CHECKLIST Bachelor of Engineering (Honours) Electrical Engineering Specialisation: Transition to new program

* This checklist is for the BE(Hons) component for dual programs with Bachelor of Arts, Bachelor of Business Management, Bachelor of Commerce, Bachelor of Design, Bachelor of Economics, Bachelor of Information Technology

| Full name: | Student Number: | Date: |
|------------|-----------------|-------|
| | · | |

Points to note

- You need to ensure that you meet minimum program and major requirements (listed below)
- You cannot count the same course twice
- You need to ensure that you don't take courses that are incompatible with courses that you have already counted towards your program, and that any prerequisites have been met
- Please ensure you read the program rules to check for any special rules with your dual program, as course restrictions may apply
- Please contact the relevant Faculty for information regarding the other component of your dual program

For the BE(Hons) component, with a specialisation in Electrical Engineering:

- (a) 56 units from the BE(Hons) component, comprising—
 - (i) 8 units for BE(Hons) core courses, and
 - (ii) 36 units for a BE(Hons) Electrical Engineering specialisation, and
 - (iii) 12 units for specified BE(Hons) Electrical Engineering electives

| √/X compl. | You must complete (NEW Program requirements) | Sem offering | # | First offered | Approved substitution | Last offered |
|---------------|---|-----------------|---|------------------|--|--------------|
| | 8 units for all: Core Courses | | | | | |
| | ENGG1100 Professional Engineering | 1,2 | 2 | | Course must be completed [ENGG1211 (4 units) will count as 2 units towards Part A in lieu of ENGG1100, and 2 units towards program electives] | |
| | ENGG1001 Programming for Engineers (NEW) or CSSE1001 Introduction to Software Engineering | 1,2 | 2 | 1/21 | Course must be completed | |
| | MATH1051 Calculus & Linear Algebra I or MATH1071 Advanced Calculus & Linear Algebra I | 1,2 | 2 | | Course must be completed | |
| | MATH1052 Multivariate Calculus & Ordinary Differential Equations or MATH1072 Advanced Multivariate Calculus & Ordinary Differential Equations | 1,2 | 2 | | Course must be completed | |

| Checked by (Faculty: Name and Date): | |
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2021 Electrical Engineering specialisation (36 units)

| √/X compl. | | Sem offering | # | First offered | Approved substitution | Last offered |
|---------------|---|-----------------|---|---------------|--|--------------|
| • | 34 units for all: | | | | | |
| | Compulsory Courses | | | | | |
| | ENGG1300 Introduction to Electrical Systems | 1,2 | 2 | | Course must be completed | |
| | CSSE2010 Introduction to Computer Systems | 1,2 | 2 | | Course must be completed | |
| | CSSE2310 Computer Systems, Principles and Programming | 1,2 | 2 | | Course must be completed | |
| | ELEC2004 Circuits, Signals and Systems | 2 | 2 | | Course must be completed | |
| | ELEC2300 Electromagnetism and Electromechanics (NEW) | 1 | 2 | 1/22 | ELEC2003 Electromechanics & Electronics (discontinued). | 1/21 |
| | ELEC2400 Electronic Circuits and Amplifiers (NEW) | 1 | 2 | 1/22 | ELEC3400 Electronic Circuits (discontinued) | 1/21 |
| | ENGG2800 Team Project I | 1,2 | 2 | | Course must be completed | |
| | MATH2001 Calculus & Linear Algebra II | 1,2,5 | 2 | | MATH2001 Advanced Calculus & Linear Algebra II | |
| | MATH2010 Analysis of Ordinary Differential Equations (1) | 1,2 | 1 | | Course must be completed | |
| | STAT2201 Probability Models and Data Analysis for Engineering (1) | 1,2 | 1 | | STAT2202 Probability Models for Engineering & Science (discontinued) | 2/20 |
| | CSSE3010 Embedded Systems Design & Interfacing | 1 | 2 | | Course must be completed | |
| | ELEC3004 Signals, Systems & Control | 1 | 2 | | Course must be completed | |
| | ELEC3100 Fundamentals of Electromagnetic Fields & Waves | 2 | 2 | | Course must be completed | |
| | ENGG3800 Team Project II | 2 | 2 | | Course must be completed | |
| | ENGG4900 Professional Practice and the Business Environment | 1,2 | 2 | | Course must be completed | |
| | METR4201 Control Engineering I | 1 | 2 | | Course must be completed | |
| | REIT4841 Research and Development Methods and Practice (NEW) (4) | 1 2 | 4 | 1/22 | ENGG4801 Thesis Project (discontinued) / ENGG4811 (from 1/21) or | 1/21 |
| | REIT4842 Research and Development Methods and Practice (NEW) (4) | | | 2/22 | ENGG4802 Thesis Project (discontinued) / ENGG4812 (from 2/21) | 2/21 |
| | 2 units from Program Electives | | | | | |

Electrical Engineering Electives

You must complete 12 units comprising -

- i. 2 units for Electrical Engineering Extension Course; and
- ii. 6 to 10 units from any Electrical Engineering Advanced Electives; and
- iii. 0 to 4 units from any Electrical Engineering Breadth Electives

| √/x | 2 units for: | Sem | # | First offered | Approved substitution | Last offered |
|--------|---|----------|---|---------------|--|--------------|
| compl. | Electrical Engineering Extension Course | offering | | | | |
| | ELEC3310 Electrical Energy Conversion & Utilisation | 2 | 2 | 2/21 | ELEC3300 Electrical Energy Conversion & Utilisation (discontinued) | 2/20 |
| | 6 to 10 units from any: | | | | | |
| | Electrical Engineering Advanced Electives | | | | | |
| | COMS4113 Photonics | 1 | 2 | 1/21 | COMS4103 Photonics (discontinued) | 1/20 |
| | COMS4104 Microwave Engineering | 1 | 2 | | No substitution | |
| | COMS4105 Communication Systems | 2 | 2 | | No substitution | |
| | CSSE4010 Digital System Design | 2 | 2 | | No substitution | |
| | ELEC4310 Power Systems Analysis | 1 | 2 | 1/21 | ELEC4300 Power Systems Analysis (discontinued) | 1/20 |
| | ELEC4410 Advanced Electronic & Power Electronics Design | 2 | 2 | 2/21 | ELEC4400 Advanced Electronic & Power Electronics Design (discontinued) | 2/20 |
| | ELEC4620 Digital Signal Processing | 2 | 2 | | No substitution | |
| | ELEC4630 Image Processing and Computer Vision | 1 | 2 | | No substitution | |
| | METR4202 Robotics & Automation | 2 | 2 | | No substitution | |
| | METR6203 Control Engineering 2 | 2 | 2 | 2/21 | METR7203 Control Engineering 2 (discontinued) | 2/20 |
| | 0 to 4 units from any: | | | | | |
| | Electrical Engineering Breadth Electives | | | | | |
| | ELEC4302 Power System Protection | 2 | 2 | | No substitution | |
| | ELEC4320 Modern Asset Management and Condition Monitoring in Power System | 2 | 2 | | No substitution | |
| | ENGG4020 Systems Safety Engineering | 2 | 2 | | No substitution | |

Electrical Engineering Breadth Electives can also be chosen from course lists for the following majors:

- o Biomedical Engineering
- o Computer Engineering

Courses on this list may require pre-requisites. Please seek academic advice if required.