

# 2022 Study Plan

## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) — Semester 1 Start

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No Major

Year 1				
S1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	<sup>^</sup> ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S1	ENG 3005 Research Method & Project Management <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S2	ELEC ENG 3104 Electric Drive Systems <input type="checkbox"/>	ELEC ENG 3110 Electric Power Systems <input type="checkbox"/>	ELEC ENG 4105 Real-Time and Embedded Systems <input type="checkbox"/>	ELEC ENG 4106 Radio Frequency Systems <input type="checkbox"/>
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Core Course		Elective (see table)		Double Degree Courses

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

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### 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 & 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

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## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) – Semester 1 Start

### Communication Systems Major

Year 1				
S1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	^ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S1	ENG 3005 Research Method & Project Management <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S2	COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/>	ELEC ENG 3108 Telecommunications Principles <input type="checkbox"/>	ELEC ENG 4106 Radio Frequency Systems <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	COMP SCI 3001 Computer Networks & Applications <input type="checkbox"/>	ELEC ENG 4063 Communications <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	ELEC ENG 4054 Telecommunication Systems <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Core Course		Major course	Elective (see table)	Double Degree Courses

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## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) — Semester 1 Start

### Electives Table

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

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### Computer Engineering Major

Year 1				
S1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	^ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S1	ELEC ENG 4109 Digital Microelectronics <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S2	COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/>	ELEC ENG 4105 Real-Time & Embedded Systems <input type="checkbox"/>	ENG 3005 Research Method & Project Management <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	COMP SCI 3001 Computer Networks & Applications <input type="checkbox"/>	ELEC ENG 3088 Computer Architecture <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>	COMP SCI 3004 Operating Systems <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Core Course		Major course	Elective (see table)	Double Degree Courses

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### 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

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## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) – Semester 1 Start

### Cybersecurity Major

Year 1				
S 1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	^ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S 2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S 1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S 2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S 1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S 2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S 1	COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S 2	COMP SCI 2000 Computer Systems <input type="checkbox"/>	COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/>	ENG 3005 Research Method & Project Management <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Year 5				
S 1	ENG 4001A Research Project Part A <input type="checkbox"/>	COMP SCI 3308 Cybersecurity Fundamentals <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
S 2	ENG 4001B Research Project Part B <input type="checkbox"/>	COMP SCI 3307 Secure Programming <input type="checkbox"/>	COMP SCI 3004 Operating Systems <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>
Core Course		Major course	Elective (see table)	Double Degree Courses

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### 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

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# 2022 Study Plan

## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) — Semester 1 Start

### Defence Systems Major

Year 1				
S1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	<sup>^</sup> ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S1	POLIS 1104 Introduction to Comparative Politics <input type="checkbox"/>	ENG 3005 Research Method & Project Management <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S2	ELEC ENG 4106 Radio Frequency Systems <input type="checkbox"/>	ELEC ENG 4107 Autonomous Systems <input type="checkbox"/>	ENG 3305 Human Factors for Decision Making <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	ENG 4010 Defence Leadership <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	ENG 4020 Complex Systems Engineering <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>
Core Course		Major course	Elective (see table)	Double Degree Courses

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### 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 and Propagation
	ELEC ENG 4109	Digital Microelectronics		ELEC ENG 4111	Distributed Generation Technologies
	ELEC ENG 4112	Signal Processing Applications			

#### NOTES

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## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) – Semester 1 Start

### Medical Technologies Major

Year 1				
S1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	<sup>^</sup> ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S1	ANAT SC 1102 Human Anatomy and Physiology IA <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S1	PHYSIOL 2510 Physiology IIA: Heart, Lung & Neuromuscular Systems <input type="checkbox"/>	ENG 3101 Introduction to Medical Technologies <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S2	ELEC ENG 3113 Principles of Medical Imaging <input type="checkbox"/>	ELEC ENG 4115 Biomedical Instrumentation <input type="checkbox"/>	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ENG 3005 Research Method & Project Management <input type="checkbox"/>
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Core Course		Major course	Elective (see table)	Double Degree Courses

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### 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 and Propagation
	ELEC ENG 4109	Digital Microelectronics			
	ELEC ENG 4112	Signal Processing Applications			

#### NOTES

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### Renewable Energy Major

Year 1				
S1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	^ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S1	MECH ENG 4064 Renewable Power Technologies <input type="checkbox"/>	ENG 3005 Research Method & Project Management <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S2	ELEC ENG 3104 Electric Drive Systems <input type="checkbox"/>	ELEC ENG 3110 Electric Power Systems <input type="checkbox"/>	ELEC ENG 4111 Distributed Generation Technologies <input type="checkbox"/>	CHEM ENG 4048 Biofuels, Biomass and Wastes <input type="checkbox"/>
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Core Course		Major course	Elective (see table)	Double Degree Courses

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# 2022 Study Plan

## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) — 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		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		<del>MECH ENG 4145</del>	<del>Sustainable Thermal Technologies (not offered 2022)</del>

#### 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](mailto:askecms@adelaide.edu.au)

Website: <https://ecms.adelaide.edu.au/study-with-us/student-support>

# 2022 Study Plan

## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) — Semester 1 Start

### Smart Technologies Major

Year 1				
S1	ELEC ENG 1100 Analog Electronics <input type="checkbox"/>	^ENG 1001 Introduction to Engineering <input type="checkbox"/>	MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
S2	ELEC ENG 1102 Digital Electronics <input type="checkbox"/>	ENG 1002 Programming (Matlab and C) <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PHYSICS 1200 Physics IB <input type="checkbox"/>
Year 2				
S1	ELEC ENG 2100 Digital Systems <input type="checkbox"/>	ELEC ENG 2101 Electronic Circuits <input type="checkbox"/>	ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/>	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>
S2	ELEC ENG 2103 Design & Innovation <input type="checkbox"/>	ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/>	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming <input type="checkbox"/>
Year 3				
S1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	ELEC ENG 3101 Control <input type="checkbox"/>	ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/>	PHYSICS 2510 Physics IIA <input type="checkbox"/>
S2	ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/>	PHYSICS 2520 Physics IIB <input type="checkbox"/>	PHYSICS 2532 Classical Physics II <input type="checkbox"/>	PHYSICS 2534 Electromagnetism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see note below elective table.				
Year 4				
S1	ENG 3005 Research Method & Project Management <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>	PHYSICS 3542 Physics III <input type="checkbox"/>	
S2	COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/>	ELEC ENG 4107 Autonomous Systems <input type="checkbox"/>	MECH ENG 3032 Micro-Controller Programming <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	COMP SCI 3001 Computer Networks & Applications <input type="checkbox"/>	E&E Engineering Elective (see elective table) <input type="checkbox"/>	Level III PHYSICS Elective <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	ELEC ENG 3108 Telecommunications Principles <input type="checkbox"/>	ELEC ENG 4100 Business Management Systems <input type="checkbox"/>	PHYSICS 3002 Experimental Physics III <input type="checkbox"/>
Core Course		Major course	Elective (see table)	Double Degree Courses

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# 2022 Study Plan

## Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Science (Physics) — Semester 1 Start

### Electives Table

CHOOSE FROM THE FOLLOWING ELECTRICAL & ELECTRONIC (E&E) ENGINEERING ELECTIVES					
<b>S1</b>	ELEC ENG 3088	Computer Architecture	<b>S2</b>	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 and Propagation
	ELEC ENG 4112	Signal Processing Applications			

#### NOTES

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