



THE UNIVERSITY
of ADELAIDE

Faculty of Engineering, Computer and Mathematical Sciences 2020 Study Plan

Bachelor of Engineering (Honours) (Mechanical) – All Majors with Bachelor of Science

Semester 1 Start

[Bachelor of Engineering \(Honours\) \(Mechanical\) with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Renewable Energy Major with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Smart Technologies Major with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Defence Systems Major with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Medical Technologies Major with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Aerospace Engineering Major with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Mechanical Engineering Major with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Mechatronics and Robotics Major with Bachelor of Science](#)

[Bachelor of Engineering \(Honours\) \(Mechanical\) - Sports Engineering Major with Bachelor of Science](#)

Bachelor of Engineering (Honours) (Mechanical) with Bachelor of Science

| Year 1 | | | | |
|---|---|---|---|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | Mechanical Engineering Elective (see elective table) <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 | | | | |
| S 1 | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | Mechanical Engineering Elective (see elective table) <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | Mechanical Engineering Elective (see elective table) <input type="checkbox"/> | Mechanical Engineering Elective (see elective table) <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | Mechanical Engineering Elective (see elective table) <input type="checkbox"/> | Mechanical Engineering Elective (see elective table) <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

Electives Table

| CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES | | | | |
|--|---|--|--|---|
| S1 | MECH ENG 4102 Advanced PID Control <input type="checkbox"/> | MECH ENG 4105 Advanced Vibrations <input type="checkbox"/> | MECH ENG 4106 Aerospace Propulsion <input type="checkbox"/> | MECH 4112 Combustion Technology & Emission Control <input type="checkbox"/> |
| | MECH ENG 4118 Finite Element Analysis of Structures <input type="checkbox"/> | MECH ENG 4121 Materials Selection & Failure Analysis <input type="checkbox"/> | MECH ENG 4124 Robotics M <input type="checkbox"/> | MECH ENG 4104 Advanced Topics in Fluid Mechanics <input type="checkbox"/> |
| | ELEC ENG 3100 Systems Engineering <input type="checkbox"/> | ENTREP 3006 Energy Management, Economics & Policy <input type="checkbox"/> | MECH ENG 3026 Advanced Mechanics of Materials <input type="checkbox"/> | MECH ENG 3106 Mechatronics II <input type="checkbox"/> |
| | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | MECH ENG 2020 Materials & Manufacturing <input type="checkbox"/> | MECH ENG 2102 Sports Engineering I <input type="checkbox"/> | MECH ENG 3100 Aeronautical Engineering <input type="checkbox"/> |
| | MECH ENG 3103 Advanced Manufacturing Systems <input type="checkbox"/> | MECH ENG 4111 CFD for Engineering Applications <input type="checkbox"/> | GEOG 2129 Introductory GIS <input type="checkbox"/> | |
| S2 | MECH ENG 4100 Advanced Topics in Aerospace Engineering <input type="checkbox"/> | MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/> | MECH ENG 4107 Air Conditioning <input type="checkbox"/> | MECH ENG 4108 Aircraft Design <input type="checkbox"/> |
| | MECH ENG 4125 Stresses in Plates & Shells <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | ENTREP 3006 Energy Management, Economics & Policy <input type="checkbox"/> | MECH ENG 3032 Micro-Controller Programming <input type="checkbox"/> |
| | MECH ENG 3101 Applied Aerodynamics <input type="checkbox"/> | MECH ENG 4145 Sustainable Thermal Technologies <input type="checkbox"/> | MECH ENG 3104 Space Vehicle Design <input type="checkbox"/> | MECH ENG 3107 Sports Engineering II <input type="checkbox"/> |
| | MECH ENG 4140 Sports Engineering III <input type="checkbox"/> | | | |
| Summer | MECH ENG 4126 Topics in Welded Structures <input type="checkbox"/> | ENTREP 3006 Energy Management, Economics & Policy <input type="checkbox"/> | MECH ENG 4115 Engineering Acoustics <input type="checkbox"/> | |
| TBC | MECH ENG 4064 Renewable Power Technologies <input type="checkbox"/> | CEME 3007 Integrated Environment Planning and Impact Assessment <input type="checkbox"/> | | |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:

<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>

Bachelor of Engineering (Honours) (Mechanical) - Renewable Energy Major with Bachelor of Science

| Year 1 | | | | |
|---|---|---|---|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | MECH ENG 2020 Materials and Manufacturing <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 | | | | |
| S 1 | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | Mechanical Engineering Elective (see elective table) <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | ELEC ENG 4111 Distributed Generation Technologies <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | MECH ENG 4064 Renewable Power Technologies <input type="checkbox"/> | MECH ENG 4112 Combustion Technology & Emission Control <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | CHEM ENG 4048 Biofuels, Biomass and Wastes <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

Electives Table

| CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES | | | | |
|--|---|---|--|---|
| S1 | MECH ENG 4102 Advanced PID Control <input type="checkbox"/> | MECH ENG 4105 Advanced Vibrations <input type="checkbox"/> | ELEC ENG 3100 Systems Engineering <input type="checkbox"/> | MECH ENG 3106 Mechatronics II <input type="checkbox"/> |
| | MECH ENG 4121 Materials Selection & Failure Analysis <input type="checkbox"/> | MECH ENG 2102 Sports Engineering I <input type="checkbox"/> | MECH ENG 3026 Advanced Mechanics of Materials <input type="checkbox"/> | MECH ENG 3100 Aeronautical Engineering <input type="checkbox"/> |
| | MECH ENG 3103 Advanced Manufacturing Systems <input type="checkbox"/> | MECH ENG 4104 Advanced Topics in Fluid Mechanics <input type="checkbox"/> | MECH ENG 4106 Aerospace Propulsion <input type="checkbox"/> | MECH ENG 4118 Finite Element Analysis of Structures <input type="checkbox"/> |
| | MECH ENG 4124 Robotics M <input type="checkbox"/> | MECH ENG 4111 CFD for Engineering Applications <input type="checkbox"/> | GEOG 2129 Introductory GIS <input type="checkbox"/> | |
| S2 | MECH ENG 3032 Micro-Controller Programming <input type="checkbox"/> | MECH ENG 4125 Stresses in Plates & Shells <input type="checkbox"/> | MECH ENG 3101 Applied Aerodynamics <input type="checkbox"/> | MECH ENG 4100 Advanced Topics in Aerospace Engineering <input type="checkbox"/> |
| | MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/> | MECH ENG 4107 Air conditioning <input type="checkbox"/> | MECH ENG 4108 Aircraft Design <input type="checkbox"/> | MECH ENG 4145 Sustainable Thermal Technologies <input type="checkbox"/> |
| | MECH ENG 4123 Advanced Digital Control <input type="checkbox"/> | MECH ENG 3104 Space Vehicle Design <input type="checkbox"/> | MECH ENG 3107 Sports Engineering II <input type="checkbox"/> | MECH ENG 4140 Sports Engineering III <input type="checkbox"/> |
| Summer | MECH ENG 4126 Topics in Welded Structures <input type="checkbox"/> | MECH ENG 4115 Engineering Acoustics <input type="checkbox"/> | | |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:
<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>

Bachelor of Engineering (Honours) (Mechanical) - Smart Technologies Major with Bachelor of Science

| Year 1 | | | | |
|---|---|---|--|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | COMP SCI 1102 Object Oriented Programming <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 notes below. | | | | |
| Year 4 | | | | |
| S 1 | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | COMP SCI 2103 Algorithm Design & Data Structures <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | COMP SCI 3012 Distributed Systems <input type="checkbox"/> | MECH ENG 3032 Micro-Controller Programming <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | COMP SCI 3001 Computer Networks & Applications <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | ELEC ENG 4107 Autonomous Systems <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:
<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>

Bachelor of Engineering (Honours) (Mechanical) - Defence Systems Major with Bachelor of Science

| Year 1 | | | | |
|---|---|--|---|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | POLIS 1104 Introduction to Comparative Politics <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 notes below. | | | | |
| Year 4 | | | | |
| S 1 | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | MECH ENG 2020 Materials and Manufacturing <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | ENG 3305 Human Factors for Decision Making <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | ENG 4020 Complex Systems Engineering <input type="checkbox"/> | ENG 4010 Defence Leadership <input type="checkbox"/> | MECH ENG 3026 Advanced Mechanics of Materials <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:
<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>

Bachelor of Engineering (Honours) (Mechanical) - Medical Technologies Major with Bachelor of Science

| Year 1 | | | | |
|---|---|--|--|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | ANAT SC 1102 Human Anatomy and Physiology IA <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 notes below. | | | | |
| Year 4 | | | | |
| S 1 | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | PHYSIOL 2510 Physiology IIA: Heart, Lung & Neuromuscular System <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | | ANAT SC 2009 Musculoskeletal Anatomy <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | ENG 3101 Introduction to Medical Technologies <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | ELEC ENG 4115 Biomedical Instrumentation <input type="checkbox"/> | MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:
<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>

Bachelor of Engineering (Honours) (Mechanical) - Aerospace Engineering Major with Bachelor of Science

| Year 1 | | | | |
|---|---|--|--|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | MECH ENG 2020 Materials & Manufacturing <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 notes below. | | | | |
| Year 4 | | | | |
| S 1 | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | MECH ENG 3100 Aeronautical Engineering <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | MECH ENG 3101 Applied Aerodynamics <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | MECH ENG 4106 Aerospace Propulsion <input type="checkbox"/> | MECH ENG 3026 Advanced Mechanics of Materials <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | MECH ENG 4108 Aircraft Design <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:

<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>

Bachelor of Engineering (Honours) (Mechanical) - Mechanical Engineering Major with Bachelor of Science

| Year 1 | | | | |
|---|---|--|---|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | MECH ENG 2020 Materials and Manufacturing <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 notes below. | | | | |
| Year 4 | | | | |
| S 1 | MECH ENG 3026 Advanced Mechanics of Materials <input type="checkbox"/> | MECH ENG 3103 Advanced Manufacturing Systems <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | MECH ENG 3101 Applied Aerodynamics <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | MECH ENG 4118 Finite Element Analysis of Structures <input type="checkbox"/> | MECH ENG 4111 CFD for Engineering Applications <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:
<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>

Bachelor of Engineering (Honours) (Mechanical) - Mechatronics and Robotics Major with Bachelor of Science

| Year 1 | | | | |
|---|---|---|---|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | ELEC ENG 2105 Electronic Circuits M <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 notes below. | | | | |
| Year 4 | | | | |
| S 1 | MECH ENG 3103 Advanced Manufacturing Systems <input type="checkbox"/> | MECH ENG 3106 Mechatronics II <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | |
| S 2 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | MECH ENG 3032 Micro-Controller Programming <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | MECH ENG 4102 Advanced PID Control <input type="checkbox"/> | MECH ENG 4124 Robotics <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:
<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>

Bachelor of Engineering (Honours) (Mechanical) - Sports Engineering Major with Bachelor of Science

| Year 1 | | | | |
|---|---|---|---|---|
| S 1 | # MATHS 1011 Mathematics IA <input type="checkbox"/> | ^ ENG 1001 Introduction to Engineering <input type="checkbox"/> | CEME 1004 Engineering Mechanics-Statics <input type="checkbox"/> | ELEC ENG 1101 Electronic Systems <input type="checkbox"/> |
| S 2 | MATHS 1012 Mathematics IB <input type="checkbox"/> | ENG 1002 Programming (Matlab and C) <input type="checkbox"/> | CHEM ENG 1009 Materials I <input type="checkbox"/> | MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/> |
| Year 2 | | | | |
| S 1 | MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/> | MECH ENG 2100 Design Practice <input type="checkbox"/> | MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| S 2 | MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/> | MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/> | MECH ENG 2019 Dynamics & Control I <input type="checkbox"/> | Science Level I Elective <input type="checkbox"/> |
| Year 3 | | | | |
| S 1 | MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/> | MECH ENG 2102 Sports Engineering <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3038 Computer Aided Engineering <input type="checkbox"/> | MECH ENG 2101 Mechatronics IM <input type="checkbox"/> | Science Level II Elective <input type="checkbox"/> | Science Level II Elective <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 notes below. | | | | |
| Year 4 | | | | |
| S 1 | ENG 3005 Research Method & Project Management <input type="checkbox"/> | MECH ENG 3101 Applied Aerodynamics <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | MECH ENG 3107 Sports Engineering II <input type="checkbox"/> | MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/> | MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| Year 5 | | | | |
| S 1 | ENG 4001A Research Project Part A <input type="checkbox"/> | MECH ENG 3103 Advanced Manufacturing Systems <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |
| S 2 | ENG 4100B Research Project Part B <input type="checkbox"/> | MECH ENG 4140 Sports Engineering III <input type="checkbox"/> | ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/> | Science Level III Elective <input type="checkbox"/> |

NOTES

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

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: 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. Enrolment into 6 unit internship course opens from S1 2021. 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:
<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>