Credit

ELECTRICAL ENGINEERING, TESTAMUR MAJOR (T102)

Western Sydney University Major Code: T102

Previous Code: KT3172, MT3053

Available to students in other Western Sydney University programs?

No

Handbook Summary Summary 2022-2023

The Electrical Engineering major includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems. This major includes a mandatory 12-week industrial placement as a completion requirement.

Summary 2024

The Electrical Engineering major includes core subjects from all branches of electrical engineering. Graduates will work in the fields of electronic components, computers, electro-magnetics, power generation and distribution systems, power and control in public utilities, telecommunications, manufacturing, and electrical systems. All students complete a mandatory 300 to 450 hour industrial placement.

Location

Campus	Mode	Advice	
Parramatta Campus - Victoria Road	Internal	Major Advice (edbe@westernsydney.e	edu S
Parramatta City Campus-Macquarie Street	Internal	Major advice (edbe@westernsydney.e	edu F
Penrith Campus	Internal	Major Advice (edbe@westernsydney.e	edu.
Sydney City Campus*	Internal	Major Advice (edbe@westernsydney.e	edu.

^{*} Curriculum delivered through an agreement with another party

Recommended Sequence 2022-23

If you commenced in 2024 or later please refer to the Sequence 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 program as noted below.

3691 Bachelor of Engineering Science

This major will be offered at Parramatta South, 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 sequence below.

* All students undertaking the Bachelor of Engineering Science are required to enrol in MATH 1021 Mathematics for Engineers Preliminary and undertake a readiness test at the beginning of their study.

The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to 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.

Students remaining in MATH 1021 Mathematics for Engineers
Preliminary will be required to complete MATH 1016 Mathematics
for Engineers 1 during second semester and will be encouraged to
complete MATH 1019 Mathematics for Engineers 2 during the Summer
session

Students who finish MATH 1021 Mathematics for Engineers Preliminary will then use this subject as an elective.

Start-year intake

Course

		Points
Year 1		
Autumn session		
Select one of the fol	lowing:	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	lowing:	10
MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Select one elective		10
ı.au) Year 2	Credit Points	40
Autumn session		
ENGR 3029	Specialisation Workshop 1	10
ELEC 2001	Circuit Theory	10
ELEC 2011	Signals and Systems	10
ELEC 1001	Digital Systems 1	10
	Credit Points	40
Spring session		
ENGR 3030	Specialisation Workshop 2	10
ELEC 2009	Microprocessor Systems	10
ELEC 2010	Power and Machines	10
ENGR 3006	Control Systems	10
	Credit Points	40
Year 3		
Autumn session		
ENGR 3013	Engineering Science Project 1	10
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
ELEC 2004	Electronics	10
	Credit Points	40

ENGR 3014	Engineering Science Project 2	10
ELEC 3009	Power Systems	10
ELEC 3003	Digital Signal Processing	10
Select one elective (10
Industrial Experienc	e	
ENGR 2033	Industrial Experience (Engineering	0
	Technologist)	
	Credit Points	40
	Total Credit Points	240
Mid-year intake		
Course	Title	Credit
oodisc	THE	Points
Year 1		
Spring session		
Select one of the fol	lowing:	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40
Autumn session		
Select one of the fol	lowing:	10
MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
Select one elective		10
	st be Level 1 or higher	10
Elective unit mu	st be Level 1 or higher Credit Points	40
Elective unit mu Year 2	<u> </u>	
• Elective unit mu Year 2 Spring session	Credit Points	40
• Elective unit mu Year 2 Spring session ENGR 3029	Credit Points Specialisation Workshop 1	40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009	Credit Points Specialisation Workshop 1 Microprocessor Systems	40 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines	10 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems	10 10 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines	10 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points	10 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2	10 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory	10 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems	10 10 10 10 40 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1	40 10 10 10 10 40 10 10 10 10 10 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 2011	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems	10 10 10 10 40 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1	40 10 10 10 10 40 10 10 10 10 10 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 1001 Year 3	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1 Credit Points	40 10 10 10 10 40 10 10 10 10 10 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 2011 ELEC 1001 Year 3 Spring session	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1	10 10 10 10 40 10 10 10 10
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 1001 Year 3 Spring session ENGR 3013	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1 Credit Points Engineering Science Project 1	10 10 10 10 40 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 1001 Year 3 Spring session ENGR 3013 ELEC 3009	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1 Credit Points Engineering Science Project 1 Power Systems Digital Signal Processing	10 10 10 10 40 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 1001 Year 3 Spring session ENGR 3013 ELEC 3009 ELEC 3003	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1 Credit Points Engineering Science Project 1 Power Systems Digital Signal Processing	10 10 10 10 40 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 1001 Year 3 Spring session ENGR 3013 ELEC 3009 ELEC 3003	Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1 Credit Points Engineering Science Project 1 Power Systems Digital Signal Processing (Level 2 or higher)	10 10 10 10 40 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2001 ELEC 1001 Year 3 Spring session ENGR 3013 ELEC 3009 ELEC 3003 Select one elective (Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1 Credit Points Engineering Science Project 1 Power Systems Digital Signal Processing (Level 2 or higher)	10 10 10 10 40 10 10 10 40
• Elective unit mu Year 2 Spring session ENGR 3029 ELEC 2009 ELEC 2010 ENGR 3006 Autumn session ENGR 3030 ELEC 2001 ELEC 2011 ELEC 1001 Year 3 Spring session ENGR 3013 ELEC 3009 ELEC 3003 Select one elective (Credit Points Specialisation Workshop 1 Microprocessor Systems Power and Machines Control Systems Credit Points Specialisation Workshop 2 Circuit Theory Signals and Systems Digital Systems 1 Credit Points Engineering Science Project 1 Power Systems Digital Signal Processing (Level 2 or higher) Credit Points	10 10 10 10 40 10 10 10 10 10 10 10 10

	Total Credit Points	240
	Credit Points	40
ENGR 2033	Industrial Experience (Engineering Technologist)	0
Industrial Experie	nce	
ELEC 2004	Electronics	10

3771 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 in the recommended sequence below.

Start-year intake

Start-year ilitak	C	
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 2023	Advanced Engineering Physics 2	10
COMP 2008	Computer Organisation	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 2013	Circuits and Signals	10
ELEC 1001	Digital Systems 1	10
ELEC 2004	Electronics	10
ELEC 2014	Mathematics for Electrical Engineers 1	10
	Credit Points	40
Spring session		
ELEC 2009	Microprocessor Systems	10
ELEC 2015	Mathematics for Electrical Engineers 2	10
ELEC 2010	Power and Machines	10
Select one elective		10
of completion of 160	maintain a minimum GPA of 5.0 at the end 0 Credit Points, and again at the completion will be automatically transferred to the B. rs) (3740) program.	
	Credit Points	40
Year 3		
Autumn session		
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
Select one alternate	subject	10
Select one elective		10
	Credit Points	40

	Total Credit Points	320
	Credit Points	40
Select two alterna		20
ENGR 4036	Advanced Engineering Thesis 2: Detailed Investigations	10
, ,	2 ELEC 3008 is replaced with ELEC 4009 and Measurement	
Spring session ELEC 3008	Instrumentation and Measurement	10
	Credit Points	40
Select one electiv	re	10
Select one alterna	ate subject	10
ENGR 4037	Advanced Engineering Thesis 1: Preliminary Investigations	10
ELEC 4002	Power Electronics	10
Autumn session		
Year 4		
	Credit Points	40
ENGR 3017	Industrial Experience (Engineering)	0
Industrial Experie		
Select one electiv		10
ELEC 3005	Electrical Drives	10
ELEC 3003	Digital Signal Processing	10
ELEC 3009	Power Systems	10

Mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ELEC 1009	Electrical Circuit Fundamentals	10
ENGR 2023	Advanced Engineering Physics 2	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40
Autumn session		
MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ELEC 1001	Digital Systems 1	10
ENGR 1047	Advanced Engineering Physics 1	10
ENGR 1045	Engineering Programming Fundamentals	10
	Credit Points	40
Year 2		
Spring session		
ELEC 2014	Mathematics for Electrical Engineers 1	10
ELEC 2009	Microprocessor Systems	10
COMP 2008	Computer Organisation	10
Select one elective		10
	Credit Points	40
Autumn session		
ELEC 2015	Mathematics for Electrical Engineers 2	10
ELEC 2013	Circuits and Signals	10
ELEC 2004	Electronics	10
select one elective		

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.

	Total Credit Points	310
	Credit Points	40
Select one alternat	e subject	10
Select one elective		10
ELEC 4002	Power Electronics	10
ENGR 4036	Advanced Engineering Thesis 2: Detailed Investigations	10
Autumn session		
	Credit Points	40
Select one alternat	e subject	10
Instrumentation ar ELEC 3005	nd Measurement Electrical Drives	10
	ELEC 3008 is replaced with ELEC 4009	
ELEC 3008	Instrumentation and Measurement	10
ENGR 4037	Advanced Engineering Thesis 1: Preliminary Investigations	10
Spring session		
Year 4	Credit Points	40
ENGR 3017	Industrial Experience (Engineering) Credit Points	0
Industrial Experien		
Select one elective		10
Select one alternat	•	10
ELEC 3006	Electrical Machines 1	10
ELEC 3001	Communication Systems	10
Autumn session		
	Credit Points	40
Select one alternat	e subject	10
ELEC 2010	Power and Machines	10
ELEC 3003	Digital Signal Processing	10
ELEC 3009	Power Systems	10
Spring session		
Year 3		
	Credit Points	30

3740 Bachelor of Engineering (Honours)

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

* All students undertaking the Bachelor of Engineering (Honours) are required to enrol in MATH 1021 Mathematics for Engineers Preliminary and undertake a readiness test at the beginning of their study.

The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to 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.

Students remaining in MATH 1021 Mathematics for Engineers Preliminary will be required to complete MATH 1016 Mathematics for Engineers 1 during second semester and will be encouraged to complete MATH 1019 Mathematics for Engineers 2 during the Summer session.

Start-year intal	ke		Spring session	
Course	Title	Credit	ELEC 3008	Instrumentation and Measurement
Year 1		Points	From Spring 2022 E Instrumentation and	LEC 3008 is replaced with ELEC 4009 d Measurement
Autumn session			ENGR 4026	Final Year Project 2 (UG Engineering)
Select one of the fo	llowing:	10	Select one alternate	subject
MATH 1021	Mathematics for Engineers Preliminary		Select one elective	
MATH 1016	Mathematics for Engineers 1			Credit Points
ENGR 1011	Engineering Physics	10		Total Credit Points
ENGR 1024	Introduction to Engineering Practice	10		
ELEC 1006	Engineering Computing	10	Mid-year intake	2
	Credit Points	40	Course	Title
Spring session				
Select one of the fo	llowing:	10	Year 1	
MATH 1019	Mathematics for Engineers 2		Spring session	
MATH 1016	Mathematics for Engineers 1		Select one of the fol	
ENGR 1018	Fundamentals of Mechanics	10	MATH 1021	Mathematics for Engineers Preliminary
ELEC 1003	Electrical Fundamentals	10	MATH 1016	Mathematics for Engineers 1
Select one elective	(Level 1 or higher)	10	ENGR 1018	Fundamentals of Mechanics
	Credit Points	40	ELEC 1003	Electrical Fundamentals
Year 2			ENGR 1024	Introduction to Engineering Practice
Autumn session				Credit Points
ELEC 2001	Circuit Theory	10	Autumn session	
ELEC 2004	Electronics	10	Select one of the fol	llowing:
ELEC 2011	Signals and Systems	10	MATH 1019	Mathematics for Engineers 2
ELEC 1001	Digital Systems 1	10	MATH 1016	Mathematics for Engineers 1
	Credit Points	40	ENGR 1011	Engineering Physics
Spring session			ELEC 1006	Engineering Computing
ELEC 2009	Microprocessor Systems	10	Select one elective	
ELEC 2006	Engineering Electromagnetics	10	Elective unit mu	st be Level 1 or higher
ELEC 2010	Power and Machines	10		Credit Points
ENGR 3006	Control Systems	10	Year 2	Credit Foliits
	Credit Points	40	Spring session	
Year 3			ELEC 2009	Microprocessor Systems
Autumn session			ELEC 2004	Electronics
ELEC 3001	Communication Systems	10	ELEC 2010	Power and Machines
ELEC 3006	Electrical Machines 1	10	ELEC 3006	Electrical Machines 1
Select one alternate	e subject	10		Credit Points
Select one elective	•	10	Autumn session	orealt i onits
	Credit Points	40	ELEC 2011	Signals and Systems
Spring session			ELEC 1001	Digital Systems 1
ELEC 3009	Power Systems	10	ELEC 2006	Engineering Electromagnetics
ELEC 3003	Digital Signal Processing	10	ELEC 2001	Circuit Theory
ELEC 3005	Electrical Drives	10	LLLC 2001	Credit Points
Select one alternate	e subject	10	Year 3	Cledit Foliits
Industrial Experience	-		Spring session	
ENGR 3017	Industrial Experience (Engineering)	0	ELEC 3009	Power Systems
	Credit Points	40	ELEC 3003	Digital Signal Processing
Year 4			ELEC 3003	Electrical Drives
Autumn session				
ELEC 4002	Power Electronics	10	Select one alternate	
ENGR 4025	Final Year Project 1 (UG Engineering)	10	Autumn session	Credit Points
Select one alternate		10		Communication Systems
Select one elective	,	10	ELEC 3001	Communication Systems
Solds, one diconve	Credit Points	40	ELEC 3006	Electrical Machines 1
	S. Cart I Office	40	Select one alternate	subject

Select one elective

Credit Points

	Total Credit Points	320
	Credit Points	40
Select one electi	ve	10
Select one altern	nate subject	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
ELEC 4002	Power Electronics	10
Autumn session		
	Credit Points	40
Select one electi	ve	10
Select one altern	nate subject	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
	2 ELEC 3008 is replaced with ELEC 4009 and Measurement	
ELEC 3008	Instrumentation and Measurement	10
Spring session		
Year 4		
	Credit Points	40
ENGR 3017	Industrial Experience (Engineering)	0
industriai Experi	ence	

3728 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

Industrial Experience

	Credit Points	40
Business Major Su	bject 3	10
Business Major Su	bject 2	10
ENGR 1018	Fundamentals of Mechanics	10
ELEC 1003	Electrical Fundamentals	10
Spring session		
	Credit Points	40
Business Major Su	bject 1	10
Business Profession	onal Subject 2	10
Business Professio	onal Subject 1	10
ELEC 1006	Engineering Computing	10
Autumn session		
Year 2		
·	Credit Points	40
Business Core Sub	ject 4	10
Business Core Sub	ject 3	10
PROC 1008	Introduction to Materials Engineering	10
MATH 1019	Mathematics for Engineers 2	10
Spring session		
	Credit Points	40
Business Core Sub	•	10
Business Core Sub		10
ENGR 1011	Engineering Physics	10
MATH 1016	Mathematics for Engineers 1	10
Autumn session		
Year 1		1 011113
Course	Title	Credit Points

Teal 5		
Autumn session		
ELEC 2001	Circuit Theory	10
ELEC 2004	Electronics	10
ELEC 2011	Signals and Systems	10
ELEC 1001	Digital Systems 1	10
	Credit Points	40
Spring session		
ELEC 2009	Microprocessor Systems	10
ELEC 2006	Engineering Electromagnetics	10
ELEC 2010	Power and Machines	10
ENGR 3006	Control Systems	10
	Credit Points	40
Year 4		
Autumn session		
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
Business Major S	Subject 4	10
Business Major S	Subject 5	10
	Credit Points	40
Spring session		
ELEC 3009	Power Systems	10
ELEC 3003	Digital Signal Processing	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		
ELEC 4002	Power Electronics	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		
ELEC 3005	Electrical Drives	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
ELEC 3008	Instrumentation and Measurement	10
From Spring 202:	2 ELEC 3008 is replaced with ELEC 4009	
Instrumentation	and Measurement	
		10
Business Profess	sional Subject 4	10
Business Profess	sional Subject 4 Credit Points	10 40

Equivalent Subjects

Year 3

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		
MATH 1016	Mathematics for Engineers 1	10

PROC 1008	Introduction to Materials Engineering	10
Business Core Sub	ject 1	10
Business Core Sub	ject 2	10
	Credit Points	40
Autumn session		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10
Business Core Sub		10
Business Core Sub	<u></u>	10
	Credit Points	40
Year 2		
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major Sul	•	10
Business Major Sul		10
A	Credit Points	40
Autumn session	Famina anima Oamanitia a	10
ELEC 1006	Engineering Computing Electronics	10
ELEC 2004		10
Business Major Sul		10
Business Professio	Credit Points	10
Year 3	Credit Points	40
Spring session		
ELEC 2009	Migraproggar Systems	10
ELEC 2006	Microprocessor Systems Engineering Electromagnetics	10
ELEC 2010	Power and Machines	10
ENGR 3006	Control Systems	10
LINGIT 3000	Credit Points	40
Autumn session	Credit Follits	40
ELEC 1001	Digital Systems 1	10
ELEC 2001	Circuit Theory	10
ELEC 2011	Signals and Systems	10
Business Professio	-	10
	Credit Points	40
Year 4		
Spring session		
ELEC 3009	Power Systems	10
ELEC 3003	Digital Signal Processing	10
Business Major Sul		10
Business Major Sul	bject 5	10
	Credit Points	40
Autumn session		
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
Business Major Sul	bject 6	10
Business Major Sul	bject 7	10
Industrial Experience	ce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 5		
Spring session		
ELEC 3005	Electrical Drives	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
ELEC 3008	Instrumentation and Measurement	10

	rom Spring 2022 ELEC 3008 is replaced with ELEC 4009 nstrumentation and Measurement		
Business Profes	sional Subject 3	10	
	Credit Points	40	
Autumn session			
ENGR 4026	Final Year Project 2 (UG Engineering)	10	
ELEC 4002	Power Electronics	10	
Business Profes	sional Subject 4	10	
Business Major	Business Major Subject 8		
	Credit Points	40	
	Total Credit Points	400	

Alternate Subjects

Subject	Title	Credit
		Points
ELEC 3004	Digital Systems 2	10
ELEC 4003	Power Quality	10
ELEC 4006	Sustainable Energy Systems	10
ELEC 4005	Smart Grids and Distributed Generation	10
ELEC 4004	Radio and Satellite Communication	10
ELEC 4007	Wireless Communications	10
HLTH 2003	Biomechanics	10
ENGR 3003	Biomedical Electronics	10
ENGR 3004	Biomedical Signals and Data Analysis	10
BIOS 1022	Introduction to Human Biology	10
ELEC 3002	Data Communications	10
ELEC 2007	Engineering Visualization	10

Minors

Power Engineering, Minor (https://hbook.westernsydney.edu.au/majors-minors/power-engineering-minor/)
Telecommunications, Minor (https://hbook.westernsydney.edu.au/majors-minors/telecommunications-minor/)
Biomedical Engineering, Minor (https://hbook.westernsydney.edu.au/majors-minors/biomedical-engineering-minor/)

Optional Elective

The following subject is an optional elective unit 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

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

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

Replaced Subjects

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

ELEC 3008 Instrumentation and Measurement, replaced by ELEC 4009 Instrumentation and Measurement

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 Science (3691)

This major will be offered at Parramatta South, 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 sequence below.

* All students undertaking the Bachelor of Engineering Science are required to enrol in MATH 1021 Mathematics for Engineers Preliminary and undertake a readiness test at the beginning of their study.

The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to 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.

Students remaining in MATH 1021 Mathematics for Engineers Preliminary will be required to complete MATH 1016 Mathematics for Engineers 1 during second semester and will be encouraged to complete MATH 1019 Mathematics for Engineers 2 during the Summer session.

Students who finish MATH 1021 Mathematics for Engineers Preliminary will then use this subject as an elective.

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	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one of the foll	owing:	10

MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Year 2		
Autumn session		
ENGR 3029	Specialisation Workshop 1	10
ELEC 2001	Circuit Theory	10
ELEC 2011	Signals and Systems	10
ELEC 1001	Digital Systems 1	10
	Credit Points	40
Spring session		
ENGR 3030	Specialisation Workshop 2	10
ELEC 2009	Microprocessor Systems	10
ELEC 2010	Power and Machines	10
ENGR 3006	Control Systems	10
	Credit Points	40
Year 3		
Autumn session		
ENGR 3013	Engineering Science Project 1	10
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
ELEC 2004	Electronics	10
	Credit Points	40
Spring session		
ENGR 3014	Engineering Science Project 2	10
ELEC 3003	Digital Signal Processing	10
Select two electiv	res (Level 2 or higher)	20
Industrial Experie	nce	
ENGR 2033	Industrial Experience (Engineering Technologist)	0
	Credit Points	40
	Total Credit Points	240

Mid-vear intake

Year 1 Spring session ELEC 1003 Electrical Fundamentals 1 ENGR 1018 Fundamentals of Mechanics 1 PROC 1008 Introduction to Materials Engineering 1 Select one of the following: 1 MATH 1021 Mathematics for Engineers Preliminary MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	wiiu-yeai iiitak	7C	
Spring session ELEC 1003 Electrical Fundamentals 1 ENGR 1018 Fundamentals of Mechanics 1 PROC 1008 Introduction to Materials Engineering 1 Select one of the following: 1 MATH 1021 Mathematics for Engineers Preliminary MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	Course	Title	Credit Points
ELEC 1003 Electrical Fundamentals 1 ENGR 1018 Fundamentals of Mechanics 1 PROC 1008 Introduction to Materials Engineering 1 Select one of the following: 1 MATH 1021 Mathematics for Engineers Preliminary MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	Year 1		
ENGR 1018 Fundamentals of Mechanics 1 PROC 1008 Introduction to Materials Engineering 1 Select one of the following: 1 MATH 1021 Mathematics for Engineers Preliminary MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	Spring session		
PROC 1008 Introduction to Materials Engineering 1 Select one of the following: 1 MATH 1021 Mathematics for Engineers Preliminary MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	ELEC 1003	Electrical Fundamentals	10
Select one of the following: MATH 1021 Mathematics for Engineers Preliminary MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	ENGR 1018	Fundamentals of Mechanics	10
MATH 1021 Mathematics for Engineers Preliminary MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	PROC 1008	Introduction to Materials Engineering	10
MATH 1016 Mathematics for Engineers 1 Credit Points 4 Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	Select one of the f	ollowing:	10
Credit Points Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	MATH 1021	Mathematics for Engineers Preliminary	
Autumn session ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	MATH 1016	Mathematics for Engineers 1	
ELEC 1006 Engineering Computing 1 ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2		Credit Points	40
ENGR 1011 Engineering Physics 1 ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	Autumn session		
ENGR 1024 Introduction to Engineering Practice 1 Select one of the following: 1 MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	ELEC 1006	Engineering Computing	10
Select one of the following: MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	ENGR 1011	Engineering Physics	10
MATH 1019 Mathematics for Engineers 2 MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	ENGR 1024	Introduction to Engineering Practice	10
MATH 1016 Mathematics for Engineers 1 Credit Points 4 Year 2	Select one of the f	ollowing:	10
Credit Points 4 Year 2	MATH 1019	Mathematics for Engineers 2	
Year 2	MATH 1016	Mathematics for Engineers 1	
· · · · ·		Credit Points	40
Spring accion	Year 2		
Spring session	Spring session		
ENGR 3029 Specialisation Workshop 1 1	ENGR 3029	Specialisation Workshop 1	10

ELEC 2009	Microprocessor Systems	10
ELEC 2010	Power and Machines	10
ENGR 3006	Control Systems	10
	Credit Points	40
Autumn session		
ENGR 3030	Specialisation Workshop 2	10
ELEC 2001	Circuit Theory	10
ELEC 2011	Signals and Systems	10
ELEC 1001	Digital Systems 1	10
	Credit Points	40
Year 3		
Spring session		
ENGR 3013	Engineering Science Project 1	10
ELEC 3003	Digital Signal Processing	10
Select two elective	s (Level 2 or higher)	20
	Credit Points	40
Autumn session		
ENGR 3014	Engineering Science Project 2	10
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
ELEC 2004	Electronics	10
Industrial Experien	ce	
ENGR 2033	Industrial Experience (Engineering	0
	Technologist)	
	Credit Points	40
	Total Credit Points	240

Bachelor of Engineering Advanced (Honours) (3771)

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
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		
ELEC 1003	Electrical Fundamentals	10
MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ENGR 2023	Advanced Engineering Physics 2	10
ENGR 1018	Fundamentals of Mechanics	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 2001	Circuit Theory	10
ELEC 1001	Digital Systems 1	10
ELEC 2004	Electronics	10
ELEC 2011	Signals and Systems	10
	Credit Points	40

Spring session

		a the second	
	Engineering (Honour	s) (3740) program.	
	· ·	will be automatically transferred to the B.	
of completion of 160 Credit Points, and again at the completion			
Students who fail to maintain a minimum GPA of 5.0 at the en			
	Select one elective or Minor subject		10
	COMP 2008	Computer Organisation	10
	ELEC 2010	Power and Machines	10
	ELEC 2009	Microprocessor Systems	10

Engineering (Honours) (3740) program.		
	Credit Points	40
Year 3		
Autumn session		
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
BUSM 2049	Creative and Innovative Thinkers	10
Select one elective of	or Minor subjects	10
	Credit Points	40
Spring session		
ELEC 3009	Power Systems	10
ELEC 3003	Digital Signal Processing	10
ELEC 3005	Electrical Drives	10
ELEC 3004	Digital Systems 2	10
Industrial Experience	e	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
ELEC 4002	Power Electronics	10
ENGR 4043	Advanced Engineering Thesis 1:	20
	Preliminary Investigations	
Select one elective of	or Minor subject	10
	Credit Points	40
Spring session		
ELEC 4009	Instrumentation and Measurement	10
ENGR 4044	Advanced Engineering Thesis 2: Detailed	20

Optional Elective

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.

10

40

320

Investigations

Credit Points

Total Credit Points

ENGR 3022 Special Technical Project

Select one elective or Minor subject

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

wild year ilitak		
Course	Title	Credit Points
Year 1		Tomics
Spring session		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ELEC 1003	Electrical Fundamentals	10
ENGR 2023	Advanced Engineering Physics 2	10
ENGR 1018	Fundamentals of Mechanics	10
	Credit Points	40
Autumn session		
MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ELEC 1001	Digital Systems 1	10
ENGR 1047	Advanced Engineering Physics 1	10
ELEC 1006	Engineering Computing	10
	Credit Points	40
Year 2		
Spring session		
ELEC 2011	Signals and Systems	10
ELEC 2009	Microprocessor Systems	10
COMP 2008	Computer Organisation	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40
Autumn session		
ELEC 2001	Circuit Theory	10
ELEC 2004	Electronics	10
Select two electives	s or Minor subjects	20
Students who fail to	o maintain a minimum GPA of 5.0 at the end	
of completion of 16	0 Credit Points, and again at the completion	
	will be automatically transferred to the B.	
Engineering (Honou	urs) (3740) program.	
	Credit Points	40
Year 3		
Spring session		
ELEC 3009	Power Systems	10
ELEC 3003	Digital Signal Processing	10
ELEC 2010	Power and Machines	10
ELEC 3004	Digital Systems 2	10
	Credit Points	40
Autumn session		
ELEC 3001	Communication Systems	10
ELEC 3006	Electrical Machines 1	10
BUSM 2049	Creative and Innovative Thinkers	10
Select one elective	or Minor subject	10
Industrial Experience	ce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
ENGR 4043	Advanced Engineering Thesis 1:	20
	Preliminary Investigations	
ELEC 4009	Instrumentation and Measurement	10
ELEC 3005	Electrical Drives	10
	Credit Points	40

Mid-year intake

Autumn session

ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	20
ELEC 4002	Power Electronics	10
Select one elective or minor subject		10
	Credit Points	40
	Total Credit Points	320

Optional Elective

The following subject is an optional elective unit 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

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)

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

* All students undertaking the Bachelor of Engineering (Honours) are required to enrol in MATH 1021 Mathematics for Engineers Preliminary and undertake a readiness test at the beginning of their study.

The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to 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.

Students remaining in MATH 1021 Mathematics for Engineers Preliminary will be required to complete MATH 1016 Mathematics for Engineers 1 during second semester and will be encouraged to complete MATH 1019 Mathematics for Engineers 2 during the Summer session.

Start-vear intake

PROC 1008

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Course	Title	Credit Points
Year 1		
Autumn session		
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
ELEC 1006	Engineering Computing	10
Select one of the following:		
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
ELEC 1003	Electrical Fundamentals	10

Introduction to Materials Engineering

10

Select one of the	following:	10	MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2			Credit Points	40
MATH 1016	Mathematics for Engineers 1		Autumn session		
	Credit Points	40	ENGR 1011	Engineering Physics	10
Year 2			ELEC 1006	Engineering Computing	10
Autumn session			ELEC 1001	Digital Systems 1	10
ELEC 2001	Circuit Theory	10	Select one of the fol		10
ELEC 2004	Electronics	10	MATH 1019	Mathematics for Engineers 2	
ELEC 2011	Signals and Systems	10	MATH 1016	Mathematics for Engineers 1	
ELEC 1001	Digital Systems 1	10		Credit Points	40
	Credit Points	40	Year 2		
Spring session			Spring session		
ELEC 2009	Microprocessor Systems	10	ELEC 2009	Microprocessor Systems	10
ELEC 2006	Engineering Electromagnetics	10	ELEC 2006	Engineering Electromagnetics	10
ELEC 3011	Power and Machines	10	ELEC 3004	Digital Systems 2	10
ENGR 3006	Control Systems	10	Select one elective of	or major subject	10
	Credit Points	40		Credit Points	40
Year 3			Autumn session		
Autumn session			ELEC 2011	Signals and Systems	10
ELEC 3001	Communication Systems	10	ELEC 2004	Electronics	10
ELEC 3006	Electrical Machines 1	10	ELEC 2001	Circuit Theory	10
ELEC 2007	Engineering Visualization	10	ENGR 1024	Introduction to Engineering Practice	10
Select one electiv	re or major subject	10		Credit Points	40
	Credit Points	40	Year 3		
Spring session			Spring session		
ELEC 3002	Data Communications	10	ELEC 3002	Data Communications	10
ELEC 3003	Digital Signal Processing	10	ELEC 3003	Digital Signal Processing	10
ELEC 3004	Digital Systems 2	10	ELEC 3011	Power and Machines	10
Select one elective	re or major subject	10	ENGR 3006	Control Systems	10
Industrial Experie				Credit Points	40
ENGR 3017	Industrial Experience (Engineering)	0	Autumn session		
	Credit Points	40	ELEC 3001	Communication Systems	10
Year 4			ELEC 3006	Electrical Machines 1	10
Autumn session			ELEC 2007	Engineering Visualization	10
ELEC 4002	Power Electronics	10	Select one elective of		10
ENGR 4041	Final Year Project 1 (UG Engineering)	20	Industrial Experience		
Select one elective	re or major subject	10	ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40		Credit Points	40
Spring session			Year 4		
ELEC 4009	Instrumentation and Measurement	10	Spring session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20	ELEC 4009	Instrumentation and Measurement	10
Select one elective	re or major subject	10	ENGR 4041	Final Year Project 1 (UG Engineering)	20
	Credit Points	40	Select one elective of		10
	Total Credit Points	320		Credit Points	40
Mid-year inta	ke		Autumn session	Davis Flactures	10
Course	Title	Credit	ELEC 4002	Power Electronics	10
Juise	THE	Points	ENGR 4042	Final Year Project 2 (UG Engineering)	20
Year 1			Select one elective of	<u>-</u>	10
Spring session				Credit Points	40
ENGR 1018	Fundamentals of Mechanics	10		Total Credit Points	320
ELEC 1003	Electrical Fundamentals	10			
PROC 1008	Introduction to Materials Engineering	10			
Select one of the		10			
	•				

Mathematics for Engineers Preliminary

MATH 1021

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		
MATH 1016	Mathematics for Engineers 1	10
ENGR 1011	Engineering Physics	10
BBus Core Subject	1	10
BBus Core Subject	2	10
	Credit Points	40
Spring session		
MATH 1019	Mathematics for Engineers 2	10
PROC 1008	Introduction to Materials Engineering	10
BBus Core Subject	3	10
BBus Core Subject	4	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 1006	Engineering Computing	10
ENGR 1024	Introduction to Engineering Practice	10
ELEC 1001	Digital Systems 1	10
BBus Major Subjec	et 1	10
	Credit Points	40
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
BBus Major Subjec	rt 2	10
BBus Major Subjec	et 3	10
	Credit Points	40
Year 3		
Autumn session		
ELEC 2004	Electronics	10
ELEC 2001	Circuit Theory	10
ELEC 2011	Signals and Systems	10
BBus Professional	Subject 1	10
	Credit Points	40
Spring session		
ELEC 2009	Microprocessor Systems	10
ELEC 3011	Power and Machines	10
ELEC 3002	Data Communications	10
BBus Major Subjec	et 4	10
	Credit Points	40
Year 4		
Autumn session		
ELEC 3001	Communication Systems	10
ELEC 2007	Engineering Visualization	10
BBus Professional Subject 2		
BBus Major Subjec	et 5	10
	Credit Points	40

Spring session

opining occordin		
ELEC 2006	Engineering Electromagnetics	10
ENGR 3006	Control Systems	10
ELEC 3003	Digital Signal Processing	10
BBus Major Subject	t 6	10
Industrial Experience	ce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 5		
Autumn session		
ELEC 3006	Electrical Machines 1	10
BBus Professional	Subject 3	10
BBus Major Subject	t 7	10
BBus Major Subject	t 8	10
	Credit Points	40
Spring session		
ELEC 4009	Instrumentation and Measurement	10
ENGR 4041	Final Year Project 1 (UG Engineering)	20
BBus Professional	Subject 4	10
	Credit Points	40
Year 6		
Autumn session		
ELEC 4002	Power Electronics	10
ELEC 3004	Digital Systems 2	10
ENGR 4042	Final Year Project 2 (UG Engineering)	20
	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-

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/)