

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	Credit Points
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Parramatta City Internal beng@westernsydney.edu.au

Campus 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	Credit Points
Parramatta City Campus-Macquarie Street	Internal	Xiaohua (Sean) Jin (https://directory.westernsydney.edu.au/search/email/xiaohua.jin@westernsydney.edu.au)	40

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
• 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		CIVL 2012	Soil Mechanics	10																												
Autumn session		Credit Points		40																												
BLDG 4009	Residential Building Project	10	Spring session																													
ENGR 4025	Final Year Project 1 (UG Engineering)	10	ENGR 2016	Pavement Materials and Design																												
Minor Alternate Subject		10	CIVL 2007	Introduction to Structural Engineering																												
Select one elective		10	BLDG 2001	Building Estimates and Tendering																												
*Elective subjects must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary subject)		Select one elective <ul style="list-style-type: none"> Elective subjects must be level 2 or higher 		10																												
Credit Points		40	Industrial Experience																													
Spring session		Credit Points		0																												
CIVL 4016	Envelope and Services	10	ENGR 3017	Industrial Experience (Engineering)																												
ENGR 4026	Final Year Project 2 (UG Engineering)	10	Credit Points																													
Minor Alternate Subject		10	Year 3																													
Select one elective		10	Autumn session																													
*Elective subjects must be level 2 or higher (an exception applies for students completing Mathematics for Engineers Preliminary subject)		CIVL 3014 Structural Analysis		10																												
Credit Points		40	CIVL 3003 Construction Planning	10																												
Total Credit Points		320	ENGR 3013 Engineering Science Project 1	10																												
Minor Alternate Subjects		CIVL 4003 Construction Technology 5 (Envelope)		10																												
Minor Alternate Subjects may be used to complete one of the minors listed below.		Credit Points		40																												
Subject	Title	Credit Points	Spring session																													
CIVL 4001	Applied Mechanics	10	CIVL 3012	Steel Structures																												
CIVL 3021	Bridge Engineering Design	10	BUSM 3061	Project Management																												
CIVL 4002	Composite Structures	10	ENGR 3014	Engineering Science Project 2																												
CIVL 3010	Highway Infrastructure	10	Select one elective	10																												
CIVL 4008	Pile Foundations	10	*Elective subjects must be level 2 or higher																													
CIVL 4009	Timber Structures (UG)	10	Credit Points																													
BLDG 3004	Construction Information Systems	10	Total Credit Points																													
BLDG 3010	Building Cost Studies	10	160																													
GEOM 3001	Advanced Building Measurement	10	Optional Elective																													
BLDG 3009	Quality and Value Management	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 major, however, permission is required to enrol in the subject.																													
Minors		ENGR 3022 Special Technical Project																														
Structures, Minor (https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/structures-minor/)		Equivalent Subjects																														
Construction Economics, Minor (https://hbook.westernsydney.edu.au/archives/2023-2024/majors-minors/construction-economics-minor/)		The subjects listed below count towards completion of this major for students who passed these subjects in 2019 or earlier.																														
Equivalent Subjects		GEOM 2001 - Quantity Surveying 1																														
The subjects listed below count towards completion of this program for students who passed these subjects in Autumn 2022 or earlier.		BLDG 2010 - Estimating 1																														
ENGR 1008 - Engineering Materials, replaced by PROC 1008 - Introduction to Materials Engineering		- Diploma in Aerotropolis Industry 4.0 (Mechtronics Skills)/Bachelor of Engineering Science																														
Bachelor of Engineering Science		- Diploma in Engineering/Bachelor of Engineering Studies																														
Full-time start-year intake		Full-time start-year intake																														
Course	Title	Credit Points																														
Year 2		Credit Points		Credit Points																												
Autumn session		Year 2																														
CIVL 1001	Surveying for Engineers	10	Autumn session																													
MECH 2003	Mechanics of Materials	10	BLDG 2002	Building Measurement	10	CIVL 1001	Surveying for Engineers	BLDG 2002	Building Measurement	10	MECH 2003	Mechanics of Materials	Credit Points		10	BLDG 2002	Building Measurement	Spring session		Credit Points		10	ENGR 2016 Pavement Materials and Design		CIVL 2007 Introduction to Structural Engineering		10	CIVL 2007 Introduction to Structural Engineering				
BLDG 2002	Building Measurement	10	CIVL 1001	Surveying for Engineers																												
BLDG 2002	Building Measurement	10	MECH 2003	Mechanics of Materials																												
Credit Points		10	BLDG 2002	Building Measurement																												
Spring session		Credit Points		10																												
ENGR 2016 Pavement Materials and Design		CIVL 2007 Introduction to Structural Engineering		10																												
CIVL 2007 Introduction to Structural Engineering																																

BLDG 2001	Building Estimates and Tendering	10	BLDG 7002	Building Regulations
MATH 1019	Mathematics for Engineers 2	10	ARCH 7001	Developing Sustainable Places
Industrial Experience			ARCH 7020	Cool Green Cities
ENGR 3017	Industrial Experience (Engineering)	0	PUBH 7007	Disaster and Emergency Management (PG)
	Credit Points	40	BLDG 7006	Financing Cities in the Global Economy
Year 3			BLDG 7007	Interpreting Building Regulations (Residential Buildings)
Autumn session			ARCH 7004	Planning and Development Control
CIVL 3014	Structural Analysis	10	ENVL 7002	Planning and Environmental Regulation
CIVL 3003	Construction Planning	10	PUBH 7023	Safe and Sustainable Construction
ENGR 3013	Engineering Science Project 1	10	INFO 7019	Smart Construction
CIVL 4003	Construction Technology 5 (Envelope)	10		From 2022 INF 7005 Smart Construction is replaced by INFO 7019 Smart Construction
	Credit Points	40		
Spring session				Total Credit Points 60
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	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			
30			
BLDG 7001	Advanced Contract Management		
INFO 7019	Smart Construction		
PUBH 7023	Safe and Sustainable Construction		
Total Credit Points 60			
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			
Select four of the following:			
40			
BLDG 7001	Advanced Contract Management		
CIVL 7007	Advanced Timber Structures		
CIVL 7008	Advanced Waste Management		

CIVL 7008	Advanced Waste Management	ENVL 7002	Planning and Environmental Regulation
BLDG 7002	Building Regulations	ENGR 7020	Sustainability and Risk Engineering (PG)
ARCH 7001	Developing Sustainable Places	Total Credit Points	80
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)		

Master of Project Management 2025

Pathway A - Research (Specialisation stream)

Subject	Title	Credit Points	
Students must complete the following 30 credit points			
PUBH 7023	Safe and Sustainable Construction	10	
BLDG 7001	Advanced Contract Management	10	
INFO 7019	Smart Construction	10	
Select 10 credit points from the following		10	
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)		
Total Credit Points			40

Pathway B – Coursework (Specialisation stream)

Subject	Title	Credit Points	
Students must complete the following 30 credit points			
PUBH 7023	Safe and Sustainable Construction	10	
BLDG 7001	Advanced Contract Management	10	
INFO 7019	Smart Construction	10	
Select 50 credit points from the following		50	
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)		
Total Credit Points			0

Related Programs

Bachelor of Engineering (Honours) (3740) (<https://hbook.westernsydney.edu.au/archives/2023-2024/programs/bachelor-engineering-honours/>)

Diploma in Aerotropolis Industry 4.0 (Mechatronics Skills)/Bachelor of Engineering Science (6046) (<https://hbook.westernsydney.edu.au/archives/2023-2024/programs/diploma-aerotropolis-industry-40-mechatronics-skillsbachelor-engineering-science/>)

Diploma in Engineering/Bachelor of Engineering Studies (6033)
(<https://hbook.westernsydney.edu.au/archives/2023-2024/programs/diploma-engineering-bachelor-engineering-studies/>)

Graduate Diploma in Project Management (3786) (<https://hbook.westernsydney.edu.au/archives/2023-2024/programs/graduate-diploma-project-management/>)

Master of Project Management (3752) (<https://hbook.westernsydney.edu.au/archives/2023-2024/programs/master-project-management/>)