How to enrol in the Bachelor of Engineering (Honours) and Bachelor of Science
### Quick facts

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Bachelor of Engineering (Honours) and Bachelor of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short title</td>
<td>BE(Hons)/BSc</td>
</tr>
<tr>
<td>Course code</td>
<td>E3007</td>
</tr>
<tr>
<td>Engineering specialisations you can choose</td>
<td>Aerospace, Chemical, Civil, Electrical and Computer Systems, Environmental, Materials, Mechanical, Mechatronics or Software Engineering</td>
</tr>
</tbody>
</table>
| You’ll graduate with | Two awards:  
1. The award title for your engineering specialisation for example: Bachelor of Aerospace Engineering (Honours)  
2. Bachelor of Science |
| Credit points | 40 units x 6 credit points = 240 credit points  
41 units x 6 credit points = 246 cps if you need two foundation units |
| Duration     | 5 years full time - domestic and international students  
10 years part time - domestic students |
| Time limit   | 10 years                                                |
Now for the course structure

**Engineering Common first year**
Students commence engineering and acquire knowledge in core disciplines, design and teamwork. Taken over the first three semesters.

**Science**
The Bachelor of Science is a comprehensive course, structured in equal parts. In the double degree course you complete:

**Science specified study**
- provides you with the mathematical or statistical foundation for your study of science and address the nature of science and its communication.
- exposes you to different science disciplines, contributing breadth to your understanding of science and giving you the opportunity to learn about several disciplines before finalising your choice of major.

**Science listed major**
- a focused program of study that will develop your expertise in one discipline area.
- learn to develop, apply and communicate an advanced level of understanding of the concepts and theoretical frameworks that constitute the knowledge base of the discipline.

<table>
<thead>
<tr>
<th>Level 1 units</th>
<th><strong>Engineering Common first year</strong></th>
</tr>
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<td></td>
<td>Students commence engineering and acquire knowledge in core disciplines, design and teamwork. Taken over the first three semesters.</td>
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<table>
<thead>
<tr>
<th>Level 2 units</th>
<th><strong>Engineering specialisation selection at the end of third semester</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Levels 2, 3 and 4 units are taken in your specialisation over the remaining semesters.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 3 units</th>
<th><strong>Level 2 units</strong> Builds basic theory and further design skills</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Level 3 units</th>
<th><strong>Level 3 units</strong> Extends theory and design into more complex, professional scenarios</th>
</tr>
</thead>
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<table>
<thead>
<tr>
<th>Level 4 units</th>
<th><strong>Level 4 units</strong> Provides specialised electives and an individual project</th>
</tr>
</thead>
</table>
Let’s enrol

• Your handbook entry and course map detail the units and other requirements you must meet to complete your degree

• You’ll need to enrol for semester 1 and 2
  • Full-time study (local and international students)
    o 8 units for the year 2019
  • Part-time study (local students only)
    o 2 units per semester

• What you enrol in is dependent on your academic preparation
  o I am enrolling from Level 1 of the course
  o I have been awarded credit for part of the course eg students transferring from another university
Level 1 - foundation units

These units develop your understanding of the natural and physical sciences and mathematics that underpin all engineering disciplines.

You may have already completed these units in your final year of school or in tertiary study (VCE Year 12, IB, A Levels or Monash College). If you haven’t, these units are compulsory.

- **ENG1090** Foundation maths (equivalent to VCE Specialist Maths units 3 & 4)
  - You don’t need to take Analysis of change if you have completed VCE Specialist Maths (score of ≥30), IB higher level maths, MUFY Adv Maths 1 & 2 ≥ 65%+, any higher level maths with calculus or if you have completed Monash College Dip of Eng Pt 2.
  - **However, Maths is the language of engineering so if you are not confident with maths and calculus in particular, we recommend to strengthen your maths foundation.**
- **PHS1001** Foundation physics (equivalent to VCE Physics units 3 & 4)
  - You don’t need to take foundation physics if you have completed VCE, IB or A Level Physics; MUFY Physics 65%+; Physics at a tertiary level or if you have completed Monash College Dip of Eng Pt 2.
Your remaining Level 1 Engineering units for 2019 will depend on whether you needed to take any foundation units.

<table>
<thead>
<tr>
<th>I need to take two foundation units</th>
<th>⇒ You need to select two core engineering units</th>
</tr>
</thead>
<tbody>
<tr>
<td>I need to take one foundation unit</td>
<td>⇒ You need to select three core engineering units</td>
</tr>
<tr>
<td>I don’t need to take any foundation units</td>
<td>⇒ You need to select four core engineering units</td>
</tr>
</tbody>
</table>
These five Engineering units are compulsory and must be completed in the first 18 months of your course (your first, second and third semesters)

- **ENG1001** Engineering design: Lighter, faster, stronger
- **ENG1002** Engineering design: Cleaner, safer smarter
- **ENG1003** Engineering mobile apps
- **ENG1060** Computing for engineers
- **ENG1005** Engineering mathematics

**Tips!**
- ✓ Split your design units (ENG1001 and ENG1002) across two semesters
- ✓ If you don’t have a background in physics, put ENG1001 in semester 2
- ✓ Keep ENG1060 and ENG1005 in the same semester
Now that you have your four engineering units, you will need to select four science units to complete your Level 1 enrolment.

The Faculty of Science enrolment site for double degree students provides lots of resources to help you choose your science units.

**Tips!**
- Earth science is a good fit if you are thinking about specialising in Civil Engineering
- Astrophysics or Physics for Aerospace Engineering
- Chemistry for Chemical Engineering
- Mathematics or Physics are good all round options for most specialisations

**Science Q & A**
- Have a question or need course advice regarding Science? [https://www.monash.edu/science/current-students/help-and-support](https://www.monash.edu/science/current-students/help-and-support)
# Let’s enrol

## Here’s what to enrol in if you don’t need any foundation units

<table>
<thead>
<tr>
<th>Sem 1</th>
<th>ENG1060 Computing for engineers</th>
<th>ENG1005 Engineering mathematics</th>
<th>Science unit</th>
<th>Science unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem 2</td>
<td>ENG1002 Engineering design: cleaner, safer, smarter</td>
<td>ENG1003 Engineering mobile apps</td>
<td>Science unit</td>
<td>Science unit</td>
</tr>
</tbody>
</table>

In October 2019 you will re-enrol in the following units for 2020

| Sem 1 | ENG1001 Engineering design: lighter, faster, stronger | **Engineering elective** | Science unit | Science unit |

### Engineering specialisation selection after your third semester

| Sem 2 | ENG2001 Engineering Specialisation selection code (12cp) | Science unit | Science unit |

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**Tip!**

- You can swap the semester of ENG1003 and your Engineering elective unit if you like.
Here’s what to enrol in if you need to enrol in Foundation physics

<table>
<thead>
<tr>
<th>Sem 1</th>
<th>ENG1002 Engineering design: cleaner, safer, smarter</th>
<th>PHS1001 Foundation physics</th>
<th>Science unit</th>
<th>Science unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem 2</td>
<td>ENG1060 Computing for engineers</td>
<td>ENG1005 Engineering mathematics</td>
<td>Science unit</td>
<td>Science unit</td>
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In October 2019 you will re-enrol in the following units for 2020

<table>
<thead>
<tr>
<th>Sem 1</th>
<th>ENG1003 Engineering mobile apps</th>
<th>ENG1001 Engineering design: lighter, faster, stronger</th>
<th>Science unit</th>
<th>Science unit</th>
</tr>
</thead>
</table>

Engineering specialisation selection after your third semester

<table>
<thead>
<tr>
<th>Sem 2</th>
<th>ENG2001 Engineering Specialisation selection code (12cp)</th>
<th>Science unit</th>
<th>Science unit</th>
</tr>
</thead>
</table>

Tip!
☑️ You can swap the semester of ENG1005 and ENG1003 if you like.
Let’s enrol

Here’s what to enrol in if you need to enrol in Foundation mathematics

<table>
<thead>
<tr>
<th>Sem 1</th>
<th>ENG1002 Engineering design: cleaner, safer, smarter</th>
<th>ENG1090 Foundation Mathematics</th>
<th>Science unit</th>
<th>Science unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem 2</td>
<td>ENG1060 Computing for engineers</td>
<td>ENG1005 Engineering mathematics</td>
<td>Science unit</td>
<td>Science unit</td>
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In October 2019 you will re-enrol in the following units for 2020

| Sem 1 | ENG1003 Engineering mobile apps                   | ENG1001 Engineering design: lighter, faster, stronger | Science unit | Science unit |

Engineering specialisation selection after your third semester

| Sem 2 | ENG2001 Engineering Specialisation selection code (12cp) | Science unit | Science unit |

Tip!
✓ You can swap the semester of ENG1005 and ENG1003 if you like.
Let’s enrol

Here’s what to enrol in if you need to enrol in Foundation physics and maths

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Science unit</th>
<th>Science unit</th>
</tr>
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<tbody>
<tr>
<td>Sem 1</td>
<td>PHS1001</td>
<td>Foundation physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG1090</td>
<td>Foundation Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sem 2</td>
<td>ENG1002</td>
<td>Engineering design: cleaner, safer, smarter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG1005</td>
<td>Engineering mathematics</td>
<td></td>
<td></td>
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In October 2019 you will re-enrol in the following units for 2020 (semester one will require an overload of one unit)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Science unit</th>
<th>Science unit</th>
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<tbody>
<tr>
<td>Sem 1</td>
<td>ENG1001</td>
<td>Engineering design: lighter, faster, stronger</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>ENG1060</td>
<td>Computing for engineers</td>
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<td></td>
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Engineering specialisation selection after your third semester

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<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Sem 2</td>
<td>ENG2001</td>
<td>Engineering Specialisation selection code (12cp)</td>
<td></td>
<td></td>
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</table>

Tip!

✔ You can swap the semesters of ENG1005 and ENG1003.
What if I have credit?

Students granted some credit or credit across multiple year levels

- Your credit has been keyed
- The units you need to enrol in are listed on the course map
- Print off a course map and mark the units you have been granted credit for
- Enrol in eight units, starting from the lowest year level, making sure to check prerequisites have been met.

Tip!
- Prerequisites are listed against each unit in the specialisation section of the handbook (at the bottom of the course page)
How to apply for credit

• You can **apply for credit** for completed university level subjects
• You can **search online** for previous credit decisions to give you an idea of what you **may** be granted
• You do not need to provide your results or a syllabus for Monash enhancement units (we have these already!)
• Enrol in level one science and engineering units to secure your place in the course. You can change your enrolment once your credit application has been finalised.

Tip!

- Submit your credit application as quickly as possible to give you plenty of time to change your enrolment if you have to
- You will only be awarded credit if you have room in your course structure.
## What next?

<table>
<thead>
<tr>
<th>Domestic students</th>
<th>International students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enrol on WES</strong> (Step 3)</td>
<td></td>
</tr>
<tr>
<td>• Order your ID card (Step 4)</td>
<td></td>
</tr>
<tr>
<td>• Select your preferred class times</td>
<td></td>
</tr>
<tr>
<td>• Prepare for uni (Host Scheme, support services, online systems, transport, accommodation)</td>
<td></td>
</tr>
<tr>
<td>• View your fee Student Amenities fee statement.</td>
<td></td>
</tr>
</tbody>
</table>

**Domestic student checklist**

**International student checklist**

Once you have your ID card, you'll need to register your arrival by scanning your card at [Monash Connect](#).

You need to register your arrival from Tuesday 29 January and no later than Friday 1 March 2019.
Orientation provides critical academic and social preparation for your study in engineering. Your attendance is required. See you in February!

Tip!
✓ We’ll send you a reminder email and further orientation details in early February. Be sure to monitor your student email account.