

CONSTRUCTION, TESTAMUR MAJOR (T034)

Western Sydney University Major Code: T034

Previous Codes: KT3153.1, KT3155.1, ST3067.1, KT3166

Available to students in other Western Sydney University programs?
No

Select the link for your program below for the locations of your major

- Bachelor of Engineering (Honours)
- Bachelor of Engineering Science
- Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills)/Bachelor of Engineering Science
- Diploma in Engineering/Bachelor of Engineering Studies

Location

Campus	Mode	Advice
Parramatta City Campus	Internal	beng@westernsydney.edu.au
Penrith Campus	Internal	beng@westernsydney.edu.au

- Graduate Diploma in Project Management
- Graduate Diploma in Project Management (exit only)
- Master of Project Management

Location

Campus	Mode	Advice
Parramatta City Campus-Macquarie Street	Internal	Xiaohua (Sean) Jin (https://directory.westernsydney.edu.au/search/email/xiaohua.jin@westernsydney.edu.au)

Recommended Sequence

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

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.

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

The readiness test will be conducted at the beginning of the first semester of enrolment and the result will be used to determine whether a student will remain in MATH 1021 Mathematics for Engineers Preliminary or be transferred by the School to MATH 1016 Mathematics for Engineers 1

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

Full-time 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		
MATH 1019	Mathematics for Engineers 2	10
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
Select one elective (any level)		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		10
<ul style="list-style-type: none"> • Elective subjects must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary unit) 		
Credit Points		40
Year 3		
Autumn session		
CIVL 3014	Structural Analysis	10
BUSM 3077	Construction Project Management	10
CIVL 3002	Concrete Structures (UG)	10
Minor Alternate Subject		10
Credit Points		40
Spring session		
CIVL 3012	Steel Structures	10
CIVL 3017	Construction Scheduling	10
CIVL 3007	Engineering Geomechanics	10
Minor Alternate Subject		10
Industrial Experience		
ENGR 3017	Industrial Experience (Engineering)	0
Credit Points		40

Year 4**Autumn session**

BLDG 4009	Residential Building Project	10
ENGR 4025	Final Year Project 1 (UG Engineering)	10
Minor Alternate Subject		10
Select one elective		10
*Elective subjects must be level 2 or higher (an exception applies for students 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
Minor Alternate Subject		10
Select one elective		10
*Elective subjects must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary subject)		
Credit Points		40

Total Credit Points **320**

Minor Alternate Subjects

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

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

Minors

Structures, Minor (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/structures-minor/>)
Construction Economics, Minor (<https://hbook.westernsydney.edu.au/archives/2022-2023/majors-minors/construction-economics-minor/>)

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 Science**Full-time start-year intake**

Course	Title	Credit Points
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		

Industrial Experience

ENGR 3017	Industrial Experience (Engineering)	0
Credit Points		40

Year 3**Autumn session**

CIVL 3014	Structural Analysis	10
CIVL 3003	Construction Planning	10
ENGR 3013	Engineering Science Project 1	10
CIVL 4003	Construction Technology 5 (Envelope)	10
Credit Points		40

Spring session

CIVL 3012	Steel Structures	10
BUSM 3061	Project Management	10
ENGR 3014	Engineering Science Project 2	10
Select one elective		10
*Elective subjects must be level 2 or higher		
Credit Points		40

Total Credit Points **160**

Optional Elective

The following subject is an optional elective subject offered to students who are engaged in a School approved project. This subject can be taken during the third year of this major, 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 major for students who passed these subjects in 2019 or earlier.

GEOM 2001 - Quantity Surveying 1

BLDG 2010 - Estimating 1

- Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills)/Bachelor of Engineering Science
- Diploma in Engineering/Bachelor of Engineering Studies

Full-time start-year intake

Course	Title	Credit Points
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
MATH 1019	Mathematics for Engineers 2	10
Industrial Experience		
ENGR 3017	Industrial Experience (Engineering)	0
Credit Points		40
Year 3		
Autumn session		
CIVL 3014	Structural Analysis	10
CIVL 3003	Construction Planning	10
ENGR 3013	Engineering Science Project 1	10
CIVL 4003	Construction Technology 5 (Envelope)	10
Credit Points		40
Spring session		
CIVL 3012	Steel Structures	10
BUSM 3061	Project Management	10
ENGR 3014	Engineering Science Project 2	10
Select one elective		10
*Elective subjects must be level 2 or higher		
Credit Points		40
Total Credit Points		160

Optional Elective

The following subject is an optional elective subject offered to students who are engaged in a School approved project. This subject can be taken during the third year of this major, 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 major for students who passed these subjects in 2019 or earlier.

GEOM 2001 - Quantity Surveying 1
BLDG 2010 - Estimating 1

Postgraduate Project Management programs 2018 - 2022

Graduate Diploma in Project Management (3786)

Graduate Diploma in Project Management (exit only) (3760)

Master of Project Management (3752)

Postgraduate Major Structure

Subject	Title	Credit Points
Management Subjects - these subjects are offered in Quarter 2 and Quarter 4		
Select three of the following:		30
BUSM 7018	Contemporary People Management	
ACCT 7015	Financial Reports for Decision Making	
BUSM 7040	Governance, Ethics and Social Entrepreneurship	
BUSM 7065	Managing in the Global Context	
BUSM 7086	Strategic Business Management	
BUSM 7092	Supply Chain Management	
Construction Subjects		
Select three of the following:		30
BLDG 7001	Advanced Contract Management	
CIVL 7007	Advanced Timber Structures	
CIVL 7008	Advanced Waste Management	

BLDG 7002	Building Regulations	
ARCH 7001	Developing Sustainable Places	
ARCH 7020	Cool Green Cities	
BLDG 5001	Construction Claims	
PUBH 7007	Disaster and Emergency Management (PG)	
BLDG 7006	Financing Cities in the Global Economy	
BLDG 7007	Interpreting Building Regulations (Residential Buildings)	
ARCH 7004	Planning and Development Control	
ENVL 7002	Planning and Environmental Regulation	
PUBH 7023	Safe and Sustainable Construction	
INFO 7019	Smart Construction	
From 2022 INFS 7005 Smart Construction is replaced by INFO 7019 Smart Construction		
Total Credit Points		60

Equivalent Subjects

The subjects listed below count towards completion of this major for students who passed these subjects in 2021 or earlier.

INFS 7005 - Smart Construction replaced by INFO 7019 Smart Construction

Postgraduate Project Management programs from 2023

Graduate Diploma in Project Management (3786)

Graduate Diploma in Project Management (exit only) (3760)

Master of Project Management (3752)

Postgraduate Major Structure

Subject	Title	Credit Points
Management Subjects - these subjects are offered in Quarter 2 and Quarter 4		
Select three of the following:		30
BUSM 7018	Contemporary People Management	
ACCT 7015	Financial Reports for Decision Making	
BUSM 7040	Governance, Ethics and Social Entrepreneurship	
BUSM 7065	Managing in the Global Context	
BUSM 7086	Strategic Business Management	
BUSM 7092	Supply Chain Management	
Construction Subjects		
Students in Pathway A, B and C must complete the following three subjects		
BLDG 7001	Advanced Contract Management	
INFO 7019	Smart Construction	
PUBH 7023	Safe and Sustainable Construction	
Total Credit Points		30

Students in Pathway A Research (Testamur major stream) complete 40 credit points of Research subjects and Pathway C Work Placement (Testamur major stream) complete 40 credit points of WIL subjects as noted in the 3752 program structure.

Students in Pathway B - Coursework (Testamur major stream) must also complete 40 credit points from the following subject list

Subject	Title	Credit Points
Select four of the following:		40
CIVL 7007	Advanced Timber Structures	
CIVL 7008	Advanced Waste Management	
BLDG 7002	Building Regulations	
ARCH 7001	Developing Sustainable Places	
ARCH 7020	Cool Green Cities	
BLDG 5001	Construction Claims	
PUBH 7007	Disaster and Emergency Management (PG)	
BLDG 7006	Financing Cities in the Global Economy	
BLDG 7007	Interpreting Building Regulations (Residential Buildings)	
ARCH 7004	Planning and Development Control	
ENVL 7002	Planning and Environmental Regulation	
ENGR 7020	Sustainability and Risk Engineering (PG)	

Related Programs

Bachelor of Engineering (Honours) (3740) (<https://hbook.westernsydney.edu.au/archives/2022-2023/programs/bachelor-engineering-honours/>)

Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills)/Bachelor of Engineering Science (6046) (<https://hbook.westernsydney.edu.au/archives/2022-2023/programs/diploma-aerotropolis-industry-40-mechatronics-skillsbachelor-engineering-science/>)

Diploma in Engineering/Bachelor of Engineering Studies (6033) (<https://hbook.westernsydney.edu.au/archives/2022-2023/programs/diploma-engineering-bachelor-engineering-studies/>)

Graduate Diploma in Project Management (3786) (<https://hbook.westernsydney.edu.au/archives/2022-2023/programs/graduate-diploma-project-management/>)

Master of Project Management (3752) (<https://hbook.westernsydney.edu.au/archives/2022-2023/programs/master-project-management/>)