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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Completed at ANU</th>
<th>Awarded as Credit</th>
<th>Awarded as Exemption</th>
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<td>ENGN6250</td>
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</table>
|             | Prerequisites:  
|             | – Successful completion of ENGN6250 |       |                  |                   |                      |
| ENGN8100    | Introduction to Systems Engineering  | 6     |                  |                   |                      |
|             |                                      |       | Awarded as Credit |                   |                      |
|             |                                      |       | Awarded as Exemption |               |                      |
|             | Availability: Semester 1             |       |                  |                   |                      |
|             | Prerequisites: N/A                   |       |                  |                   |                      |
| ENGN8120    | Systems Modelling                    | 6     |                  |                   |                      |
|             |                                      |       | Awarded as Credit |                   |                      |
|             |                                      |       | Awarded as Exemption |               |                      |
|             | Availability: Semester 2             |       |                  |                   |                      |
|             | Prerequisites: N/A                   |       |                  |                   |                      |
| ENGN8170    | Group Project                        | 12    |                  |                   |                      |
|             |                                      |       | Awarded as Credit |                   |                      |
|             |                                      |       | Awarded as Exemption |               |                      |
|             | Availability: Semester 1 / Semester 2|       |                  |                   |                      |
|             | Prerequisites:  
<p>|             | – Successful completion of ENGN8100  |       |                  |                   |                      |
|             | – Successful completion of ENGN8260  |       |                  |                   |                      |
|             | This course must be completed in one semester. | | | | |
| ENGN6625    | Power Systems and Power Electronics  | 6     |                  |                   |                      |
|             |                                      |       | Awarded as Credit |                   |                      |
|             |                                      |       | Awarded as Exemption |               |                      |
|             | Availability: Semester 2             |       |                  |                   |                      |
|             | Prerequisites: N/A                   |       |                  |                   |                      |
| ENGN6223    | Control Systems                      | 6     |                  |                   |                      |
|             |                                      |       | Awarded as Credit |                   |                      |
|             |                                      |       | Awarded as Exemption |               |                      |
|             | Availability: Semester 2             |       |                  |                   |                      |
|             | Prerequisites: N/A                   |       |                  |                   |                      |</p>
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<td>Advanced Control Systems</td>
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Prerequisites:

- Successful completion of ENGN6223 or an equivalent course in control systems
ENGN8534 Information Theory
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Prerequisites: Successful completion of ENGN8538
- Availability: Semester 2

ENGN8535 Engineering Data Analytics
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1
- Prerequisites: N/A

ENGN8536 Advanced Topics in Mechatronics Systems
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 2
- Prerequisites: N/A

ENGN8537 Embedded Systems and Real Time Digital Signal Processing
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 2
- Prerequisites: N/A

ENGN8538 Probability and Stochastic Processes in Engineering
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1
- Prerequisites: N/A

ENGN8539 Advanced Topics in Communications and Signal Processing
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1
- Prerequisites: N/A

ENGN8540 Photovoltaic Power Plants
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 2
- Prerequisites: N/A

ENGN8541 Integration of Renewable Energy into Power Systems and Microgrids
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1
- Prerequisites: N/A

ENGN8542 Industrial Energy Efficiency and Decarbonisation
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1
- Prerequisites: Successful completion of ENGN2222 or an equivalent undergraduate course in thermodynamics

ENGN8625 Advanced Power Systems
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1
- Prerequisites: Successful completion of ENGN6625

Technical Computing Courses
Complete 3x of the courses listed below

COMP6710 Structured Programming
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1 / Semester 2
- Prerequisites: N/A

COMP6310 Systems, Networks and Concurrency
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 2
- Prerequisites: Successful completion of COMP6300
- Successful completion of COMP6710

COMP6262 Logic
- Completed at ANU
- Awarded as credit
- Awarded as exemption
- Availability: Semester 1
- Prerequisites: N/A
☐ 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 2 Commencement

### YEAR 1

**Semester 2 2020**
- ENGN6250 Professional Practice 1
- ENGN6223 Control Systems
- ENGN6625 Power Systems and Power Electronics
- Technical Computing Course

**Semester 1 2021**
- ENGN8260 Professional Practice 2
- ENGN8100 Introduction to Systems Engineering
- Technical Computing Course
- ANU-wide elective course

### YEAR 2

**Semester 2 2021**
- ENGN8120 Systems Modelling
- Technical Computing Course
- Technical Electrical Engineering Course
- Technical Breadth Course

**Semester 1 2022**
- ENGN8170 Group Project
- Technical Electrical Engineering Course
- ANU-wide elective course