1201 OR Course MTR2301)   Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600) | OL     | OL  |             |     |           |     |
| ICA1202 - Automation Engineering Foundation B<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: (Course EEE1202 OR Course MTR2302)   Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600) | OL     | OL  |             |     |           |     |
| ICA2301 - Topics in Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ICA1201 AND Course ICA1202)                                                                                    | OL     | OL  |             |     |           |     |
| ICA2302 - Topics in Instrumentation Control and Automation Engineering Operations & Maintenance<br>1.00 Unit(s)<br>No requisites                                                                                                        | OL     | OL  |             |     |           |     |

|                                                                                                                                                                                                                                                                                                                                                                                                                 | Online |     | Springfield |     | Toowoomba |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|----------|
| Course                                                                                                                                                                                                                                                                                                                                                                                                          | TR1    | TR3 | TR1         | TR3 | TR1       | TR3      |
| ICA2303 - Intermediate Instrumentation Control and Automation Engineering Topics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course EEE2303                                                                                                                                                                                                                                             | OL     | OL  |             |     |           |          |
| ICA2311 - Automation Engineering Affiliate Project A<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ICA2301   Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                                                                                                                                        |        |     |             |     |           | EXT      |
| ICA2312 - Instrumentation Control and Automation Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ICA2302   Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                                                                                               |        |     |             |     | EXT       |          |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR Course BME2311 OR Course BME2312 OR Course CVL2311 OR Course CVL2312 OR Course EEE2311 OR Course EEE2312 OR Course ICA2311 OR Course ICA2312 OR Course MCH2311 OR Course MCH2312 OR Course MNG2311 OR Course MNG2312 OR Course MTR2311 OR Course MTR2312) |        |     | ON          | ON  | ON / EXT  | EXT / ON |
| ICA3301 - Automation Engineering Advanced A<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                                 |        |     |             |     |           |          |
| ICA3302 - Automation Engineering Advanced B<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                                 |        |     |             |     |           |          |
| ICA3314 - Sustainable Systems Engineering Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ICA3301 AND Course ENP3102)   Course Pre-requisites:<br>(Course ENP2313 AND Course ICA3301 AND                                                                                                                                                                |        |     |             |     |           |          |

| Course                                                                                                                                                                                                                                    | Online |     | Springfield |     | Toowoomba |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-------------|-----|-----------|-----|
|                                                                                                                                                                                                                                           | TR1    | TR3 | TR1         | TR3 | TR1       | TR3 |
| Course ENP3102)<br>**Not Offered**                                                                                                                                                                                                        |        |     |             |     |           |     |
| ICA3315 - Professional Engineer Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course ICA3302   Course Pre-requisites: (Course ENP2313 AND Course ICA3302)<br>**Not Offered** |        |     |             |     |           |     |
| ICA4301 - Professional Engineering Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                    |        |     |             |     |           |     |
| ENP4313 - Engineering Professional Team Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge: (Course AGC4301 OR Course CVL4301 OR Course EEE4301 OR Course MCH4301 OR Course MTR4301)                                |        | OL  |             | ON  |           | ON  |

## Mechanical Engineering

### Core (14 Units)

| Course                                                                                                                                                                                                           | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                  | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MCH1201 - Mechanical Engineering Foundation A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: Course MTR1202   Course Co-requisite: (Course ENM1500 OR Course ENM1600) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| MCH1202 - Mechanical Engineering Foundation B<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600) OR Course ENP1002                                               | OL     | OL  | OL  | ON          | ON  |     |           | ON  | ON  |
| MCH2301 - Topics in Mechanical Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:                                                                                         | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                                                                                                                                                                 | Online |     |     | Springfield |          |     | Toowoomba |     |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|----------|-----|-----------|-----|----------|
| Course                                                                                                                                                                                                                                                                                                                                                                                                          | TR1    | TR2 | TR3 | TR1         | TR2      | TR3 | TR1       | TR2 | TR3      |
| Course ENP1002 AND (Course ENM1500 OR Course ENM1600)                                                                                                                                                                                                                                                                                                                                                           |        |     |     |             |          |     |           |     |          |
| MCH2302 - Topics in Mechanical Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course MCH1201 OR Course AGC1201 OR Course MTR1202)                                                                                                                                                                                                                        | OL     | OL  | OL  |             |          |     |           | ON  | ON       |
| MCH2303 - Mechanical Engineering Intermediate Topics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course MEC2106                                                                                                                                                                                                                                                                         | OL     |     | OL  |             |          |     |           |     | ON       |
| MCH2311 - Mechanical Engineering Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MCH2301  <br>Course Pre-requisites: (Course ENP1111 AND Course ENP1112)                                                                                                                                                                                |        |     |     | ON          |          |     | EXT / ON  |     | EXT      |
| MCH2312 - Mechanical Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MCH2302  <br>Course Pre-requisites: Course ENP1112                                                                                                                                                                                             |        |     |     |             | EXT / ON |     | EXT / ON  |     |          |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR Course BME2311 OR Course BME2312 OR Course CVL2311 OR Course CVL2312 OR Course EEE2311 OR Course EEE2312 OR Course ICA2311 OR Course ICA2312 OR Course MCH2311 OR Course MCH2312 OR Course MNG2311 OR Course MNG2312 OR Course MTR2311 OR Course MTR2312) |        |     |     | ON          |          | ON  | ON / EXT  |     | EXT / ON |
| MCH3301 - Mechanical Engineering Advanced A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MCH2302 OR Course MEC2402)                                                                                                                                                                                                                                                              | OL     | OL  |     | ON          |          |     | ON        |     |          |
| MCH3302 - Mechanical Engineering Advanced B<br>1.00 Unit(s)                                                                                                                                                                                                                                                                                                                                                     | OL     | OL  |     | ON          |          |     | ON        |     |          |

| Course                                                                                                                                                                                                                                                   | Online |     |     | Springfield |     |          | Toowoomba |          |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|----------|-----------|----------|-----|
|                                                                                                                                                                                                                                                          | TR1    | TR2 | TR3 | TR1         | TR2 | TR3      | TR1       | TR2      | TR3 |
| Course Pre-requisites: Course Pre-requisites:<br>(Course MCH2303 OR Course MEC2106)                                                                                                                                                                      |        |     |     | ON          |     |          | ON        |          |     |
| MCH3314 - Mechanical Engineering Sustainable Systems Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENP3102 AND Course MCH3301)   Course Pre-requisites:<br>(Course ENP3102 AND Course MCH3301) |        |     |     |             | ON  |          |           | EXT / ON |     |
| MCH3315 - Professional Mechanical Engineer Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MCH3302  <br>Course Pre-requisites: Course MCH3302                                          |        |     |     |             |     | EXT / ON |           | EXT / ON |     |
| MCH4301 - Professional Mechanical Engineering Advanced Topics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course MCH3301<br>**Not Offered**                                                                                      |        |     |     |             |     |          |           |          |     |
| ENP4313 - Engineering Professional Team Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR Course EEE4301 OR Course MCH4301 OR Course MTR4301)                                            |        |     | OL  |             |     | ON       |           |          | ON  |

## Mechanical Engineering recommended selectives

The following courses are recommended selective units for students completing the Mechanical Engineering major. Students have the flexibility to complete any courses from this list or to select a package of courses organised by theme if they wish to develop depth in a particular area. Students who complete at least four (4) courses from this list whether across different themes or within one theme will satisfy a pre-approved elective package and will not require Program Director approval for their elective choices. The themes are:

## Mechanical Engineering depth electives

Students who are interested in further Mechanical Engineering courses can choose courses from this list

| Course                                                                                                 | Online |     |     | Toowoomba |     |     |
|--------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
|                                                                                                        | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| MEC4104 - Renewable Energy Technology<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: |        | OL  |     |           |     |     |

|                                                                                                                                                                                                                                                                                                                           | Online |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                                    | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| (Course MEC2106 OR Course MEC3107 OR Course MEC4108 OR Course MEC5107 OR Course MCH2303 OR Course ICA2301) OR (Program GCNS OR Program GDNS OR Program MENS OR Program MEPR)                                                                                                                                              |        |     |     |           |     |     |
| MEC4108 - Thermofluids 3<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: Course MCH4301 OR (Course MEC3107 AND Course ENM2600 AND Course ENG3104) OR (Program GCNS OR Program GDNS OR Program MENS OR Program MEPR)                                                                                      | OL     |     |     |           |     |     |
| MEC5100 - Computational Fluid Dynamics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: (Course MEC3107 OR Course MEC4108 OR Course MEC5107 OR Course ENV3104 OR Course ENV5104 OR Course MCH3302 OR Course CVL3301 OR Course AGC3301) OR (Program MENS OR Program MEPR)                                  | OL     |     |     |           |     |     |
| MEC5105 - Combustion<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: (Course MEC3107 OR Course MEC4108 OR Course MEC5107 OR Course MCH3302) OR (Program MEPR AND Program MENS)<br>**Not Offered**                                                                                                        |        |     |     |           |     |     |
| MEC5109 - Aerospace Propulsion Systems<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: (Course MEC3107 OR Course MEC4108 OR Course MEC5107 OR Course MCH3302) OR (Program GCNS OR Program GDNS OR Program GEPR OR Program MENS OR Program MEPR)                                                          |        |     | OL  |           |     |     |
| MEC5203 - Fibre Reinforced Composites<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: (Course ENM2600 AND Course MEC2402) AND (Program GCNS OR Program GDNS OR Program MENS OR Program MEPR) AND Course MCH2302   Transition Arrangements: Pre-requisite: (MEC1201 and (ENM2600 or MAT2100) and MEC2402) |        |     | OL  |           |     | ON  |
| MEC6203 - Advanced Materials Technology<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not                                                                                                                                                                                                                      |        | OL  |     |           | ON  |     |

|                                                               | Online |     |     | Toowoomba |     |     |
|---------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
| Course                                                        | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| permitted in MEC6203 if MEC3203 has been previously completed |        |     |     |           |     |     |

## Space Technology Major (8 Units)

Students who complete all 8 units (7 core + 1 elective specific to Space Technology because ENP1002 is core to the BENH) are eligible to complete the Space Technology major. Students can choose to complete some of these courses as part of satisfying their elective requirements.

|                                                                                                                                                                  | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                           | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| SPT1208 - Introduction to Space Technology<br>1.00 Unit(s)<br>No requisites                                                                                      | OL     |     |     |             |     |     |           |     |     |
| SPT2308 - Topics in Spacecraft Subsystem Design<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course SPT1208 AND Course ENP1002)          |        | OL  |     |             | ON  |     |           | ON  |     |
| AST2202 - Planetary and Exoplanetary Science<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course PHY2208                                  |        |     | OL  |             |     |     |           |     |     |
| SPT2318 - Spacecraft Design Project<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308                                           |        |     | OL  |             |     | ON  |           |     | ON  |
| SPT3308 - Topics in Space Mission Lifecycle and Operations<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308<br>**Not Offered** |        |     |     |             |     |     |           |     |     |
| SPT3309 - Advanced Space Applications<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                        |        |     |     |             |     |     |           |     |     |
| SPT3318 - Space Mission Operations Project<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                   |        |     |     |             |     |     |           |     |     |

## Space Technology Electives for Mechanical Engineering (1 Units)

Students must complete one of these courses as their elective for the Space Technology major

| Course                                                                                                                                                                                                                                                                                                                                      | Online |     |     | Toowoomba |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                                                                                             | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG5500 - Advanced Aerospace Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                       |        | OL  |     |           | ON  |     |
| MEC5100 - Computational Fluid Dynamics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC3107 OR Course MEC4108 OR<br>Course MEC5107 OR Course ENV3104 OR<br>Course ENV5104 OR Course MCH3302 OR<br>Course CVL3301 OR Course AGC3301) OR<br>(Program MENS OR Program MEPR)                                     | OL     |     |     |           |     |     |
| MEC5105 - Combustion<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC3107 OR Course MEC4108 OR<br>Course MEC5107 OR Course MCH3302) OR<br>(Program MEPR AND Program MENS)<br>**Not Offered**                                                                                                                 |        |     |     |           |     |     |
| MEC5109 - Aerospace Propulsion Systems<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC3107 OR Course MEC4108 OR<br>Course MEC5107 OR Course MCH3302) OR<br>(Program GCNS OR Program GDNS OR<br>Program GEPR OR Program MENS OR<br>Program MEPR)                                                             |        |     | OL  |           |     |     |
| MEC5203 - Fibre Reinforced Composites<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course ENM2600 AND Course MEC2402)<br>AND (Program GCNS OR Program GDNS OR<br>Program MENS OR Program MEPR) AND<br>Course MCH2302   Transition Arrangements:<br>Pre-requisite: (MEC1201 and (ENM2600 or<br>MAT2100) and MEC2402) |        |     | OL  |           |     | ON  |

## Mechatronic & Robotic Engineering electives

Students who are interested in courses relevant to Mechatronic & Robotic Engineering can choose courses from this list

| Course                                                                                                                       | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                              | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MTR2301 - Topics in Mechatronic Engineering<br>Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite: | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                     | Online |     |     | Springfield |     |          | Toowoomba |          |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|----------|-----------|----------|-----|
| Course                                                                                                                                                                                                                                                              | TR1    | TR2 | TR3 | TR1         | TR2 | TR3      | TR1       | TR2      | TR3 |
| (Course ENM1500 OR Course ENM1600)                                                                                                                                                                                                                                  |        |     |     |             | ON  |          |           | ON       | ON  |
| MTR2302 - Topics in Mechatronic Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: Course EEE1202  <br>Course Co-requisite: (Course ENM1500 OR Course ENM1600)                          | OL     | OL  | OL  |             | ON  |          |           | ON       | ON  |
| MTR2303 - Mechatronic & Robotic Engineering Intermediate Topics<br>1.00 Unit(s)<br>Assumed Knowledge   Course Pre-requisites:<br>Assumed Knowledge: (Course MTR2302 OR Course EEE1202)   Course Pre-requisites:<br>(Course MTR1201 OR Course MCH1202)               | OL     | OL  | OL  |             | ON  |          |           | ON       | ON  |
| MTR3301 - Mechatronic & Robotic Engineering Advanced A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR2303 OR Course EEE2303 OR Course ICA2303)                                                                                     | OL     | OL  |     |             |     |          | ON        |          |     |
| MTR3302 - Mechatronic & Robotic Engineering Advanced B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR2303 OR Course EEE2303 OR Course ICA2303)                                                                                     | OL     | OL  |     |             |     |          |           |          |     |
| MTR3314 - Mechatronic & Robotic Engineering Sustainable Systems Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MTR3301 AND<br>(Course ENP3102 OR Course ENG3003)  <br>Course Pre-requisites: Course ENP2313 |        |     |     |             | ON  |          |           | EXT / ON |     |
| MTR3315 - Professional Mechatronic & Robotic Engineer Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MTR3302  <br>Course Pre-requisites: Course MTR3302                                          |        |     |     |             |     | EXT / ON |           | ON / EXT |     |
| MTR4301 - Professional Mechatronic & Robotic Engineering Advanced Topics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR3301 AND Course MTR3302)                                                                                    |        |     | OL  |             |     |          |           |          |     |

## Engineering Management electives

Students who are interested in Management can choose courses from this list

| Course                                                                                                                                                                                                                 | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                        | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG6104 - Asset Management in an Engineering Environment<br>1.00 Unit(s)<br>No requisites                                                                                                                              |        | OL  |     |             |     |     |           | ON  |     |
| ENG6205 - Project Management Practice<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                              |        |     |     |             |     |     |           |     |     |
| ENG6207 - Innovation Management and New Product Development<br>1.00 Unit(s)<br>No requisites                                                                                                                           |        |     | OL  |             |     |     |           |     | ON  |
| ENG6208 - Advanced Engineering Project Management<br>1.00 Unit(s)<br>No requisites                                                                                                                                     | OL     |     |     |             |     |     | ON        |     |     |
| MGT2009 - Emerging Leaders<br>1.00 Unit(s)<br>Requisites Prior to 2024: Anti-requisite: MGT2007 Leadership                                                                                                             |        | OL  |     |             |     |     |           |     |     |
| MGT2302 - Thinking Like a Leader<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not permitted in MGT2302 if MGT3201 and MGT3004 have been previously completed                                               |        |     | OL  |             |     |     |           |     |     |
| ACC1202 - Accounting Systems and Processes<br>1.00 Unit(s)<br>Requisites Prior to 2024: Enrolment is not permitted in ACC1202 if ACC1105 has been previously completed                                                 | OL     | OL  | OL  | ON          |     |     |           |     | ON  |
| ACC2201 - Financial Reporting and Analysis A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ACC2102  <br>Course Pre-requisites: (Course ACC1202 OR Course ACC1105) | OL     | OL  |     |             | ON  |     | ON        |     |     |

## Mechanical Engineering breadth electives

Students who are interested in courses relevant to Mechanical Engineering can choose courses from this list

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MAT2100 - Algebra and Calculus II<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course ENM2600  <br>Course Pre-requisites: (Course MAT1102 OR<br>Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: MAT1502                                                                                                                                                                                                               |        |     | OL  |             |     |     |           |     |     |
| ENG5105 - Advanced Numerical Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                                                                                                                                                            |        | OL  | OL  |             |     |     |           | ON  | ON  |
| ENG5500 - Advanced Aerospace Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                                                                                                                                                              |        | OL  |     |             |     |     |           | ON  |     |
| AGC4301 - Professional Agriculture<br>Engineering Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                                                                                                              |        |     |     |             |     |     |           |     |     |
| AGR4305 - Agricultural Soil Mechanics<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                                                                                                                                                                                                             | OL     |     |     |             |     |     | ON        |     |     |
| CVL3302 - Civil Engineering Advanced B<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: (Course CIV4505 AND<br>Course CIV4506)   Course Co-requisite:<br>(Course CVL2301 AND Course CVL2303)                                                                                                                                                                                                                                              | OL     | OL  |     | ON          |     |     | ON        |     |     |
| EEE1201 - Electrical & Electronic Engineering<br>Foundation A<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)   Course Pre-requisites:<br>Program ADNG AND Program BENS AND<br>Program BENH AND Program BSED AND<br>(Area of Study EEEMJR OR Area of Study<br>MCHMJR) AND (Area of Study EEEMJRBENS<br>OR Area of Study MCHMJRBENS) AND (Area<br>of Study EEEMJRBENH OR Area of Study<br>MCHMJRBENH) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE1202 - Electrical & Electronic Engineering<br>Foundation B<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)   Course Pre-requisites:                                                                                                                                                                                                                                                               | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                                            | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                     | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| Program ADNG AND Program BENS AND Program BENH AND (Area of Study EEEMJR OR Area of Study MCHMJR) AND (Area of Study EEEMJRBENS OR Area of Study MCHMJRBENS) AND (Area of Study EEEMJRBENH OR Area of Study MCHMJRBENH)                                                                    |        |     |     |             | ON  |     |           | ON  | ON  |
| EEE2301 - Topics in Electrical & Electronic Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite: (Course EEE1201 AND Course EEE1202) AND (Course MTR2301 AND Course MTR2302) AND (Course CSE1201 AND Course CSE1202)                                  | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE2302 - Topics in Electrical & Electronic Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites: (Course EEE1201 AND Course EEE1202) AND (Course MTR2301 AND Course MTR2302) AND (Course CSE1201 AND Course CSE1202)                      | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE2303 - Electrical & Electronic Engineering Intermediate Topics<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite: (Course EEE1201 AND Course EEE1202) AND (Course ICA1201 AND Course ICA1202) AND (Course MTR2301 AND Course MTR2302) AND (Course CSE1201 AND Course CSE1202) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| STA1003 - Fundamental Statistics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite: Course STA1004   Requisites Prior to 2024: Enrolment is also not permitted in STA1003 if STA2300 has been previously completed.                                                          | OL     | OL  | OL  |             | ON  | ON  | ON        | ON  |     |
| STA2100 - Evaluating Information<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                                                          |        | OL  |     |             |     |     |           |     |     |
| STA2190 - Experimental Design and Analysis<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites: Course Anti-requisite: Course STA3300   Course Pre-requisites: (Course STA1003 OR Course STA1004)                                                                             |        | OL  |     |             |     |     |           | ON  |     |

|                                                                                                                                                                                                                                                                        | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| STA2301 - Distribution Theory<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course STA1003 OR (Course MAT1102 OR<br>Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: (STA2300 or STA1003 or<br>equivalent) and (MAT1102 or ENM1600) |        | OL  |     |             |     |     |           |     |     |
| STA3200 - Multivariate Statistical Methods<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA6100  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                                                |        | OL  |     |             |     |     |           |     |     |
| STA3301 - Statistical Models<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course STA1003 OR Course STA1004)  <br>Requisites Prior to 2024: Students that have<br>completed STA2300 meet the pre-requisite<br>requirement.                      |        |     | OL  |             |     |     |           |     |     |

## Mechatronic and Robotic Engineering

### Core (14 Units)

|                                                                                                                                                                                                                                                                                                                                                                                                       | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                                                                                                                | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MTR1201 - Mechatronic Engineering<br>Foundation A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: Course MCH1202  <br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)                                                                                                                                                                            | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| MTR1202 - Mechatronic Engineering<br>Foundation B<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite  <br>Course Pre-requisites: Course Anti-requisite:<br>Course MCH1201   Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600) OR<br>Course ENP1002   Course Pre-requisites:<br>(Program ADNG AND Area of Study<br>MTRMJRBENH) AND (Program BENH AND<br>Area of Study MTRMJRBENH) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| MTR2301 - Topics in Mechatronic Engineering<br>Subsystem Design                                                                                                                                                                                                                                                                                                                                       | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                         | Online |     |     | Springfield |             |     | Toowoomba   |     |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-------------|-----|-------------|-----|-------------|
| Course                                                                                                                                                                                                                                                                                                                                                                                                                                  | TR1    | TR2 | TR3 | TR1         | TR2         | TR3 | TR1         | TR2 | TR3         |
| 1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course ENM1500 OR Course ENM1600)                                                                                                                                                                                                                                                                                                                                         |        |     |     |             | ON          |     |             | ON  | ON          |
| MTR2302 - Topics in Mechatronic Engineering<br>Operations & Maintenance<br>1.00 Unit(s)<br>Course Anti-requisite   Course Co-requisite:<br>Course Anti-requisite: Course EEE1202  <br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)                                                                                                                                                                                        | OL     | OL  | OL  |             | ON          |     |             | ON  | ON          |
| MTR2303 - Mechatronic & Robotic Engineering<br>Intermediate Topics<br>1.00 Unit(s)<br>Assumed Knowledge   Course Pre-requisites:<br>Assumed Knowledge: (Course MTR2302 OR<br>Course EEE1202)   Course Pre-requisites:<br>(Course MTR1201 OR Course MCH1202)                                                                                                                                                                             | OL     | OL  | OL  |             | ON          |     |             | ON  | ON          |
| MTR2311 - Mechatronic Engineering<br>Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MTR2301  <br>Course Pre-requisites: (Course ENP1111 AND<br>Course ENP1112)                                                                                                                                                                                                 |        |     |     | ON          |             |     | EXT /<br>ON |     | EXT         |
| MTR2312 - Mechatronic Engineering<br>Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MTR2302  <br>Course Pre-requisites: (Course ENP1112 AND<br>Course ENP1112)                                                                                                                                                                                         |        |     |     |             | EXT /<br>ON |     | ON /<br>EXT |     |             |
| ENP2313 - Engineering Associate Capstone<br>Project<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR<br>Course BME2311 OR Course BME2312 OR<br>Course CVL2311 OR Course CVL2312 OR<br>Course EEE2311 OR Course EEE2312 OR<br>Course ICA2311 OR Course ICA2312 OR<br>Course MCH2311 OR Course MCH2312 OR<br>Course MNG2311 OR Course MNG2312 OR<br>Course MTR2311 OR Course MTR2312) |        |     |     | ON          |             | ON  | ON /<br>EXT |     | EXT /<br>ON |
| MTR3301 - Mechatronic & Robotic Engineering<br>Advanced A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:                                                                                                                                                                                                                                                                                                              | OL     | OL  |     |             |             |     | ON          |     |             |

| Course                                                                                                                                                                                                                                                              | Online |     |     | Springfield |     |          | Toowoomba |          |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|----------|-----------|----------|-----|
|                                                                                                                                                                                                                                                                     | TR1    | TR2 | TR3 | TR1         | TR2 | TR3      | TR1       | TR2      | TR3 |
| (Course MTR2303 OR Course EEE2303 OR Course ICA2303)                                                                                                                                                                                                                |        |     |     |             |     |          |           |          |     |
| MTR3302 - Mechatronic & Robotic Engineering Advanced B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR2303 OR Course EEE2303 OR Course ICA2303)                                                                                     | OL     | OL  |     |             |     |          |           |          |     |
| MTR3314 - Mechatronic & Robotic Engineering Sustainable Systems Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MTR3301 AND<br>(Course ENP3102 OR Course ENG3003)  <br>Course Pre-requisites: Course ENP2313 |        |     |     |             | ON  |          |           | EXT / ON |     |
| MTR3315 - Professional Mechatronic & Robotic Engineer Innovation Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course MTR3302  <br>Course Pre-requisites: Course MTR3302                                          |        |     |     |             |     | EXT / ON |           | ON / EXT |     |
| MTR4301 - Professional Mechatronic & Robotic Engineering Advanced Topics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MTR3301 AND Course MTR3302)                                                                                    |        |     | OL  |             |     |          |           |          |     |
| ENP4313 - Engineering Professional Team Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR Course EEE4301 OR Course MCH4301 OR Course MTR4301)                                                       |        |     | OL  |             |     | ON       |           |          | ON  |

## Mechatronic and Robotic Engineering recommended selectives (8 Units)

The following courses are recommended selective units for students completing the Mechatronic and Robotic Engineering major. Students have the flexibility to complete any courses from this list or to select a package of courses organised by theme if they wish to develop depth in a particular area. Students who complete at least four (4) courses from this list whether across different themes or within one theme will satisfy a pre-approved elective package and will not require Program Director approval for their elective choices. The themes are:

### Mechanical Engineering breadth electives

Students who are interested in courses relevant to Mechanical Engineering can choose courses from this list

|                                                                                                                                                                                                                                                                                           | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                    | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MCH2301 - Topics in Mechanical Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>Course ENP1002 AND (Course ENM1500 OR Course ENM1600)                                                                                                         | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| MCH2302 - Topics in Mechanical Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course MCH1201 OR Course AGC1201 OR Course MTR1202)                                                                                                  | OL     | OL  | OL  |             |     |     |           | ON  | ON  |
| MCH2303 - Mechanical Engineering Intermediate Topics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course MEC2106                                                                                                                                                   | OL     |     | OL  |             |     |     |           |     | ON  |
| MCH3301 - Mechanical Engineering Advanced A<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MCH2302 OR Course MEC2402)                                                                                                                                        | OL     | OL  |     | ON          |     |     | ON        |     |     |
| MCH3302 - Mechanical Engineering Advanced B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MCH2303 OR Course MEC2106)                                                                                                                                        | OL     | OL  |     | ON          |     |     | ON        |     |     |
| MCH4301 - Professional Mechanical Engineering Advanced Topics<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course MCH3301<br>**Not Offered**                                                                                                                       |        |     |     |             |     |     |           |     |     |
| MEC4104 - Renewable Energy Technology<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC2106 OR Course MEC3107 OR Course MEC4108 OR Course MEC5107 OR Course MCH2303 OR Course ICA2301) OR<br>(Program GCNS OR Program GDNS OR Program MENS OR Program MEPR) |        | OL  |     |             |     |     |           |     |     |
| MEC4302 - Computational Mechanics in Design<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course MEC2401 AND Course MEC2402)                                                                                                                                       | OL     |     |     |             |     |     | ON        |     |     |

| Course                                                                                                                                                                                                                                                                                                                             | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                                                                                    | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| AND (Program GCNS OR Program GDNS OR Program MENS OR Program MEPR) AND Course MCH2302 AND Course BME3302                                                                                                                                                                                                                           |        |     |     |             |     |     |           |     |     |
| MEC5203 - Fibre Reinforced Composites<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course ENM2600 AND Course MEC2402)<br>AND (Program GCNS OR Program GDNS OR Program MENS OR Program MEPR) AND Course MCH2302   Transition Arrangements:<br>Pre-requisite: (MEC1201 and (ENM2600 or MAT2100) and MEC2402) |        |     | OL  |             |     |     |           |     | ON  |
| MEC6203 - Advanced Materials Technology<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not permitted in MEC6203 if MEC3203 has been previously completed                                                                                                                                                                 |        | OL  |     |             |     |     |           | ON  |     |

## Electrical and Electronic Engineering breadth electives

Students who are interested in courses relevant to Electrical and Electronic Engineering can choose courses from this list

| Course                                                                                                                                                                                                                                                                      | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                             | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| EEE2301 - Topics in Electrical & Electronic Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course EEE1201 AND Course EEE1202) AND (Course MTR2301 AND Course MTR2302)<br>AND (Course CSE1201 AND Course CSE1202)             | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE2302 - Topics in Electrical & Electronic Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course EEE1201 AND Course EEE1202) AND (Course MTR2301 AND Course MTR2302)<br>AND (Course CSE1201 AND Course CSE1202) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| ELE4605 - Fields and Waves<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Program GCNS OR Program GDNS OR Program MENS OR Program MEPR) OR Course ENM1600 OR Course EEE1201 OR                                                                        | OL     |     |     |             |     |     | ON        |     |     |

|                                                                                | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|--------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                         | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| (Course ELE2103 AND Course ELE2601)                                            |        |     |     |             |     |     |           |     |     |
| ELE5001 - Industrial Communications Protocols<br>1.00 Unit(s)<br>No requisites | OL     |     |     |             |     |     | ON        |     |     |
| ELE5605 - Electro-Magnetic Modelling<br>1.00 Unit(s)<br>No requisites          |        |     | OL  |             |     |     |           |     | ON  |

## Space Technology Major (8 Units)

Students who complete all 8 units (7 core + 1 elective specific to Space Technology because ENP1002 is core to the BENH) are eligible to complete the Space Technology major. Students can choose to complete some of these courses as part of satisfying their elective requirements.

|                                                                                                                                                                  | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                           | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| SPT1208 - Introduction to Space Technology<br>1.00 Unit(s)<br>No requisites                                                                                      | OL     |     |     |             |     |     |           |     |     |
| SPT2308 - Topics in Spacecraft Subsystem Design<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course SPT1208 AND Course ENP1002)          |        | OL  |     |             | ON  |     |           | ON  |     |
| AST2202 - Planetary and Exoplanetary Science<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course PHY2208                                  |        |     | OL  |             |     |     |           |     |     |
| SPT2318 - Spacecraft Design Project<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308                                           |        |     | OL  |             |     | ON  |           |     | ON  |
| SPT3308 - Topics in Space Mission Lifecycle and Operations<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308<br>**Not Offered** |        |     |     |             |     |     |           |     |     |
| SPT3309 - Advanced Space Applications<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                        |        |     |     |             |     |     |           |     |     |

| Course                                                                                         | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| SPT3318 - Space Mission Operations Project<br>1.00 Unit(s)<br>No requisites<br>**Not Offered** |        |     |     |             |     |     |           |     |     |

### Space Technology Electives for Mechatronic and Robotic Engineering (1 Units)

Students must complete one of these courses as their elective for the Space Technology major

| Course                                                                                                                                                                                                                                   | Online |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                          | TR1    | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG5500 - Advanced Aerospace Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                    |        | OL  |     |           | ON  |     |
| ELE4607 - Advanced Digital Communications<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Program MENS OR Program GDNS OR<br>Program GCNS OR Course EEE1201)  <br>Transition Arrangements: Pre-requisite<br>ELE1301 | OL     |     |     |           |     |     |
| ELE5001 - Industrial Communications Protocols<br>1.00 Unit(s)<br>No requisites                                                                                                                                                           | OL     |     |     | ON        |     |     |
| ELE5605 - Electro-Magnetic Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                    |        |     | OL  |           |     | ON  |

### Engineering Management electives

Students who are interested in Management can choose courses from this list

| Course                                                                                       | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                              | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG6104 - Asset Management in an<br>Engineering Environment<br>1.00 Unit(s)<br>No requisites |        | OL  |     |             |     |     |           | ON  |     |
| ENG6205 - Project Management Practice<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**    |        |     |     |             |     |     |           |     |     |
| ENG6207 - Innovation Management and New<br>Product Development                               |        |     | OL  |             |     |     |           |     | ON  |

|                                                                                                                                                                                                                  | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                           | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| 1.00 Unit(s)<br>No requisites                                                                                                                                                                                    |        |     |     |             |     |     |           |     |     |
| ENG6208 - Advanced Engineering Project Management<br>1.00 Unit(s)<br>No requisites                                                                                                                               | OL     |     |     |             |     |     | ON        |     |     |
| MGT2009 - Emerging Leaders<br>1.00 Unit(s)<br>Requisites Prior to 2024: Anti-requisite: MGT2007 Leadership                                                                                                       |        | OL  |     |             |     |     |           |     |     |
| MGT2302 - Thinking Like a Leader<br>1.00 Unit(s)<br>Transition Arrangements: Enrolment is not permitted in MGT2302 if MGT3201 and MGT3004 have been previously completed                                         |        |     | OL  |             |     |     |           |     |     |
| ACC1202 - Accounting Systems and Processes<br>1.00 Unit(s)<br>Requisites Prior to 2024: Enrolment is not permitted in ACC1202 if ACC1105 has been previously completed                                           | OL     | OL  | OL  | ON          |     |     |           |     | ON  |
| ACC2201 - Financial Reporting and Analysis A<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites: Course Anti-requisite: Course ACC2102   Course Pre-requisites: (Course ACC1202 OR Course ACC1105) | OL     | OL  |     |             | ON  |     | ON        |     |     |

## Mechatronic & Robotic Engineering breadth electives

Students who are interested in courses relevant to Mechatronic & Robotic Engineering can choose courses from this list

|                                                                                                                                                                                                                                                          | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                   | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| MAT2100 - Algebra and Calculus II<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites: Course Anti-requisite: Course ENM2600   Course Pre-requisites: (Course MAT1102 OR Course ENM1600)   Requisites Prior to 2024: Pre-requisite: MAT1502 |        |     | OL  |             |     |     |           |     |     |
| ENG5105 - Advanced Numerical Modelling<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                                  |        | OL  | OL  |             |     |     |           | ON  | ON  |

| Course                                                                                                                                                                                                                                     | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                            | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENG5500 - Advanced Aerospace Systems<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                      |        | OL  |     |             |     |     |           | ON  |     |
| AGC3302 - Agricultural Engineering Advanced B<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course MTR2303 OR Course AGC2302 OR<br>(Course AGC1202 OR Course AGR2202)                                                |        | OL  |     |             |     |     |           | ON  |     |
| AGR4305 - Agricultural Soil Mechanics<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                     | OL     |     |     |             |     |     | ON        |     |     |
| CSC1060 - Data Analytics Fundamentals<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                     |        | OL  |     |             | ON  |     |           | ON  |     |
| CSC1410 - Software Engineering Foundations<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CSC1401 OR Course CSC1030)                                                                                          |        | OL  |     |             | ON  |     |           | ON  |     |
| CSC2220 - Artificial Intelligence<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CSC1401 AND Course MAT1101)                                                                                                  | OL     |     |     | ON          |     |     | ON        |     |     |
| CSC2406 - Web Technology 1: Client Side<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course CSC1401 OR Program UCCC OR<br>Program BSED)                                                                            | OL     |     |     | ON          |     |     |           |     |     |
| STA1003 - Fundamental Statistics<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course STA1004   Requisites Prior to 2024:<br>Enrolment is also not permitted in STA1003 if<br>STA2300 has been previously completed. | OL     | OL  | OL  |             | ON  | ON  | ON        | ON  |     |
| STA2100 - Evaluating Information<br>1.00 Unit(s)<br>No requisites                                                                                                                                                                          |        | OL  |     |             |     |     |           |     |     |
| STA2190 - Experimental Design and Analysis<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA3300  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                    |        | OL  |     |             |     |     |           | ON  |     |

|                                                                                                                                                                                                                                                                        | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| STA2301 - Distribution Theory<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course STA1003 OR (Course MAT1102 OR<br>Course ENM1600)   Requisites Prior to 2024:<br>Pre-requisite: (STA2300 or STA1003 or<br>equivalent) and (MAT1102 or ENM1600) |        | OL  |     |             |     |     |           |     |     |
| STA3200 - Multivariate Statistical Methods<br>1.00 Unit(s)<br>Course Anti-requisite   Course Pre-requisites:<br>Course Anti-requisite: Course STA6100  <br>Course Pre-requisites: (Course STA1003 OR<br>Course STA1004)                                                |        | OL  |     |             |     |     |           |     |     |
| STA3301 - Statistical Models<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course STA1003 OR Course STA1004)  <br>Requisites Prior to 2024: Students that have<br>completed STA2300 meet the pre-requisite<br>requirement.                      |        |     | OL  |             |     |     |           |     |     |

## Power Engineering

### Core (14 Units)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
| Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| EEE1201 - Electrical & Electronic Engineering<br>Foundation A<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)   Course Pre-requisites:<br>Program ADNG AND Program BENS AND<br>Program BENH AND Program BSED AND<br>(Area of Study EEEMJR OR Area of Study<br>MCHMJR) AND (Area of Study EEEMJRBENS<br>OR Area of Study MCHMJRBENS) AND (Area<br>of Study EEEMJRBENH OR Area of Study<br>MCHMJRBENH) | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |
| EEE1202 - Electrical & Electronic Engineering<br>Foundation B<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course ENM1500 OR<br>Course ENM1600)   Course Pre-requisites:<br>Program ADNG AND Program BENS AND<br>Program BENH AND (Area of Study EEEMJR                                                                                                                                                                                | OL     | OL  | OL  |             | ON  |     |           | ON  | ON  |

|                                                                                                                                                                                                                                                                                                        | Online |     |     | Springfield |             |     | Toowoomba   |     |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-------------|-----|-------------|-----|-------------|
| Course                                                                                                                                                                                                                                                                                                 | TR1    | TR2 | TR3 | TR1         | TR2         | TR3 | TR1         | TR2 | TR3         |
| OR Area of Study MCHMJR) AND (Area of Study EEEMJRBENS OR Area of Study MCHMJRBENS) AND (Area of Study EEEMJRBENH OR Area of Study MCHMJRBENH)                                                                                                                                                         |        |     |     |             | ON          |     |             | ON  | ON          |
| EEE2301 - Topics in Electrical & Electronic Engineering Subsystem Design<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course EEE1201 AND Course EEE1202) AND<br>(Course MTR2301 AND Course MTR2302)<br>AND (Course CSE1201 AND Course CSE1202)                                     | OL     | OL  | OL  |             | ON          |     |             | ON  | ON          |
| EEE2302 - Topics in Electrical & Electronic Engineering Operations & Maintenance<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course EEE1201 AND Course EEE1202) AND<br>(Course MTR2301 AND Course MTR2302)<br>AND (Course CSE1201 AND Course CSE1202)                         | OL     | OL  | OL  |             | ON          |     |             | ON  | ON          |
| EEE2303 - Electrical & Electronic Engineering Intermediate Topics<br>1.00 Unit(s)<br>Course Co-requisite: Course Co-requisite:<br>(Course EEE1201 AND Course EEE1202) AND<br>(Course ICA1201 AND Course ICA1202) AND<br>(Course MTR2301 AND Course MTR2302)<br>AND (Course CSE1201 AND Course CSE1202) | OL     | OL  | OL  |             | ON          |     |             | ON  | ON          |
| EEE2311 - Electrical and Electronic Engineering Subsystem Design Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course EEE2301   Course<br>Pre-requisites: (Course ENP1111 AND Course<br>ENP1112)                                                     |        |     |     | ON          |             |     | EXT         |     | EXT         |
| EEE2312 - Electrical and Electronic Engineering Operations & Maintenance Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course EEE2302   Course<br>Pre-requisites: (Course ENP1111 AND Course<br>ENP1112)                                             |        |     |     |             | EXT /<br>ON |     | EXT         |     |             |
| ENP2313 - Engineering Associate Capstone Project<br>1.00 Unit(s)                                                                                                                                                                                                                                       |        |     |     | ON          |             | ON  | ON /<br>EXT |     | EXT /<br>ON |

| Course                                                                                                                                                                                                                                                                                                                                                           | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                                                                                                                                                                                                                  | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| Course Co-requisite: Course Co-requisite:<br>(Course AGC2311 OR Course AGC2312 OR<br>Course BME2311 OR Course BME2312 OR<br>Course CVL2311 OR Course CVL2312 OR<br>Course EEE2311 OR Course EEE2312 OR<br>Course ICA2311 OR Course ICA2312 OR<br>Course MCH2311 OR Course MCH2312 OR<br>Course MNG2311 OR Course MNG2312 OR<br>Course MTR2311 OR Course MTR2312) |        |     |     | ON          |     | ON  | ON        |     | ON  |
| PWR3301 - Power Engineering Advanced A<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                       |        |     |     |             |     |     |           |     |     |
| PWR3302 - Power Engineering Advanced B<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                                       |        |     |     |             |     |     |           |     |     |
| PWR3314 - Sustainable Systems Engineering<br>Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: (Course PWR3302 AND<br>Course ENP3102)   Course Pre-requisites:<br>(Course ENP2313 AND Course PWR3301 AND<br>Course ENP3102)<br>**Not Offered**                                                                     |        |     |     |             |     |     |           |     |     |
| PWR3315 - Professional Engineer Innovation<br>Project<br>1.00 Unit(s)<br>Course Co-requisite   Course Pre-requisites:<br>Course Co-requisite: Course PWR3302  <br>Course Pre-requisites: (Course ENP2313 AND<br>Course PWR3302)<br>**Not Offered**                                                                                                               |        |     |     |             |     |     |           |     |     |
| PWR4301 - Professional Engineering<br>Advanced Topics<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                                                                                                                                                                                                        |        |     |     |             |     |     |           |     |     |
| ENP4313 - Engineering Professional Team<br>Capstone Project<br>1.00 Unit(s)<br>Assumed Knowledge: Assumed Knowledge:<br>(Course AGC4301 OR Course CVL4301 OR<br>Course EEE4301 OR Course MCH4301 OR<br>Course MTR4301)                                                                                                                                           |        |     | OL  |             |     | ON  |           |     | ON  |

## Approved Selectives (8 Units)

Students complete 8 student selective units as approved by the Program Director from the options below. Students can refer to the recommended electives list in their chosen major. Students in the following majors can choose the Space Technology major for their 8 units: Electrical & Electronic Engineering Mechanical Engineering and Mechatronic & Robotic Engineering. The Space Technology major is not accredited by Engineers Australia and will not appear as a named major on transcripts or testamurs. Students who choose to complete the Space Technology major should refer to their chosen engineering major for specific information regarding the courses they need to complete.

## Second Major (8 Units)

### Space Technology

#### Core (8 Units)

| Course                                                                                                                                                           | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                                                                                                                                  | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| ENP1002 - Engineering Fundamentals B<br>1.00 Unit(s)<br>No requisites                                                                                            | OL     | OL  | OL  | ON          | ON  |     | ON        | ON  |     |
| SPT1208 - Introduction to Space Technology<br>1.00 Unit(s)<br>No requisites                                                                                      | OL     |     |     |             |     |     |           |     |     |
| SPT2308 - Topics in Spacecraft Subsystem Design<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>(Course SPT1208 AND Course ENP1002)          |        | OL  |     |             | ON  |     |           | ON  |     |
| AST2202 - Planetary and Exoplanetary Science<br>1.00 Unit(s)<br>Course Anti-requisite: Course Anti-requisite:<br>Course PHY2208                                  |        |     | OL  |             |     |     |           |     |     |
| SPT2318 - Spacecraft Design Project<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308                                           |        |     | OL  |             |     | ON  |           |     | ON  |
| SPT3308 - Topics in Space Mission Lifecycle and Operations<br>1.00 Unit(s)<br>Course Pre-requisites: Course Pre-requisites:<br>Course SPT2308<br>**Not Offered** |        |     |     |             |     |     |           |     |     |
| SPT3309 - Advanced Space Applications<br>1.00 Unit(s)<br>No requisites<br>**Not Offered**                                                                        |        |     |     |             |     |     |           |     |     |
| SPT3318 - Space Mission Operations Project                                                                                                                       |        |     |     |             |     |     |           |     |     |

| Course                                           | Online |     |     | Springfield |     |     | Toowoomba |     |     |
|--------------------------------------------------|--------|-----|-----|-------------|-----|-----|-----------|-----|-----|
|                                                  | TR1    | TR2 | TR3 | TR1         | TR2 | TR3 | TR1       | TR2 | TR3 |
| 1.00 Unit(s)<br>No requisites<br>**Not Offered** |        |     |     |             |     |     |           |     |     |

**2 Minors (8 Units)**

**1 Minor and 4 Electives (8 Units)**

**Electives (8 Units)**

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Generated: 02 June 2026

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