## 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. This major includes a mandatory 12 weeks of industrial placement as a completion requirement.

#### Location

Campus	Mode	Advice	_
Parramatta City Campus - Macquarie Street	Internal	Major Advice (edbe@westernsydney.ed	S du S
Parramatta Campus - Victoria Road	Internal	Major Advice (edbe@westernsydney.ed	0
Penrith Campus	Internal	Major Advice (edbe@westernsydney.ed	Lu.a
Sydney City Campus*	Internal	Major Advice (p.lendrum@city.westerns	syd

<sup>\*</sup> Curriculum delivered through an agreement with another party

### Recommended 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
Year 1		
Autumn session		
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
	Credit Points	40
Spring session		
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  Credit Points	10
Year 2	Credit Points	40
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
	Credit Points	40
Spring session		
MECH 2005	Mathematics for Mechanical and	10
	Mechatronic Engineers	
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 2025	Design Graphics: Engineering Documentation	10
Select one elective	•	10
of completion of 1 of 200 Credit point	to maintain a minimum GPA of 5.0 at the end 60 Credit Points, and again at the completion is will be automatically transferred to the B. ours) (3740) program.	
	Credit Points	40
u.au) <b>Year 3</b>		
Autumn session		
ydnev edu auj MECH 3002	Advanced Mechanics of Materials	10
yAutumn session ydnev.edu.asin MECH 3002 MECH 3005	Mechanical Design	10
ydnev.edu.aui MECH 3002 MECH 3005 Select one Alterna	Mechanical Design te Subject	10 10
yAutumn session ydnev.edu.asin MECH 3002 MECH 3005	Mechanical Design te Subject	10 10 10
Mech 3002 MECH 3005 MECH 3005 Select one Alterna	Mechanical Design te Subject	10 10
Autumn session ydnev.edu.au MECH 3002 MECH 3005 Select one Alterna Select one elective Spring session	Mechanical Design te Subject Credit Points	10 10 10 40
MECH 3005 Select one Alterna Select one elective  Spring session  MECH 3007	Mechanical Design te Subject Credit Points Thermal and Fluid Engineering	10 10 10 <b>40</b>
Autumn session ydnev.edu.au MECH 3002 MECH 3005 Select one Alterna Select one elective Spring session	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design	10 10 10 <b>40</b> 10
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020	Mechanical Design te Subject Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering	10 10 10 <b>40</b>
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject	10 10 10 <b>40</b> 10 10
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject	10 10 10 <b>40</b> 10 10
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject	10 10 10 40 10 10 10
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject Industrial Experience (Engineering)	10 10 10 40 10 10 10 10
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject Industrial Experience (Engineering)	10 10 10 40 10 10 10 10
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject Industrial Experience (Engineering)	10 10 10 40 10 10 10 10
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017  Year 4 Autumn session	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject nce Industrial Experience (Engineering)  Credit Points	10 10 10 40 10 10 10 10 40
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017  Year 4 Autumn session MECH 4004	Mechanical Design  te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject Ince Industrial Experience (Engineering)  Credit Points  Robotics Advanced Engineering Thesis 1: Preliminary Investigations	10 10 10 40 10 10 10 10 40
Spring session MECH 3005 Select one Alterna Select one elective Spring session MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017  Year 4 Autumn session MECH 4004 ENGR 4037	Mechanical Design  te Subject  Credit Points  Thermal and Fluid Engineering  Mechatronic Design  Numerical Methods in Engineering  te Subject  Industrial Experience (Engineering)  Credit Points  Robotics  Advanced Engineering Thesis 1:  Preliminary Investigations  te Subject	10 10 10 40 10 10 10 10 40
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017  Year 4 Autumn session MECH 4004 ENGR 4037  Select one Alterna	Mechanical Design  te Subject  Credit Points  Thermal and Fluid Engineering  Mechatronic Design  Numerical Methods in Engineering  te Subject  Industrial Experience (Engineering)  Credit Points  Robotics  Advanced Engineering Thesis 1:  Preliminary Investigations  te Subject	10 10 10 40 10 10 10 10 40
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017  Year 4 Autumn session MECH 4004 ENGR 4037  Select one Alterna	Mechanical Design  te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering  te Subject Ince Industrial Experience (Engineering)  Credit Points  Robotics Advanced Engineering Thesis 1: Preliminary Investigations  te Subject	10 10 10 40 10 10 10 40 40
Spring session MECH 3005 Select one Alterna Select one elective Spring session MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017  Year 4 Autumn session MECH 4004 ENGR 4037  Select one Alterna Select one elective	Mechanical Design  te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering  te Subject Ince Industrial Experience (Engineering)  Credit Points  Robotics Advanced Engineering Thesis 1: Preliminary Investigations  te Subject	10 10 10 40 10 10 10 40 40
Autumn session MECH 3002 MECH 3005 Select one Alterna Select one elective  Spring session MECH 3007 MECH 3006 ENGR 3020 Select one Alterna Industrial Experier ENGR 3017  Year 4 Autumn session MECH 4004 ENGR 4037  Select one Alterna Select one elective  Spring session	Mechanical Design te Subject  Credit Points  Thermal and Fluid Engineering Mechatronic Design Numerical Methods in Engineering te Subject Ince Industrial Experience (Engineering)  Credit Points  Robotics Advanced Engineering Thesis 1: Preliminary Investigations te Subject  Credit Points	10 10 10 40 10 10 10 10 40 10 20

Select one elective		
	Credit Points	40
	Total Credit Points	320

#### **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
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
	Credit Points	40
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
	Credit Points	4
Year 2		
Spring session		
MECH 2005	Mathematics for Mechanical and Mechatronic Engineers	10
MECH 3008	Thermodynamics and Heat Transfer	1
ENGR 2025	Design Graphics: Engineering Documentation	1
Select one elective	e	1
	Credit Points	4
Autumn session		
ENGR 2027	Engineering Design	1
MECH 2003	Mechanics of Materials	1
MECH 2001	Kinematics and Kinetics of Machines	1
CIVL 2003	Fluid Mechanics	1
of completion of 1 of 200 Credit point	to maintain a minimum GPA of 5.0 at the end 60 Credit Points, and again at the completion its will be automatically transferred to the B. burs) (3740) program.	
3 3 (	Credit Points	4
Year 3		
Spring session		
MECH 3007	Thermal and Fluid Engineering	1
MECH 3006	Mechatronic Design	1
ENGR 3020	Numerical Methods in Engineering	1
One alternate subj		1
	Credit Points	4
Autumn session		
MECH 3002	Advanced Mechanics of Materials	1
MECH 3005	Mechanical Design	1
One alternate subj	iect	1
Select one elective	9	1
Industrial Experier	nce	
ENGR 3017	Industrial Experience (Engineering)	
	Credit Points	4
Year 4		
Spring session		
ENGR 4037	Advanced Engineering Thesis 1:	1
	Preliminary Investigations	
MECH 4002	Computer Aided Engineering	1
One alternate subj	ect	1
Select one elective	e	1
	Credit Points	4
Autumn session		
ENGR 4036	Advanced Engineering Thesis 2: Detailed Investigations	1
MECH 4004	Robotics	1
One alternate subj	ect	1
Select one elective	e	1
	Credit Points	4

#### **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 Parramatta City, 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
Year 1		
Autumn session		
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	

	Credit Points	40
	finish MATH 1021 Mathematics for nary will then use this unit as an elective.	
	•	
Mathematics for E		
student will remain in MATH 1021 Mathematics for Engineers Preliminary or be transferred by the School to MATH 1016		
semester of enrolment and the result will determine whether a		
This test will be co	onducted at the beginning of the first	
Mathematics for E	are required to enrol in MATH 1021 Engineers Preliminary first and undertake a he beginning of their study.	
MATH 1016	Mathematics for Engineers 1	

		Credit Points	40
S	pring session		
Е	NGR 1018	Fundamentals of Mechanics	10
P	ROC 1008	Introduction to Materials Engineering	10
Select one of the following:		10	
	MATH 1016	Mathematics for Engineers 1	
	MATH 1019	Mathematics for Engineers 2	
S	elect 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.

for Engineers 2 dur	ing the Summer session.	
	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 3029	Specialisation Workshop 1	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
ENGR 3030	Specialisation Workshop 2	10
	Credit Points	40
Year 3		
Autumn session		
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
	Credit Points	40
Spring session		
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
Industrial Experience	ce	
ENGR 2033	Industrial Experience (Engineering Technologist)	0

Note: Elective subjects must be level 2 or higher

Credit Points	40
Total Credit Points	240

#### **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
Year 1		
Spring session		
Select one of the fo	<b>J</b>	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
	Credit Points	40
Autumn session		
Select one of the fo	ollowing:	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	pe Level 1 or higher	
	Credit Points	40
Year 2		
Spring session		
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 a control of the control of t	pe Level 2 or higher	
	Credit Points	40
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
Industrial Experien	ce	
ENGR 2033	Industrial Experience (Engineering Technologist)	C
	Credit Points	40
Year 3		
Spring session		
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
	Credit Points	40

#### **Autumn session**

	Total Credit Points	240
	Credit Points	40
	Manufacture	
ENGR 2024	Design Graphics: Communication for	10
ENGR 3013	Engineering Science Project 1	10
MECH 3001	Advanced Dynamics	10
MECH 3005	Mechanical Design	10

### **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

Otalit year ilitan	•	
Course	Title	Credit Points
Year 1		
Autumn session		
ENGR 1011	Engineering Physics	10
Business Core Subje	ct 1	10
Business Core Subje	ct 2	10
MATH 1016	Mathematics for Engineers 1	10
	Credit Points	40
Spring session		
PROC 1008	Introduction to Materials Engineering	10
Business Core Subje	ct 3	10
Business Core Subje	ct 4	10
MATH 1019	Mathematics for Engineers 2	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 1006	Engineering Computing	10
<b>Business Profession</b>	al Subject 1	10
<b>Business Profession</b>	al Subject 2	10
Business Major Subj	ect 1	10
	Credit Points	40
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major Subj	ect 2	10
Business Major Subj	ect 3	10
	Credit Points	40
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	10
	Manufacture	
	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 4		
Autumn session		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
Business Major S	Subject 4	10
Business Major S	Subject 5	10
	Credit Points	40
Spring session		
MECH 3007	Thermal and Fluid Engineering	10
ENGR 3020	Numerical Methods in Engineering	10
Business Major S	Subject 6	10
Business Major S	Subject 7	10
Industrial Experie	ence	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 5		
Autumn session		
MECH 4004	Robotics	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
Business Profess	sional Subject 3	10
Business Major S	Subject 8	10
	Credit Points	40
Spring session		
MECH 4002	Computer Aided Engineering	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
MECH 3006	Mechatronic Design	10
Business Profess	3	10
	Credit Points	40
	Total Credit Points	400

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

Course	Title	Credit Points
Year 1		
Spring session		
PROC 1008	Introduction to Materials Engineering	10
MATH 1016	Mathematics for Engineers 1	10
Business Core Sub	oject 1	10
Business Core Sub	oject 2	10
	Credit Points	40
Autumn session		
MATH 1019	Mathematics for Engineers 2	10

ENOD 1011	For the continue Discording	1.0
ENGR 1011	Engineering Physics	10 10
Business Core St Business Core St		10
Dusilless Cole St	Credit Points	40
Year 2	Credit Folins	40
Spring session		
FI FC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major S	Subject 1	10
Business Major S	-	10
,	Credit Points	40
Autumn session		
ELEC 1006	Engineering Computing	10
MECH 2003	Mechanics of Materials	10
Business Profess	sional Subject 1	10
Business Major S	Subject 3	10
	Credit Points	40
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 S	Subject 4	10
	Credit Points	40
Autumn session		
MECH 2001	Kinematics and Kinetics of Machines	10
CIVL 2003	Fluid Mechanics	10
ENGR 2024	Design Graphics: Communication for Manufacture	10
Business Profess	sional Subject 2	10
	Credit Points	40
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 S	Subject 5	10
	Credit Points	40
Autumn session		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
Business Major S	Subject 6	10
Business Major S		10
Industrial Experie	ence	
ENGR 3017	Industrial Experience (Engineering)	(
	Credit Points	40
Year 5		
Spring session		
MECH 4002	Computer Aided Engineering	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
	Mechatronic Design	10
MECH 3006		
MECH 3006 Business Profess	sional Subject 3	10
	sional Subject 3  Credit Points	
Business Profess		10 <b>40</b>
Business Profess  Autumn session	Credit Points	4

40
10
10

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)**

Title

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

V1		Folits
Year 1		
Autumn session		
Select one of the fol	•	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
	Credit Points	40
Spring session		
Select one of the fol	-	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	e 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 2003	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 sub	ject	10
Industrial Experie	nce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
MECH 4004	Robotics	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
One alternate subject		10
Select one electiv	re	10
<ul> <li>Elective must</li> </ul>	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 sub	ject	10
Select one elective		10
<ul> <li>Elective must</li> </ul>	be Level 2 or higher	
	Credit Points	40
	Total Credit Points	320

### **Equivalent Subjects**

Credit Points

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

mia year mean	•	
Course	Title	Credit Points
Year 1		
Spring session		
Select one of the fo	llowing:	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
	Credit Points	40
Autumn session		
Select one of the fo	llowing:	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 b	e Level 1 or higher	
	Credit Points	40

Year 2		
Spring session		
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
One alternate sul	bject	10
Select one electiv	ve	10
Elective must	t be Level 2 or higher	
	Credit Points	40
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
Year 3		
Spring session		
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
	Credit Points	40
Autumn session		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
One alternate sul	•	10
Select one elective	• •	10
Elective must	t be Level 2 or higher	
Industrial Experie	ence	
ENGR 3017	Industrial Experience (Engineering)	C
	Credit Points	40
Year 4		
Spring session		
MECH 4002	Computer Aided Engineering	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
MECH 3006	Mechatronic Design	10
One alternate sul	oject	10
	Credit Points	40
Autumn session		
MECH 4004	Robotics	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
One alternate sul	oject	10
Select one elective		10
Elective must	t be Level 2 or higher	

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

**Credit Points** 

**Total Credit Points** 

### **Major Sequence 2024**

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.

### Start-year intake

40

320

MECH 3005

BUSM 2049

Start-year int	аке	
Course	Title	Credit Points
Year 1		
Autumn session		
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
	Credit Points	40
Spring session		
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
	Credit Points	40
Year 2		
Autumn session		
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
	Credit Points	40
Spring session		
MECH 3008	Thermodynamics and Heat Transfer	10
ENGR 2025	Design Graphics: Engineering Documentation	10
ENGR 2001	Automated Manufacturing	10
Select one electiv	e	10
of completion of 3 of 200 Credit point	to maintain a minimum GPA of 5.0 at the end 160 Credit Points, and again at the completion its will be automatically transferred to the B. ours) (3740) program.	
	Credit Points	40
Year 3		
Autumn session		
PROC 2003	Materials Selection and Design	10

Mechanical Design

Creative and Innovative Thinkers

10

10

Select one elec	tive or Minor subject	10
	Credit Points	40
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
Industrial Expe	rience	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn sessio	n	
ENGR 4043	Advanced Engineering Thesis 1: Preliminary Investigations	20
MECH 4004	Robotics	10
Select one elec	tive or Minor subject	10
	Credit Points	40
Spring session		
ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	20
MECH 4002	Computer Aided Engineering	10
Select one elec	tive or Minor subject	10
	Credit Points	40
	Total Credit Points	320
Subject	Title	Credit Points
Optional Electiv	ves	
_	subject is an optional elective subject offered to are engaged in a School approved project.	
-	n be taken during the third year of this program, ssion is required to enrol in the subject.	
ENGR 3022	Special Technical Project	10

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

Course	Title	Credit Points
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
	Credit Points	40
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
	Credit Points	40

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 elec	tive	10
	Credit Points	4
Autumn session	n	
ENGR 2025	Design Graphics: Engineering Documentation	1
MECH 2003	Mechanics of Materials	1
MECH 2001	Kinematics and Kinetics of Machines	1
CIVL 2003	Fluid Mechanics	1
Students who f	ail to maintain a minimum GPA of 5.0 at the end	
of completion of 200 Credit po	of 160 Credit Points, and again at the completion points will be automatically transferred to the B. conours) (3740) program.	
	Credit Points	4
Year 3		
Spring session		
MECH 3007	Thermal and Fluid Engineering	1
MECH 3006	Mechatronic Design	1
MECH 3004	Dynamics of Mechanical Systems	1
MECH 3002	Advanced Mechanics of Materials	1
WILCH 3002	Credit Points	
	0.00	4
Autumn session		_
PROC 2003	Materials Selection and Design	1
MECH 3005	Mechanical Design	1
BUSM 2049	Creative and Innovative Thinkers	1
	tive or Minor subject	1
Industrial Expe		
ENGR 3017	Industrial Experience (Engineering)	
	Credit Points	4
Year 4		
Spring session		
ENGR 4043	Advanced Engineering Thesis 1:	2
	Preliminary Investigations	
MECH 4002	Computer Aided Engineering	1
Select one elec	tive or Minor subject	1
	Credit Points	4
Autumn sessio	n	
ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	2
MECH 4004	Robotics	1
Select one elec	tive or Minor subject	1
	Credit Points	4
	Total Credit Points	32
Subject	Title	Credi Point
Optional Electiv	res	
The following s	ubject is an optional elective subject offered to	
	re engaged in a School approved project.	
This subject ca	n be taken during the third year of this program, ssion is required to enrol in the subject.	
ENGR 3022	Special Technical Project	1
	.,	

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.

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
Year 1		
Autumn session		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the fo	ollowing	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the fo	ollowing	10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
	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 2035	Modern Digital Design and Development	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
PROC 2003	Materials Selection and Design	10
Select one elective	or Minor subject	10
Industrial Experien	ce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40

#### Spring session

MECH 3007	Thermal and Fluid Engineering	10
MECH 4002	Computer Aided Engineering	10
MECH 3006	Mechatronic Design	10
Select one elective of	r Minor subject	10
	Credit Points	40
Year 4		
Autumn session		
MECH 4001	Computational Fluid Dynamics	10
MECH 4004	Robotics	10
ENGR 4041	Final Year Project 1 (UG Engineering)	20
	Credit Points	40
Spring session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20
Select one elective of	r Minor subject	10
Select one elective of	Select one elective or Minor subject	
	Credit Points	40
	Total Credit Points	320

MECH 3002

Cuadia

Mid-year intak	e	
Course	Title	Credit
Year 1		Points
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the fo		10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
	Credit Points	40
Autumn session		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the fo	llowing	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Year 2		
Spring session		
ENGR 2001	Automated Manufacturing	10
MECH 3008	Thermodynamics and Heat Transfer	10
Select one elective	or Minor subject	10
Select one elective	•	10
	Credit Points	40
Autumn session		
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
	Credit Points	40
Year 3		
Spring session		
MECH 3007	Thermal and Fluid Engineering	10

Advanced Mechanics of Materials

10

MECH 4002	Computer Aided Engineering	10
MECH 3004	Dynamics of Mechanical Systems	10
	Credit Points	40
Autumn session		
MECH 3005	Mechanical Design	10
MECH 3001	Advanced Dynamics	10
PROC 2003	Materials Selection and Design	10
MECH 4001	Computational Fluid Dynamics	10
Industrial Experien	nce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
MECH 3006	Mechatronic Design	10
ENGR 4041	Final Year Project 1 (UG Engineering)	20
Select one elective	e or Minor subject	10
	Credit Points	40
Autumn session		
MECH 4004	Robotics	10
ENGR 4042	Final Year Project 2 (UG Engineering)	20
Select one elective	e or Minor subject	10
	Credit Points	40
	Total Credit Points	320

### **Bachelor of Engineering Science**

This Major will be offered at Parramatta City, 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
Year 1		
Autumn session		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the foll	owing	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the foll	owing	10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
	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 3029	Specialisation Workshop 1	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
ENGR 3030	Specialisation Workshop 2	10
Industrial Experie	ence	
ENGR 2033	Industrial Experience (Engineering Technologist)	0
	Credit Points	40
Year 3		
Autumn session		
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
	Credit Points	40
Spring session		
MECH 3007	Thermal and Fluid Engineering	10
ENGR 3014	Engineering Science Project 2	10
Select two electi	ves (Level 2 or higher)	20
	Credit Points	40
	Total Credit Points	240

Course	Title	Credit Points
Year 1		
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the fo	llowing	10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
	Credit Points	40
Autumn session		
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	
	Credit Points	40
Year 2		
Spring session		
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
	Credit Points	40
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 Experien</b>	ce	
ENGR 2033	Industrial Experience (Engineering Technologist)	0
	Credit Points	40
Year 3		
Spring session		
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
	Credit Points	40
Autumn session		
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
	Credit Points	40
	Total Credit Points	240

### 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
Year 1		
Autumn session		
ENGR 1011	Engineering Physics	10
MATH 1016	Mathematics for Engineers 1	10
Business Core Subje	ect 1	10
Business Core Subje	ect 2	10
	Credit Points	40
Spring session		
PROC 1008	Introduction to Materials Engineering	10
ENGR 1018	Fundamentals of Mechanics	10
MATH 1019	Mathematics for Engineers 2	10
Business Core Subje	ect 3	10
	Credit Points	40
Year 2		
Autumn session		
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
	Credit Points	40
Spring session		
ENGR 2001	Automated Manufacturing	10
MECH 3002	Advanced Mechanics of Materials	10
<b>Business Profession</b>	nal Subject 1	10
Business Professional Subject 2		10
	Credit Points	40

Year 3		
Autumn session		
MECH 2001	Kinematics and Kinetics of Machines	10
ELEC 1006	Engineering Computing	10
CIVI 2003	Fluid Mechanics	10
ENGR 2035	Modern Digital Design and Development	10
	Credit Points	40
Spring session	orealt i onito	40
MECH 3007	Thermal and Fluid Engineering	10
MECH 3004	Dynamics of Mechanical Systems	10
Business Major Sub	•	10
Business Major Sul		10
- Buomicoo major our	Credit Points	40
Year 4	orealt i onits	40
Autumn session		
FLFC 1003	Electrical Fundamentals	10
MECH 3001		10
	Advanced Dynamics	
Business Major Sub	,	10
Business Major Sub	<u>-                                      </u>	10
	Credit Points	40
Spring session		10
MECH 3006	Mechatronic Design	10
MECH 4002	Computer Aided Engineering	10
Business Major Sub		10
Business Major Sub	•	10
Industrial Experience		
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 Sub	•	10
Business Major Sub	oject 8	10
	Credit Points	40
Spring session		
ENGR 4041	Final Year Project 1 (UG Engineering)	20
Business Professio	•	10
Business Professio	nal Subject 4	10
	Credit Points	40
Year 6		
Autumn session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20
MECH 4004	Robotics	10
MECH 4001	Computational Fluid Dynamics	10
	Credit Points	40
	Total Credit Points	440
Mid-year intake	9	
Course	Title	Credit
		Points
Year 1		

Mathematics for Engineers 1

Fundamentals of Mechanics

10

10

10

Spring session MATH 1016

Business Core Subject 1

ENGR 1018

Business Core Sub		1
	Credit Points	4
Autumn session		_
MATH 1019	Mathematics for Engineers 2	1
ENGR 1011	Engineering Physics	1
ELEC 1006	Engineering Computing	1
ELEC 1003	Electrical Fundamentals	1
V0	Credit Points	4
Year 2		
Spring session	Automoted Manufacturing	1
ENGR 2001 PROC 1008	Automated Manufacturing	1
	Introduction to Materials Engineering	1
Business Professi	•	
Business Professi	Credit Points	1
At	Credit Points	4
Autumn session	Manhanian of Mahaniala	1
MECH 2003 FNGR 1024	Mechanics of Materials	1
	Introduction to Engineering Practice	1
MECH 3008	Thermodynamics and Heat Transfer Kinematics and Kinetics of Machines	1
MECH 2001	Credit Points	
V2	Credit Points	4
Year 3		
Spring session MECH 3004	Dynamics of Machanical Systems	1
MECH 3004 MECH 3002	Dynamics of Mechanical Systems  Advanced Mechanics of Materials	1
		1
Business Professi Business Professi	•	1
Dusiliess Floressi	Credit Points	4
Autumn session	orealt round	
CIVL 2003	Fluid Mechanics	1
ENGR 2035	Modern Digital Design and Development	1
Business Major Su		1
Business Major Su		1
	Credit Points	4
Year 4	0.00.00	
Spring session		
opining account	Thermal and Fluid Engineering	1
MECH 3007	Thermal and Flaid Engineering	
MECH 3007 MECH 3006		1
MECH 3006	Mechatronic Design	
MECH 3006 Business Major Su	Mechatronic Design ubject 3	1
MECH 3006 Business Major Su	Mechatronic Design  ubject 3  ubject 4	1
MECH 3006 Business Major St Business Major St	Mechatronic Design ubject 3	1
MECH 3006 Business Major St Business Major St <b>Autumn session</b>	Mechatronic Design ubject 3 ubject 4 Credit Points	1 1 4
MECH 3006 Business Major Su Business Major Su Autumn session PROC 2003	Mechatronic Design  ubject 3  ubject 4  Credit Points  Materials Selection and Design	1 1 4
MECH 3006 Business Major St Business Major St  Autumn session PROC 2003 MECH 3005	Mechatronic Design  ubject 3  ubject 4  Credit Points  Materials Selection and Design  Mechanical Design	1 1 4 1
MECH 3006 Business Major Su Business Major Su Autumn session PROC 2003 MECH 3005 MECH 3001	Mechatronic Design  Ibject 3  Ibject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics	1 4 1 1 1
MECH 3006 Business Major Su Business Major Su  Autumn session PROC 2003 MECH 3005 MECH 3001 Business Major Su	Mechatronic Design  Ibject 3  Ibject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  Ibject 5	1 4 1 1 1
MECH 3006 Business Major St Business Major St  Autumn session PROC 2003 MECH 3005 MECH 3001 Business Major St Industrial Experier	Mechatronic Design  ubject 3  ubject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  ubject 5  nce	1 4 1 1 1
MECH 3006 Business Major Su	Mechatronic Design  Ibject 3  Ibject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  Ibject 5  Ince  Industrial Experience (Engineering)	1 4 1 1 1
MECH 3006 Business Major Su Business Major Su Autumn session PROC 2003 MECH 3005 MECH 3001 Business Major Su Industrial Experier	Mechatronic Design  ubject 3  ubject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  ubject 5  nce	1 4 1 1 1
MECH 3006 Business Major Su Business Major Su Autumn session PROC 2003 MECH 3005 MECH 3001 Business Major Su Industrial Experier ENGR 3017	Mechatronic Design  Ibject 3  Ibject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  Ibject 5  Ince  Industrial Experience (Engineering)	1 4 1 1 1
MECH 3006 Business Major State	Mechatronic Design  ubject 3  ubject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  ubject 5  nce  Industrial Experience (Engineering)  Credit Points	1 1 1 1 1 1 1
MECH 3006 Business Major Su Business Major Su Business Major Su Autumn session PROC 2003 MECH 3005 MECH 3001 Business Major Su Industrial Experier ENGR 3017  Year 5 Spring session MECH 4002	Mechatronic Design  Ibject 3  Ibject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  Ibject 5  Ince  Industrial Experience (Engineering)  Credit Points  Computer Aided Engineering	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MECH 3006 Business Major Su Business Major Su Business Major Su Autumn session PROC 2003 MECH 3005 MECH 3001 Business Major Su Industrial Experier ENGR 3017  Year 5 Spring session MECH 4002 Business Professi	Mechatronic Design  Ibject 3  Ibject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  Ibject 5  Ince  Industrial Experience (Engineering)  Credit Points  Computer Aided Engineering  onal Subject 6	1 1 1 1 1 1 1 1 4
MECH 3006 Business Major Su Business Major Su Business Major Su Autumn session PROC 2003 MECH 3005 MECH 3001 Business Major Su Industrial Experier ENGR 3017  Year 5 Spring session MECH 4002	Mechatronic Design  ubject 3  ubject 4  Credit Points  Materials Selection and Design  Mechanical Design  Advanced Dynamics  ubject 5  nce  Industrial Experience (Engineering)  Credit Points  Computer Aided Engineering  onal Subject 6  onal Subject 7	1 1 4 1 1 1 1 1 1 1 1 1 1

#### **Autumn session**

MECH 4004	Robotics	10
MECH 4001	Computational Fluid Dynamics	10
ENGR 4041	Final Year Project 1 (UG Engineering)	20
	Credit Points	40
Year 6		
Spring session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20
Business Professional Subject 3		10
Business Professional Subject 4		10
	Credit Points	40
	Total Credit Points	440

### **Related Programs**

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

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

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

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