

Bachelor of Engineering (Honours) (Electrical and Electronic) with Bachelor of Mathematical and Computer Sciences – Computer Science Major Study Plans — Semester 2 Start

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Bachelor of Engineering (Honours) (Electrical and Electronic)
with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Sem 2 Start

| Year 1 | | | | |
|---|--|--|---|--|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | [^] ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | 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"/> |
| S2 | ELEC ENG 3110 Electric Power Systems <input type="checkbox"/> | ELEC ENG 3104 Electric Drive Systems <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> |
| 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 | ELEC ENG 3101 Control <input type="checkbox"/> | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | ELEC ENG 4105 Real-Time and Embedded Systems <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | ENG 3005 Research Method and Project Management <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | ELEC ENG 4106 Radio Frequency Systems <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| 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.

[~] COMP SCI 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 | ELEC ENG 3108 | Telecommunications Principles |
| | ELEC ENG 4058 | Power Quality & Condition Monitoring | | ELEC ENG 4061 | Image Processing |
| | ELEC ENG 4063 | Communications | | ELEC ENG 4067 | Antennas and Propagation |
| | ELEC ENG 4069 | Radar Principles & Systems (not offered 2021) | | ELEC ENG 4087 | Electricity Market and Power System Operations |
| | ELEC ENG 4109 | Digital Microelectronics | | ELEC ENG 4107 | Autonomous Systems |
| | ELEC ENG 4112 | Signal Processing Applications (not offered 2021) | | ELEC ENG 4111 | Distributed Generation Technology |
| | | | ELEC ENG 4115 | Biomedical Instrumentation | |

NOTES

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Bachelor of Engineering (Honours) (Electrical and Electronic) - Communication Systems Major
with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Sem 2 Start

| Year 1 | | | | |
|---|--|--|---|--|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | ^ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | 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"/> |
| S2 | ELEC ENG 3108 Telecommunications Principles <input type="checkbox"/> | ELEC ENG 4054 Telecommunication Systems <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> |
| 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 | ELEC ENG 3101 Control <input type="checkbox"/> | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | COMP SCI 3001 Computer Networks & Applications <input type="checkbox"/> | ENG 3005 Research Method and Project Management <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4106 Radio Frequency Systems <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | ELEC ENG 4063 Communications <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| Core Course | Major course | Elective (see table) | Double Degree Courses | |

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~ COMP SCI Electives may be chosen from the courses listed in the Program Rules for the Bachelor of Mathematical 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 | ELEC ENG 4061 | Image Processing |
| | ELEC ENG 4069 | Radar Principles & Systems (<i>not offered 2021</i>) | | ELEC ENG 4067 | Antennas and Propagation |
| | ELEC ENG 4109 | Digital Microelectronics | | ELEC ENG 4105 | Real Time & Embedded Systems |
| | ELEC ENG 4112 | Signal Processing Applications (<i>not offered 2021</i>) | | | |

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with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Sem 2 Start

| Year 1 | | | | |
|---|--|--|--|---|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | ^ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | 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"/> |
| S2 | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> | ELEC ENG 4105 Real-Time and Embedded Systems <input type="checkbox"/> | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> |
| 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 <input type="checkbox"/> | ELEC ENG 3101 Control <input type="checkbox"/> | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> |
| S2 | COMP SCI 3004 Operating Systems <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | ENG 3005 Research Method and Project Management <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | ELEC ENG 4109 Digital Microelectronics <input type="checkbox"/> | COMP SCI 3005 Computer Architecture <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| Core Course | Major course | Elective (see table) | Double Degree Courses | |

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|---|---------------|--|---------------|-------------------------|-------------------------------|
| S1 | COMP SCI 3007 | Artificial Intelligence | S2 | COMP SCI 3307 | Secure Programming |
| | COMP SCI 3308 | Cybersecurity Fundamentals | | ELEC ENG 3104 | Electric Drive Systems |
| | ELEC ENG 4112 | Signal Processing Applications <i>(not offered 2021)</i> | | ELEC ENG 3108 | Telecommunications Principles |
| | | | ELEC ENG 4061 | Image Processing | |
| | | | ELEC ENG 4106 | Radio Frequency Systems | |

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| Year 1 | | | | |
|---|--|--|--|---|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | ^ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | ELEC ENG 2101 Electronic Circuits <input type="checkbox"/> | ELEC ENG 2102 Electric Energy Conversion <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> |
| S2 | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> |
| 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 | ELEC ENG 3101 Control <input type="checkbox"/> | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | ELEC ENG 2100 Digital Systems <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| S2 | COMP SCI 3307 Secure Programming <input type="checkbox"/> | COMP SCI 3004 Operating Systems <input type="checkbox"/> | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | COMP SCI 3308 Cybersecurity Fundamentals <input type="checkbox"/> | ENG 3005 Research Method and Project Management <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| Core Course | Major course | Elective (see table) | Double Degree Courses | |

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Electives Table

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|---|---------------|----------------------------------|---------------|------------------------------|-------------------------------|
| S1 | COMP SCI 3001 | Computer Networks & Applications | S2 | ELEC ENG 3104 | Electric Drive Systems |
| | ELEC ENG 4063 | Communications | | ELEC ENG 3108 | Telecommunications Principles |
| | ELEC ENG 4109 | Digital Microelectronics | | ELEC ENG 4061 | Image Processing |
| | | | ELEC ENG 4105 | Real Time & Embedded Systems | |
| | | | ELEC ENG 4106 | Radio Frequency Systems | |

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Bachelor of Engineering (Honours) (Electrical and Electronic) - Defence Systems Major
with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Sem 2 Start

| Year 1 | | | | |
|---|--|--|---|--|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | [^] ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | 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"/> |
| S2 | ENG 3305 Human Factors for Decision Making <input type="checkbox"/> | ELEC ENG 4107 Autonomous Systems <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> |
| 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 | ELEC ENG 3101 Control <input type="checkbox"/> | ENG 3005 Research Method and Project Management <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | ENG 4010 Defence Leadership <input type="checkbox"/> | ENG 4020 Complex Systems Engineering <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | E&E Engineering Elective (see elective table) <input type="checkbox"/> | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4106 Radio Frequency Systems <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | POLIS 1104 Introduction to Comparative Politics <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| Core Course | Major course | Elective (see table) | Double Degree Courses | |

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Electives Table

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|---|--------------------------|--|----|---------------|-----------------------------------|
| S1 | COMP SCI 3001 | Computer Networks & Applications | S2 | ELEC ENG 3108 | Telecommunications Principles |
| | ELEC ENG 4063 | Communications | | ELEC ENG 4061 | Image Processing |
| | ELEC ENG 4069 | Radar Principles & Systems (not offered 2021) | | ELEC ENG 4067 | Antennas and Propagation |
| | ELEC ENG 4109 | Digital Microelectronics | | ELEC ENG 4111 | Distributed Generation Technology |
| | ELEC ENG 4112 | Signal Processing Applications (not offered 2021) | | | |

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Bachelor of Engineering (Honours) (Electrical and Electronic) - Medical Technologies Major
with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Sem 2 Start

| Year 1 | | | | |
|---|---|--|---|--|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | ^ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | ANAT SC 1102 Human Biology IA <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 | ANAT SC 2009 Musculoskeletal Anatomy <input type="checkbox"/> | ELEC ENG 4115 Biomedical Instrumentation <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> |
| Internship | | | | |
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| Year 4 | | | | |
| S1 | ELEC ENG 3100 Systems Engineering <input type="checkbox"/> | ELEC ENG 3101 Control <input type="checkbox"/> | ELEC ENG 2100 Digital Systems <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> |
| S2 | MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/> | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | ENG 3005 Research Method and Project Management <input type="checkbox"/> | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | ENG 3101 Introduction to Medical Technologies <input type="checkbox"/> | PHYSIOL 2510 Physiology IIA: Heart, Lung & Neuromuscular Systems <input type="checkbox"/> | ~Level III COMP SCI Elective <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 | ELEC ENG 3108 | Telecommunications Principles |
| | ANAT SC 2109 | Biology and Development of Human Tissues | | 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 (<i>not offered 2021</i>) | | | |

NOTES

Internship: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Internships are self-sourced and resources are available through [Careers Service](#). Register with CareerHub to access a database where opportunities are posted.

Program Rules: For academic program rules please refer to the following website:

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Information and Enrolment Advice:

Ask ECMS

Email: askecms@adelaide.edu.au

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

Bachelor of Engineering (Honours) (Electrical and Electronic) - Renewable Energy Major
with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Sem 2 Start

| Year 1 | | | | |
|---|--|--|--|--|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | [^] ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | 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"/> |
| S2 | ELEC ENG 4111 Distributed Generation Technologies <input type="checkbox"/> | ELEC ENG 3110 Electric Power Systems <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> |
| 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 | ELEC ENG 3101 Control <input type="checkbox"/> | ENG 3005 Research Method and Project Management <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| S2 | ELEC ENG 3104 Electric Drive Systems <input type="checkbox"/> | CHEM ENG 4048 Biofuels, Biomass and Wastes <input type="checkbox"/> | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | MECH ENG 4064 Renewable Power Technologies <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| 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.

~ COMP SCI 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 | 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 (<i>not offered 2021</i>) |

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Bachelor of Engineering (Honours) (Electrical and Electronic) - Smart Technologies Major
with Bachelor of Mathematical and Computer Sciences (Computer Science Major) – Sem 2 Start

| Year 1 | | | | |
|---|--|--|---|--|
| S1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| S2 | MATHS 1011 Mathematics IA <input type="checkbox"/> | PHYSICS 1510 Physics 1E Mechanics & Thermodynamics <input type="checkbox"/> | ELEC ENG 1102 Digital Electronics <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> |
| Year 2 | | | | |
| S1 | MATHS 1012 Mathematics IB <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | [^] ENG 1001 Introduction to Engineering <input type="checkbox"/> | ELEC ENG 1100 Analog Electronics <input type="checkbox"/> |
| S2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | ELEC ENG 2103 Design & Innovation <input type="checkbox"/> | ELEC ENG 2104 Digital Signal Processing <input type="checkbox"/> | ELEC ENG 2106 Vector Calculus & Electromagnetics <input type="checkbox"/> |
| Year 3 | | | | |
| S1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | 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"/> |
| S2 | MECH ENG 3032 Micro-Controller Programming <input type="checkbox"/> | ELEC ENG 4107 Autonomous Systems <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> | COMP SCI 2000 Computer Systems <input type="checkbox"/> |
| 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 | ELEC ENG 3101 Control <input type="checkbox"/> | ELEC ENG 3103 Engineering Electromagnetics <input type="checkbox"/> | COMP SCI 2201 Algorithm & Data Structure Analysis <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| S2 | COMP SCI 4092 Mobile and Wireless Systems <input type="checkbox"/> | ENG 3004 Systems Engineering and Industry Practice <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | ~Level II or III COMP SCI Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S1 | COMP SCI 3001 Computer Networks & Applications <input type="checkbox"/> | ENG 3005 Research Method and Project Management <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| S2 | ENG 4001A Research Project Part A <input type="checkbox"/> | ELEC ENG 4100 Business Management Systems <input type="checkbox"/> | COMP SCI 3006 Software Engineering and Project <input type="checkbox"/> | ~Level III COMP SCI Elective <input type="checkbox"/> |
| Year 6 | | | | |
| S1 | ENG 4001B Research Project Part B <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> | E&E Engineering Elective (see elective table) <input type="checkbox"/> |
| Core Course | Major course | Elective (see table) | Double Degree Courses | |

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|---|--------------------------|--|----|---------------|-------------------------------|
| S1 | ELEC ENG 4063 | Communications | S2 | ELEC ENG 3108 | Telecommunications Principles |
| | ELEC ENG 4069 | Radar Principles & Systems (not offered 2021) | | ELEC ENG 4061 | Image Processing |
| | ELEC ENG 4109 | Digital Microelectronics | | ELEC ENG 4067 | Antennas and Propagation |
| | ELEC ENG 4112 | Signal Processing Applications (not offered 2021) | | | |

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