Master of Engineering in Electrical Engineering

Instructions
1. Make sure that you are familiar with the program requirements of your degree.
2. Make sure you are following the program requirements for the academic year that you commenced your degree.
3. Fill in the boxes once you have successfully passed the course (or if you have been awarded course credit or exemption).
4. Ensure that you have completed the minimum unit requirements for each section.
5. Always check your enrolments with CECS Student Services to ensure that you are on track to graduate.

The Master of Engineering in Electrical Engineering requires the completion of 16 courses.

Advice from the Program Convenor:
- ENGN6250 and ENGN8260 should be completed in your first year.
- ENGN8100 should be completed before ENGN8120.

Compulsory Courses
Complete the 8x courses listed below

- **ENGN6250 Professional Practice** (6 units)
  - completed at the ANU
  - awarded as credit
  - awarded as exemption

- **ENGN8260 Professional Practice 2** (6 units)
  - completed at the ANU
  - awarded as credit
  - awarded as exemption

- **ENGN8100 Introduction to Systems Engineering** (6 units)
  - completed at the ANU
  - awarded as credit
  - awarded as exemption

- **ENGN8120 Systems Modelling** (6 units)
  - completed at the ANU
  - awarded as credit
  - awarded as exemption

- **ENGN8170 Group Project** (12 units)
  - completed at the ANU
  - awarded as credit
  - awarded as exemption
  - Successful completion of ENGN8100
  - Successful completion of ENGN8260
  This course must be completed in one semester.

- **ENGN6625 Power Systems and Power Electronics** (6 units)
  - completed at the ANU
  - awarded as credit
  - awarded as exemption

- **ENGN6223 Control Systems** (6 units)
  - completed at the ANU
  - awarded as credit
  - awarded as exemption

...
## Technical Electrical Engineering Courses

**Complete 2x of the courses listed below**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN6213</td>
<td>Digital Systems and Microprocessors</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN631</td>
<td>Systems Dynamics</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN634</td>
<td>Semiconductors</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6513</td>
<td>Fibre Optics Communication Systems</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6516</td>
<td>Energy Resources and Renewable Technologies</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6524</td>
<td>Photovoltaic Technologies</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6528</td>
<td>Computer Vision</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6536</td>
<td>Wireless Communications</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6537</td>
<td>Digital Signal Processing</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6626</td>
<td>Digital Communications</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6627</td>
<td>Robotics</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6539</td>
<td>Computer Networks</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN6628</td>
<td>Network Optimisation and Control</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>ENGN8224</td>
<td>Advanced Control Systems</td>
<td>6</td>
<td>N/A</td>
</tr>
</tbody>
</table>

- **ENGN6213 Digital Systems and Microprocessors**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN631 Systems Dynamics**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN634 Semiconductors**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6513 Fibre Optics Communication Systems**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6516 Energy Resources and Renewable Technologies**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6524 Photovoltaic Technologies**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6528 Computer Vision**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6536 Wireless Communications**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6537 Digital Signal Processing**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6626 Digital Communications**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6627 Robotics**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6539 Computer Networks**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN6628 Network Optimisation and Control**
  - Credits: 6
  - Prerequisites: N/A
- **ENGN8224 Advanced Control Systems**
  - Credits: 6
  - Prerequisites: N/A

- **Successful completion of ENGN6223 or an equivalent course in control systems**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Availability</th>
<th>Status</th>
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<tbody>
<tr>
<td>ENGN8534</td>
<td>Information Theory</td>
<td>6</td>
<td>–</td>
<td>Semester 2</td>
<td>✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8535</td>
<td>Engineering Data Analytics</td>
<td>6</td>
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<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8536</td>
<td>Advanced Topics in Mechatronics Systems</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8537</td>
<td>Embedded Systems and Real Time Digital Signal Processing</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8538</td>
<td>Probability and Stochastic Processes in Engineering</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8637</td>
<td>Advanced Topics in Communications and Signal Processing</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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</tr>
<tr>
<td>ENGN8830</td>
<td>Photovoltaic Power Plants</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8831</td>
<td>Integration of Renewable Energy into Power Systems and Microgrids</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8833</td>
<td>Industrial Energy Efficiency and Decarbonisation</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>ENGN8625</td>
<td>Advanced Power Systems</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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</tr>
</tbody>
</table>

### Technical Computing Courses

Complete 3x of the courses listed below

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Availability</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP6710</td>
<td>Structured Programming</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
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<tr>
<td>COMP6310</td>
<td>Systems, Networks and Concurrency</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
<td></td>
</tr>
<tr>
<td>COMP6262</td>
<td>Logic</td>
<td>6</td>
<td>–</td>
<td>✔️ completed at the ANU ✔️ awarded as credit ✔️ awarded as exemption</td>
<td></td>
</tr>
</tbody>
</table>
☐ COMP6320 Artificial Intelligence (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 1
  Prerequisites:
  - Successful completion of COMP6710
  - Successful completion or current enrolment in COMP6262

☐ COMP6464 High Performance Scientific Computing (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 2
  Prerequisites:
  - Successful completion of COMP6710

☐ COMP6670 Introduction to Machine Learning (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 2
  Prerequisites:
  - Successful completion of COMP6710 or COMP6730

☐ COMP8300 Parallel Systems (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 1
  Prerequisites: N/A

☐ COMP8600 Statistical Machine Learning (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 1
  Prerequisites:
  - Successful completion of COMP6670

Technical Breadth Courses
Complete 1x of the courses listed below

☐ SOCR8201 Introduction to Social Science Methods and Types of Data (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Autumn / Semester 2
  Prerequisites: N/A

☐ SOCR8202 Using Data to Answer Policy Questions and Evaluate Policy (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 1 / Spring
  Prerequisites: N/A

☐ SOCR8082 Social Research Practice (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 2
  Prerequisites: N/A

☐ ENVS6015 GIS and Spatial Analysis (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Semester 2
  Prerequisites: N/A

☐ ENVS6021 Participatory Resource Management: Working with Communities and Stakeholders (6 units)
- completed at the ANU
- awarded as credit
- awarded as exemption
  Availability: Winter
  Prerequisites: N/A

Unspecified Elective Courses
Complete 2x ANU-wide courses

☐ ANU-wide elective course (6 units)
  Course: ___________________________
  - completed at the ANU
  - awarded as credit

☐ ANU-wide elective course (6 units)
  Course: ___________________________
  - completed at the ANU
  - awarded as credit

Additional electives as a result of awarded course exemption(s)
You are required to complete an additional ______ ENGN-coded elective courses.
You are required to complete an additional ______ ANU-wide elective courses.
## 2020 Suggested Study Plan – Semester 1 Commencement

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Semester 1 2020</td>
<td>ENGN6250 Professional Practice 1</td>
<td>ENGN8100 Introduction to Systems Engineering</td>
<td>Technical Computing Course</td>
</tr>
<tr>
<td>Semester 2 2020</td>
<td>ENGN8260 Professional Practice 2</td>
<td>ENGN8120 Systems Modelling</td>
<td>ENGN6223 Control Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Semester 1 2021</td>
<td>Technical Computing Course</td>
<td>Technical Electrical Engineering Course</td>
<td>Technical Breadth Course</td>
</tr>
<tr>
<td>Semester 2 2021</td>
<td>ENGN8170 Group Project</td>
<td>Technical Computing Course</td>
<td>Technical Electrical Engineering Course</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>Semester 2 2020</td>
<td>ENGN6250 Professional Practice 1</td>
<td>ENGN6223 Control Systems</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>Semester 1 2021</td>
<td>ENGN8260 Professional Practice 2</td>
<td>ENGN8100 Introduction to Systems Engineering</td>
</tr>
</tbody>
</table>

| YEAR 2 | Semester 2 2021 | ENGN8120 Systems Modelling | Technical Computing Course | Technical Electrical Engineering Course | Technical Breadth Course |
| YEAR 2 | Semester 1 2022 | ENGN8170 Group Project | Technical Electrical Engineering Course | | ANU-wide elective course |