

# MECHANICAL ENGINEERING, TESTAMUR MAJOR (T103)

Western Sydney University Major Code: T103

Previous Code: KT3173.1, MT3054

Available to students in other Western Sydney University programs?  
No

Mechanical engineering is a dynamic area involving the design and build of moving machines including engines that power transportation, industrial machinery, and a range of tools. Students put the core concepts of mechanical engineering, energy, thermodynamics, mechanics, kinematics, and fluid mechanics, into practical application in workshops, industry projects, and work integrated learning. Students design and construct machines and tools, monitor and evaluate their performance. Employment opportunities include automotive or mechanical engineer, control and instrumentation engineer. All students complete a mandatory industrial placement. The completion of this major includes a mandatory industry placement of 300 or 450 hours in duration, depending upon the program undertaken.

## Location

Campus	Mode	Advice
Parramatta City Campus - Macquarie Street	Internal	Major Advice (edbe@westernsydney.edu.au)
Parramatta Campus - Victoria Road	Internal	Major Advice (edbe@westernsydney.edu.au)
Penrith Campus	Internal	Major Advice (edbe@westernsydney.edu.au)
Sydney City Campus*	Internal	Major Advice (p.lendrum@city.westerns)

\* Curriculum delivered through an agreement with another party

## Major Sequence Current

This major sequence applies to students who commenced in 2024 or later. If you commenced prior to 2024 please refer to the Sequence 2022-23 tab for details.

This major is included in Bachelor of Engineering Science, Bachelor of Engineering (Honours), Bachelor of Engineering Advanced (Honours) and Bachelor of Engineering (Honours)/Bachelor of Business.

Please follow the recommended sequence for your program as noted below.

## Bachelor of Engineering Advanced (Honours) (3771)

This Major will be offered at Engineering Innovation Hub which is part of Parramatta City campus.

Qualification for this award requires the successful completion of 320 credit points which include the subjects listed below.

\*\* Electives must be Level 2 or higher

## Start-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ENGR 1024	Introduction to Engineering Practice	10
ENGR 1047	Advanced Engineering Physics 1	10
ELEC 1006	Engineering Computing	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ENGR 1018	Fundamentals of Mechanics	10
ELEC 1003	Electrical Fundamentals	10
ENGR 2023	Advanced Engineering Physics 2	10
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
ENGR 2035	Modern Digital Design and Development	10
MECH 2003	Mechanics of Materials	10
MECH 2001	Kinematics and Kinetics of Machines	10
CIVL 2003	Fluid Mechanics	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 2025	Design Graphics: Engineering Documentation	10
ENGR 2001	Automated Manufacturing	10
Select one elective** or Minor subject		10
Students who fail to maintain a minimum GPA of 5.0 at the end of completion of 160 Credit Points, and again at the completion of 200 Credit points will be automatically transferred to the B. Engineering (Honours) (3740) program.		
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
PROC 2003	Materials Selection and Design	10
MECH 3005	Mechanical Design	10
BUSM 2049	Creative and Innovative Thinkers	10
Select one elective** or Minor subject		10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
MECH 3006	Mechatronic Design	10
MECH 3004	Dynamics of Mechanical Systems	10
MECH 3002	Advanced Mechanics of Materials	10
<b>Industrial Experience</b>		
ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>
<b>Year 4</b>		
<b>Autumn session</b>		
ENGR 4043	Advanced Engineering Thesis 1: Preliminary Investigations	20
MECH 4004	Robotics	10
Select one elective** or Minor subject		10
<b>Credit Points</b>		<b>40</b>

**Spring session**

ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	20
MECH 4002	Computer Aided Engineering	10
Select one elective** or Minor subject		10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>320</b>

Subject	Title	Credit Points
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**Optional Electives**

The following subject is an optional elective subject offered to students who are engaged in a School approved project.

This subject can be taken during the third year of this program, however, permission is required to enrol in the subject.

ENGR 3022	Special Technical Project	10
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**Equivalent Subjects**

The subjects listed below count towards completion of this program for students who passed these subjects in 2023 or earlier.

BUSM 2047 Venture Makers Foundations, replaced by BUSM 2049 Creative and Innovative Thinkers

**Mid-year intake**

Course	Title	Credit Points
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**Year 1****Spring session**

MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ENGR 1018	Fundamentals of Mechanics	10
ELEC 1003	Electrical Fundamentals	10
ENGR 2023	Advanced Engineering Physics 2	10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ENGR 1024	Introduction to Engineering Practice	10
ENGR 1047	Advanced Engineering Physics 1	10
ELEC 1006	Engineering Computing	10
<b>Credit Points</b>		<b>40</b>

**Year 2****Spring session**

MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 2025	Design Graphics: Engineering Documentation	10
ENGR 2001	Automated Manufacturing	10
Select one elective** or Minor subject		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

MECH 2003	Mechanics of Materials	10
ENGR 2035	Modern Digital Design and Development	10
MECH 2001	Kinematics and Kinetics of Machines	10
CIVL 2003	Fluid Mechanics	10

Students who fail to maintain a minimum GPA of 5.0 at the end of completion of 160 Credit Points, and again at the completion of 200 Credit points will be automatically transferred to the B. Engineering (Honours) (3740) program.

**Credit Points** **40**

**Year 3****Spring session**

MECH 3007	Thermal and Fluid Engineering	10
MECH 3006	Mechatronic Design	10
MECH 3004	Dynamics of Mechanical Systems	10
MECH 3002	Advanced Mechanics of Materials	10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

PROC 2003	Materials Selection and Design	10
MECH 3005	Mechanical Design	10
BUSM 2049	Creative and Innovative Thinkers	10
Select one elective** or Minor subject		10

**Industrial Experience**

ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>

**Year 4****Spring session**

ENGR 4043	Advanced Engineering Thesis 1: Preliminary Investigations	20
MECH 4002	Computer Aided Engineering	10
Select one elective** or Minor subject		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	20
MECH 4004	Robotics	10
Select one elective** or Minor subject		10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>320</b>

Subject	Title	Credit Points
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**Optional Electives**

The following subject is an optional elective subject offered to students who are engaged in a School approved project.

This subject can be taken during the third year of this program, however, permission is required to enrol in the subject.

ENGR 3022	Special Technical Project	10
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**Equivalent Subjects**

The subjects listed below count towards completion of this program for students who passed these subjects in 2023 or earlier.

BUSM 2047 Venture Makers Foundations, replaced by BUSM 2049 Creative and Innovative Thinkers

**Bachelor of Engineering (Honours) (3740)**

**This Major will be offered at Engineering Innovation Hub which is part of Parramatta City campus, Penrith and Sydney City campuses.**

Qualification for this award requires the successful completion of 320 credit points which include the subjects listed below.

**\*\* Electives** must be Level 2 or higher (An exception applies for students completing MATH 1021 Mathematics for Engineers Preliminary. This subject will then count as one of the elective subjects)

**Start-year intake**

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the following		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the following		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 2035	Modern Digital Design and Development	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3004	Dynamics of Mechanical Systems	10
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
MECH 3002	Advanced Mechanics of Materials	10
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
PROC 2003	Materials Selection and Design	10
Select one elective** or Minor subject		10
<b>Industrial Experience</b>		
ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
MECH 4002	Computer Aided Engineering	10
MECH 3006	Mechatronic Design	10
Select one elective** or Minor subject		10
<b>Credit Points</b>		<b>40</b>
<b>Year 4</b>		
<b>Autumn session</b>		
MECH 4001	Computational Fluid Dynamics	10
MECH 4004	Robotics	10
ENGR 4041	Final Year Project 1 (UG Engineering)	20
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
ENGR 4042	Final Year Project 2 (UG Engineering)	20

Select one elective** or Minor subject	10
Select one elective** or Minor subject	10
<b>Credit Points</b>	<b>40</b>
<b>Total Credit Points</b>	<b>320</b>

**Mid-year intake**

Course	Title	Credit Points
<b>Year 1</b>		
<b>Spring session</b>		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the following		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the following		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Spring session</b>		
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
Select one elective or Minor subject		10
Select one elective or Minor subject		10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 2035	Modern Digital Design and Development	10
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
MECH 3002	Advanced Mechanics of Materials	10
MECH 4002	Computer Aided Engineering	10
MECH 3004	Dynamics of Mechanical Systems	10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
PROC 2003	Materials Selection and Design	10
MECH 4001	Computational Fluid Dynamics	10
<b>Industrial Experience</b>		
ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>
<b>Year 4</b>		
<b>Spring session</b>		
MECH 3006	Mechatronic Design	10

ENGR 4041	Final Year Project 1 (UG Engineering)	20
Select one elective or Minor subject		10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 4004	Robotics	10
ENGR 4042	Final Year Project 2 (UG Engineering)	20
Select one elective or Minor subject		10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>320</b>

## Bachelor of Engineering Science

This Major will be offered at Engineering Innovation Hub which is part of Parramatta City campus, Penrith and Sydney City campuses.

Qualification for this award requires the successful completion of 240 credit points which include the subjects listed in the recommended sequences below.

### Start-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the following		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the following		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 3029	Specialisation Workshop 1	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3004	Dynamics of Mechanical Systems	10
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 3030	Specialisation Workshop 2	10
<b>Industrial Experience</b>		
ENGR 2033	Industrial Experience (Engineering Technologist)	0
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
MECH 3005	Mechanical Design	10

MECH 3001	Advanced Dynamics	10
ENGR 3013	Engineering Science Project 1	10
ENGR 2035	Modern Digital Design and Development	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
ENGR 3014	Engineering Science Project 2	10
Select two electives (Level 2 or higher)		20
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

### Mid-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Spring session</b>		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the following		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the following		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Spring session</b>		
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 3029	Specialisation Workshop 1	10
Select one elective (Level 2 or higher)		10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 3030	Specialisation Workshop 2	10
<b>Industrial Experience</b>		
ENGR 2033	Industrial Experience (Engineering Technologist)	0
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
MECH 4002	Computer Aided Engineering	10
ENGR 3013	Engineering Science Project 1	10
MECH 3004	Dynamics of Mechanical Systems	10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 3005	Mechanical Design	10

MECH 3001	Advanced Dynamics	10
ENGR 3014	Engineering Science Project 2	10
ENGR 2035	Modern Digital Design and Development	10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

## Bachelor of Engineering (Honours)/ Bachelor of Business (3800)

Qualification for this award requires the successful completion of 440 credit points, which include the subjects listed in the recommended sequence below.

### Start-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
ENGR 1011	Engineering Physics	10
MATH 1016	Mathematics for Engineers 1	10
Business Core Subject 1		10
Business Core Subject 2		10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
PROC 1008	Introduction to Materials Engineering	10
ENGR 1018	Fundamentals of Mechanics	10
MATH 1019	Mathematics for Engineers 2	10
Business Core Subject 3		10
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
MECH 2003	Mechanics of Materials	10
ENGR 1024	Introduction to Engineering Practice	10
MECH 3008	Thermodynamics and Heat Transfer	10
Business Core Subject 4		10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
ENGR 2001	Automated Manufacturing	10
MECH 3002	Advanced Mechanics of Materials	10
Business Professional Subject 1		10
Business Professional Subject 2		10
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
MECH 2001	Kinematics and Kinetics of Machines	10
ELEC 1006	Engineering Computing	10
CIVL 2003	Fluid Mechanics	10
ENGR 2035	Modern Digital Design and Development	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
MECH 3004	Dynamics of Mechanical Systems	10
Business Major Subject 1		10
Business Major Subject 2		10
<b>Credit Points</b>		<b>40</b>

### Year 4

#### Autumn session

ELEC 1003	Electrical Fundamentals	10
MECH 3001	Advanced Dynamics	10
Business Major Subject 3		10
Business Major Subject 4		10
<b>Credit Points</b>		<b>40</b>

#### Spring session

MECH 3006	Mechatronic Design	10
MECH 4002	Computer Aided Engineering	10
Business Major Subject 5		10
Business Major Subject 6		10
<b>Industrial Experience</b>		
ENGR 3017	Industrial Experience (Engineering)	0

**Credit Points** **40**

### Year 5

#### Autumn session

MECH 3005	Mechanical Design	10
PROC 2003	Materials Selection and Design	10
Business Major Subject 7		10
Business Major Subject 8		10
<b>Credit Points</b>		<b>40</b>

#### Spring session

ENGR 4041	Final Year Project 1 (UG Engineering)	20
Business Professional Subject 3		10
Business Professional Subject 4		10
<b>Credit Points</b>		<b>40</b>

### Year 6

#### Autumn session

ENGR 4042	Final Year Project 2 (UG Engineering)	20
MECH 4004	Robotics	10
MECH 4001	Computational Fluid Dynamics	10
<b>Credit Points</b>		<b>40</b>

**Total Credit Points** **440**

## Mid-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Spring session</b>		
MATH 1016	Mathematics for Engineers 1	10
ENGR 1018	Fundamentals of Mechanics	10
Business Core Subject 1		10
Business Core Subject 2		10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10
ELEC 1006	Engineering Computing	10
ELEC 1003	Electrical Fundamentals	10
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Spring session</b>		
ENGR 2001	Automated Manufacturing	10
PROC 1008	Introduction to Materials Engineering	10
Business Professional Subject 3		10

Business Professional Subject 4	10
<b>Credit Points</b>	<b>40</b>
<b>Autumn session</b>	
MECH 2003 Mechanics of Materials	10
ENGR 1024 Introduction to Engineering Practice	10
MECH 3008 Thermodynamics and Heat Transfer	10
MECH 2001 Kinematics and Kinetics of Machines	10
<b>Credit Points</b>	<b>40</b>
<b>Year 3</b>	
<b>Spring session</b>	
MECH 3004 Dynamics of Mechanical Systems	10
MECH 3002 Advanced Mechanics of Materials	10
Business Professional Subject 1	10
Business Professional Subject 2	10
<b>Credit Points</b>	<b>40</b>
<b>Autumn session</b>	
CIVL 2003 Fluid Mechanics	10
ENGR 2035 Modern Digital Design and Development	10
Business Major Subject 1	10
Business Major Subject 2	10
<b>Credit Points</b>	<b>40</b>
<b>Year 4</b>	
<b>Spring session</b>	
MECH 3007 Thermal and Fluid Engineering	10
MECH 3006 Mechatronic Design	10
Business Major Subject 3	10
Business Major Subject 4	10
<b>Credit Points</b>	<b>40</b>
<b>Autumn session</b>	
PROC 2003 Materials Selection and Design	10
MECH 3005 Mechanical Design	10
MECH 3001 Advanced Dynamics	10
Business Major Subject 5	10
<b>Industrial Experience</b>	
ENGR 3017 Industrial Experience (Engineering)	0
<b>Credit Points</b>	<b>40</b>
<b>Year 5</b>	
<b>Spring session</b>	
MECH 4002 Computer Aided Engineering	10
Business Professional Subject 6	10
Business Professional Subject 7	10
Business Professional Subject 8	10
<b>Credit Points</b>	<b>40</b>
<b>Autumn session</b>	
MECH 4004 Robotics	10
MECH 4001 Computational Fluid Dynamics	10
ENGR 4041 Final Year Project 1 (UG Engineering)	20
<b>Credit Points</b>	<b>40</b>
<b>Year 6</b>	
<b>Spring session</b>	
ENGR 4042 Final Year Project 2 (UG Engineering)	20
Business Professional Subject 3	10
Business Professional Subject 4	10
<b>Credit Points</b>	<b>40</b>
<b>Total Credit Points</b>	<b>440</b>

## Major Sequence 2022 - 2023

If you commenced in 2024 or later please refer to the Structure 2024 tab for details.

This major is included in Bachelor of Engineering Science, Bachelor of Engineering (Honours), Bachelor of Engineering Advanced (Honours) and Bachelor of Engineering (Honours)/Bachelor of Business.

Please follow the recommended sequence for your course as noted below.

## Bachelor of Engineering Advanced (Honours)

This Major will be offered at Engineering Innovation Hub which is part of Parramatta City campus.

Qualification for this award requires the successful completion of 320 credit points which include the subjects listed below.

### Start-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ENGR 1024	Introduction to Engineering Practice	10
ENGR 1047	Advanced Engineering Physics 1	10
ENGR 1045	Engineering Programming Fundamentals	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
ELEC 1009	Electrical Circuit Fundamentals	10
MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ENGR 1018	Fundamentals of Mechanics	10
MANU 2001	Design and Manufacturing	10
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
ENGR 2027	Engineering Design	10
MECH 2003	Mechanics of Materials	10
MECH 2001	Kinematics and Kinetics of Machines	10
CIVL 2003	Fluid Mechanics	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 2005	Mathematics for Mechanical and Mechatronic Engineers	10
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 2025	Design Graphics: Engineering Documentation	10
Select one elective		10
Students who fail to maintain a minimum GPA of 5.0 at the end of completion of 160 Credit Points, and again at the completion of 200 Credit points will be automatically transferred to the B. Engineering (Honours) (3740) program.		
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
MECH 3002	Advanced Mechanics of Materials	10
MECH 3005	Mechanical Design	10
Select one Alternate Subject		10



Select one elective	10
<b>Credit Points</b>	<b>40</b>
<b>Spring session</b>	
MECH 3007 Thermal and Fluid Engineering	10
MECH 3006 Mechatronic Design	10
ENGR 3020 Numerical Methods in Engineering	10
Select one Alternate Subject	10
<b>Industrial Experience</b>	
ENGR 3017 Industrial Experience (Engineering)	0
<b>Credit Points</b>	<b>40</b>
<b>Year 4</b>	
<b>Autumn session</b>	
MECH 4004 Robotics	10
ENGR 4037 Advanced Engineering Thesis 1: Preliminary Investigations	10
Select one Alternate Subject	20
Select one elective	
<b>Credit Points</b>	<b>40</b>
<b>Spring session</b>	
MECH 4002 Computer Aided Engineering	10
ENGR 4036 Advanced Engineering Thesis 2: Detailed Investigations	10
Select one Alternate Subject	20
Select one elective	
<b>Credit Points</b>	<b>40</b>
<b>Total Credit Points</b>	<b>320</b>

**Alternate Subjects**

Subject	Title	Credit Points
ENGR 3025	Designing for Circular Economy (Advanced)	10
ENGR 2024	Design Graphics: Communication for Manufacture	10
ENGR 2022	Design Practice: Sustainable Manufacturing	10
MECH 4003	Mobile Robotics	10
INFO 3003	Human-Computer Interaction	10
HLTH 2003	Biomechanics	10
ENGR 3003	Biomedical Electronics	10
ENGR 3004	Biomedical Signals and Data Analysis	10
MECH 4001	Computational Fluid Dynamics	10
BIOS 1022	Introduction to Human Biology	10
MECH 4003	Mobile Robotics	10

**Minors**

SM3072 Automation

SM3091 Biomedical Engineering

SM3099 Computer Aided Design (Mechanical)

**Optional Electives**

The following subject is an optional elective subject offered to students who are engaged in a School approved project. This subject can be taken during the third year of this program, however, permission is required to enrol in the subject.

Subject	Title	Credit Points
ENGR 3022	Special Technical Project	10

**Equivalent Subjects**

The subjects listed below count towards completion of this program for students who passed these subjects in 2021 or earlier.

MECH 4005 Advanced Engineering Thesis 1: Preliminary Investigations, replaced by ENGR 4037 Advanced Engineering Thesis 1: Preliminary Investigations

MECH 4006 Advanced Engineering Thesis 2: Detailed Investigations, replaced by ENGR 4036 Advanced Engineering Thesis 2: Detailed Investigations

**Mid-year intake**

Course	Title	Credit Points
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**Year 1****Spring session**

MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ENGR 1018	Fundamentals of Mechanics	10
MANU 2001	Design and Manufacturing	10
ELEC 1009	Electrical Circuit Fundamentals	10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ENGR 1024	Introduction to Engineering Practice	10
ENGR 1047	Advanced Engineering Physics 1	10
ENGR 1045	Engineering Programming Fundamentals	10
<b>Credit Points</b>		<b>40</b>

**Year 2****Spring session**

MECH 2005	Mathematics for Mechanical and Mechatronic Engineers	10
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 2025	Design Graphics: Engineering Documentation	10
Select one elective		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

ENGR 2027	Engineering Design	10
MECH 2003	Mechanics of Materials	10
MECH 2001	Kinematics and Kinetics of Machines	10
CIVL 2003	Fluid Mechanics	10

Students who fail to maintain a minimum GPA of 5.0 at the end of completion of 160 Credit Points, and again at the completion of 200 Credit points will be automatically transferred to the B. Engineering (Honours) (3740) program.

<b>Credit Points</b>		<b>40</b>
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**Year 3****Spring session**

MECH 3007	Thermal and Fluid Engineering	10
MECH 3006	Mechatronic Design	10
ENGR 3020	Numerical Methods in Engineering	10
One alternate subject		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

MECH 3002	Advanced Mechanics of Materials	10
MECH 3005	Mechanical Design	10
One alternate subject		10
Select one elective		10

**Industrial Experience**

ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>

**Year 4****Spring session**

ENGR 4037	Advanced Engineering Thesis 1: Preliminary Investigations	10
MECH 4002	Computer Aided Engineering	10
One alternate subject		10
Select one elective		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

ENGR 4036	Advanced Engineering Thesis 2: Detailed Investigations	10
MECH 4004	Robotics	10
One alternate subject		10
Select one elective		10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>320</b>

**Alternate Subjects**

Subject	Title	Credit Points
ENGR 3025	Designing for Circular Economy (Advanced)	10
ENGR 2024	Design Graphics: Communication for Manufacture	10
ENGR 2022	Design Practice: Sustainable Manufacturing	10
MECH 4003	Mobile Robotics	10
INFO 3003	Human-Computer Interaction	10
HLTH 2003	Biomechanics	10
ENGR 3003	Biomedical Electronics	10
ENGR 3004	Biomedical Signals and Data Analysis	10
MECH 4001	Computational Fluid Dynamics	10
BIOS 1022	Introduction to Human Biology	10
MECH 4003	Mobile Robotics	10

**Minors**

SM3072 Automation

SM3091 Biomedical Engineering

SM3099 Computer Aided Design (Mechanical)

**Optional Electives**

The following subject is an optional elective subject offered to students who are engaged in a School approved project. This subject can be taken during the third year of this program, however, permission is required to enrol in the subject.

Subject	Title	Credit Points
ENGR 3022	Special Technical Project	10

**Equivalent Subjects**

The subjects listed below count towards completion of this program for students who passed these subjects in 2021 or earlier.

MECH 4005 Advanced Engineering Thesis 1: Preliminary Investigations, replaced by ENGR 4037 Advanced Engineering Thesis 1: Preliminary Investigations

MECH 4006 Advanced Engineering Thesis 2: Detailed Investigations, replaced by ENGR 4036 Advanced Engineering Thesis 2: Detailed Investigations

**Bachelor of Engineering Science**

**This Major will be offered at Engineering Innovation Hub which is part of Parramatta City campus, Penrith and Sydney City campuses.**

Qualification for this award requires the successful completion of 240 credit points which include the subjects listed in the recommended sequences below.

**Start-year intake**

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the following:		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	

Note: All students are required to enrol in MATH 1021 Mathematics for Engineers Preliminary first and undertake a readiness test at the beginning of their study.

This test will be conducted at the beginning of the first semester of enrolment and the result will determine whether a student will remain in MATH 1021 Mathematics for Engineers Preliminary or be transferred by the School to MATH 1016 Mathematics for Engineers 1.

The students who finish MATH 1021 Mathematics for Engineers Preliminary will then use this unit as an elective.

<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one of the following:		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
Select one elective		10

Note: Students who remained in MATH 1021 Mathematics for Engineers Preliminary during the first semester will be required to complete MATH 1016 Mathematics for Engineers 1 during second semester.

These students must then complete MATH 1019 Mathematics for Engineers 2 during the Summer session.

<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Autumn session</b>		
MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10



ENGR 3029	Specialisation Workshop 1	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3004	Dynamics of Mechanical Systems	10
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 3030	Specialisation Workshop 2	10
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Autumn session</b>		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
ENGR 3013	Engineering Science Project 1	10
ENGR 2024	Design Graphics: Communication for Manufacture	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
ENGR 3020	Numerical Methods in Engineering	10
ENGR 3014	Engineering Science Project 2	10
Select one elective		10
<b>Industrial Experience</b>		
ENGR 2033	Industrial Experience (Engineering Technologist)	0
Note: Elective subjects must be level 2 or higher		
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

### Equivalent Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.

ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering

### Mid-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Spring session</b>		
Select one of the following:		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ENGR 1024	Introduction to Engineering Practice	10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
Select one of the following:		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
Select one elective		10
• Elective must be Level 1 or higher		
<b>Credit Points</b>		<b>40</b>

### Year 2

<b>Spring session</b>		
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 3029	Specialisation Workshop 1	10
Select one elective		10
• Elective must be Level 2 or higher		
<b>Credit Points</b>		<b>40</b>

### Autumn session

MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 3030	Specialisation Workshop 2	10
<b>Industrial Experience</b>		
ENGR 2033	Industrial Experience (Engineering Technologist)	0
<b>Credit Points</b>		<b>40</b>

### Year 3

<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
ENGR 3020	Numerical Methods in Engineering	10
ENGR 3014	Engineering Science Project 2	10
MECH 3004	Dynamics of Mechanical Systems	10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
ENGR 3013	Engineering Science Project 1	10
ENGR 2024	Design Graphics: Communication for Manufacture	10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>240</b>

### Equivalent Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.

ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering

## Bachelor of Engineering (Honours)/ Bachelor of Business (3728)

Qualification for this award requires the successful completion of 400 credit points, which include the subjects listed in the recommended sequence below.

### Start-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
ENGR 1011	Engineering Physics	10
Business Core Subject 1		10
Business Core Subject 2		10
MATH 1016	Mathematics for Engineers 1	10
<b>Credit Points</b>		<b>40</b>

**Spring session**

PROC 1008	Introduction to Materials Engineering	10
Business Core Subject 3		10
Business Core Subject 4		10
MATH 1019	Mathematics for Engineers 2	10
<b>Credit Points</b>		<b>40</b>

**Year 2****Autumn session**

ELEC 1006	Engineering Computing	10
Business Professional Subject 1		10
Business Professional Subject 2		10
Business Major Subject 1		10
<b>Credit Points</b>		<b>40</b>

**Spring session**

ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major Subject 2		10
Business Major Subject 3		10
<b>Credit Points</b>		<b>40</b>

**Year 3****Autumn session**

MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 2024	Design Graphics: Communication for Manufacture	10
<b>Credit Points</b>		<b>40</b>

**Spring session**

MECH 3004	Dynamics of Mechanical Systems	10
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
MECH 3002	Advanced Mechanics of Materials	10
<b>Credit Points</b>		<b>40</b>

**Year 4****Autumn session**

MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
Business Major Subject 4		10
Business Major Subject 5		10
<b>Credit Points</b>		<b>40</b>

**Spring session**

MECH 3007	Thermal and Fluid Engineering	10
ENGR 3020	Numerical Methods in Engineering	10
Business Major Subject 6		10
Business Major Subject 7		10

**Industrial Experience**

ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>

**Year 5****Autumn session**

MECH 4004	Robotics	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
Business Professional Subject 3		10
Business Major Subject 8		10
<b>Credit Points</b>		<b>40</b>

**Spring session**

MECH 4002	Computer Aided Engineering	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
MECH 3006	Mechatronic Design	10
Business Professional Subject 4		10
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>400</b>

**Equivalent Subjects**

The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.

ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering

**Mid-year intake**

Course	Title	Credit Points
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**Year 1****Spring session**

PROC 1008	Introduction to Materials Engineering	10
MATH 1016	Mathematics for Engineers 1	10
Business Core Subject 1		10
Business Core Subject 2		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10
Business Core Subject 3		10
Business Core Subject 4		10
<b>Credit Points</b>		<b>40</b>

**Year 2****Spring session**

ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major Subject 1		10
Business Major Subject 2		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

ELEC 1006	Engineering Computing	10
MECH 2003	Mechanics of Materials	10
Business Professional Subject 1		10
Business Major Subject 3		10
<b>Credit Points</b>		<b>40</b>

**Year 3****Spring session**

ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
MECH 3002	Advanced Mechanics of Materials	10
Business Major Subject 4		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

MECH 2001	Kinematics and Kinetics of Machines	10
CIVL 2003	Fluid Mechanics	10
ENGR 2024	Design Graphics: Communication for Manufacture	10
Business Professional Subject 2		10
<b>Credit Points</b>		<b>40</b>

**Year 4****Spring session**

MECH 3007	Thermal and Fluid Engineering	10
ENGR 3020	Numerical Methods in Engineering	10
MECH 3004	Dynamics of Mechanical Systems	10
Business Major Subject 5		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
Business Major Subject 6		10
Business Major Subject 7		10

**Industrial Experience**

ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>

**Year 5****Spring session**

MECH 4002	Computer Aided Engineering	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
MECH 3006	Mechatronic Design	10
Business Professional Subject 3		10
<b>Credit Points</b>		<b>40</b>

**Autumn session**

ENGR 4026	Final Year Project 2 (UG Engineering)	10
MECH 4004	Robotics	10
Business Professional Subject 4		10
Business Major Subject 8		10
<b>Credit Points</b>		<b>40</b>

**Total Credit Points 400****Equivalent Subjects**

The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.

ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering

**Bachelor of Engineering (Honours)**

This Major will be offered at Engineering Innovation Hub which is part of Parramatta City campus, Penrith and Sydney City campuses.

Qualification for this award requires the successful completion of 320 credit points, which include the subjects listed in the recommended sequence below.

**Start-year intake**

Course	Title	Credit Points
<b>Year 1</b>		
<b>Autumn session</b>		
Select one of the following:		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
<b>Credit Points</b>		<b>40</b>
<b>Spring session</b>		
Select one of the following:		10

MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective		10
• Elective must be Level 1 or higher		

**Credit Points 40****Year 2****Autumn session**

MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 2025	Design Graphics: Engineering Documentation	10

**Credit Points 40****Spring session**

MECH 3004	Dynamics of Mechanical Systems	10
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
MECH 3002	Advanced Mechanics of Materials	10

**Credit Points 40****Year 3****Autumn session**

MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
One alternate subject		10
Select one elective		10

• Elective must be Level 2 or higher

**Credit Points 40****Spring session**

MECH 3007	Thermal and Fluid Engineering	10
ENGR 3020	Numerical Methods in Engineering	10
MECH 3006	Mechatronic Design	10
One alternate subject		10

**Industrial Experience**

ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>

**Year 4****Autumn session**

MECH 4004	Robotics	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
One alternate subject		10
Select one elective		10

• Elective must be Level 2 or higher

**Credit Points 40****Spring session**

MECH 4002	Computer Aided Engineering	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
One alternate subject		10
Select one elective		10

• Elective must be Level 2 or higher

**Credit Points 40****Total Credit Points 320**

## Equivalent Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.

ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering

## Mid-year intake

Course	Title	Credit Points
<b>Year 1</b>		
<b>Spring session</b>		
Select one of the following:		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ENGR 1024	Introduction to Engineering Practice	10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
Select one of the following:		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
Select one elective		10
• Elective must be Level 1 or higher		
<b>Credit Points</b>		<b>40</b>
<b>Year 2</b>		
<b>Spring session</b>		
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
One alternate subject		10
Select one elective		10
• Elective must be Level 2 or higher		
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 2001	Kinematics and Kinetics of Machines	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 2025	Design Graphics: Engineering Documentation	10
<b>Credit Points</b>		<b>40</b>
<b>Year 3</b>		
<b>Spring session</b>		
MECH 3007	Thermal and Fluid Engineering	10
MECH 3002	Advanced Mechanics of Materials	10
ENGR 3020	Numerical Methods in Engineering	10
MECH 3004	Dynamics of Mechanical Systems	10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
One alternate subject		10
Select one elective		10
• Elective must be Level 2 or higher		

## Industrial Experience

ENGR 3017	Industrial Experience (Engineering)	0
<b>Credit Points</b>		<b>40</b>
<b>Year 4</b>		
<b>Spring session</b>		
MECH 4002	Computer Aided Engineering	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
MECH 3006	Mechatronic Design	10
One alternate subject		10
<b>Credit Points</b>		<b>40</b>
<b>Autumn session</b>		
MECH 4004	Robotics	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
One alternate subject		10
Select one elective		10
• Elective must be Level 2 or higher		
<b>Credit Points</b>		<b>40</b>
<b>Total Credit Points</b>		<b>320</b>

## Equivalent Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.

ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering

## Related Programs

Bachelor of Engineering (Honours)/Bachelor of Business (3728) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-honours-bachelor-business/>)

Bachelor of Engineering (Honours) (3740) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-honours/>)

Bachelor of Engineering Advanced (Honours) (3771) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-advanced-honours/>)

Bachelor of Engineering Science (3691) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-science/>)