CIVIL ENGINEERING, TESTAMUR MAJOR (T131)

Western Sydney University Major Code: T131

Previous Code: MT3051.1

Available to students in other Western Sydney University programs?

No

Civil engineering covers the fields of structural design, geotechnical engineering and water engineering, together with infrastructure design and environmental engineering. Graduates may pursue career paths in the fields of design, construction and management of engineering structures and be associated with private industry, government departments, or in city, municipal or shire councils. These career paths may include engineering projects related to residential and commercial buildings, highways and airports, water supply and sewerage schemes, etc. This major includes a mandatory 300 to 450 hour industrial placement as a completion requirement.

Location

Campus	Mode	Advice	C
Parramatta Campus - Victoria Road	Internal	Program Advice (edbe@westernsydney.e	M edu _C
Parramatta City Campus-Macquarie Street	Internal	Program Advice (edbe@westernsydney.e	C edu .a
Penrith Campus	Internal	Program Advice (edbe@westernsydney.e	edu.a
Sydney City Campus*	Internal	Peter Lendrum (https:// directory.westernsydney search/email/ p.lendrum@city.western	S

^{*} 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

Select the link for your program below to see details of the major

Bachelor of Engineering Advanced (Honours)

This Major will be offered at Engineering Innovation Hub – Hassall St, 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

Course	Title	Credit Points
Year 1		
Autumn session		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ENGR 1047	Advanced Engineering Physics 1	10
ELEC 1006	Engineering Computing	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40
Spring session		
MATH 1035	Mathematics for Engineers 2 (Advanced)	10
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective		10
Elective must be	Level 1 or higher	
	Credit Points	40
V0		

Year 2

Autumn session

CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
^{lu} CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
u .au)	Credit Points	40
Spring session		
UENGR 2016	Pavement Materials and Design	10

lι	i.au) 11 2010	i avenient materials and besign	10
	CIVL 2007	Introduction to Structural Engineering	10
	CIVL 2002	Environmental Engineering	10
9(CIVL 3011	Hydraulics	10
	Students may transfe	er to 3740 Bachelor of Engineering	

Students may transfer to 3740 Bachelor of Engineering (PRACHES) & 3691 Bachelor of Engineering Science at the end of Year 2 of study.

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

gg (.ou.o, (o. 10) programm	
	Credit Points	40
Year 3		
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 4017	Surface Water Hydrology	10
CIVL 3002	Concrete Structures (UG)	10
One Alternate su	bject	10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
ENGR 3020	Numerical Methods in Engineering	10
One Alternate su	bject	10
Industrial Experie	ence	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
ENGR 4037	Advanced Engineering Thesis 1:	10

Preliminary Investigations

One Alternate Subject 10 Select two electives 20

· Elective subjects must be Level 2 or higher

	Credit Points	40
Spring session		
ENGR 4035	Smart and Liveable Cities	10
ENGR 4036	Advanced Engineering Thesis 2: Detailed Investigations	10
One Alternate sub	pject	10
Select one electiv	ve	10
Elective subjective	ects must be Level 2 or higher	

	Credit Points	40
•	Total Credit Points	320

Alternate Subjects

Subject	Title	Credit Points
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3022	Bridge Embankment Design	10
CIVL 3021	Bridge Engineering Design	10
CIVL 4002	Composite Structures	10
CIVL 3010	Highway Infrastructure	10
CIVL 3018	Hydrogeology	10
CIVL 4008	Pile Foundations	10
EART 3005	Statistical Hydrology	10
CIVL 3020	Sustainable Waste Engineering	10
CIVL 4009	Timber Structures (UG)	10
CIVL 4012	Water Resource Engineering	10
CIVL 2018	Water Supply Systems Design	10

Optional Electives

Subject	Title	Credit Points
BLDG 4006	Modern Construction Enterprises	10
BLDG 4007	Modern Construction Projects	10
The following subject is an optional elective subject offered to students who are engaged in a School approved project. This subject can be taken during the third year of this program, however, permission is required to enrol in the subject.		
ENGR 3022	Special Technical Project	10

Minors

Alternate subjects may be used to complete one of the minors listed

Geotechnical, Minor (https://hbook.westernsydney.edu.au/majorsminors/geotechnical-minor/)

Structures, Minor (https://hbook.westernsydney.edu.au/majorsminors/structures-minor/)

Water and Environment, Minor (https://hbook.westernsydney.edu.au/ majors-minors/water-environment-minor/)

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

Mid-year intake

Year 3

Spring session

One Alternate subject

CIVL 3012

ENGR 3020

CIVL 3011

Course Title		Credit Points
Year 1		
Spring session		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
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		
MATH 1035	Mathematics for Engineers 2 (Advanced)	10
MECH 2003	Mechanics of Materials	10
ENGR 1047	Advanced Engineering Physics 1	10
ELEC 1006	Engineering Computing	10
	Credit Points	40
Year 2		
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
ENGR 2016	Pavement Materials and Design	10
Select one elective		10
Elective unit must	st be Level 2 or higher	
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
select one elective (I	evel 2 or higher)	10
•	er to 3740 Bachelor of Engineering achelor of Engineering Science at the end	
of completion of 160	, , , , , , , , , , , , , , , , , , ,	
	Credit Points	40

Steel Structures

Hydraulics

Credit Points

Numerical Methods in Engineering

10

10

10

10

40

	Total Credit Points	320
	Credit Points	40
Elective unit m	nust be Level 2 or higher	
Select two elective	•	20
One Alternate sub		10
One Alternate auto	Investigations	10
Autumn session ENGR 4036	Advanced Engineering Thesis 2: Detailed	10
	Credit Points	40
One Alternate sub	ject	10
CIVL 3007	Engineering Geomechanics	10
ENGR 4035	Smart and Liveable Cities	10
ENGR 4037	Advanced Engineering Thesis 1: Preliminary Investigations	10
Spring session		
Year 4		
	Credit Points	40
ENGR 3017	Industrial Experience (Engineering)	0
Industrial Experier	nce	
One Alternate sub	ject	10
CIVL 3002	Concrete Structures (UG)	10
CIVL 4017	Surface Water Hydrology	10
CIVL 1001	Surveying for Engineers	10
Autumn session		

Alternate Subjects

Subject	Title	Credit Points
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3022	Bridge Embankment Design	10
CIVL 3021	Bridge Engineering Design	10
CIVL 4002	Composite Structures	10
CIVL 3010	Highway Infrastructure	10
CIVL 3018	Hydrogeology	10
CIVL 4008	Pile Foundations	10
EART 3005	Statistical Hydrology	10
CIVL 3020	Sustainable Waste Engineering	10
CIVL 4009	Timber Structures (UG)	10
CIVL 4012	Water Resource Engineering	10
CIVL 2018	Water Supply Systems Design	10

Optional Electives

Subject		Credit Points
BLDG 4006	Modern Construction Enterprises	10
BLDG 4007	Modern Construction Projects	10
students who are subject can be ta	oject is an optional elective subject offered to engaged in a School approved project. This ken during the third year of this program, howevouried to enrol in the subject.	er,
ENGR 3022	Special Technical Project	10

Minors

Alternate subjects may be used to complete one of the minors listed below.

Geotechnical, Minor (https://hbook.westernsydney.edu.au/majors-minors/geotechnical-minor/)

Structures, Minor (https://hbook.westernsydney.edu.au/majors-minors/structures-minor/)

Water and Environment, Minor (https://hbook.westernsydney.edu.au/majors-minors/water-environment-minor/)

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

Bachelor of Engineering Science

This Major will be offered at Parramatta, 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

our your munic			
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	llowing:	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
Select one elective		10
Elective must be Level 2 or higher		
	and the second s	

Scient one elective				
Elective must b	e Level 2 or higher			
Select one of the fo	llowing:	10		
MATH 1016	Mathematics for Engineers 1			
MATH 1019	Mathematics for Engineers 2			
	Credit Points	40		
Year 2				
Autumn session				
CIVL 1001	Surveying for Engineers	10		
MECH 2003	Mechanics of Materials	10		
CIVL 2003	Fluid Mechanics	10		
ENGR 3029	Specialisation Workshop 1	10		
	Credit Points	40		
Spring session	Credit Points	40		
Spring session ENGR 2016	Credit Points Pavement Materials and Design	40 10		
ENGR 2016	Pavement Materials and Design	10		
ENGR 2016 CIVL 2007	Pavement Materials and Design Introduction to Structural Engineering	10		
ENGR 2016 CIVL 2007 CIVL 3011	Pavement Materials and Design Introduction to Structural Engineering Hydraulics	10 10 10		
ENGR 2016 CIVL 2007 CIVL 3011	Pavement Materials and Design Introduction to Structural Engineering Hydraulics Specialisation Workshop 2	10 10 10		
ENGR 2016 CIVL 2007 CIVL 3011 ENGR 3030	Pavement Materials and Design Introduction to Structural Engineering Hydraulics Specialisation Workshop 2	10 10 10		
ENGR 2016 CIVL 2007 CIVL 3011 ENGR 3030	Pavement Materials and Design Introduction to Structural Engineering Hydraulics Specialisation Workshop 2	10 10 10		
ENGR 2016 CIVL 2007 CIVL 3011 ENGR 3030 Year 3 Autumn session	Pavement Materials and Design Introduction to Structural Engineering Hydraulics Specialisation Workshop 2 Credit Points	10 10 10 10 40		
ENGR 2016 CIVL 2007 CIVL 3011 ENGR 3030 Year 3 Autumn session CIVL 3014	Pavement Materials and Design Introduction to Structural Engineering Hydraulics Specialisation Workshop 2 Credit Points Structural Analysis	10 10 10 10 40		

CIVL 2002	Environmental Engineering
Select one elective	
 Elective must be 	Level 2 or higher (an exception applies
for students com	pleting Mathematics for Engineers

Soil Mechanics

Steel Structures

Credit Points

Industrial Experi ENGR 2033	Industrial Experience (Engineering	0
	Technologist)	
	Credit Points	40
•	Total Credit Points	240

Engineering Science Project 2

Optional Elective

Preliminary subject)

CIVL 2012

Spring session CIVL 3012

ENGR 3014

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 Autumn 2022 or earlier.

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

Mid-year intake

10

40

10

10

10 10

Mid-year intake	•	
Course	Title	Credit Points
Year 1		
Spring session		
Select one of the foll	owing:	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 foll	owing:	10
MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
MECH 2003	Mechanics of Materials	10
ENGR 1011	Engineering Physics	10
Select one elective		10
Elective must be	Level 2 or higher	
Year 2	Credit Points	40
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
ENGR 2016	Pavement Materials and Design	10
ENGR 3029	Specialisation Workshop 1	10
	Credit Points	40
Autumn session	orealt i oilits	40
CIVL 3014	Structural Analysis	10
ELEC 1006	Engineering Computing	10
CIVL 2003	Fluid Mechanics	10
ENGR 3030	Specialisation Workshop 2	10
2110110000	Credit Points	40
Year 3	orean remite	
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3011	Hydraulics	10
ENGR 3013	Engineering Science Project 1	10
Select one elective		10
	ust be level 2 or higher (an exception completing Mathematics for Engineers	
,	Credit Points	40
Autumn session		
CIVL 1001	Surveying for Engineers	10
CIVL 2012	Soil Mechanics	10
CIVL 3002	Concrete Structures (UG)	10
ENGR 3014	Engineering Science Project 2	10
Industrial Experience		. 3
ENGR 2033	Industrial Experience (Engineering	0
	Technologist)	40

Credit Points

Total Credit Points

40

240

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 Autumn 2022 or earlier.

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

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.

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	llowing:	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
Select one of the fo	llowing:	10
MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective		10
Elective unit mu	st be Level 1 or higher	
	Credit Points	40
Year 2	Credit Points	40
Autumn session		
Autumn session CIVL 1001	Surveying for Engineers	10
Autumn session CIVL 1001 MECH 2003	Surveying for Engineers Mechanics of Materials	10 10
Autumn session CIVL 1001 MECH 2003 CIVL 2003	Surveying for Engineers Mechanics of Materials Fluid Mechanics	10 10 10
Autumn session CIVL 1001 MECH 2003	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics	10 10 10
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012	Surveying for Engineers Mechanics of Materials Fluid Mechanics	10 10 10
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points	10 10 10 10 40
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design	10 10 10 10 40
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design Introduction to Structural Engineering	10 10 10 10 40
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007 CIVL 2002	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design	10 10 10 10 40
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design Introduction to Structural Engineering Environmental Engineering Hydraulics	10 10 10 10 40
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007 CIVL 2002 CIVL 3011	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design Introduction to Structural Engineering Environmental Engineering	10 10 10 10 40 10
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007 CIVL 2002 CIVL 3011 Year 3	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design Introduction to Structural Engineering Environmental Engineering Hydraulics	10 10 10 10 40 10 10 10
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007 CIVL 2002 CIVL 3011 Year 3 Autumn session	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design Introduction to Structural Engineering Environmental Engineering Hydraulics	10 10 10 40 10 10 10 10
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007 CIVL 2002 CIVL 3011 Year 3 Autumn session CIVL 3014	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design Introduction to Structural Engineering Environmental Engineering Hydraulics Credit Points Structural Analysis	10 10 10 40 10 10 10 10
Autumn session CIVL 1001 MECH 2003 CIVL 2003 CIVL 2012 Spring session ENGR 2016 CIVL 2007 CIVL 2002 CIVL 3011 Year 3 Autumn session	Surveying for Engineers Mechanics of Materials Fluid Mechanics Soil Mechanics Credit Points Pavement Materials and Design Introduction to Structural Engineering Environmental Engineering Hydraulics Credit Points	10 10 10 40 10 10 10 10

One Alternate subject		10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
ENGR 3020	Numerical Methods in Engineering	10
One Alternate subject	t	10
Industrial Experience	•	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
ENGR 4025	Final Year Project 1 (UG Engineering)	10
One Alternate subject	t	10
Select two electives		20
*Elective subjects m	ust be level 2 or higher (an exception	
• •	completing Mathematics for Engineers	
Preliminary subject)		
	Credit Points	40
Spring session		
ENGR 4026	Final Year Project 2 (UG Engineering)	10
ENGR 4011	Sustainability and Risk Engineering	10
Major Alternate Subj	ect	10
Select one elective		10
*Elective subjects m	ust be level 2 or higher (an exception	
• •	completing Mathematics for Engineers	
Preliminary subject)		
	Credit Points	40

Alternate Subjects

Subject	Title	Credit Points
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3022	Bridge Embankment Design	10
CIVL 3021	Bridge Engineering Design	10
CIVL 4002	Composite Structures	10
CIVL 3010	Highway Infrastructure	10
CIVL 3018	Hydrogeology	10
CIVL 4008	Pile Foundations	10
EART 3005	Statistical Hydrology	10
CIVL 3020	Sustainable Waste Engineering	10
CIVL 4009	Timber Structures (UG)	10
CIVL 4012	Water Resource Engineering	10
CIVL 2018	Water Supply Systems Design	10

Total Credit Points

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
Year 1		Points
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	
MECH 2003	Mechanics of Materials	10
ENGR 1011	Engineering Physics	10
ELEC 1006	Engineering Computing	10
	Credit Points	40
Year 2		
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
ENGR 2016	Pavement Materials and Design	10
Select one elective		10
	nust be level 2 or higher (an exception	
•	completing Mathematics for Engineers	
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
select one elective ((level 2 or higher)	10
	Credit Points	40
Year 3		
Spring session		
CIVL 3012	Steel Structures	10
ENGR 3020	Numerical Methods in Engineering	10
CIVL 3011	Hydraulics	10
One Alternate Subje	ect	10
	Credit Points	40
Autumn session		
CIVL 1001	Surveying for Engineers	10
CIVL 4017	Surface Water Hydrology	10
CIVL 3002	Concrete Structures (UG)	10
One Alternate Subje	ect	10
Industrial Experience	ee	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
ENGR 4025	Final Year Project 1 (UG Engineering)	10
ENGR 4011	Sustainability and Risk Engineering	10
CIVL 3007	Engineering Geomechanics	10

Alternate Subject		10	
	Credit Points	40	
Autumn session			
ENGR 4026	Final Year Project 2 (UG Engineering)	10	
Major Alternate	Subject	10	
Select two elect	Select two electives		
*Elective subjects must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary subject)			
	Credit Points	40	
	Total Credit Points	320	

Alternate Subjects		
Subject	Title	Credit Points
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3022	Bridge Embankment Design	10
CIVL 3021	Bridge Engineering Design	10
CIVL 4002	Composite Structures	10
CIVL 3010	Highway Infrastructure	10
CIVL 3018	Hydrogeology	10
CIVL 4008	Pile Foundations	10
EART 3005	Statistical Hydrology	10
CIVL 3020	Sustainable Waste Engineering	10
CIVL 4009	Timber Structures (UG)	10

Equivalent Subjects

CIVL 4012

CIVL 2018

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

10

10

Water Resource Engineering

Water Supply Systems Design

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 sequences below.

Start-year intake

Course	Title	Credit Points
Year 1		1 011113
Autumn session		
ENGR 1011	Engineering Physics	10
MATH 1016	Mathematics for Engineers 1	10
Business Core Subject 1		10
Business Core Subject 2		10
	Credit Points	40
Spring session		
MATH 1019	Mathematics for Engineers 2	10
PROC 1008	Introduction to Materials Engineering	10
Business Core Subject 3		10
Business Core Sub	ject 4	10
	Credit Points	40

Year 2		
Autumn session		
ELEC 1006	Engineering Computing	10
Business Profession	al Subject 1	10
Business Profession	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		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Spring session		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
CIVL 3011	Hydraulics	10
	Credit Points	40
Year 4		
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
CIVL 4017	Surface Water Hydrology	10
Business Major Subj		10
0	Credit Points	40
Spring session	Ot and Other transport	10
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
Business Major Subj		10
Business Major Subj		10
Industrial Experience ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 5	orealt rolling	40
Autumn session		
Industrial Experience		
ENGR 3017	Industrial Experience (Engineering)	0
ENGR 4025	Final Year Project 1 (UG Engineering)	10
Business Profession		10
Business Major Subj		10
Business Major Subj		10
	Credit Points	40
Spring session		
ENGR 4026	Final Year Project 2 (UG Engineering)	10
ENGR 4035	Smart and Liveable Cities	10
ENGR 3020	Numerical Methods in Engineering	10

Business Professional Subject 4	
Credit Points	40
Total Credit Points	400

Equivalent Subjects

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

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

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 Subje	ct 1	10
Business Core Subje	ct 2	10
	Credit Points	40
Autumn session		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10
Business Core Subje	ct 3	10
Business Core Subje	ct 4	10
	Credit Points	40
Year 2		
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
Business Profession	al Subject 1	10
Business Profession	al Subject 2	10
Business Major Subj	ect 1	10
	Credit Points	40
Autumn session		
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
Business Major Subj	ect 2	10
Business Major Subj	ect 3	10
	Credit Points	40
Year 3		
Spring session		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
CIVL 3011	Hydraulics	10
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
CIVL 4017	Surface Water Hydrology	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Year 4		
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
Business Major Subj	ect 4	10

Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering Business Professional Subject 3 Credit Points Autumn session ENGR 4026 Final Year Project 2 (UG Engineering) Business Professional Subject 4 Business Major Subject 7 Business Major Subject 8	-	Total Credit Points	400
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering Business Professional Subject 3 Credit Points Autumn session ENGR 4026 Final Year Project 2 (UG Engineering) Business Professional Subject 4 Business Major Subject 7		Credit Points	40
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering Business Professional Subject 3 Credit Points Autumn session ENGR 4026 Final Year Project 2 (UG Engineering) Business Professional Subject 4	Business Major Subject 8		10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering Business Professional Subject 3 Credit Points Autumn session ENGR 4026 Final Year Project 2 (UG Engineering)	Business Major Subject 7		10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering Business Professional Subject 3 Credit Points Autumn session	Business Professional Subject 4		10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering Business Professional Subject 3 Credit Points	ENGR 4026	Final Year Project 2 (UG Engineering)	10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering Business Professional Subject 3	Autumn session		
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering ENGR 3020 Numerical Methods in Engineering		Credit Points	40
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering) ENGR 4011 Sustainability and Risk Engineering	Business Profess	sional Subject 3	10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session ENGR 4025 Final Year Project 1 (UG Engineering)	ENGR 3020	Numerical Methods in Engineering	10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5 Spring session	ENGR 4011	Sustainability and Risk Engineering	10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points Year 5	ENGR 4025	Final Year Project 1 (UG Engineering)	10
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering) Credit Points	Spring session		
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience ENGR 3017 Industrial Experience (Engineering)	Year 5		
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing Industrial Experience		Credit Points	40
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6 ELEC 1006 Engineering Computing	ENGR 3017	Industrial Experience (Engineering)	0
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5 Business Major Subject 6	Industrial Experie	ence	
Credit Points Autumn session CIVL 1001 Surveying for Engineers Business Major Subject 5	ELEC 1006	Engineering Computing	10
Credit Points Autumn session CIVL 1001 Surveying for Engineers	Business Major S	Subject 6	10
Credit Points Autumn session	Business Major S	Subject 5	10
Credit Points	CIVL 1001	Surveying for Engineers	10
	Autumn session		
ELEC 1003 Electrical Fundamentals		Credit Points	40
	ELEC 1003	Electrical Fundamentals	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

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

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

Course	Title	Credit Points
Year 1		
Autumn session		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ENGR 1047	Advanced Engineering Physics 1	10
ELEC 1006	Engineering Computing	10

ENGR 1024	Introduction to Engineering Practice	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		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
CIVL 3011	Hydraulics	10
PROC 1008	Introduction to Materials Engineering	10
,	er to 3740 Bachelor of Engineering achelor of Engineering Science at the end	
Students who fail to	maintain a minimum GPA of 5.0 at the end	

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

Credit Points

	Credit Points	40
Year 3		
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 4017	Surface Water Hydrology	10
CIVL 3002	Concrete Structures (UG)	10
Select one elective	ve or Minor subject	10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
ENGR 3020	Numerical Methods in Engineering	10
ENGR 2016	Pavement Materials and Design	10
Industrial Experie	ence	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
ENGR 4043	Advanced Engineering Thesis 1: Preliminary Investigations	20
Select one elective	ve or Minor subject	10
Select one electiv	ve or Minor subject	10
	Credit Points	40
Spring session		
ENGR 4035	Smart and Liveable Cities	10
ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	20

Select one elec	ctive or Minor subject	10
	Credit Points	40
	Total Credit Points	320
Subject	Title	Credit Points
Optional Electi	ves	
BLDG 4006	Modern Construction Enterprises	10
BLDG 4007	Modern Construction Projects	10
	subject is an optional elective subject offered to are engaged in a School approved project.	
•	an be taken during the third year of this program, ission is required to enrol in the subject.	
ENGR 3022	Special Technical Project	10
Mid-year in	take	
Course	Title	Credit Points
Year 1		

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
MECH 2003	Mechanics of Materials	10
ENGR 1047	Advanced Engineering Physics 1	10
ELEC 1006	Engineering Computing	10
	Credit Points	40
Year 2		
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective o	r Minor subject	10
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
ENGR 1024	Introduction to Engineering Practice	10
•	er to 3740 Bachelor of Engineering achelor of Engineering Science at the end	
of completion of 160	maintain a minimum GPA of 5.0 at the end Credit Points, and again at the completion will be automatically transferred to the B. s) (3740) program.	

Engineering (Honot	irs) (3740) program.	
	Credit Points	40
Year 3		
Spring session		
CIVL 3012	Steel Structures	10
ENGR 3020	Numerical Methods in Engineering	10
CIVL 3011	Hydraulics	10
ENGR 2016	Pavement Materials and Design	10
	Credit Points	40

Autumn session		
CIVL 1001	Surveying for Engineers	10
CIVI 4017	Surface Water Hydrology	10
CIVL 4017	Concrete Structures (UG)	10
	ve or Minor subject	10
	-	10
Industrial Experie		0
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
ENGR 4043	Advanced Engineering Thesis 1: Preliminary Investigations	20
CIVL 3007	Engineering Geomechanics	10
ENGR 4035	Smart and Liveable Cities	10
	Credit Points	40
Autumn session		
ENGR 4044	Advanced Engineering Thesis 2: Detailed	20
	Investigations	
Select one election	ve or Minor subject	10
Select one electi	ve or Minor subject	10
	Credit Points	40
	Total Credit Points	320
Subject	Title	Credit
		Points
Optional Elective	es	
BLDG 4006	Modern Construction Enterprises	10
BLDG 4007	Modern Construction Projects	10
3	bject is an optional elective subject offered to e engaged in a School approved project.	
•	be taken during the third year of this program, sion is required to enrol in the subject.	
ENGR 3022	Special Technical Project	10

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 f	following	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 fol	lowing	10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
	Credit Points	40
Year 2		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Spring session		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
CIVL 3011	Hydraulics	10
0172 0011	Credit Points	40
Year 3	Great Folits	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 4017	Surface Water Hydrology	10
CIVL 4017	Concrete Structures (UG)	10
Select one elective of	` ,	10
Select one elective of	Credit Points	40
Curium coccion	Credit Points	40
Spring session	04	10
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
ENGR 3020	Numerical Methods in Engineering	10
Select one elective of	•	10
Industrial Experience		
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
ENGR 4041	Final Year Project 1 (UG Engineering)	20
BLDG 4008	Digital Construction	10
Select one elective of	<u> </u>	10
	Credit Points	40
Spring session		
ENGR 4042	Final Year Project 2 (UG Engineering)	
ENGR 4011	Sustainability and Risk Engineering	10
Select one elective of	<u> </u>	10
	Credit Points	20
	Total Credit Points	300
Mid-year intak		
•		o 15
Course	Title	Credit Points
Year 1		i onits
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008 ENGR 1024	Introduction to Materials Engineering	10
	Introduction to Engineering Practice	10
Select one of the fol	•	10
MATH 1021	Mathematics for Engineers Preliminary	

MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Autumn session		
MECH 2003	Mechanics of Materials	10
ENGR 1011	Engineering Physics	10
ELEC 1006	Engineering Computing	10
Select one of the fo	<u> </u>	10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
V 0	Credit Points	40
Year 2		
Spring session CIVL 2007	Introduction to Ctrustural Engineering	10
CIVL 2007	Introduction to Structural Engineering	10
ENGR 2016	Environmental Engineering Pavement Materials and Design	10
ELEC 1003	Electrical Fundamentals	10
LLLO 1003	Credit Points	40
Autumn session	Cleuit Foilits	40
CIVL 3014	Structural Analysis	10
CIVL 2003	Fluid Mechanics	10
CIVL 2012	Soil Mechanics	10
CIVL 1001	Surveying for Engineers	10
	Credit Points	40
Year 3	0.04.0	
Spring session		
CIVL 3012	Steel Structures	10
ENGR 3020	Numerical Methods in Engineering	10
CIVL 3011	Hydraulics	10
CIVL 3007	Engineering Geomechanics	10
	Credit Points	40
Autumn session		
CIVL 4017	Surface Water Hydrology	10
CIVL 3002	Concrete Structures (UG)	10
Select one elective	or Minor subject	10
Select one elective	or Minor subject	10
Industrial Experien		
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
ENGR 4041	Final Year Project 1 (UG Engineering)	20
ENGR 4011	Sustainability and Risk Engineering	10
Select one elective		10
	Credit Points	40
Autumn session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20
BLDG 4008	Digital Construction	10
Select one elective		10
	Credit Points	40
	Total Credit Points	320

Bachelor of Engineering Science

This Major will be offered at Parramatta, 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.

Start year intake

	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		10
MATH 1016	Mathematics for Engineers 1	10
MATH 1010 MATH 1019		
WATH TUT9	Mathematics for Engineers 2 Credit Points	40
V0	Credit Points	40
Year 2		
Autumn session	0	10
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
ENGR 3029	Specialisation Workshop 1	10
	Credit Points	40
Spring session		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
CIVL 3011	Hydraulics	10
ENGR 3030	Specialisation Workshop 2	10
	Credit Points	40
Year 3		
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
ENGR 3013	Engineering Science Project 1	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
ENGR 3014	Engineering Science Project 2	10
	s (Level 2 or higher)	20
	Level 2 or higher (an exception applies for	
	ng Mathematics for Engineers Preliminary	
Industrial Experien	ce	
ENGR 2033	Industrial Experience (Engineering	0
	Technologist)	
	Credit Points	40

Subject	Title	Credit Points
Optional Elective		
-	oject is an optional elective unit offered to engaged in a School approved project.	
•	be taken during the third year of this program, ion is required to enrol in the subject.	
ENGR 3022	Special Technical Project	10
Mid-year inta		
Course	Title	Credit
Course	Title	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	•	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
Autumn session	Credit Points	40
MECH 2003	Mechanics of Materials	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the		10
MATH 1016	Mathematics for Engineers 1	10
MATH 1019	Mathematics for Engineers 2	
WATTITOTS	Credit Points	40
Year 2	Great Folitis	40
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
ENGR 2016	Pavement Materials and Design	10
ENGR 3029	Specialisation Workshop 1	10
Select one electiv	· · · · · · · · · · · · · · · · · · ·	10
*Elective subject	s must be level 2 or higher (an exception	
applies for stude	nts completing Mathematics for Engineers	
Preliminary subje	· ,	40
	Credit Points	40
Autumn session CIVL 3014	Chrystowal Analysis	10
	Structural Analysis Engineering Computing	10
ELEC 1006 CIVL 2003		10
		10
	Fluid Mechanics	10
ENGR 3030	Fluid Mechanics Specialisation Workshop 2	10 10
ENGR 3030	Fluid Mechanics	10
ENGR 3030 Year 3	Fluid Mechanics Specialisation Workshop 2	10 10
ENGR 3030 Year 3 Spring session	Fluid Mechanics Specialisation Workshop 2 Credit Points	10 10 40
Year 3 Spring session CIVL 3012	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures	10 10 40
Year 3 Spring session CIVL 3012 CIVL 3011	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics	10 10 40
Year 3 Spring session CIVL 3012 CIVL 3011 ENGR 3013	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics Engineering Science Project 1	10 10 40 10 10 10
Year 3 Spring session CIVL 3012 CIVL 3011 ENGR 3013 Select one elective	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics Engineering Science Project 1	10 10 40
Year 3 Spring session CIVL 3012 CIVL 3011 ENGR 3013 Select one elective	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics Engineering Science Project 1	10 10 40 10 10 10
Year 3 Spring session CIVL 3012 CIVL 3011 ENGR 3013 Select one elective subject	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics Engineering Science Project 1	10 10 40 10 10 10
Year 3 Spring session CIVL 3012 CIVL 3011 ENGR 3013 Select one electiv *Elective subject	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics Engineering Science Project 1 Ve s must be level 2 or higher Credit Points	10 10 40 10 10 10 10
Year 3 Spring session CIVL 3012 CIVL 3011 ENGR 3013 Select one elective* *Elective subject Autumn session CIVL 1001	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics Engineering Science Project 1 //e s must be level 2 or higher Credit Points Surveying for Engineers	10 10 40 10 10 10 10
Year 3 Spring session CIVL 3012 CIVL 3011 ENGR 3013 Select one electiv *Elective subject	Fluid Mechanics Specialisation Workshop 2 Credit Points Steel Structures Hydraulics Engineering Science Project 1 Ve s must be level 2 or higher Credit Points	10 10 40 10 10 10 10

ENGR 3014	Engineering Science Project 2	10
Industrial Experien	ce	
ENGR 2033	Industrial Experience (Engineering Technologist)	0
	Credit Points	40
	Total Credit Points	240
Subject 1	Fitle	Credit Points
Optional Elective		
,	ect is an optional elective unit offered to engaged in a School approved project.	
•	e taken during the third year of this program,	
nowever, permissio	on is required to enrol in the subject.	

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 sequences below.

Start year intake

Course	Title	Credit Points
Year 1		
Autumn session		
MATH 1016	Mathematics for Engineers 1	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Business Core Subj	ect 1	10
	Credit Points	40
Spring session		
MATH 1019	Mathematics for Engineers 2	10
PROC 1008	Introduction to Materials Engineering	10
Business Core Subj	ect 2	10
Business Core Subj	ect 3	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 1006	Engineering Computing	10
Business Core Subject 4		10
Business Professional Subject 1		10
Business Professio	nal Subject 2	10
	Credit Points	40
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major Subject 1		10
Business Major Sub	oject 2	10
	Credit Points	40
Year 3		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10

	Soil Mechanics	10
	Credit Points	40
Spring session		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
CIVL 3011	Hydraulics	10
	Credit Points	40
Year 4		
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
CIVL 4017	Surface Water Hydrology	10
Business Major St	ıbject 3	10
<u> </u>	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
ENGR 3020	Numerical Methods in Engineering	10
Business Major Su		10
Industrial Experier	-	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 5		
Autumn session		
ENGR 4041	Final Year Project 1 (UG Engineering)	20
BLDG 4008	Digital Construction	10
Business Major St		10
Basiliess Major St	Credit Points	40
Spring session	Credit Folints	40
ENGR 4042	Final Year Project 2 (UG Engineering)	20
ENGR 4035	Smart and Liveable Cities	10
		10
Business Major Su		
VC	Credit Points	40
Year 6		
Autumn session		
Business Major Su		10
Business Major Su		10
Business Professi	•	10
Business Professi		10
	Credit Points	40

Mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
MATH 1016	Mathematics for Engineers 1	10
ENGR 1024	Introduction to Engineering Practice	10
PROC 1008	Introduction to Materials Engineering	10
Business Core Sul	Business Core Subject 1	
	Credit Points	40
Autumn session		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10

Business Core Sul	oject 2	10
Business Core Sul	oject 3	10
	Credit Points	40
Year 2		
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Core Sul	oject 4	10
Business Major Su	ubject 1	10
	Credit Points	40
Autumn session		
MECH 2003	Mechanics of Materials	10
CIVL 2003	Fluid Mechanics	10
Business Professi	onal Subject 1	10
Business Major Su	ubject 2	10
	Credit Points	40
Year 3		
Spring session		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
CIVL 2002	Environmental Engineering	10
CIVL 3011	Hydraulics	10
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
CIVL 4017	Surface Water Hydrology	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Year 4		
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
ENGR 3020	Numerical Methods in Engineering	10
Business Major Su	ubject 3	10
	Credit Points	40
Autumn session		
ELEC 1006	Engineering Computing	10
CIVL 1001	Surveying for Engineers	10
Business Professi	onal Subject 2	10
Business Major Su	ubject 4	10
Industrial Experien	nce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 5		
Spring session		
ENGR 4041	Final Year Project 1 (UG Engineering)	20
ENGR 4035	Smart and Liveable Cities	10
Business Major Su	ubject 5	10
	Credit Points	40
Autumn session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20
BLDG 4008	Digital Construction	10
Business Major Su	ubject 6	10
	Credit Points	40

Year 6 Spring session Business Professional Subject 3 10 Business Professional Subject 4 10 Business Major Subject 7 10 Business Major Subject 8 10 Credit Points 40 Total Credit Points 440

Related Programs

B Engineering Adv (Hons) B Engineering Science