Mathematics for Engineers 2 (Advanced)

10

CONSTRUCTION **ENGINEERING, TESTAMUR MAJOR (T132)**

Western Sydney University Major Code: T132

Previous Code: MT3052.1

Available to students in other Western Sydney University programs?

Construction Engineering consists of core subjects in structural engineering, project management and construction technologies. Graduates will work in the fields of construction, structural design, and project management. Career opportunities include those in the private or public sector on projects covering highways, airports, and residential & commercial buildings. This major includes a mandatory 300 to 450 hour industrial placement as a completion requirement.

Location

Campus	Mode	Advice	S
Parramatta Campus - Victoria Road	Internal	Program Advice (edbe@westernsydney.e	edu ź
Parramatta City Campus-Macquarie Street	Internal	Program Advice (edbe@westernsydney.e	o edu o
Penrith Campus	Internal	Program Advice (edbe@westernsydney.e	du.a

Recommended Sequence 2022 - 2023

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 course as noted

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
ELEC 1006	Engineering Computing	10
ENGR 1047	Advanced Engineering Physics 1	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40

Spring	session
MAATII	1025

MATH 1035	Mathematics for Engineers 2 (Advanced)	
ENGR 1018	Fundamentals of Mechanics	
PROC 1008	Introduction to Materials Engineering	10
Select one elective		10
Elective must be	e Level 2 or higher	
	Credit Points	40
Year 2		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	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
BLDG 2001	Building Estimates and Tendering	10
Select one elective		10

· Elective subjects must be level 2 or higher

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

Credit Points 40 au) Yeár 3

Select one elective

Autumn session		
CIVL 3014	Structural Analysis	10
BUSM 3077	Construction Project Management	10
CIVL 3002	Concrete Structures (UG)	10
One Alternate su	bject	10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 3007	Engineering Geomechanics	10
One Alternate su	bject	10
Industrial Experi	ence	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
ENGR 4037	Advanced Engineering Thesis 1: Preliminary Investigations	10
BLDG 4007	Modern Construction Projects	10
One Alternate su	bject	10

Credit Points 40 Spring session **ENGR 4036** Advanced Engineering Thesis 2: Detailed 10 Investigations **CIVL 4016 Envelope and Services** 10 One Alternate subject 10 Select one elective 10

· Elective subjects must be Level 2 or higher

• Elect	ive subjects must be Level 2 or higher	
	Credit Points	40
	Total Credit Points	320

Alternate Subjects

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

Subject	Title	Credit Points
GEOM 3001	Advanced Building Measurement	10
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3021	Bridge Engineering Design	10
BLDG 3010	Building Cost Studies	10
CIVL 4002	Composite Structures	10
BLDG 3004	Construction Information Systems	10
CIVL 3010	Highway Infrastructure	10
CIVL 4008	Pile Foundations	10
BLDG 3009	Quality and Value Management	10
CIVL 4009	Timber Structures (UG)	10

Optional Electives

Subject		redit oints
BLDG 4006	Modern Construction Enterprises	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, howeve uired to enrol in the subject.	r,
ENGR 3022	Special Technical Project	10

Minors

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

, ,		
Course	Title	Credit Points
Year 1		
Spring session		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10

ENGR 1018	Fundamentals of Mechanics	
PROC 1008	Introduction to Materials Engineering	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	
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		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
BLDG 2001	Building Estimates and Tendering	10
Select one elective		10
 Elective unit mu 	st be Level 2 or higher	
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
BLDG 2002	Building Measurement	10
CIVL 2012	Soil Mechanics	10
select one elective (level 2 or higher)	10
Students who fail to	maintain a minimum GPA of 5.0 at the end	
of completion of 160	Credit Points, and again at the completion	
	will be automatically transferred to the B.	
Engineering (Honou		
	Credit Points	40
Year 3	Credit Points	40
Spring session		
Spring session CIVL 3012	Steel Structures	10
Spring session CIVL 3012 CIVL 3017	Steel Structures Construction Scheduling	10
Spring session CIVL 3012 CIVL 3017 CIVL 4016	Steel Structures Construction Scheduling Envelope and Services	10 10 10
Spring session CIVL 3012 CIVL 3017	Steel Structures Construction Scheduling Envelope and Services	10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subjection	Steel Structures Construction Scheduling Envelope and Services	10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject	Steel Structures Construction Scheduling Envelope and Services ct Credit Points	10 10 10 10 40
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001	Steel Structures Construction Scheduling Envelope and Services ct Credit Points Surveying for Engineers	10 10 10 10 40
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077	Steel Structures Construction Scheduling Envelope and Services ct Credit Points Surveying for Engineers Construction Project Management	10 10 10 10 40
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002	Steel Structures Construction Scheduling Envelope and Services ct Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG)	10 10 10 10 40 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject	Steel Structures Construction Scheduling Envelope and Services ct Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG)	10 10 10 10 40
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et	10 10 10 10 40 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject	Steel Structures Construction Scheduling Envelope and Services ct Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) ct e Industrial Experience (Engineering)	10 10 10 40 40 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et	10 10 10 10 40 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4	Steel Structures Construction Scheduling Envelope and Services ct Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) ct e Industrial Experience (Engineering)	10 10 10 40 40 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et e Industrial Experience (Engineering) Credit Points	10 10 10 40 40 10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et e Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1:	10 10 10 40 40 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037	Steel Structures Construction Scheduling Envelope and Services ct Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) ct e Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations	10 10 10 40 10 10 10 10 40
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037 CIVL 3007	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations Engineering Geomechanics	10 10 10 10 40 10 10 10 10 10 10 10 10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037 CIVL 3007 One Alternate subject One Altern	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations Engineering Geomechanics	10 10 10 10 40 10 10 10 10 10 10 10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037 CIVL 3007 One Alternate subject Select one elective	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et e Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations Engineering Geomechanics et	10 10 10 10 40 10 10 10 10 10 10 10 10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037 CIVL 3007 One Alternate subject Select one elective	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations Engineering Geomechanics	10 10 10 10 40 10 10 10 10 10 10 10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037 CIVL 3007 One Alternate subject Select one elective	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et e Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations Engineering Geomechanics et	10 10 10 10 40 10 10 10 10 10 10 10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037 CIVL 3007 One Alternate subject Select one elective	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et e Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations Engineering Geomechanics et	10 10 10 10 40 10 10 10 10 10 10 10 10 10 10
Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subject Autumn session CIVL 1001 BUSM 3077 CIVL 3002 One Alternate subject Industrial Experience ENGR 3017 Year 4 Spring session ENGR 4037 CIVL 3007 One Alternate subject • Elective unit mu	Steel Structures Construction Scheduling Envelope and Services et Credit Points Surveying for Engineers Construction Project Management Concrete Structures (UG) et e Industrial Experience (Engineering) Credit Points Advanced Engineering Thesis 1: Preliminary Investigations Engineering Geomechanics et	10 10 10 10 40 10 10 10 10 10 10 10 10 10 10

Cradit

BLDG 4007	Modern Construction Projects	10
One Alternate subject	t	10
Select one elective		10
 Elective unit mus 	st be Level 2 or higher	

Credit Points	40
Total Credit Points	320

Alternate Subjects

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

Subject	Title	Credit Points
GEOM 3001	Advanced Building Measurement	10
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3021	Bridge Engineering Design	10
BLDG 3010	Building Cost Studies	10
CIVL 4002	Composite Structures	10
BLDG 3004	Construction Information Systems	10
CIVL 3010	Highway Infrastructure	10
CIVL 4008	Pile Foundations	10
BLDG 3009	Quality and Value Management	10
CIVL 4009	Timber Structures (UG)	10

Optional Electives

Subject	Title	Credit Points
BLDG 4006	Modern Construction Enterprises	10
The following su	bject is an optional elective subject offered to	
students who are	e engaged in a School approved project. This	
subject can be ta	aken during the third year of this program, howe	ver,
permission is red	guired to enrol in the subject.	

Minors

ENGR 3022

Construction Economics, Minor (https://hbook.westernsydney.edu.au/ majors-minors/construction-economics-minor/) Structures, Minor (https://hbook.westernsydney.edu.au/majorsminors/structures-minor/)

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

Bachelor of Engineering Science

This Major will be offered at Parramatta, and Penrith 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.

Title

Start-year intake

Course

10

Course	Title	Credit Points
Year 1		
Autumn session		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the foll	owing:	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective		10
Select one of the foll	owing:	10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
	Credit Points	40
Year 2		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	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
BLDG 2001	Building Estimates and Tendering	10
ENGR 3030	Specialisation Workshop 2	10
	Credit Points	40
Year 3		
Autumn session		
ENGR 3013	Engineering Science Project 1	10
CIVL 2012	Soil Mechanics	10

·	Total Credit Points	240
	Credit Points	40
ENGR 2033	Industrial Experience (Engineering Technologist)	0
Industrial Experienc	e	
Elective must be	e Level 2 or higher	
Select one elective		10
CIVL 2002	Environmental Engineering	10
ENGR 3014	Engineering Science Project 2	10
CIVL 3017	Construction Scheduling	10
Spring session		
	Credit Points	40
BLDG 4007	Modern Construction Projects	10
BUSM 3077	Construction Project Management	10

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

Mid-vear intake

mıd-year intai	Ke .	
Course	Title	Credit Points
Year 1		1 011113
Spring session		
Select one of the	following:	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40
Autumn session		
Select one of the	following:	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 electiv	e	10
Elective unit n	nust be Level 1 or higher	
	Credit Points	40
Year 2		
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
BLDG 2001	Building Estimates and Tendering	10
ENGR 2016	Pavement Materials and Design	10
ENGR 3029	Specialisation Workshop 1	10
	Credit Points	40

Autumn session		
CIVL 1001	Surveying for Engineers	10
ELEC 1006	Engineering Computing	10
BLDG 2002	Building Measurement	10
ENGR 3030	Specialisation Workshop 2	10
	Credit Points	40
Year 3		
Spring session		
CIVL 3017	Construction Scheduling	10
CIVL 2002	Environmental Engineering	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

	Credit Points	40
Autumn session	1	
CIVL 2012	Soil Mechanics	10
BUSM 3077	Construction Project Management	10
BLDG 4007	Modern Construction Projects	10
ENGR 3014	Engineering Science Project 2	10
Industrial Experi	ience	
ENGR 2033	Industrial Experience (Engineering Technologist)	0
	Credit Points	40
	Total Credit Points	240

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)/ Bachelor of Business (3728)

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

Start-year intake

Course Year 1	Title	Credit Points
Autumn session		
MATH 1016	Mathematics for Engineers 1	10
ENGR 1011	Engineering Physics	10
Business Core Su	ıbject 1	10
Business Core Su	ıbject 2	10
	Credit Points	40

Spring session		
MATH 1019	Mathematics for Engineers 2	10
PROC 1008	Introduction to Materials Engineering	10
Business Core Sub	oject 3	10
Business Core Sub	oject 4	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 1006	Engineering Computing	10
Business Profession	onal Subject 1	10
Business Profession	onal Subject 2	10
Business Major Su	·	10
	Credit Points	40
Spring session		
BLDG 1014	Non-Residential Building	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major Su	· ·	10
Business Major Su		10
., .	Credit Points	40
Year 3		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	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
BLDG 2001 CIVL 3017	Building Estimates and Tendering Construction Scheduling	10
CIVE 3017	Credit Points	10 40
Year 4	Cledit Foliits	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10
Business Major Su	· · · · · · · · · · · · · · · · · · ·	10
Buomicoo major oc	Credit Points	40
Spring session	orealt i emile	
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
Business Major Su	-	10
Business Major Su		10
	Credit Points	40
Year 5		
Autumn session		
ENGR 4025	Final Year Project 1 (UG Engineering)	10
BLDG 4007	Modern Construction Projects	10
Business Profession	onal Subject 3	10
Business Major Su	-	10
	Credit Points	40
Spring session		
Spring session CIVL 4016	Envelope and Services	10
	Envelope and Services Final Year Project 2 (UG Engineering)	10 10

	Total Credit Points	400
	Credit Points	40
ENGR 3017	Industrial Experience (Engineering)	0
Industrial Exper	ience	
Business Major Subject 8		10

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

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

Mid-year intake

Year 1 Spring session MATH 1016 Mathematics for Engineers 1 10 PROC 1008 Introduction to Materials Engineering 10 Business Core Subject 1 10 Business Core Subject 2 10 Credit Points 40 Autumn session MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10 Business Core Subject 4 10	Course	Title	Credit Points
MATH 1016 Mathematics for Engineers 1 10 PROC 1008 Introduction to Materials Engineering 10 Business Core Subject 1 10 Business Core Subject 2 10 Credit Points 40 Autumn session MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10	Year 1		
PROC 1008 Introduction to Materials Engineering 10 Business Core Subject 1 10 Business Core Subject 2 10 Credit Points 40 Autumn session MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10	Spring session		
Business Core Subject 1 10 Business Core Subject 2 10 Credit Points 40 Autumn session MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10	MATH 1016	Mathematics for Engineers 1	10
Business Core Subject 2 10 Credit Points 40 Autumn session MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10	PROC 1008	Introduction to Materials Engineering	10
Credit Points 40 Autumn session MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10	Business Core Subject	et 1	10
Autumn session MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10	Business Core Subject	et 2	10
MATH 1019 Mathematics for Engineers 2 10 ENGR 1011 Engineering Physics 10 Business Core Subject 3 10		Credit Points	40
ENGR 1011 Engineering Physics 10 Business Core Subject 3 10	Autumn session		
Business Core Subject 3 10	MATH 1019	Mathematics for Engineers 2	10
•	ENGR 1011	Engineering Physics	10
Business Core Subject 4 10	Business Core Subject	et 3	10
	Business Core Subject	et 4	10
Credit Points 40		Credit Points	40
Year 2	Year 2		
Spring session	Spring session		
ENGR 1018 Fundamentals of Mechanics 10	ENGR 1018	Fundamentals of Mechanics	10
Business Professional Subject 1 10	Business Professiona	al Subject 1	10
Business Professional Subject 2 10	Business Professiona	al Subject 2	10
Business Major Subject 1 10	Business Major Subje	ect 1	10
Credit Points 40		Credit Points	40
Autumn session	Autumn session		
MECH 2003 Mechanics of Materials 10	MECH 2003	Mechanics of Materials	10
BLDG 2002 Building Measurement 10	BLDG 2002	Building Measurement	10
Business Major Subject 2 10	Business Major Subje	ect 2	10
Business Major Subject 3 10	Business Major Subje	ect 3	10
Credit Points 40		Credit Points	40
Year 3	Year 3		
Spring session	Spring session		
ENGR 2016 Pavement Materials and Design 10	ENGR 2016	Pavement Materials and Design	10
CIVL 2007 Introduction to Structural Engineering 10	CIVL 2007	Introduction to Structural Engineering	10
BLDG 2001 Building Estimates and Tendering 10	BLDG 2001	Building Estimates and Tendering	10
CIVL 3017 Construction Scheduling 10	CIVL 3017	Construction Scheduling	10
Credit Points 40		Credit Points	40
Autumn session	Autumn session		
CIVL 3014 Structural Analysis 10	CIVL 3014	Structural Analysis	10
CIVL 3002 Concrete Structures (UG) 10	CIVL 3002	Concrete Structures (UG)	10
BUSM 3077 Construction Project Management 10	BUSM 3077	Construction Project Management	10
CIVL 2012 Soil Mechanics 10	CIVL 2012	Soil Mechanics	10
Credit Points 40		Credit Points	40
Year 4	Year 4		
Spring session	Spring session		
CIVL 3012 Steel Structures 10	CIVL 3012	Steel Structures	10

	Total Credit Points	400
	Credit Points	40
ENGR 3017	Industrial Experience (Engineering)	0
Industrial Experie	ence	
Business Major S	Subject 8	10
Business Profess	sional Subject 4	10
BLDG 4007	Modern Construction Projects	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
Autumn session		
	Credit Points	40
Business Major S	Subject 7	10
Business Profess	sional Subject 3	10
CIVL 4016	Envelope and Services	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
Spring session		
Year 5		
	Credit Points	40
ELEC 1006	Engineering Computing	10
Business Major S	-	10
Business Major S	, , ,	10
CIVL 1001	Surveying for Engineers	10
Autumn session	orean remite	
<u> </u>	Credit Points	40
BLDG 1014	Non-Residential Building	10
Business Major S	3 3	10
CIVL 3007	Engineering Geomechanics	10

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

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

Bachelor of Engineering (Honours)

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
Year 1		Points
Autumn session		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the fol	lowing:	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
Select one of the fol	lowing:	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
Year 2	Credit Points	40
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
BLDG 2002		
	Building Measurement	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
BLDG 2001	Building Estimates and Tendering	10
Select one elective	2	10
*Elective subjects	must be level 2 or higher (an exception	
	ts completing Mathematics for Engineers	
Preliminary subject	et)	
	Credit Points	40
Year 3		
Autumn session		
CIVL 3014	Structural Analysis	10
BUSM 3077	Construction Project Management	10
CIVL 3002	Concrete Structures (UG)	10
One Alternate sub	ject	10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 3007	Engineering Geomechanics	10
One Alternate sub		10
One Aitemate sub	Credit Points	40
Van A	Credit Points	40
Year 4		
Autumn session		
BLDG 4007	Modern Construction Projects	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
One Alternate sub	ject	10
Select one elective	2	10
-	must be level 2 or higher (an exception	
	ts completing Mathematics for Engineers	
Preliminary subject	· · ·	
	Credit Points	40
Spring session		
CIVL 4016	Envelope and Services	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
One Alternate sub	ject	10
Select one elective		10
*Elective subjects	must be level 2 or higher (an exception	
applies for studen	ts completing Mathematics for Engineers	
Preliminary subject	et)	
Industrial Experier	nce	
	Industrial Experience (Engineering)	0
ENGR 3017	1 (3)	
ENGR 3017	Credit Points	40

Alternate Subjects

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

40

320

Subject	Title	Credit Points
GEOM 3001	Advanced Building Measurement	10
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3021	Bridge Engineering Design	10
BLDG 3010	Building Cost Studies	10
CIVL 4002	Composite Structures	10
BLDG 3004	Construction Information Systems	10
CIVL 3010	Highway Infrastructure	10
CIVL 4008	Pile Foundations	10
BLDG 3009	Quality and Value Management	10
CIVL 4009	Timber Structures (UG)	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

Mid-year intake

Course	Title	Credit Points
Year 1		
Spring session		
Select one of the fo	llowing:	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40
Autumn session		
Select one of the fo	llowing:	10
MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
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
BLDG 2001	Building Estimates and Tendering	10
ENGR 2016	Pavement Materials and Design	10
Select one elective		10
Elective unit mu	Elective unit must be Level 2 or higher	
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
BLDG 2002	Building Measurement	10
CIVL 2012	Soil Mechanics	10
Select one elective		10

• Elective unit must be Level 2 or higher

Elective unit i	must be Level 2 or higher	
	Credit Points	40
Year 3		
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 4016	Envelope and Services	10
One Alternate sul	bject	10
	Credit Points	40
Autumn session		
CIVL 1001	Surveying for Engineers	10
CIVL 3002	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10
One Alternate sul	bject	10
	Credit Points	40
Year 4		
Spring session		
ENGR 4025	Final Year Project 1 (UG Engineering)	10
CIVL 3007	Engineering Geomechanics	10
Select one elective	ve	10
One Alternate sul	bject	10
Elective unit i	must be Level 2 or higher	
	Credit Points	40
Autumn session		
ENGR 4026	Final Year Project 2 (UG Engineering)	10
BLDG 4007	Modern Construction Projects	10
Select one elective	ve	10
One Alternate sul	bject	10
Elective unit i	must be Level 2 or higher	
Industrial Experie	ence	
ENGR 3017	Industrial Experience (Engineering)	0

Alternate Subjects

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

Credit Points

Total Credit Points

Subject	Title	Credit Points
GEOM 3001	Advanced Building Measurement	10
ENGR 3001	Advanced Engineering Topic 1	10
ENGR 4001	Advanced Engineering Topic 2	10
CIVL 4001	Applied Mechanics	10
CIVL 3021	Bridge Engineering Design	10
BLDG 3010	Building Cost Studies	10
CIVL 4002	Composite Structures	10
BLDG 3004	Construction Information Systems	10
CIVL 3010	Highway Infrastructure	10
CIVL 4008	Pile Foundations	10
BLDG 3009	Quality and Value Management	10
CIVL 4009	Timber Structures (UG)	10

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

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

Major Sequence 2024

This sequence applies to students who commenced in 2024 or later. If you commenced prior to 2024 please refer to the Sequence 2022 - 2023 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.

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

Bachelor of Engineering Advanced (Honours) (3771)

Title

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

Start-vear intake

Course	Title	Credit Points
Year 1		
Autumn session		
MATH 1034	Mathematics for Engineers 1 (Advanced)	10
ELEC 1006	Engineering Computing	10
ENGR 1047	Advanced Engineering Physics 1	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
BLDG 2002	Building Measurement	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Spring session		
PROC 1008	Introduction to Materials Engineering	10
CIVL 2007	Introduction to Structural Engineering	10
BLDG 2001	Building Estimates and Tendering	10
Select one elective	e or Minor subject	10
of completion of 1 of 200 Credit point	to maintain a minimum GPA of 5.0 at the end 60 Credit Points, and again at the completion is will be automatically transferred to the B. ours) (3740) program.	
	Credit Points	40

Credit Points

Year 3 Autumn session

	Total Credit Points	320
	Credit Points	40
Select one elective o	r Minor subject	10
CIVL 4016	Envelope and Services	10
ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	20
Spring session		
	Credit Points	40
Select one elective o	•	10
BLDG 4007	Modern Construction Projects	10
ENGR 4043	Advanced Engineering Thesis 1: Preliminary Investigations	20
Autumn session		
Year 4		
	Credit Points	40
ENGR 3017	Industrial Experience (Engineering)	0
Industrial Experience	•	10
ENGR 2016	Pavement Materials and Design	10
CIVL 3017 CIVL 3007	Engineering Geomechanics	10
CIVL 3012 CIVL 3017	Construction Scheduling	10
Spring session CIVL 3012	Steel Structures	10
	Credit Points	40
Select one elective o		10
CIVL 3002	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10
CIVL 3014	Structural Analysis	10

Optional Electives

Subject

Cradit

Cabject	Po	oints
BLDG 4006	Modern Construction Enterprises	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, however uired to enrol in the subject.	•
ENGR 3022	Special Technical Project	10

Credit

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

	Credit
Voor 1	oints
Tedi I	
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	
PROC 1008 Introduction to Materials Engineering	10
CIVL 2007 Introduction to Structural Engineering	10
BLDG 2001 Building Estimates and Tendering	10
Select one elective or Minor subject	10
Credit Points	40
Autumn session	
CIVL 3014 Structural Analysis	10
BLDG 2002 Building Measurement	10
CIVL 2012 Soil Mechanics	10
ENGR 1024 Introduction to Engineering Practice	10
Students who fail to maintain a minimum GPA of 5.0 at the end	
of completion of 160 Credit Points, and again at the completion of 200 Credit points will be automatically transferred to the B. Engineering (Honours) (3740) program.	
Credit Points	40
Year 3	
Spring session	
CIVL 3012 Steel Structures	10
CIVL 3017 Construction Scheduling	10
CIVL 4016 Envelope and Services	10
ENGR 2016 Pavement Materials and Design	10
Credit Points	40
Autumn session	
CIVL 1001 Surveying for Engineers	10
BUSM 3077 Construction Project Management	10
CIVL 3002 Concrete Structures (UG)	10
Select one elective or Minor subject	10
Industrial Experience	
ENGR 3017 Industrial Experience (Engineering)	0
Credit Points	40
Year 4	
Spring session	
ENGR 4043 Advanced Engineering Thesis 1:	20
Preliminary Investigations	
CIVL 3007 Engineering Geomechanics	10
Select one elective or Minor subject	10
	40

Autumn session

	Total Credit Points	320
	Credit Points	40
Select one elective	e or Minor subject	10
BLDG 4007	Modern Construction Projects	10
ENGR 4044	Advanced Engineering Thesis 2: Detailed Investigations	20

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 (3691)

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

ENGR 1018

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		

Fundamentals of Mechanics

PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
Select one of the fo	ollowing:	10
MATH 1016	Mathematics for Engineers 1	
MATH 1019	Mathematics for Engineers 2	
	Credit Points	40
Year 2		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	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
BLDG 2001	Building Estimates and Tendering	10
ENGR 3030	Specialisation Workshop 2	10
	Credit Points	40
Year 3		
Autumn session		
ENGR 3013	Engineering Science Project 1	10
CIVL 2012	Soil Mechanics	10
BUSM 3077	Construction Project Management	10
Select one elective		10
	Credit Points	40
Spring session		
CIVL 3017	Construction Scheduling	10
ENGR 3014	Engineering Science Project 2	10
CIVL 2002	Environmental Engineering	10
Select one elective		10
	pe Level 2 or higher (an exception applies ompleting Mathematics for Engineers oject)	
Industrial Experien	ce	
ENGR 2033	Industrial Experience (Engineering Technologist)	0
	Credit Points	40
	Total Credit Points	240

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

Mid-year intake

Mid-year intak	(e	
Course	Title	Credit Points
Year 1		i onits
Spring session		
Select one of the f	ollowing:	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
ELEC 1003	Electrical Fundamentals	10
	Credit Points	40
Autumn session		
Select one of the f	following:	10
MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
MECH 2003	Mechanics of Materials	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
	Credit Points	40
Year 2		-
Spring session		
CIVL 2007	Introduction to Structural Engineering	10
BLDG 2001	Building Estimates and Tendering	10
ENGR 2016	Pavement Materials and Design	10
ENGR 3029	Specialisation Workshop 1	10
ENGIT 0025	Credit Points	40
Autumn session	orealt i onito	40
CIVL 1001	Surveying for Engineers	10
ELEC 1006	Engineering Computing	10
BLDG 2002	Building Measurement	10
ENGR 3030	Specialisation Workshop 2	10
	Credit Points	40
Year 3	orealt i onito	40
Spring session		
CIVL 3017	Construction Scheduling	10
CIVL 2002	Environmental Engineering	10
ENGR 3013	Engineering Science Project 1	10
Select one elective		10
	must be level 2 or higher (an exception	10
-	ts completing Mathematics for Engineers	
Preliminary subject		
	Credit Points	40
Autumn session		
CIVL 2012	Soil Mechanics	10
BUSM 3077	Construction Project Management	10
Select one elective	· · · · · · · · · · · · · · · · · · ·	10
ENGR 3014	Engineering Science Project 2	10
Industrial Experier		
ENGR 2033	Industrial Experience (Engineering	0
	Technologist)	
	Credit Points	40
	Total Credit Points	240
	. Juli Ordan i Ollito	270

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

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
ENGR 1024	Introduction to Engineering Practice	10
Business Core Su	bject 1	10
	Credit Points	40
Spring session		
MATH 1019	Mathematics for Engineers 2	10
PROC 1008	Introduction to Materials Engineering	10
Business Core Su	bject 3	10
Business Core Su	bject 4	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 1006	Engineering Computing	10
Business Core Su	bject 4	10
Business Professi	onal Subject 1	10
Business Professi	onal Subject 2	10
	Credit Points	40
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major S	ubject 1	10
Business Major S	ubject 2	10
	Credit Points	40
Year 3		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	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
Business Major S	ubject 3	10

BLDG 2001	Building Estimates and Tendering	10
	Credit Points	40
Year 4		
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10
Business Major Sub	ject 4	10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
CIVL 3017	Construction Scheduling	10
Business Major Sub	ject 5	10
Industry Experience		
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
BLDG 4007	Modern Construction Projects	10
	Credit Points	40
Spring session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20
CIVL 4016	Envelope and Services	10
Business Major Sub	ject 6	10
	Credit Points	40
Year 6		
Spring session		
Business Major Sub	ject 7	10
Business Profession	al Subject 3	10
Business Profession	al Subject 4	10
Business Major Sub	ject 8	10
	Credit Points	40
	Total Credit Points	440

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
ENGR 1024	Introduction to Engineering Practice	10
Business Core Subject 1		10
	Credit Points	40
Autumn session		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10
Business Core Subject 2		10

Business Core Sub	oject 3	10
	Credit Points	40
Year 2		
Spring session		
ELEC 1003	Electrical Fundamentals	10
ENGR 1018	Fundamentals of Mechanics	10
Business Core Sub	ject 4	10
Business Major Su	ıbject 1	10
	Credit Points	40
Autumn session		
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	10
Business Major Su	ıbject 2	10
Business Profession	onal Subject 1	10
	Credit Points	40
Year 3		
Spring session		
ENGR 2016	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
BLDG 2001	Building Estimates and Tendering	10
Business Major Su	ıbject 3	10
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3002	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10
CIVL 2012	Soil Mechanics	10
	Credit Points	40
Year 4		
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
CIVL 3017	Construction Scheduling	10
Business Major Su	_	10
,	Credit Points	40
Autumn session		
ELEC 1006	Engineering Computing	10
CIVL 1001	Surveying for Engineers	10
Business Major Su		10
Business Profession		10
Industrial Experien	-	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 5	orealt i onits	40
Spring session		
ENGR 4041	Final Year Project 1 (UG Engineering)	20
	Envelope and Services	10
	Envelope and Services	
CIVL 4016 Rusiness Major Su	ihiect 6	10
Business Major Su		
Business Major Su	bject 6 Credit Points	
Business Major Su Autumn session	Credit Points	40
Business Major Su Autumn session ENGR 4042	Credit Points Final Year Project 2 (UG Engineering)	40 20
Business Major Su Autumn session	Credit Points	10 40 20 10

Year 6

Spring session

Total Credit Points	440
Credit Points	40
Business Major Subject 8	10
Business Professional Subject 4	10
Business Professional Subject 3	10
Business Major Subject 7	

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) (3740)

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

CIVL 3014

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 fol	lowing:	10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
Select one of the fol	lowing:	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
ELEC 1003	Electrical Fundamentals	10
	Credit Points	40
Year 2		
Autumn session		
CIVL 1001	Surveying for Engineers	10
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	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
BLDG 2001	Building Estimates and Tendering	10
Select one elective of	or Major subject	10
	Credit Points	40
Year 3		
Autumn session		

Structural Analysis

10

	Total Credit Points	320
	Credit Points	40
Select one elective	ve or Major subject	10
ENGR 4042	Final Year Project 2 (UG Engineering)	20
CIVL 4016	Envelope and Services	10
Spring session		
	Credit Points	40
BLDG 4008	Digital Construction	10
ENGR 4041	Final Year Project 1 (UG Engineering)	20
BLDG 4007	Modern Construction Projects	10
Autumn session		
Year 4		
	Credit Points	40
One elective or M		10
CIVL 3007	Engineering Geomechanics	10
CIVL 3017	Construction Scheduling	10
CIVL 3012	Steel Structures	10
Spring session	oreant rounts	
One elective of W	Credit Points	40
One elective or M		10
CIVL 3002	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10

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

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

Mid-year intake

wiid year iiitak	ic .	
Course	Title	Credit Points
Year 1		
Spring session		
Select one of the f	ollowing:	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 f	ollowing:	10
MATH 1019	Mathematics for Engineers 2	
MATH 1016	Mathematics for Engineers 1	
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
BLDG 2001	Building Estimates and Tendering	10
ENGR 2016	Pavement Materials and Design	10
ELEC 1003	Electrical Fundamentals	10
	Credit Points	40

Autumn session		
CIVL 3014	Structural Analysis	10
BLDG 2002	Building Measurement	10
CIVL 2012	Soil Mechanics	10
CIVL 1001	Surveying for Engineers	10
	Credit Points	40
Year 3		
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 3007	Engineering Geomechanics	10
Select one elective o	r Major subject	10
	Credit Points	40
Autumn session		
BUSM 3077	Construction Project Management	10
CIVL 3002	Concrete Structures (UG)	10
Select one elective or Major subject		10
Select one elective or Major subject		10
Industrial Experience	2	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
ENGR 4041	Final Year Project 1 (UG Engineering)	20
CIVL 4016	Envelope and Services	10
Select one elective o	r Major subject	10
	Credit Points	40
Autumn session		
ENGR 4042	Final Year Project 2 (UG Engineering)	20
BLDG 4007	Modern Construction Projects	10
BLDG 4008	Digital Construction	10
	Credit Points	40
	Total Credit Points	320

Equivalent Subjects

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

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

Related Programs

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