# 2021 Study Plan Template

**Bachelor of Engineering (Mechanical) (Honours), Master of Engineering (Biomedical)**

Please note that this document is provided as a guide only. Students are responsible for ensuring that they have completed 180 units of study according to the official course rule available at [https://students.flinders.edu.au/my-course/course-rules/undergrad/bengmchmeb](https://students.flinders.edu.au/my-course/course-rules/undergrad/bengmchmeb).

Students are responsible for planning their Core and Option Topics ahead to ensure they meet the topic prerequisites. A list of all topics, including topic prerequisite information and alternate study period availabilities, is available at [Topics 2021](#).

## Semester 1, 2021 start:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>S1</th>
<th>ENGR1721 Engineering Programming</th>
<th>ENGR1711 Engineering Design</th>
<th>ENGR1732 Engineering Mechanics</th>
<th>MATH1121 Mathematics 1A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S2</td>
<td>ENGR1201 Electronics</td>
<td>ENGR1401 Professional Skills</td>
<td>ENGR1722 Engineering Physics and Materials</td>
<td>MATH1122 Mathematics 1B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>S1</th>
<th>ENGR2711 Engineering Mathematics</th>
<th>ENGR2751 Fluid Mechanics</th>
<th>ENGR2781 Mechanical Design Project</th>
<th>MMED1005 How Your Body Works: Human Physiology and Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NS1</td>
<td>ENGR2703 Mechanical Practice Certificate (0 units)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S2</td>
<td>COMP2711 Computer Programming 2</td>
<td>ENGR2722 Analysis of Engineering Systems</td>
<td>ENGR2771 Dynamics</td>
<td>PHYS2712 Thermodynamics and Energy Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>S1</th>
<th>ENGR2741 Mechanics and Structures</th>
<th>ENGR2752 Mechanics of Machines</th>
<th>ENGR3761 Applied Thermo-Fluid Dynamics</th>
<th>MMED2931 Human Physiology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S2</td>
<td>ENGR2732 Biomechanics</td>
<td>ENGR2742 Biomedical Instrumentation</td>
<td>ENGR2812 Engineering Materials</td>
<td>ENGR7702 Biomaterials</td>
</tr>
</tbody>
</table>
### Year 4

- **S1**
  - ENGR9721 Control Systems
  - ENGR9741 Physiological Measurement GE
  - ENGR9811 Solid Mechanics GE
  - MMED2933 Fundamental Neuroscience

- **NS1**
  - ENGR3750 Workplace preparation (0 units)

- **S2**
  - ENGR9704 Engineering Management
  - ENGR3700 Engineering Practicum or ENGR3710 International Engineering Practicum (13.5 units)

### Year 5

- **S1**
  - ENGR9700A Masters Thesis (4.5/18 units)
  - ENGR9700B Masters Thesis (4.5/18 units)
  - ENGR7781 Innovation in Medical Devices
  - ENGR7811 Advanced Mechanical Design

- **S2**
  - ENGR9700C Masters Thesis (4.5/18 units)
  - ENGR9700D Masters Thesis (4.5/18 units)
  - MMED2932 Integrative Human Physiology
  - Year 5 Option Topic^:

### Semester 2, 2021 start:

- **S2**
  - ENGR1201 Electronics
  - ENGR1401 Professional Skills
  - ENGR1732 Engineering Mechanics
  - MATH1121 Mathematics 1A

- **S1**
  - ENGR1711 Engineering Design
  - ENGR1721 Engineering Programming
  - ENGR1722 Engineering Physics and Materials
  - MATH1122 Mathematics 1B

- **S2**
  - COMP2711 Computer Programming 2
  - ENGR2722 Analysis of Engineering Systems
  - ENGR2771 Dynamics
  - PHYS2712 Thermodynamics and Energy Systems

- **NS1**
  - ENGR2703 Mechanical Practice Certificate (0 units)

- **S1**
  - ENGR2711 Engineering Mathematics
  - ENGR2751 Fluid Mechanics
  - ENGR2781 Mechanical Design Project
  - MMED1005 How Your Body Works; Human Physiology and Structure

- **S2**
  - ENGR2732 Biomechanics
  - ENGR2742 Biomedical Instrumentation
  - ENGR2812 Engineering Materials
  - ENGR7702 Biomaterials

- **S1**
  - ENGR2741 Mechanics and Structures
  - ENGR2752 Mechanics of Machines
  - ENGR3761 Applied Thermo-Fluid Dynamics
  - MMED2931 Human Physiology

- **NS1**
  - ENGR3750 Workplace Preparation (0 units)
<table>
<thead>
<tr>
<th>Year 4</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2</td>
<td>ENGR9704</td>
<td>Engineering Management</td>
<td>ENGR3700</td>
<td>Engineering Practicum or ENGR3710</td>
<td>ENGR9811</td>
<td>Solid Mechanics GE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>International Engineering Practicum</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(13.5 units)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>ENGR9721</td>
<td>Control Systems GE</td>
<td>ENGR9741</td>
<td>Physiological Measurement GE</td>
<td>ENGR9811</td>
<td>Solid Mechanics GE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MMED2933</td>
<td>Fundamental Neuroscience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>ENGR9700A</td>
<td>Masters Thesis (4.5/18 units)</td>
<td>ENGR9700B</td>
<td>Masters Thesis (4.5/18 units)</td>
<td>MMED2932</td>
<td>Integrative Human Physiology</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>ENGR9700C</td>
<td>Masters Thesis (4.5/18 units)</td>
<td>ENGR7781</td>
<td>Innovation in Medical Devices</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGR7711</td>
<td>Advanced Mechanical Design</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key:

<table>
<thead>
<tr>
<th>Core Topic</th>
<th>Compulsory topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option Topic</td>
<td>A choice from a list of specified topics (see below)</td>
</tr>
</tbody>
</table>

Year 5 Option^:

- ENGR7707 Medical Physics (4.5 units) (S1 only)
- ENGR7771 Rehabilitation and Assistive Technologies (4.5 units) (S2 only)
- ENGR7921 Materials Selection in Design (4.5 units) (S1 only)
- ENGR7961 Finite Element Methods (4.5 units) (S1 only)
- ENGR8841 Hydrostatics (4.5 units) (S1 only)
- ENGR7701 Advanced Biomechanics (4.5 units) (S2 only)
- ENGR7721 Advanced Vibration Analysis (4.5 units) (S2 only)
- MMEDXXXX Medicine (MMED) topics with approval from the Course Coordinator (4.5 units)