CONSTRUCTION ENGINEERING, TESTAMUR MAJOR (T132)

Western Sydney University Major Code: T132

Previous Code: MT3052.1

Available to students in other Western Sydney University programs? No

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	Students who fail to maintain a minimum GPA of 5.0 at the end	
Parramatta Campus - Victoria Road	Internal	Program Advice (edbe@westernsydney.ed	of completion of 160 Credit Points, and again at the completion ^U of 200 Credit points will be automatically transferred to the B.	
Parramatta City Campus-Macquarie Street	Internal	Program Advice (edbe@westernsydney.ed	Engineering (Honours) (3740) program. u.au) Credit Points	40
Penrith Campus	Internal	Program Advice (edbe@westernsydney.ed	Autumn session	

Recommended Sequence

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
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
PROC 1008	Introduction to Materials Engineering	10
Select one elective		10
Elective must be	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 (Honour	s) (3740) program.	
	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 subjec		10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
	Construction Scheduling	10
	Engineering Geomechanics	10
One Alternate subjec		10
Industrial Experience		0
ENGR 3017	Industrial Experience (Engineering)	0
Maran A	Credit Points	40
Year 4		
Autumn session	Advented Engineering Thesis 1.	10
ENGR 4037	Preliminary Investigations	10
BLDG 4007	Modern Construction Projects	10
One Alternate subject	t	10
Select one elective		10
Elective subjects	must be Level 2 or higher	
	Credit Points	40
Spring session		
ENGR 4036	Advanced Engineering Thesis 2: Detailed Investigations	10
CIVL 4016	Envelope and Services	10
One Alternate subject	-	
one / atemate oubjee	t	10
Select one elective	t	10 10

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Elective subjects must be Level 2 of higher	
Credit Points	40
Total Credit Points	320

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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	Title	Credit
		Points
BLDG 4006	Modern Construction Enterprises	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

Construction Economics, Minor (https://hbook.westernsydney.edu.au/ archives/2022-2023/majors-minors/construction-economics-minor/) Structures, Minor (https://hbook.westernsydney.edu.au/ archives/2022-2023/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	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		
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 m	nust 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	e (level 2 or higher)	10
Students who fail	to maintain a minimum GPA of 5.0 at the end	
of completion of 1	60 Credit Points, and again at the completion	
Engineering (Hono	s will be automatically transferred to the B.	
	Credit Points	40
Vear 3	orean rolling	40
Spring session		
	Steel Structures	10
	Construction Scheduling	10
	Envelope and Services	10
One Alternate subi	Envelope and Services	10
One Alternate Subj		10
A	Credit Points	40
Autumn session		10
	Surveying for Engineers	10
BUSM 3077	Construction Project Management	10
CIVL 3002	Concrete Structures (UG)	10
One Alternate subj	ect	10
Industrial Experier		0
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
ENGR 4037	Advanced Engineering Thesis 1: Preliminary Investigations	10
CIVL 3007	Engineering Geomechanics	10
One Alternate subj	ect	10
Select one elective	2	10
Elective unit m	ust be Level 2 or higher	
	Ore dit De inte	46
A	Great Points	40
Autumn session		10

Investigations

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BLDG 4007	Modern Construction Projects	10
One Alternate subjec	t	10
Select one elective		10
Elective unit mus	t 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	Title C P	redit oints
BLDG 4006	Modern Construction Enterprises	10
The following sub students who are subject can be ta permission is req	pject 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/ archives/2022-2023/majors-minors/construction-economics-minor/) Structures, Minor (https://hbook.westernsydney.edu.au/ archives/2022-2023/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

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.

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		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective		10
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
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
BLDG 4007	Modern Construction Projects	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
 Elective mus 	t be Level 2 or higher	
Industrial Experie	ence	
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

Course	Title	Credit Points
Year 1		
Spring session		
Select one of the fo	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 fo	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
Select one elective		10
Elective unit m	ust 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

	Total Credit Points	240
	Credit Points	40
ENGR 2033	Industrial Experience (Engineering Technologist)	0
Industrial Experience	e	
ENGR 3014	Engineering Science Project 2	10
BLDG 4007	Modern Construction Projects	10
BUSM 3077	Construction Project Management	10
CIVL 2012	Soil Mechanics	10
Autumn session	Credit Points	40
*Elective subjects m applies for students Preliminary subject)	ust be level 2 or higher (an exception completing Mathematics for Engineers	
Select one elective		10
ENGR 3013	Engineering Science Project 1	10
CIVL 2002	Environmental Engineering	10
CIVL 3017	Construction Scheduling	10
Spring session		
Veer 2	Credit Points	40
ENGR 3030	Specialisation Workshop 2	10
BLDG 2002	Building Measurement	10
ELEC 1006	Engineering Computing	10
CIVL 1001	Surveying for Engineers	10
Autumin session		

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

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

Start-year intake

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

Spring session		
MATH 1019	Mathematics for Engineers 2	10
PROC 1008	Introduction to Materials Engineering	10
Business Core Sub	vject 3	10
Business Core Sub	vject 4	10
	Credit Points	40
Year 2		
Autumn session		
ELEC 1006	Engineering Computing	10
Business Professio	onal Subject 1	10
Business Professio	onal Subject 2	10
Business Major Su	ibject 1	10
	Credit Points	40
Spring session		
BLDG 1014	Non-Residential Building	10
ENGR 1018	Fundamentals of Mechanics	10
Business Major Su	ibject 2	10
Business Major Su	ıbject 3	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
CIVI 2007	Introduction to Structural Engineering	10
BLDG 2001	Building Estimates and Tendering	10
CIVI 3017	Construction Scheduling	10
	Credit Points	40
Vear 4		-10
Autumn session		
	Structural Analysis	10
	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10
Business Major Su	biect A	10
	Credit Points	10
Spring session	orealt i onita	
	Steel Structures	10
	Engineering Geomechanics	10
Business Major Su	chighteening Geomechanics	10
Business Major Su	ibject 6	10
Busiliess Major Su	Credit Pointo	10
Veer F	Credit Points	40
Autumn session		10
ENGR 4025	Final Year Project I (UG Engineering)	10
BLDG 4007	Modern Construction Projects	10
Business Professio	onal Subject 3	10
Business Major Su		10
	Credit Points	40
Spring session		
CIVL 4016	Envelope and Services	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
Business Profession	onal Subject 4	10

Industrial Experience (Engineering)

Credit Points

Business Major Subject 8

Industrial Experience

ENGR 3017

CIVL 2007

BLDG 2001

CIVL 3017

CIVL 3014

CIVL 3002

BUSM 3077

CIVL 2012

Spring session CIVL 3012

Year 4

Autumn session

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	Total Credit Points	400
Equivalent Subj	ects	
The subjects list students who pa	ed below count towards completion of this pr ssed these subjects in Autumn 2022 or earlie	ogram for r.
ENGR 1008 - Eng Introduction to N	ineering Materials, replaced by PROC 1008 - laterials Engineering	
Mid-year inta	ike	
Course	Title	Credit Points
Year 1		
Spring session		
MATH 1016	Mathematics for Engineers 1	10
PROC 1008	Introduction to Materials Engineering	10
Business Core S	ubject 1	10
Business Core S	ubject 2	10
	Credit Points	40
Autumn session		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10
Business Core S	ubject 3	10
Business Core S	ubject 4	10
	Credit Points	40
Year 2		
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
Business Profes	sional Subject 1	10
Business Profes	sional Subject 2	10
Business Major S	Subject 1	10
	Credit Points	40
Autumn session		
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	10
Business Major S	Subject 2	10
Business Major S	Subject 3	10
	Credit Points	40
Year 3		
Spring session		
ENGR 2016	Pavement Materials and Design	10

Introduction to Structural Engineering

Building Estimates and Tendering

Construction Project Management

Construction Scheduling

Concrete Structures (UG)

Credit Points

Structural Analysis

Soil Mechanics

Steel Structures

Credit Points

CIVL 3007	Engineering Geomechanics	10
Business Major Subject 4		10
BLDG 1014	Non-Residential Building	10
	Credit Points	40
Autumn session		
CIVL 1001	Surveying for Engineers	10
Business Major S	Subject 5	10
Business Major S	Subject 6	10
ELEC 1006	Engineering Computing	10
	Credit Points	40
Year 5		
Spring session		
ENGR 4025	Final Year Project 1 (UG Engineering)	10
CIVL 4016	Envelope and Services	10
Business Profess	sional Subject 3	10
Business Major S	Subject 7	10
	Credit Points	40
Autumn session		
ENGR 4026	Final Year Project 2 (UG Engineering)	10
BLDG 4007	Modern Construction Projects	10
Business Profess	sional Subject 4	10
Business Major S	Subject 8	10
Industrial Experie	ence	
ENGR 3017	Industrial Experience (Engineering)	0
	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

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 Points
Year 1		i onto
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		
Select one of the following:		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	e	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	5	10
*Elective subjects	must be level 2 or higher (an exception	
applies for studen Preliminary subjec	ts completing Mathematics for Engineers ct)	
	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	ject	10
	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	5	10
*Elective subjects	must be level 2 or higher (an exception	
applies for studen Preliminary subject	ts completing Mathematics for Engineers ct)	
	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	2	10
*Elective subjects	must be level 2 or higher (an exception	
applies for studen	ts completing Mathematics for Engineers	
Preliminary subject	ct)	
Industrial Experier	nce	
ENGR 3017	Industrial Experience (Engineering)	0
	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

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 following:		
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
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 mus	t 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

	oreun ronnos	40
Year 3		
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 4016	Envelope and Services	10
One Alternate su	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 subject		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		10
One Alternate subject		10
Elective unit	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 election	ve	10
One Alternate subject		10
Elective unit	must be Level 2 or higher	
Industrial Experie	ence	

ENGR 3017	Industrial Experience (Engineering)	0
	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

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/archives/2022-2023/programs/bachelorengineering-science/)