# Bachelor of Aerospace Systems Engineering (Honours)

**Program Code:** 40181  
**Program Option:** Full or part time  
**Start Date:** Semester 1 2019 – 2020  
**Location:** Callaghan

This program plan is an enrolment guide to ensure you are on track to graduate. If at any time you wish to vary from this program plan seek advice from your student progress advisor to ensure you remain on track.

**Program Handbook**  
**Course Handbook**

## Program Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester 1</th>
<th>Semester 2</th>
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</thead>
</table>
| 1    | ENGG1003: Introduction to Procedural Programming  
       - Core  
   | ENGG1500: Introduction to Professional Engineering  
       - Core  
   | MATH1110*: Maths for Engineering, Science & Tech 1  
       - Core  
   | PHYS1210: Advanced Physics I  
       - Core  |
| 2    | ELEC2320: Electrical & Electronic Circuits  
       - Core  
   | ENGG2500: Sustainable Engineering Practice  
       - Core  
   | MATH2310: Calculus of Science & Engineering  
       - Core  
   | MECH2360: Dynamics of Machines  
       - Core  |
| 3    | AERO3000: Principles of Flights  
       - Core  
       - First offered in 2021  
   | AERO3600: Embedded Control Systems  
       - Core  
   | ENGG3500: Managing Engineering Projects  
       - Core  
   | MCHA3400: Embedded Systems Engineering  
       - Core  |
| 4    | ELECTIVE  
       - This can be of any level and can be studied in any term, including summer or winter  
   | AERO4100: Aircraft Systems & Avionics  
       - Core  
       - First offered in 2022  
   | AERO4300: Aircraft Structural Design  
       - Core  
       - First offered in 2022  
   | ENGG4801A: Engineering Final Year Project A  
       - Core  
       - First offered in 2022  |

## Course Status Key

<table>
<thead>
<tr>
<th>Letter</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>Completed (including being awarded credit)</td>
</tr>
<tr>
<td>E</td>
<td>Current enrolment</td>
</tr>
</tbody>
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**Compulsory Requirement:** Exposure to Professional Practice (EEP) / Industrial Experience (IE) 12 weeks

**First offered in 2021:**

- ENGG1500: Introduction to Professional Engineering
- MATH2310: Calculus of Science & Engineering

**First offered in 2022:**

- AERO3600: Embedded Control Systems
- ENGG4801B: Engineering Final Year Project B
- AERO4500: Aerospace System Design
- ENGG4801A: Engineering Final Year Project A

If you have any questions visit [NEWCASTLE.EDU.AU/ASKUON](https://www.newcastle.edu.au/askuon)

Information correct as of 20 July 2020 and subject to change  
Program code: 40181
To be eligible to graduate make sure you have completed 320 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- **Core** courses – 300 units
  - MATH courses - 20 units. The choice of maths courses is based on your assumed knowledge. To find out which MATH courses you should enrol in please see the Enrolling in Maths information. There is more information in your program handbook.
  - Please note, completion of MATH1002 counts as 10 units of electives
- **Electives** – 20 units, of any level. Students can choose from any unrestricted course taught at the University (as long as it is not already a core course of this degree)
  - Visit the course handbook to see a list of available electives.
  - Please note, completion of MATH1002 counts as 10 units of electives
- Students must not exceed 120 units at 1000 level in this program
- Students must undertake 12 weeks of approved industrial experience
- The duration of this program is 4 year full-time (40 units per semester) or part-time equivalent
- The maximum time to complete this program is 10 years

Some courses have assumed knowledge and/or requisites, please refer to the individual course handbook. Please refer to the program handbook for specific information on program structure. If you are intending varying from this program plan please seek advice from your student progress advisor.