# Associate Degree of Engineering (ADNG) - AssocDegEng

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 907052; Distance education: 907055; Springfield campus: 927052

CRICOS code (International applicants): 054271G

| | On-campus | Distance education# |
|---|---|---|
| **Semester intake:** | Semester 1 (March)<br>Semester 2 (July) | Semester 1 (March)<br>Semester 2 (July)<br>Semester 3 (November) |
| **Campus:** | Springfield, Toowoomba | - |
| **Fees:** | Commonwealth supported place<br>Domestic full fee paying place<br>International full fee paying place | Commonwealth supported place<br>Domestic full fee paying place<br>International full fee paying place |
| **Standard duration:** | 2 years full-time, 4 years part-time or external | |
| **Program articulation:** | To: Bachelor of Engineering (Honours); Bachelor of Engineering Science | |

**Notes:**

Please note that the Civil Engineering major is the only major that is available on-campus at Springfield.

The Associate Degree of Engineering (Civil, En

**International full fee paying place**
International students pay full fees. Full fees vary depending on the courses that are taken and whether they are studied on-campus, via distance education/online. You are able to calculate the fees for a particular course via the Course Fee Finder.

## Program structure

The Associate Degree of Engineering program consists of core, major study and in most majors Elective components. Students enrolled in the Associate Degree of Engineering program may undertake a specialisation in one of nine major discipline areas:

- Agricultural Engineering
- Civil Engineering
- Computer Systems Engineering
- Electrical and Electronic Engineering
- Environmental Engineering
- Mechanical Engineering
- Mining Engineering
- Power Engineering.
- Process Engineering

The Associate Degree of Engineering program consists of 16 Academic courses that can be completed in two years of full-time study or four years of part-time study. The program is available in on-campus and external modes of study.

Full-time, on-campus students may, with the permission of the Faculty of Health, Engineering and Sciences, undertake courses by external study. This may be desirable if students wish to extend the range of courses open to them in the Elective areas.

The program structure for each of the major studies in the Associate Degree of Engineering is shown in the following pages.

**Elective Courses**

Elective courses are included in the list of Academic courses. Students should select these courses from the Electives list.

## Required time limits

Full-time students have a maximum of four years to complete this program. Part-time students have a maximum of eight years to complete this program. A pro-rata adjustment of the maximum time period will apply for those students who transfer from one mode of study to another. A pro-rata reduction in the maximum time period will apply to students who are admitted to a program with advanced standing.

## Practical experience

To be eligible to graduate from the Associate Degree of Engineering, students must obtain an aggregate of at least 30 days of suitable practical experience during their program. This experience may be in an engineering office or laboratory where the student would be working principally with professional engineers and engineering associates. It may, however, be preferable for students to spend some time in field or factory activities to gain insight into industrial practice and to see what is involved in converting designs into finished products. Students are required to enrol in ENG2909 Work Experience - Associate in the latter part of their program and keep a record of appropriate experience as specified in the Course Specification. The work experience is to be endorsed by an appropriate person in the organisation providing the experience and submitted to the examiner. The student must meet all costs associated with the acquisition of practical experience to satisfy this requirement. The record of work experience must be made available for per0cce must be madequired to ene a

## Other information

The Faculty of Health, Engineering and Sciences may permit a student to enrol in an Elective course other than those specified for the accredited program. **Students who wish to enrol in Elective courses other than those listed, must obtain written approval prior to enrolling in the course.**

To satisfy the requirements of the program students must complete all of the Academic courses and the Practice courses in the following tables that show the recommended enrolment patterns for on-campus and external students. Students following a non-standard enrolment pattern should consult the course synopses section of this Handbook to ascertain if a course is offered in another term.

### Engineering Pathways

A special Pathway has been developed for students who intend to study the Bachelor of Engineering Science or the Bachelor of Engineering (Honours) once they have completed the Associate Degree of Engineering program. Pathway to the Bachelor of Engineering Science or the Bachelor of Engineering (Honours) maximises the advanced standing (exemptions) students will receive in these programs. A Pathway to theBachelor of Engineering Science or the Bachelor of Engineering (Honours) has been developed for each of the following Associate Degree of Engineering majors into the equivalent major:

- Agricultural Engineering
- Civil Engineering
- Computer Systems Engineering
- Electrical and Electronic Engineering
- Environmental Engineering
- Mechanical Engineering
- Power Engineering
- Mining Engineering (BENS and BENH)

Pathway to the Bachelor of Engineering Science or the Bachelor of Engineering (Honours) has been specially developed for students who study part-time. Full-time students may seek approval to follow the Pathway to the Bachelor of Engineering Science or the Bachelor of Engineering (Honours), but it is not timetabled for on-campus students.

Students must have the approval of the Faculty of Health, Engineering and Sciences to undertake the Pathway to the Bachelor of Engineering Science or the Bachelor of Engineering (Honours). Students are strongly advised to consider and apply for approval for this Pathway as soon as possible in order to maximise the credit they will receive in the Bachelor of Engineering Science or the Bachelor of Engineering (Honours). This should be done prior to the commencement of the second year of studies if possible, and after successful completion of at least eight (8) academic courses in the Associate Degree, including both ENM1500 Introductory Engineering Mathematics and CIV1500 Applied Mechanics.

The Faculty will also consider a student's GPA before granting approval. Under normal circumstances, the expectation is that this will be  5 (greater than five).

Once approval is granted, the Faculty will advise them of the courses they should study when granting approval for them to follow the Pathway to the Bachelor of Engineering Science or the Bachelor of Engineering (Honours).

## Agricultural Engineering Major recommended enrolment pattern

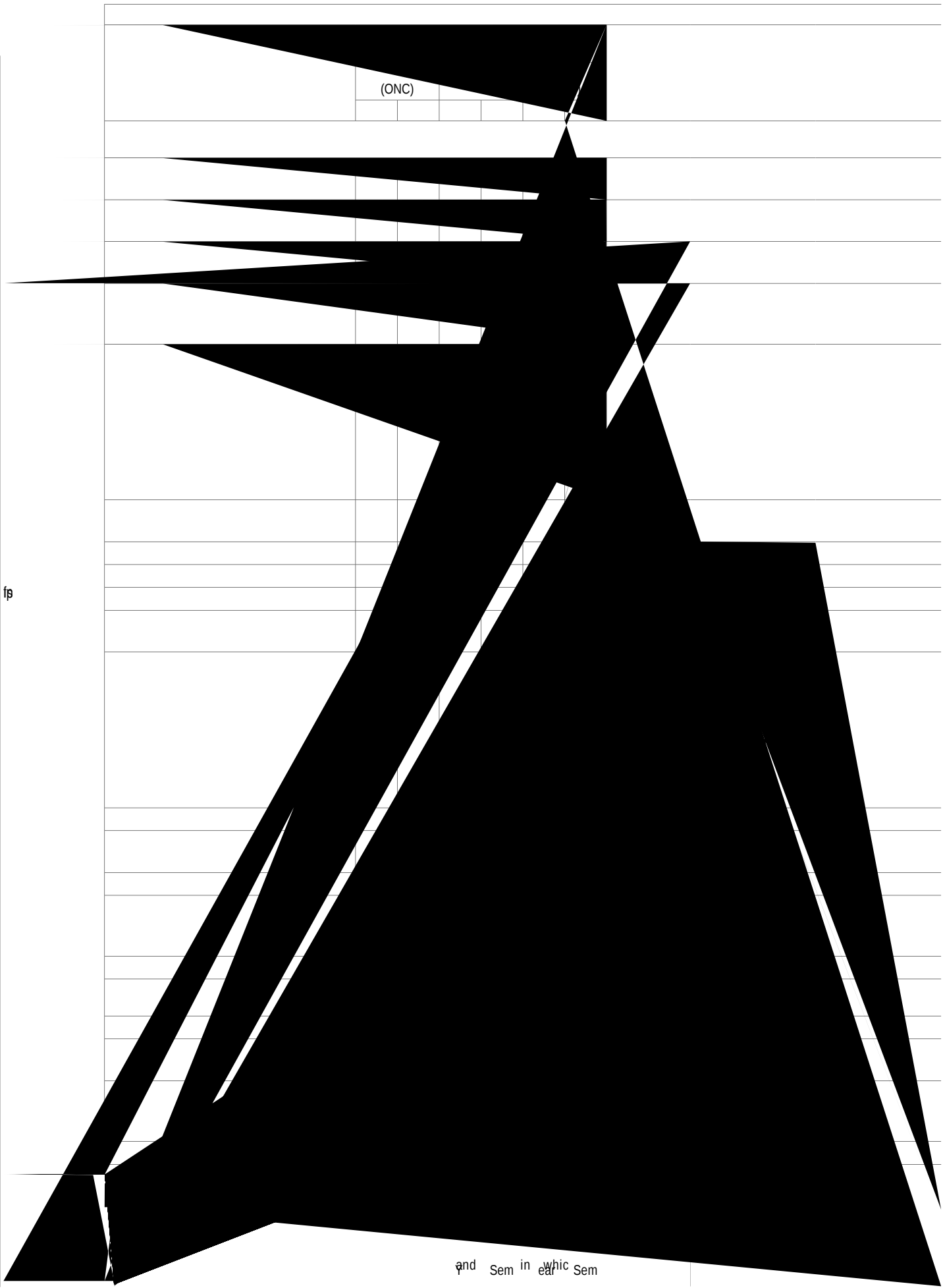
Students are able to enrol in any offered mode of a course (on-campus, distance education or online), regardless of the program mode of study they enrolled in.

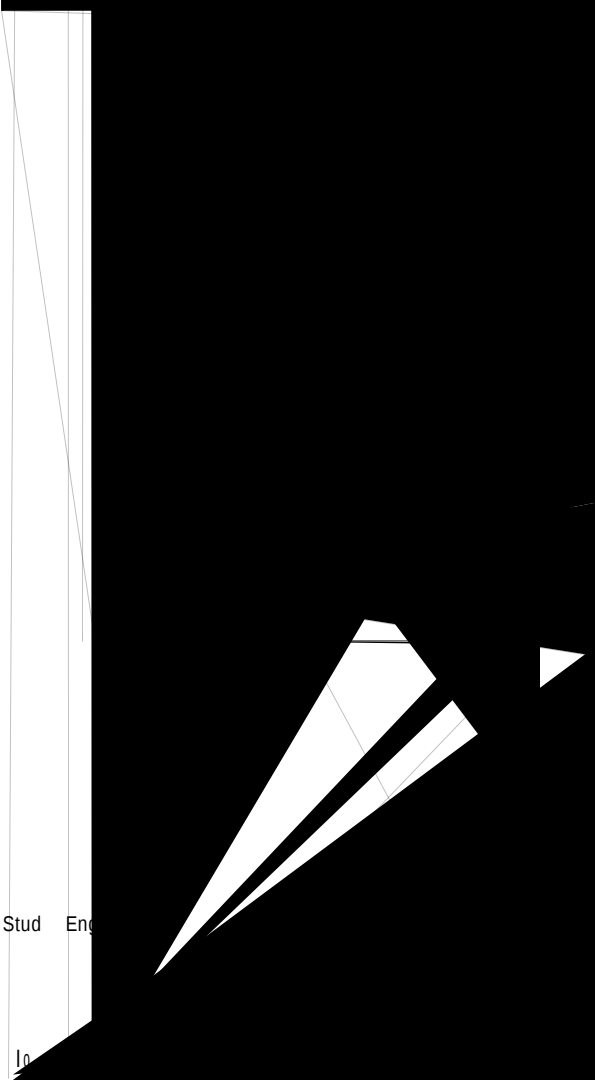
### Agricultural Engineering Pathway

It is recommended that students wishing to continue into the Bachelor of Engineering Science (Agricultural Engineering) or Bachelor of Engineering (Honours) (Agricultural Engineering) programs using a Pathway should have completed at least eight academic courses, including both ENM1500 Introductory Engineering Mathematics and CIV1500 Applied Mechanics, with a GPA greater than 5. Pathway students should enrol in

three core Bachelor of Engineering Science(Agricultural) or Bachelor of Engineering (Honours)(Agricultural)

than 5. Pathway students should enrol in CIV3703 Transport Engineering instead of CIV2702 Municipal Services and enrol in ENG2002 Technology, Sustainability and Society as an elective.





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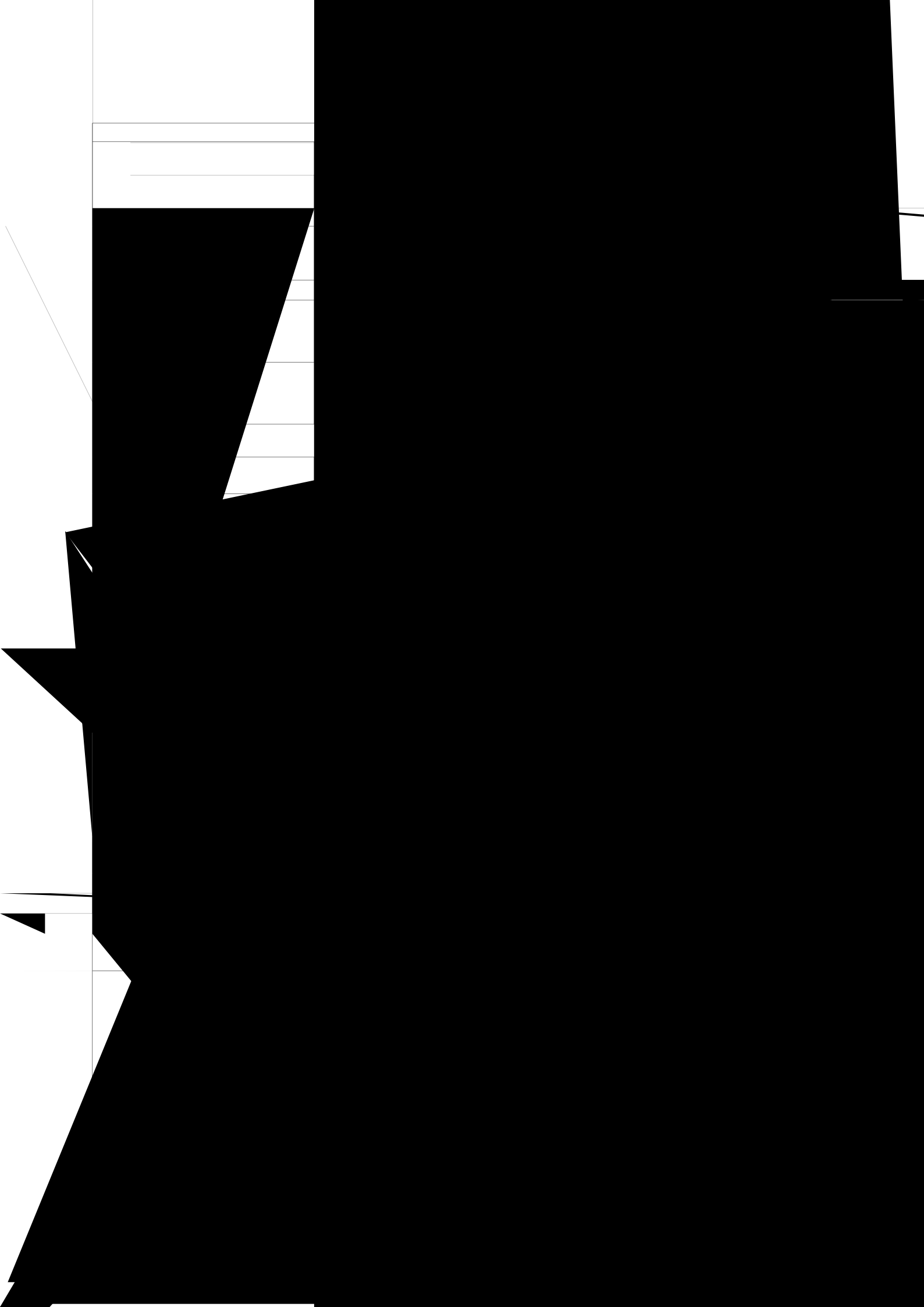

needs of recent school leavers and those lacking any significant experience of the engineering w

| Major study: Computer Systems Engineering (Major Study Code: 15434) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course | Year of program and semester in which course is normally studied | | | | | | Residential school (compulsory /optional) | Enrolment requirements | Comments |
| | On-campus (ONC) | | External (EXT) | | Online (ONL) | | | | |
| | Year | Sem | Year | Sem | Year | Sem | | | |
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Students who have been granted an exemption in the course ELE1801 Electrical Technology are strongly advised to purchase the ELE1801 Electrical Technology

| Major study: Electrical and Electronic Engineering (Major Study Code: 15435) | | | | | | | | | |
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| | | | | | | | Residential schoolCod | Enrolment requirements | Comments crCo |
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**Footnotes**

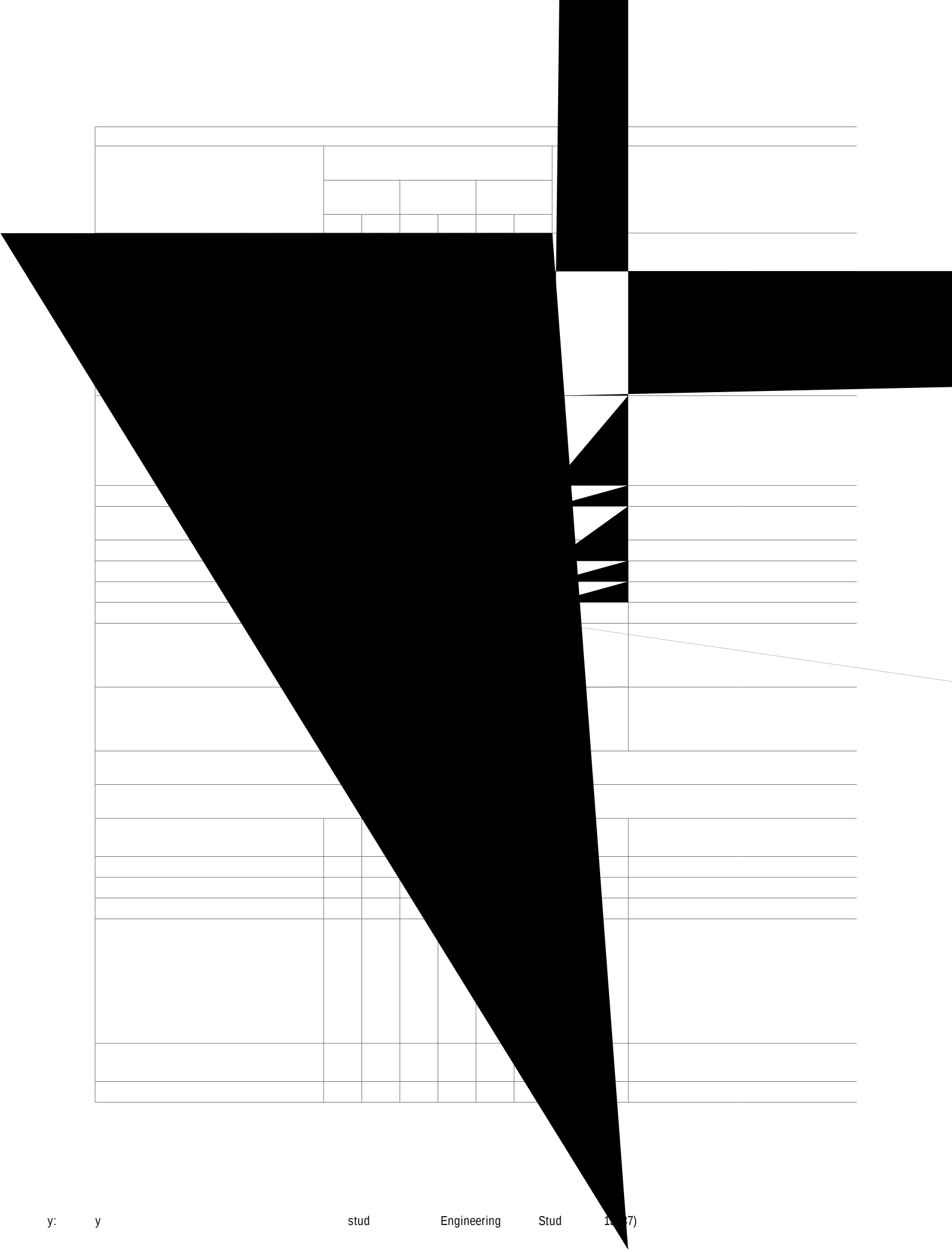
* Students who achieve a high level in Year 12 Mathematics, or an equi… …matics program, may be eligible to replace the study of ENM1500 Introductory Engineering Mathematics with ENM1600 Eng… …thematics. Please contact the Faculty of Health, Engineering and Sciences for further information.

## Mechanical Engineering Major recommend… …lment pattern

Students are able to enrol in any offered mode of a course… …us, distance education or online), regardless of the program mode of study they enrolled in.

### Mechanical Engineering Pathway

It is recommended that students wishing to continue into e… …Bachelor of Engineering Science (Mechanical Engineering) or Bachelor of Engineering (Honours) (M… …Engineering) programs using a Pathway should have completed at least eight courses, with a GP… …than 5. Pathway students should enrol in MEC2304 Solid Modelling and MEC3204 Production … …ng as electives.



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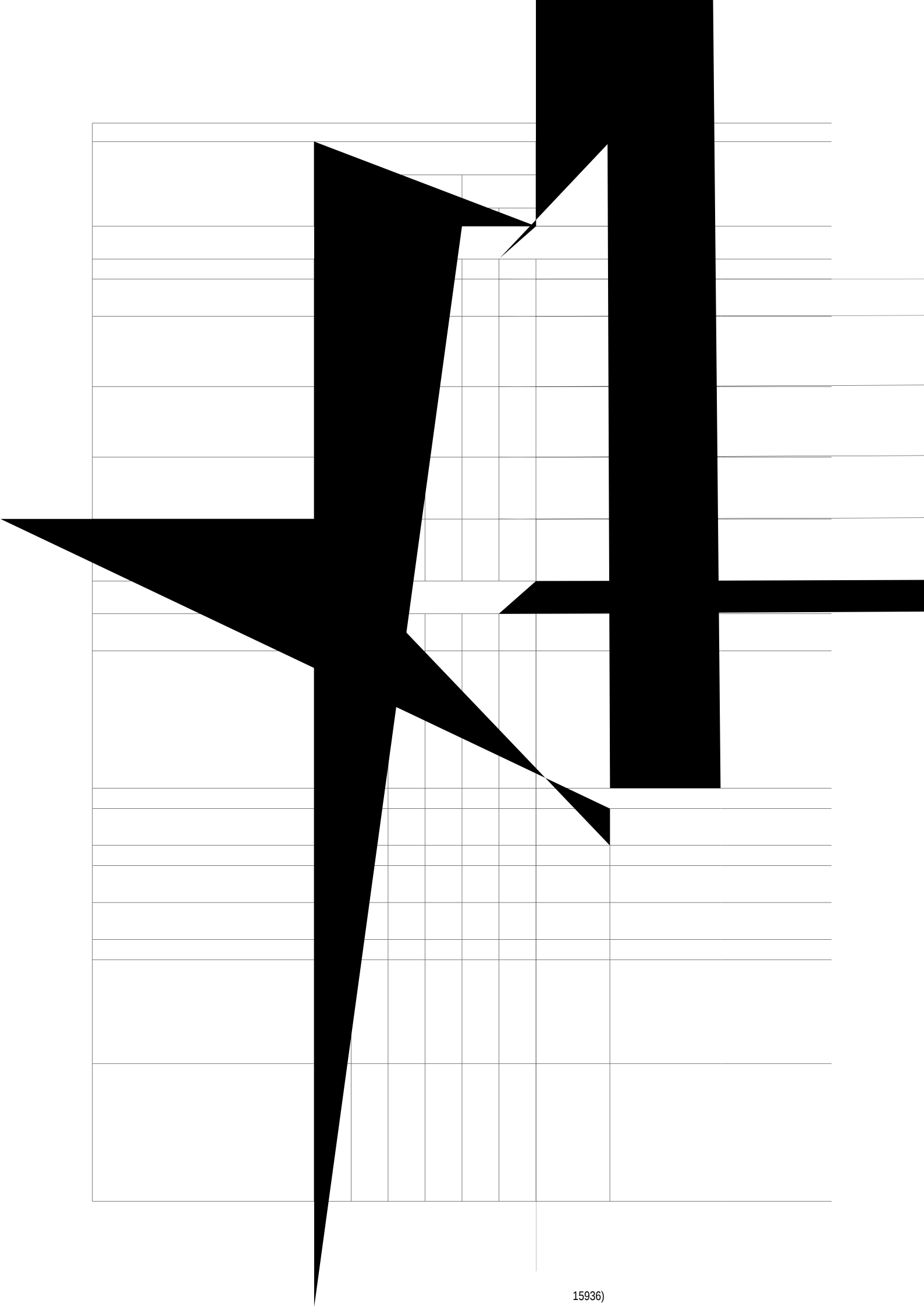
Students who have been granted an exemption in the course ELE1801 Electrical Technology are strongly advised to purchase the ELE1801 Electrical Technology study materials from the USQ Bookshop and work through these prior to attempting ELE2702 Electrical Measurement and Analysis or ELE3803 Electrical Plant.

**Power Engineering Major Pathway**

It is recommended that students wishing to continue into either the Bachelor of Engineering Science (Power Engineering) or Bachelor of Engineering (Honours) (Power Engineering) programs using a Pathway should have completed at least eight courses, including ENM1600 Engineering Mathematics



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| Major study: Major study: Process Engineering (Major Study Code: 16560) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course | Year of program and semester in which course is normally studied | | | | | | Residential school (compulsory /optional) | Enrolment requirements | Comments |
| | On-campus (ONC) | | External (EXT) | | Online (ONL) | | | | |
| | Year | Sem | Year | Sem | Year | Sem | | | |
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