### Course Title: Bachelor of Engineering (Honours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>E3001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialisation/Discipline offered</td>
<td>Chemical Engineering, Civil Engineering, Electrical and Computer Systems Engineering, Mechanical Engineering, Mechatronics Engineering, Software Engineering</td>
</tr>
<tr>
<td>You’ll graduate with</td>
<td>The award title is based on your specialization. For example: Bachelor of Mechatronics Engineering (Honours)</td>
</tr>
<tr>
<td>Credit points</td>
<td>32 units x 6 credit point = 192 credit points</td>
</tr>
<tr>
<td>Duration</td>
<td>4 years</td>
</tr>
<tr>
<td>Time limit</td>
<td>8 years (International students are advised to complete 4 years due to student pass requirements)</td>
</tr>
<tr>
<td>Meritorious honours</td>
<td>Based on academic achievement, no additional time required.</td>
</tr>
</tbody>
</table>
These five 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

Students who falls into this category are encouraged to take this unit in the first semester:
- ENG1090 Foundation mathematics

Any student from a one-year pre-U programme, who did not do advanced mathematics and did not score above 80% in basic mathematics, needs to enroll in ENG1090.

Maths is a language of engineering, so if you are not confident with maths and calculus in particular, we recommend ENG1090 to strengthen your maths foundation.
Level 1 – Engineering electives

- **ENG1021** Spatial communication in engineering
- **ENG1811** Engineering design C: Automated, integrated and connected world
- **ECE2071** Computer organization and programming
- **ECE2072** Digital systems
- **MEC2404** Mechanics of fluids
- **TRC2001** Introduction to systems engineering
- **CHM1051** Chemistry I advanced
- **PHS1002** Physics for engineering
- **FIT1047** Introduction to computer systems. Networks and security *
- **FIT1051** Programming fundamentals in java *

Compulsory elective (General studies requirement)
- **ENG2801** Leadership and innovation

*recommended for Software Engineering*
Let’s enrol

Here’s what to enrol in if **without** ENG1090

<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>Elective 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>ENG2801 Leadership and innovation</td>
<td>Elective unit</td>
</tr>
</tbody>
</table>

**Semester 1 2020 Elective Unit** (choose one only):
- CHM1051 / PHS1002 / FIT1047

*FIT1047 recommended for Software Engineering*

**Semester 2 2020 Elective Unit** (choose one only):
- ENG1021 / ECE2072 / MEC2404 / TRC2001 / FIT1051 / ENG1811 (new unit)

*FIT1051 recommended for Software Engineering*

Students are not permitted to enrol in other units unless it is granted by the First Year Coordinator
## Let’s enrol

### Here’s what to enrol in if **with** ENG1090

<table>
<thead>
<tr>
<th>Sem 1</th>
<th>ENG1001 Engineering design: lighter, faster, stronger</th>
<th>ENG1090 Foundation mathematics (*)</th>
<th>ENG1060 Computing for engineers</th>
<th>Elective 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>ENG1005 Engineering mathematics</td>
<td>ENG2801 Leadership and innovation</td>
</tr>
</tbody>
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(*) Any student from a one-year pre-U programme, who did not do advanced mathematics and did not score above 80% in basic mathematics, needs to enroll in ENG1090

- Maths is a language of engineering, so if you are not confident with maths and calculus in particular, we recommend ENG1090 to strengthen your maths foundation

### Semester 1 2020 Elective Unit (choose one only):
- CHM1051 / PHS1002 / FIT1047

**FIT1047 recommended for Software Engineering**

Students are not permitted to enrol in other units unless it is granted by the First Year Coordinator
Orientation week: 24 – 28 February 2020
School’s orientation: 26 February 2020

Students are required to read the below orientation webpage prior to the School’s orientation day

https://www.monash.edu.my/engineering/orientation-for-new-students

Have you read and click the “HERE” button for all the FOUR sections below?

1) All about first year
2) Five W’s and One H of first year engineering
3) Engineering essentials
4) Safety awareness