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

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Bachelor of Engineering (Honours) and Bachelor of Biomedical Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short title</td>
<td>BE(Hons)/BBimedSc</td>
</tr>
<tr>
<td>Course code</td>
<td>E3004</td>
</tr>
<tr>
<td>Engineering specialisations you can choose</td>
<td>Chemical, Civil, Electrical and Computer Systems, Materials or Mechanical.</td>
</tr>
</tbody>
</table>
| You’ll graduate with | Two awards:  
1. The award title for your engineering specialisation for example:  
   Bachelor of Chemical Engineering (Honours)  
2. Bachelor of Biomedical 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

<table>
<thead>
<tr>
<th>Level 1 units</th>
<th><strong>Engineering Common first year</strong></th>
<th>Biomedical Science</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students commence engineering and acquire knowledge in core disciplines, design and teamwork</td>
<td>The course provides an interdisciplinary approach to the study of biomedical science, with five central themes:</td>
</tr>
<tr>
<td></td>
<td><strong>Engineering specialisation selection at the end of common first year</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Levels 2, 3 and 4 units are taken in your specialisation over the remaining four years</td>
<td></td>
</tr>
<tr>
<td>Level 2 units</td>
<td>Builds basic theory and further design skills</td>
<td></td>
</tr>
<tr>
<td>Level 3 units</td>
<td>Extends theory and design into more complex, professional scenarios</td>
<td></td>
</tr>
<tr>
<td>Level 4 units</td>
<td>Provides specialised electives and an individual project</td>
<td></td>
</tr>
<tr>
<td></td>
<td>These themes are interwoven in units throughout the course.</td>
<td></td>
</tr>
</tbody>
</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 both semester 1 and 2
  - Full-time study (local and international students)
    - 4 units per semester/ 8 units for the year
  - Part-time study (local students only)
    - 2 units per semester/ 4 units for the year
- What you enrol in is dependent on your academic preparation
  - **I am enrolling from Level 1 of the course**
  - **I have been awarded credit for part of the course eg students transferring from another university**
These five Engineering units are compulsory and must be completed at Level 1

- **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
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 foundation maths 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 ENG1090 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 Engineering units will depend on whether you needed to take any foundation units.

| I need to take two foundation units | ⇒ You have no remaining engineering units to choose  
  ⇒ To avoid having to take 9 units in Level 1, you can take ENG1003 Engineering mobile apps in your second year as an overload  
  ⇒ Now for your Biomedical Science units |
|------------------------------------|--------------------------------------------------------------------------------------------------|
| I need to take one foundation unit  | ⇒ You have no remaining engineering units to choose  
  ⇒ Now for your Biomedical Science units |
| I don’t need to take any foundation units | ⇒ You have one engineering elective unit to choose |
Level 1 – Engineering electives

You must choose at least one unit from:

- **CHM1011** Chemistry I or **CHM1051** Chemistry I advanced
- **ECE2041** Telecommunications
- **ECE2072** Digital systems
- **ENE1621** Environmental engineering
- **ENG1021** Spatial communication in engineering
- **ENG1051** Materials for energy and sustainability
- **FIT2085** Introduction to computer science for engineers
- **MAE2405** Aircraft performance
- **MAT1830** Discrete mathematics for computer science
- **MEC2404** Mechanics of fluids
- **PHS1002** Physics for engineering
- **RSE1010** Natural resources engineering
- **TRC2001** Introduction to systems engineering

Tip!

✔ ENG1021, ENG1051, PHS1002, or CHM1011 are good choices if you’re not too sure which specialisation to choose at the end of Level 1.
These Level 2 engineering electives are offered in first year to extend capable students and provide a deeper insight into some of the specialisations:

- **ECE2041** Telecommunications
- **ECE2072** Digital systems
- **FIT2085** Introduction to computer science for engineers
- **MAE2405** Aircraft performance
- **MEC2404** Mechanics of fluids
- **TRC2001** Introduction to systems engineering

Tips!

- ✔ You must have passed four units to be eligible to undertake these Level 2 electives so you’ll need to enrol in them in semester 2
- ✔ Don’t underestimate the difficulty and level of work involved in these units. Remember, you will be in class with Level 2 students.
These two biomed units are compulsory in Level 1:

- **BMS1011** Biomedical chemistry
- **BMS1052** Human neurobiology
## 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>ENG1001 Engineering design: lighter, faster, stronger</th>
<th>ENG1005 Engineering mathematics</th>
<th>ENG1060 Computing for engineers</th>
<th>BMS1011 Biomedical chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem 2</td>
<td>ENG1002 Engineering design: cleaner, safer, smarter</td>
<td>ENG1003 Engineering mobile apps</td>
<td>Engineering elective unit</td>
<td>BMS1052 Human neurobiology</td>
</tr>
</tbody>
</table>

### Tip!
- Yes, you cannot swap the semesters of any of the units.

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

<table>
<thead>
<tr>
<th>Sem 1</th>
<th>ENG1002 Engineering design: cleaner, safer, smarter</th>
<th>PHS1001 Foundation physics</th>
<th>ENG1090 Foundation Mathematics</th>
<th>BMS1011 Biomedical chemistry</th>
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<td>Sem 2</td>
<td>ENG1001 Engineering design: lighter, faster, stronger</td>
<td>ENG1005 Engineering mathematics</td>
<td>ENG1060 Computing for engineers</td>
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### Tip!
- Yes, you can take the remaining core unit ENG1003 Engineering mobile apps in semester one of year two as an overload.
- Yes, you cannot swap the semesters of any of the units.
## Let’s enrol

### Here’s what to enrol in if you need to take Foundation physics

<table>
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<tr>
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<th>ENG1002 Engineering design: cleaner, safer, smarter</th>
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<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ENG1001 Engineering design: lighter, faster, stronger</td>
<td>ENG1005 Engineering mathematics</td>
<td>ENG1060 Computing for engineers</td>
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### Tip!
- You cannot swap the semesters of any of the units.

### Here’s what to enrol in if you need to take Foundation maths

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### Tip!
- You cannot swap the semesters of any of the units.
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)

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Credit</th>
<th>Credit</th>
<th>Enrol</th>
<th>Enrol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 2</td>
<td>Credit</td>
<td>Credit</td>
<td>Enrol</td>
<td>Enrol</td>
</tr>
<tr>
<td>Semester 1</td>
<td>Enrol</td>
<td>Credit</td>
<td>Credit</td>
<td>Enrol</td>
</tr>
<tr>
<td>Semester 2</td>
<td>Enrol</td>
<td>Enrol</td>
<td></td>
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</table>
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 a standard enrolment to secure your place in the course. Your enrolment can be changed when your application has been processed.

**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>
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</tr>
<tr>
<td>• Order your ID card (Step 4)</td>
<td>• Order your ID card (Step 4)</td>
</tr>
<tr>
<td>• Select your preferred class times</td>
<td>• Select your preferred class times</td>
</tr>
<tr>
<td>• Prepare for uni (Host Scheme, support services, online systems, transport, accommodation)</td>
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</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.