2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic)
with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

No Major

Year 1				
S 1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S 2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S 1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S 2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S 1	ELEC ENG 3103 Engineering Electromagnetics ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
S 2	ELEC ENG 3104 Electric Drive Systems ☐	ELEC ENG 3110 Electric Power Systems ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S 1	ENG 3004 Systems Engineering & Industry Practice ☐	E&E Engineering Elective (see elective table) ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S 2	ELEC ENG 4105 Real-Time and Embedded Systems ☐	ELEC ENG 4106 Radio Frequency Systems ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐
Year 5				
S 1	ENG 4001A Research Project Part A ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐
S 2	ENG 4001B Research Project Part B ☐	ELEC ENG 4100 Business Management Systems ☐	E&E Engineering Elective (see elective table) ☐	~Level III Mathematics Elective ☐

Core Course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.

~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
S1	COMP SCI 2103	Algorithm Design & Data Structures	**S2**	COMP SCI 2103	Algorithm Design & Data Structures
	COMP SCI 3001	Computer Networks & Applications		COMP SCI 3006	Software Engineering & Project
	ELEC ENG 3088	Computer Architecture		ELEC ENG 3108	Telecommunications Principles
	ELEC ENG 4058	Power Quality & Condition Monitoring		ELEC ENG 3113	Principles of Medical Imaging
	ELEC ENG 4063	Communications		ELEC ENG 4061	Image Processing
	ELEC ENG 4069	Radar Principles & Systems		ELEC ENG 4067	Antennas and Propagation
	ELEC ENG 4109	Digital Microelectronics		ELEC ENG 4087	Electricity Market and Power System Operations
	ELEC ENG 4112	Signal Processing Applications		ELEC ENG 4107	Autonomous Systems
				ELEC ENG 4111	Distributed Generation Technologies
				ELEC ENG 4115	Biomedical Instrumentation

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Communication Systems Major

Year 1				
S 1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S 2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S 1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S 2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S 1	ELEC ENG 3103 Engineering Electromagnetics ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
S 2	COMP SCI 2103 Algorithm Design & Data Structures ☐	ELEC ENG 3108 Telecommunications Principles ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S 1	COMP SCI 3001 Computer Networks & Applications ☐	ENG 3004 Systems Engineering & Industry Practice ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S 2	ELEC ENG 4054 Telecommunication Systems ☐	ELEC ENG 4106 Radio Frequency Systems ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐
Year 5				
S 1	ENG 4001A Research Project Part A ☐	ELEC ENG 4063 Communications ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐
S 2	ENG 4001B Research Project Part B ☐	ELEC ENG 4100 Business Management Systems ☐	E&E Engineering Elective (see elective table) ☐	~Level III Mathematics Elective ☐

Core Course	Major course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.

~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
	COMP SCI 3007	Artificial Intelligence		ELEC ENG 4061	Image Processing
	ELEC ENG 3088	Computer Architecture		ELEC ENG 4067	Antennas and Propagation
S1	ELEC ENG 4069	Radar Principles & Systems	**S2**	ELEC ENG 4105	Real-Time & Embedded Systems
	ELEC ENG 4109	Digital Microelectronics			
	ELEC ENG 4112	Signal Processing Applications			

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Computer Engineering Major

Year 1				
S1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S1	ELEC ENG 3103 Engineering Electromagnetics ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
S2	COMP SCI 2103 Algorithm Design & Data Structures ☐	ELEC ENG 4105 Real-Time & Embedded Systems ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S1	COMP SCI 3001 Computer Networks & Applications ☐	ENG 3004 Systems Engineering & Industry Practice ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S2	COMP SCI 3004 Operating Systems ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
Year 5				
S1	ENG 4001A Research Project Part A ☐	ELEC ENG 3088 Computer Architecture ☐	ELEC ENG 4109 Digital Microelectronics ☐	E&E Engineering Elective (see elective table) ☐
S2	ENG 4001B Research Project Part B ☐	ELEC ENG 4100 Business Management Systems ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐

Core Course	Major course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.

~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
S1	COMP SCI 3007	Artificial Intelligence	**S2**	COMP SCI 3006	Software Engineering & Project
	COMP SCI 3308	Cybersecurity Fundamentals		COMP SCI 3307	Secure Programming
	ELEC ENG 4112	Signal Processing Applications		ELEC ENG 3104	Electric Drive Systems
				ELEC ENG 3108	Telecommunications Principles
				ELEC ENG 4061	Image Processing
				ELEC ENG 4106	Radio Frequency Systems

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Cybersecurity Major

Year 1				
S1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S1	COMP SCI 2103 Algorithm Design & Data Structures ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
S2	COMP SCI 2000 Computer Systems ☐	COMP SCI 2201 Algorithm & Data Structure Analysis ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S1	COMP SCI 3308 Cybersecurity Fundamentals ☐	ELEC ENG 3103 Engineering Electromagnetics ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S2	ENG 3004 Systems Engineering & Industry Practice ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
Year 5				
S1	ENG 4001A Research Project Part A ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐
S2	ENG 4001B Research Project Part B ☐	COMP SCI 3004 Operating Systems UG ☐	COMP SCI 3307 Secure Programming ☐	ELEC ENG 4100 Business Management Systems ☐

Core Course	Major course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.

~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
S1	COMP SCI 3001	Computer Networks & Applications	**S2**	COMP SCI 3006	Software Engineering & Project
	ELEC ENG 4063	Communications		ELEC ENG 3104	Electric Drive Systems
	ELEC ENG 4109	Digital Microelectronics		ELEC ENG 3108	Telecommunications Principles
				ELEC ENG 4061	Image Processing
				ELEC ENG 4105	Real-Time & Embedded Systems
				ELEC ENG 4106	Radio Frequency Systems

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Defence Systems Major

Year 1				
S1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S1	ELEC ENG 3103 Engineering Electromagnetics ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
S2	ENG 3305 Human Factors for Decision Making ☐	ELEC ENG 4107 Autonomous Systems ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S1	POLIS 1104 Introduction to Comparative Politics ☐	ENG 3004 Systems Engineering & Industry Practice ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S2	ELEC ENG 4106 Radio Frequency Systems ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
Year 5				
S1	ENG 4001A Research Project Part A ☐	ENG 4010 Defence Leadership ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐
S2	ENG 4001B Research Project Part B ☐	ENG 4020 Complex Systems Engineering ☐	ELEC ENG 4100 Business Management Systems ☐	E&E Engineering Elective (see elective table) ☐

Core Course	Major course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.

~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
S1	COMP SCI 2103	Algorithm Design & Data Structures	**S2**	COMP SCI 2103	Algorithm Design & Data Structures
	COMP SCI 3001	Computer Networks & Applications		ELEC ENG 3108	Telecommunications Principles
	ELEC ENG 4063	Communications		ELEC ENG 4061	Image Processing
	ELEC ENG 4069	Radar Principles & Systems		ELEC ENG 4067	Antennas & Propagation
	ELEC ENG 4109	Digital Microelectronics		ELEC ENG 4111	Distributed Generation Technologies
	ELEC ENG 4112	Signal Processing Applications			

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Medical Technologies Major

Year 1				
S1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S1	ANAT SC 1102 Human Anatomy and Physiology IA ☐	ENG 3101 Introduction to Medical Technologies ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐
S2	ELEC ENG 3113 Principles of Medical Imaging ☐	ELEC ENG 4115 Biomedical Instrumentation ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S1	PHYSIOL 2510 Physiology IIA: Heart, Lung & Neuromuscular Systems ☐	ELEC ENG 3103 Engineering Electromagnetics ☐	~Level II or III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S2	ENG 3004 Systems Engineering & Industry Practice ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
Year 5				
S1	ENG 4001A Research Project Part A ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐	~Level III Mathematics Elective ☐
S2	ENG 4001B Research Project Part B ☐	MECH ENG 4101 Biomechanical Engineering ☐	ELEC ENG 4100 Business Management Systems ☐	E&E Engineering Elective (see elective table) ☐

Core Course	Major course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.

~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
S1	ANAT SC 2006	Foundations of Human Neuroanatomy	**S2**	COMP SCI 2103	Algorithm Design & Data Structures
	ANAT SC 2109	Biology and Development of Human Tissues		ELEC ENG 3108	Telecommunications Principles
	COMP SCI 2103	Algorithm Design & Data Structures		ELEC ENG 4061	Image Processing
	ELEC ENG 4063	Communications		ELEC ENG 4067	Antennas & Propagation
	ELEC ENG 4109	Digital Microelectronics			
	ELEC ENG 4112	Signal Processing Applications			

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Renewable Energy Major

Year 1				
S1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S1	ELEC ENG 3103 Engineering Electromagnetics ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
S2	ELEC ENG 3104 Electric Drive Systems ☐	ELEC ENG 3110 Electric Power Systems ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S1	MECH ENG 4064 Renewable Power Technologies ☐	ENG 3004 Systems Engineering & Industry Practice ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S2	ELEC ENG 4111 Distributed Generation Technologies ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
Year 5				
S1	ENG 4001A Research Project Part A ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐
S2	ENG 4001B Research Project Part B ☐	CHEM ENG 4048 Biofuels, Biomass and Wastes ☐	ELEC ENG 4100 Business Management Systems ☐	E&E Engineering Elective (see elective table) ☐

Core Course	Major course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.

~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
S1	COMP SCI 2103	Algorithm Design & Data Structures	**S2**	COMP SCI 2103	Algorithm Design & Data Structures
	COMP SCI 3001	Computer Networks & Applications		ELEC ENG 3108	Telecommunications Principles
	ELEC ENG 4058	Power Quality & Condition Monitoring		ELEC ENG 4087	Electricity Market and Power System Operations
	ELEC ENG 4109	Digital Microelectronics		~~MECH ENG 4145~~	~~Sustainable Thermal Technologies~~ *(not offered 2022)*

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

2022 Study Plan
Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Mathematics Major - Semester 1 Start

Smart Technologies Major

Year 1				
S1	^ENG 1001 Introduction to Engineering ☐	ELEC ENG 1100 Analog Electronics ☐	ENG 1002 Programming (Matlab and C) ☐	MATHS 1011 Mathematics IA ☐
S2	PHYSICS 1510 Physics 1E: Mechanics & Thermodynamics ☐	ELEC ENG 1102 Digital Electronics ☐	COMP SCI 1102 Object Oriented Programming ☐	MATHS 1012 Mathematics IB ☐
Year 2				
S1	ELEC ENG 2100 Digital Systems ☐	ELEC ENG 2101 Electronic Circuits ☐	ELEC ENG 2102 Electric Energy Conversion ☐	MATHS 2106 Differential Equations for Engineers II ☐
S2	ELEC ENG 2103 Design & Innovation ☐	ELEC ENG 2104 Digital Signal Processing ☐	ELEC ENG 2106 Vector Calculus & Electromagnetics ☐	MATHS 2107 Statistics & Numerical Methods II ☐
Year 3				
S1	ELEC ENG 3103 Engineering Electromagnetics ☐	ELEC ENG 3101 Control ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
S2	COMP SCI 2103 Algorithm Design & Data Structures ☐	MECH ENG 3032 Micro-Controller Programming ☐	~Level II or III Mathematics Elective ☐	~Level II or III Mathematics Elective ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below elective table.				
Year 4				
S1	COMP SCI 3001 Computer Networks & Applications ☐	ENG 3004 Systems Engineering & Industry Practice ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
S2	ELEC ENG 4107 Autonomous Systems ☐	ENG 3005 Research Method & Project Management ☐	~Level III Mathematics Elective ☐	~Level III Mathematics Elective ☐
Year 5				
S1	ENG 4001A Research Project Part A ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐	E&E Engineering Elective (see elective table) ☐
S2	ENG 4001B Research Project Part B ☐	COMP SCI 4092 Mobile and Wireless Systems ☐	ELEC ENG 4100 Business Management Systems ☐	E&E Engineering Elective (see elective table) ☐

Core Course	Major course	Elective (see table)	Double Degree Courses

^ Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering.
~ Mathematics Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematics and Computer Sciences: https://calendar.adelaide.edu.au/faculty/ecms

Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
S1	ELEC ENG 3088	Computer Architecture	**S2**	COMP SCI 3006	Software Engineering & Project
	ELEC ENG 4063	Communications		ELEC ENG 3108	Telecommunications Principles
	ELEC ENG 4069	Radar Principles & Systems		ELEC ENG 4061	Image Processing
	ELEC ENG 4109	Digital Microelectronics		ELEC ENG 4067	Antennas & Propagation
	ELEC ENG 4112	Signal Processing Applications			

NOTES

Internships: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support