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

* This checklist is for the BE(Hons) component ONLY for dual programs with Bachelor of Computer Science

Full name:	Student Number:	Date:
		Batter

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 view the Bachelor of Computer Science transition checklist for the requirements for the BCompSc Core, BCompSc Major and No Major Options

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

(a) 60 units from the BE(Hons) component, comprising—

- I. 8 units for all BE(Hons) Core Courses; and
- II. 36 units for one Specialisation in Electrical Engineering; and
- III. One of the following:
 - a. 16 units for one Major from Electrical Engineering Major Options*, or
 - b. 16 units for Electrical Engineering Specialisation No Major option

*Majors available in: Biomedical Engineering; Computer Engineering

✓/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	

✓/X compl.	2021 Electrical Engineering specialisation (36 units)	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,S	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) or	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		2/22	ENGG4802 Thesis Project (discontinued) / ENGG4812 (from 2/21)	2/21
	2 units from Program Electives					

Electrical Engineering No Major Option

You must complete 16 units comprising -

- i. 2 units for Electrical Engineering Extension Course; and
- ii. 6 to 14 units from any Electrical Engineering Advanced Electives; and
- iii. 0 to 8 units from any Electrical Engineering Breadth Electives; and
- iv. 0 to 4 units from Program Electives
- v. 0 to 4 units from General 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 14 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 8 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.

Once you have completed the checklist, you may either email your checklist to the Faculty on enquiries@eait.uq.edu.au or book an appointment with an Academic Advisor directly.
BE(Hons) Transition Plan – Electrical Engineering NEW
Checked by (Faculty: Name and Date):

 ✓/X compl. 	Major in Biomedical Engineering (16 units)	Sem offering	#	First offered	Approved substitution	Last offered
	4 units for: Biomedical Engineering courses for Electrical Engineers <u>only</u>					
	BIOE6403 Biomedical Instrumentation	2	2	2/21	ELEC6403 Biomedical Instrumentation (discontinued)	2/20
	BIOE6601 Medical Imaging	2	2	2/21	ELEC6601 Medical Imaging (discontinued)	2/20
	8 units for: Biomedical Engineering Compulsory Courses					
	BIOE1001 Principles of Biomedical & Bioprocess Engineering	1	2	1/21	CHEE1001 Principles of Biological Engineering (discontinued) or BIOL1020 Genes, Cells & Evolution	1/20
	BIOE3001 Quantitative Methods in Biomedical Engineering (NEW)	2	2	2/22	Course must be completed	
	BIOE4305 Biomaterials: Materials in Medicine	2	2	2/21	CHEE4305 Biomaterials: Materials in Medicine (discontinued)	2/20
	BIOE6901 Medical Device Engineering	1	2	1/21	ELEC7901 Advanced Medical Device Engineering (discontinued)	1/20
	4 units from: Biomedical Engineering Electives					
	BIOC2000 Biochemistry & Molecular Biology	1	2			
	BIOE6028 Metabolic Engineering	2	2	2/21	CHEE4028 Metabolic Engineering (discontinued)	2/20
	BIOE6034 Cell and Tissue Engineering	1	2	1/21	CHEE4034 Cell and Tissue Engineering (discontinued)	1/20
	BIOE6403 Biomedical Instrumentation	2	2	2/21	ELEC4403/ELEC6403 Biomedical Instrumentation (discontinued)	2/20
	BIOE6601 Medical Imaging	2	2	2/21	ELEC6601 Medical Imaging (discontinued)	2/20
	BIOL1040 Cells to Organisms	1,2	2		No substitution	
	BIOL2200 Cell Structure & Function	1	2		No substitution	
	BIOL2202 Genetics	2	2		No substitution	
	BINF3014 Advanced Bioinformatics	2	2	2/21	BIOL3014 Advanced Bioinformatics (discontinued)	2/20
	BIOM2011 Integrative Cell & Tissue Biology	1	2		No substitution	
	BIOM2012 Systems Physiology	2	2		No substitution	
	BIOM2020 Human Anatomy	1	2		No substitution	
	BIPH2000 Foundations of Biophysics	2	2		No substitution	

Once you have completed the checklist, you may either email your checklist to the Faculty on <u>enquiries@eait.uq.edu.au</u> or book an appointment with an Academic Advisor directly. **BE(Hons) Transition Plan – Electrical Engineering NEW**Checked by (Faculty: Name and Date):

COMP4702 Machine Learning	1	2		No substitution	
COMS4113 Photonics	1	2	1/21	COMS4103 Photonics (discontinued)	1/20
COMS4104 Microwave Engineering	1	2		No substitution	
CSSE2002 Programming in the Large	1,2	2		No substitution	
CSSE4011 Advanced Embedded Systems	1	2		No substitution	
ELEC4620 Digital Signal Processing	2	2		No substitution	
ELEC4630 Image Processing and Computer Vision	1	2		No substitution	
MATE6301 Nanomaterials	2	2	2/21	CHEE4301 Nanomaterials (discontinued)	2/20
MECH3301 Materials Selection	2	2		No substitution	
MECH4950 Advanced Manufacturing in Practice	2	2		No substitution	
METR4202 Robotics & Automation	2	2		No substitution	
MICR2000 Microbiology & Immunology	2	2		No substitution	
SCIE2100 Introduction to Bioinformatics	1	2		No substitution	
CHEE4026 Research Thesis	1	4		No substitution	
or CHEE4027 Research Thesis	2				

✓/X compl.	Major in Computer Engineering (16 units)	Sem offering	#	First offered	Approved substitution	Last offered
	4 units for:					
	Computer Engineering Courses for Electrical Engineers only					
	CSSE2002 Programming in the Large	1,2	2		Course must be completed	
	COMP3506 Algorithms & Data Structures	2	2		Course must be completed	
	4 units for:					
	Computer Engineering Compulsory Courses					
	CSSE4010 Digital System Design	2	2		Course must be completed	
	CSSE4011 Advanced Embedded Systems	1	2		Course must be completed	

Once you have completed the checklist, you may either email your checklist to the Faculty on <u>enquiries@eait.uq.edu.au</u> or book an appointment with an Academic Advisor directly. **BE(Hons) Transition Plan – Electrical Engineering NEW**Checked by (Faculty: Name and Date):

/X mpl.	0 to 8 units from: Computer Engineering Electives (no more than 6 units at level 1 or 2)					
	COMP2140 Web/Mobile Programming (NEW)	2	2	2/22	No substitution	
	COMP3301 Operating Systems Architecture	2	2		No substitution	
	COMP3702 Artificial Intelligence	2	2		No substitution	
	COMP3710 Pattern Recognition and Analysis	2	2		No substitution	
	COMP4403 Compilers and Interpreters	1	2		No substitution	
	COMP4500 Advanced Algorithms & Data Structures	2	2		No substitution	
	COMP4702 Machine Learning	1	2		No substitution	
	CYBR3000 Information Security	2	2	2/21	COMS3000 Information Security (discontinued)	2/2
	COMS3200 Computer Networks I	1	2		No substitution	
	COMS4113 Photonics	1	2	1/21	COMS4103 Photonics (discontinued)	1/2
	COMS4104 Microwave Engineering	1	2		No substitution	
	COMS4105 Communication Systems	2	2		No substitution	
	COMS4507 Advanced Topics in Security	1	2		No substitution	
	COMS6200 Computer Networks II	1	2	2/21	COMS4200 Computer Networks II (discontinued)	2/2
	CSSE3012 The Software Process	1	2	1/21	CSSE3002 The Software Process (discontinued)	1/2
	CSSE3100 Reasoning About Programs	1	2		No substitution	
	CSSE3200 Project Design Testing and Evaluation (NEW)	2	2	2/22	DECO2800 Design Computing Studio 2 – Testing & Evaluation	
	CSSE4004 Distributed Computing	1	2		No substitution	1/2
	CSSE4400 Software Architecture (NEW)	1	2	1/22	CSSE4004 Distributed Computing (discontinued)	1/2
	CSSE4630 Principles of Program Analysis	2	2		No substitution	
	COSC3500 High Performance Computing	2	2		No substitution	

Once you have completed the checklist, you may either email your checklist to the Faculty on <u>enquiries@eait.uq.edu.au</u> or book an appointment with an Academic Advisor directly. **BE(Hons) Transition Plan – Electrical Engineering NEW**Checked by (Faculty: Name and Date):

DEC01400 Introduction to Web Design	1	2		No substitution	
DECO2500 Human-Computer Interaction	1	2		No substitution	
ELEC3310 Electrical Energy Conversion & Utilisation	2	2	2/21	ELEC3300 Electrical Energy Conversion & Utilisation (discontinued)	2/20
ELEC4310 Power Systems Analysis	1	2	1/21	ELEC4300 Power Systems Analysis (discontinued)	1/20
ELEC4620 Digital Signal Processing	2	2		No substitution	
ELEC4630 Image Processing and Computer Vision	1	2		No substitution	
ENGG2800 Team Project I	1,2	2		No substitution	
ENGG3800 Team Project II	2	2		No substitution	
ENGG4800 Project Management	1	2		No substitution	
INFS1200 Introduction to Information Systems	1,2	2		No substitution	
INFS2200 Relational Database Systems	2	2		No substitution	
METR3100 Control System Implementation	1	2		No substitution	
METR4202 Robotics & Automation	2	2		No substitution	