# 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	S
Parramatta Campus - Victoria Road	Internal	Program Advice (edbe@westernsydney.e	0
Parramatta City Campus-Macquarie Street	Internal	Program Advice (edbe@westernsydney.e	E edu.a
Penrith Campus	Internal	Program Advice (edbe@westernsydney.e	

# **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 b	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
<ul> <li>Elective subject</li> </ul>	ts must be level 2 or higher	

	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.	
Engineering (Honours) (3740) program.			
lu	i.au)	Credit Points	40
	Year 3		
łu	Autumn session		
	CIVI 3014	Structural Analysis	10

rear o		
Autumn session		
CIVL 3014	Structural Analysis	10
BUSM 3077	Construction Project Management	10
CIVL 3002	Concrete Structures (UG)	10
One Alternate subject	et	10
	Credit Points	40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 3007	Engineering Geomechanics	10
One Alternate subject		10
Industrial Experience	e	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Autumn session		
ENGR 4037	Advanced Engineering Thesis 1: Preliminary Investigations	10

# Autumn session ENGR 4037 Advanced Engineering Thesis 1: 10 Preliminary Investigations BLDG 4007 Modern Construction Projects 10 One Alternate subject 10 Select one elective 10 • Elective subjects must be Level 2 or higher Credit Points 40

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

Elective 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
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	litle	Credit Points
BLDG 4006	Modern Construction Enterprises	10
students who are subject can be ta	bject is an optional elective subject offered to e engaged in a School approved project. This liken during the third year of this program, how juired to enrol in the subject.	ever,

10

#### **Minors**

**ENGR 3022** 

Construction Economics, Minor (https://hbook.westernsydney.edu.au/archives/2021-2022/majors-minors/construction-economics-minor/) Structures, Minor (https://hbook.westernsydney.edu.au/archives/2021-2022/majors-minors/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

#### 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 electiv		10
Elective unit n	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
	to maintain a minimum GPA of 5.0 at the end	
•	160 Credit Points, and again at the completion	
	nts will be automatically transferred to the B. ours) (3740) program.	
Liigineeniig (Hone	Credit Points	40
Year 3	Great Folits	40
Spring session		
CIVI 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 4016	Envelope and Services	10
One Alternate sub	·	10
	Credit Points	40
Autumn session		
CIVL 1001	Surveying for Engineers	10
BUSM 3077	Construction Project Management	10
CIVL 3002	Concrete Structures (UG)	10
One Alternate sub	pject	10
<b>Industrial Experie</b>	nce	
ENGR 3017	Industrial Experience (Engineering)	0
	Credit Points	40
Year 4		
Spring session		
ENGR 4037	Advanced Engineering Thesis 1:	10
00// 0007	Preliminary Investigations	
CIVL 3007	Engineering Geomechanics	10
One Alternate sub	•	10
Select one electiv		10
• Elective unit i	nust be Level 2 or higher	
	Credit Points	40
Autumn session		
ENGR 4036	Advanced Engineering Thesis 2: Detailed Investigations	10
	the transfer of the transfer o	10
BLDG 4007	Modern Construction Projects	10

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One Alternate subject	10
Select one elective	10
Elective unit 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
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**

optional mootile		
Subject	Title	Credit Points
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, howe uired to enrol in the subject.	ver,
ENGR 3022	Special Technical Project	10

#### Minors

Construction Economics, Minor (https://hbook.westernsydney.edu.au/ archives/2021-2022/majors-minors/construction-economics-minor/) Structures, Minor (https://hbook.westernsydney.edu.au/ archives/2021-2022/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.

Title

#### Start-year intake

Course

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		
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective		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
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 Experie		
	t be Level 2 or higher	
Select one elective	ve	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

mia-year intai	ke	
Course	Title	Credit Points
Year 1		
Spring session		
Select one of the f	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 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
Select one elective	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	<b>Building Estimates and Tendering</b>	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		
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 Experien	ice	
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

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 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 Sul		10
Business Core Sul		10
V0	Credit Points	40
Year 2 Autumn session		
	For min a comin or Octoor white or	1,
ELEC 1006	Engineering Computing	10
Business Professi	•	10
Business Professi	•	1(
Business Major St	Credit Points	10
Curium accaiem	Credit Points	40
Spring session BLDG 1014	Non Decidential Duilding	10
ENGR 1018	Non-Residential Building Fundamentals of Mechanics	10
Business Major St Business Major St		10
Business Major Si	Credit Points	40
Year 3	Credit Points	40
Autumn session		
CIVL 1001	Curveying for Engineers	10
MECH 2003	Surveying for Engineers  Mechanics of Materials	10
BLDG 2002	Building Measurement	10
CIVL 2012	Soil Mechanics	
CIVE 2012	Credit Points	10
Curium accaiem	Credit Points	40
Spring session ENGR 2016	Davament Materials and Davign	1.0
	Pavement Materials and Design	10
CIVL 2007	Introduction to Structural Engineering	10
BLDG 2001 CIVL 3017	Building Estimates and Tendering	10
CIVE 3017	Construction Scheduling  Credit Points	10
Year 4	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3014	Concrete Structures (UG)	10
BUSM 3077	Construction Project Management	10
Business Major St	· · · · · ·	10
business iviajor si	Credit Points	40
Spring session	Credit Follits	40
CIVL 3012	Steel Structures	10
CIVL 3007	Engineering Geomechanics	10
Business Major Si	<u> </u>	10
Business Major Si		10
Dusiness Major St	Credit Points	40
Year 5	Credit Foliits	
Autumn session		
ENGR 4025	Final Year Project 1 (UG Engineering)	10
BLDG 4007		10
	Modern Construction Projects	
Business Professi Business Major St	-	10
Dusiness Major St	Credit Points	40
Spring coccion	Great Folits	40
Spring session	Envolone and Comices	1.4
CIVL 4016	Envelope and Services	10
ENGR 4026	Final Year Project 2 (UG Engineering)	10
Business Professi	-	10
Business Major St	ubject 8	10
Industrial Experie		

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

#### Mid-year intake

Course	Title	Credit Points
Year 1		Folits
Spring session		
MATH 1016	Mathematics for Engineers 1	10
PROC 1008	Introduction to Materials Engineering	10
Business Core Subje		10
Business Core Subje	ect 2	10
	Credit Points	40
Autumn session		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1011	Engineering Physics	10
Business Core Subje	ect 3	10
Business Core Subje	ect 4	10
	Credit Points	40
Year 2		
Spring session		
ENGR 1018	Fundamentals of Mechanics	10
<b>Business Profession</b>	al Subject 1	10
Business Profession	al Subject 2	10
Business Major Sub	ect 1	10
	Credit Points	40
Autumn session		
MECH 2003	Mechanics of Materials	10
BLDG 2002	Building Measurement	10
Business Major Sub	iect 2	10
Business Major Sub	iect 3	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
CIVL 3017	Construction Scheduling	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
Business Major Sub	ect 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 Profes	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
<b>Business Profes</b>	sional Subject 4	10
Business Major S	Subject 8	10
Industrial Experi	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		
Autumn session		
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
Select one of the following:		10
MATH 1021	Mathematics for Engineers Preliminary	
MATH 1016	Mathematics for Engineers 1	
	Credit Points	40
Spring session		
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		10
	Credit Points	40

applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026 One Alternate subj Select one elective *Elective subjects	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering)  ect e must be level 2 or higher (an exception ts completing Mathematics for Engineers ett)	4 32
applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026 One Alternate subj Select one elective *Elective subjects applies for student Preliminary subject Industrial Experien	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering)  ect  must be level 2 or higher (an exception ts completing Mathematics for Engineers et)  ice Industrial Experience (Engineering)	1 1 1 1
applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026 One Alternate subj Select one elective *Elective subjects applies for student Preliminary subject Industrial Experien	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering) ect ect must be level 2 or higher (an exception ts completing Mathematics for Engineers et)	1 1 1
applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026 One Alternate subj Select one elective *Elective subjects applies for student Preliminary subject	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering)  ect e must be level 2 or higher (an exception ts completing Mathematics for Engineers ett)	1 1
applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026 One Alternate subj Select one elective *Elective subjects applies for student	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering) ect ect must be level 2 or higher (an exception ts completing Mathematics for Engineers	1 1
applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026 One Alternate subj Select one elective	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering) ect	1 1
applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026 One Alternate subj	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering)	1
applies for student Preliminary subject Spring session CIVL 4016 ENGR 4026	Credit Points  Envelope and Services Final Year Project 2 (UG Engineering)	1
applies for student Preliminary subject Spring session CIVL 4016	Credit Points  Envelope and Services	
applies for student Preliminary subject Spring session	Credit Points	4
applies for student	·	4
applies for student	t)	
	must be level 2 or higher (an exception ts completing Mathematics for Engineers	
Select one elective		1
One Alternate subj		1
ENGR 4025	Final Year Project 1 (UG Engineering)	1
BLDG 4007	Modern Construction Projects	1
Autumn session		
Year 4		
	Credit Points	4
One Alternate subj	ect	1
CIVL 3007	Engineering Geomechanics	1
CIVL 3017	Construction Scheduling	1
CIVL 3012	Steel Structures	1
Spring session		
	Credit Points	4
One Alternate subj	ect	1
CIVL 3002	Concrete Structures (UG)	1
BUSM 3077	Construction Project Management	1
CIVL 3014	Structural Analysis	1
Autumn session		
Year 3		
	Credit Points	4
Preliminary subject	ts completing Mathematics for Engineers t)	
-	must be level 2 or higher (an exception	
Select one elective		1
BLDG 2001	Building Estimates and Tendering	1
CIVL 2007	Introduction to Structural Engineering	1
ENGR 2016	Pavement Materials and Design	1
Spring session		
	Credit Points	4
CIVL 2012	Soil Mechanics	1
BLDG 2002	Building Measurement	1
	Mechanics of Materials	1
MECH 2003	Surveying for Engineers	
	O	1
Autumn session CIVL 1001 MECH 2003	Our and a few Familia and	1

#### **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
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 m	ust be Level 2 or higher	
	Credit Points	40
Autumn session		
CIVL 3014	Structural Analysis	10
	Duilding Manauramant	
BLDG 2002	Building Measurement	10
CIVL 2012	Soil Mechanics	10
CIVL 2012 Select one elective	Soil Mechanics	
CIVL 2012 Select one elective	Soil Mechanics	10
CIVL 2012 Select one elective	Soil Mechanics ust be Level 2 or higher	10 10
CIVL 2012 Select one elective • Elective unit m	Soil Mechanics	10
CIVL 2012 Select one elective • Elective unit m	Soil Mechanics ust be Level 2 or higher	10 10
CIVL 2012 Select one elective • Elective unit m  Year 3 Spring session	Soil Mechanics ust be Level 2 or higher Credit Points	10 10
CIVL 2012 Select one elective • Elective unit m  Year 3 Spring session CIVL 3012	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures	10 10 <b>40</b>
CIVL 2012 Select one elective • Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling	10 10 40
CIVL 2012 Select one elective • Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services	10 10 40 10 10
CIVL 2012 Select one elective • Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect	10 10 40 10 10 10
CIVL 2012 Select one elective • Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services	10 10 40 10 10
CIVL 2012 Select one elective • Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect Credit Points	10 10 40 10 10 10 10 40
CIVL 2012 Select one elective Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures  Construction Scheduling  Envelope and Services ect  Credit Points  Surveying for Engineers	10 10 40 10 10 10 40
CIVL 2012 Select one elective     Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001 CIVL 3002	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect Credit Points  Surveying for Engineers Concrete Structures (UG)	10 10 40 10 10 10 40
CIVL 2012 Select one elective     Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001 CIVL 3002 BUSM 3077	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect  Credit Points  Surveying for Engineers Concrete Structures (UG) Construction Project Management	10 10 40 10 10 10 40 10 10
CIVL 2012 Select one elective     Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001 CIVL 3002	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect  Credit Points  Surveying for Engineers Concrete Structures (UG) Construction Project Management ect	10 10 10 10 10 10 40 10 10
CIVL 2012 Select one elective Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001 CIVL 3002 BUSM 3077 One Alternate subj	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect  Credit Points  Surveying for Engineers Concrete Structures (UG) Construction Project Management	10 10 40 10 10 10 40 10 10
CIVL 2012 Select one elective Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001 CIVL 3002 BUSM 3077 One Alternate subj  Year 4	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect  Credit Points  Surveying for Engineers Concrete Structures (UG) Construction Project Management ect	10 10 10 10 10 10 40 10 10
CIVL 2012 Select one elective Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001 CIVL 3002 BUSM 3077 One Alternate subj  Year 4 Spring session	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect  Credit Points  Surveying for Engineers Concrete Structures (UG) Construction Project Management ect  Credit Points	10 10 10 10 10 10 40 10 10 10 40
CIVL 2012 Select one elective Elective unit m  Year 3 Spring session CIVL 3012 CIVL 3017 CIVL 4016 One Alternate subj  Autumn session CIVL 1001 CIVL 3002 BUSM 3077 One Alternate subj  Year 4	Soil Mechanics  ust be Level 2 or higher  Credit Points  Steel Structures Construction Scheduling Envelope and Services ect  Credit Points  Surveying for Engineers Concrete Structures (UG) Construction Project Management ect	10 10 10 10 10 10 40 10 10

Select one elective	10
One Alternate subject	10
. Elective unit must be Level 2 or higher	

· 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 elective		10
One Alternate subject	et	10
Elective unit mu	st be Level 2 or higher	

Elective unit must be Level 2 or higher

Industrial Experi	ence	
ENGR 3017	Industrial Experience (Engineering)	0
	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/archives/2021-2022/programs/bachelorengineering-science/)