



**Bachelor of Engineering (Honours)**  
**New Student Advising Guide**  
**Sydney City Campus Trimester 2 2026**

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## Bachelor of Engineering (Honours)

### 2026 New Student Advising Guide

This Advising Guide has been specifically created for new students enrolled in a Bachelor of Engineering (Honours) in Trimester 2 2026 at Western Sydney University, Sydney City Campus to help them successfully plan out their subjects for 2026.

This guide provides students with details of the Subjects they will need to study to complete their Program. Each key program (Civil, Mechanical, and Electrical) is divided into 3 sections;

1. **Program structure:** subjects divided into categories (e.g. Core, Major and Elective).
2. **Subjects per Trimester 2026:** subjects available each trimester in 2026 and trimester 1 in 2027.
3. **Recommended sequence:** advice on what subjects to enrol into each trimester in 2026 and trimester 1 in 2027.

#### Study load options

Fulltime study:	Students should select 3 subjects per Trimester (International students are required to study a full-time load)
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Part-time study:	Students should select 1-2 subjects per Trimester
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Accelerated study:	Students should select 4 subjects per Trimester*
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#### Subject prerequisites and assumed knowledge

Students should check the [online handbook](#) entry for more Subject information including prerequisites, subject levels and assumed knowledge.

#### Transfer Credit

Students who have received Transfer Credit for previous study should make sure they take into account which subjects they have been granted credit for, before selecting their subjects to study at Sydney City Campus. Students with Advanced Standing (or Transfer Credit) who have questions about which subjects to select can also contact the Engineering Program Convenors by major below.

Dr Eileen An (**Civil Engineering** Major Program Convenor): [E.An@city.westernsydney.edu.au](mailto:E.An@city.westernsydney.edu.au)

Dr Ehsan Gatavi (**Electrical Engineering** Major Program Convenor): [E.Gatavi@city.westernsydney.edu.au](mailto:E.Gatavi@city.westernsydney.edu.au)

Mr Peter Lendrum (**Mechanical Engineering** Major Program Convenor): [P.Lendrum@city.westernsydney.edu.au](mailto:P.Lendrum@city.westernsydney.edu.au)

Students can also contact the following email: [engineering@city.westernsydney.edu.au](mailto:engineering@city.westernsydney.edu.au)

For more assistance you can also make an appointment at Sydney City Campus reception to meet with a Student Adviser or via their online booking system <https://calendly.com/student-services-teams>  
Alternatively, you can contact them at [studentservices@city.westernsydney.edu.au](mailto:studentservices@city.westernsydney.edu.au)

For electives, students can use the [online handbook](#) to search for other undergraduate subjects available at the Sydney City Campus for each trimester.



## Program Structure

Qualification for this award requires the successful completion of 320 credit points (a subject is 10cp) made up of the following Core, Major, Elective and Minor subjects.

### Core Subjects (80 credit points)

- MATH 1016 Mathematics for Engineers 1 (see note below)
- ELEC 1006 Engineering Computing
- ENGR 1011 Engineering Physics
- ENGR 1024 Introduction to Engineering Practice
- ENGR 1018 Fundamentals of Mechanics
- PROC 1008 Introduction to Materials Engineering
- ELEC 1003 Electrical Fundamentals
- MATH 1019 Mathematics for Engineers 2

Note: All students undertaking the Bachelor of Engineering (Honours) are required to enrol in **MATH 1021 Mathematics for Engineers Preliminary** and can choose to undertake a readiness test at the beginning of their study. The readiness test will be conducted at the beginning of the first Trimester 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. For students that complete MATH 1021 Mathematics for Engineers Preliminary, this subject will replace an elective subject in the Program.

The following pages show the Program structures for each of the Majors offered at Sydney City Campus.



## **Civil Engineering Major**

### **Civil Engineering Major subjects (200 credit points)**

CIVL 1001 Surveying for Engineers  
MECH 2003 Mechanics of Materials  
CIVL 2002 Environmental Engineering  
CIVL 2003 Fluid Mechanics  
CIVL 2007 Introduction to Structural Engineering  
CIVL 2012 Soil Mechanics  
ENGR 2016 Pavement Materials and Design  
CIVL 3011 Hydraulics  
CIVL 3014 Structural Analysis  
CIVL 4017 Surface Water Hydrology  
CIVL 3002 Concrete Structures (UG)  
CIVL 3012 Steel Structures  
CIVL 3007 Engineering Geomechanics  
ENGR 3020 Numerical Methods in Engineering  
BLDG 4008 Digital Construction  
ENGR 4035 Smart and Liveable Cities  
ENGR 4041 Final Year Project 1 (UG Engineering)  
ENGR 4042 Final Year Project 2 (UG Engineering)  
ENGR 3017 Industrial Experience (Engineering) (zero (0) credit point Subject)\*

### **Elective/ Minor subjects (40 credit points)**

Four (4) elective Subjects or Four (4) Minor subjects

Note: Electives must be Level 2 or higher (An exception applies for students completing MATH 1021 Mathematics for Engineers Preliminary. This subject will then count as one of the elective subjects)

\* Students are advised to enrol in Industrial Experience (ENGR3017) subject every session (from their third session onwards) until they complete the internship.



## Civil subjects on offer in next 3 trimesters in 2026 and 2027

Trimester 2 2026	Trimester 3 2026	Trimester 1 2027
MATH 1021 Mathematics for Engineers Preliminary	MATH 1021 Mathematics for Engineers Preliminary	MATH 1021 Mathematics for Engineers Preliminary
MATH 1016 Mathematics for Engineers 1	MATH 1016 Mathematics for Engineers 1	MATH 1016 Mathematics for Engineers 1
ELEC 1006 Engineering Computing	ENGR 1011 Engineering Physics	PROC 1008 Introduction to Materials Engineering
ENGR 1011 Engineering Physics	ENGR 1018 Fundamentals of Mechanics	ENGR 1018 Fundamentals of Mechanics
ENGR 1024 Introduction to Engineering Practice	ELEC 1003 Electrical Fundamentals	ELEC 1003 Electrical Fundamentals
MATH 1019 Mathematics for Engineers 2	MATH 1019 Mathematics for Engineers 2	MATH 1019 Mathematics for Engineers 2
MECH 2003 Mechanics of Materials	CIVL 1001 Surveying for Engineers	MECH 2003 Mechanics of Materials
CIVL 2003 Fluid Mechanics	MECH 2003 Mechanics of Materials	ENGR 2016 Pavement Materials and Design
CIVL 2012 Soil Mechanics	CIVL 2003 Fluid Mechanics	CIVL 2007 Introduction to Structural Engineering
CIVL 3014 Structural Analysis	CIVL 2007 Introduction to Structural Engineering	CIVL 3011 Hydraulics
CIVL 4017 Surface Water Hydrology	CIVL 2002 Environmental Engineering	CIVL 3014 Structural Analysis
CIVL 4011 Waste Management	ENGR 3020 Numerical Methods in Engineering	ENGR 3020 Numerical Methods in Engineering
CIVL 3018 Hydrogeology	CIVL 3012 Steel Structures	ENGR 4035 Smart and Liveable Cities
ENGR 4041 Final Year Project 1 (UG Engineering)	CIVL 3002 Concrete Structures (UG)	BLDG 4008 Digital Construction
ENGR 4042 Final Year Project 2 (UG Engineering)	ENGR 4041 Final Year Project 1 (UG Engineering)	ENGR 4041 Final Year Project 1 (UG Engineering)
ENGR 3017 Industrial Experience (Engineering)	ENGR 4042 Final Year Project 2 (UG Engineering)	ENGR 4042 Final Year Project 2 (UG Engineering)
	ENGR 3017 Industrial Experience (Engineering)	ENGR 3017 Industrial Experience (Engineering)

**The delivery mode is on campus face-to-face unless otherwise stated.**

**The subjects on offer in the above plan may be subject to change.**



## Recommended subjects for New Civil Engineering students in Trimester 2 and 3, 2026 and Trimester 1, 2027

### Trimester 2 2026

*MATH 1021 or MATH 1016	*Mathematics for Engineers Preliminary or Mathematics for Engineers 1
ELEC 1006	Engineering Computing
ENGR 1011	Engineering Physics

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

ENGR 1024	Introduction to Engineering Practice
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\* Students first enrol into MATH1021 and will receive information about the Maths Readiness Test from announcements on the subject's vUWS site closer to the beginning of the trimester (more information on page 3 of this document).

### Trimester 3 2026

MATH 1016 or MATH 1019	Mathematics for Engineers 1 or Mathematics for Engineers 2
ELEC 1003	Electrical Fundamentals
ENGR 1018	Fundamentals of Mechanics

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

CIVL 1001	Surveying for Engineers
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### Trimester 1 2027

MECH 2003	Mechanics of Materials
CIVL 2007	Introduction to Structural Engineering
ENGR 2016	Pavement Materials and Design

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

	Elective Subject (Level 2 or higher)
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Student may also consider taking the following subject if not already completed:

MATH 1019	Mathematics for Engineers 2
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For more tailored advice, please contact the Program Convenor for your major.



## **Mechanical Engineering Major**

### **Mechanical Engineering Major subjects (200 credit points)**

MECH 2001 Kinematics and Kinetics of Machines  
MECH 2003 Mechanics of Materials  
CIVL 2003 Fluid Mechanics  
ENGR 2035 Modern Digital Design and Development  
MECH 3004 Dynamics of Mechanical Systems  
ENGR 2001 Automated Manufacturing  
MECH 3008 Thermodynamics and Heat Transfer  
MECH 3002 Advanced Mechanics of Materials  
MECH 3005 Mechanical Design  
MECH 3001 Advanced Dynamics  
PROC 2003 Materials Selection and Design  
MECH 3007 Thermal and Fluid Engineering  
MECH 3006 Mechatronic Design  
MECH 4001 Computational Fluid Dynamics  
MECH 4004 Robotics  
MECH 4002 Computer Aided Engineering  
ENGR 4041 Final Year Project 1 (UG Engineering)  
ENGR 4042 Final Year Project 2 (UG Engineering)  
ENGR 3017 Industrial Experience (Engineering) (zero (0) credit point Subject)\*

### **Elective/ Minor subjects (40 credit points)**

Four (4) elective Subjects or Four (4) Minor subjects

Note: Electives must be Level 2 or higher (An exception applies for students completing MATH 1021 Mathematics for Engineers Preliminary. This subject will then count as one of the elective subjects)

\* Students are advised to enrol in Industrial Experience (ENGR3017) subject every session (from their session 3 onwards) until they complete the internship.



## Mechanical subjects on offer in next 3 trimesters in 2026 and 2027

Trimester 2 2026	Trimester 3 2026	Trimester 1 2027
MATH 1021 Mathematics for Engineers Preliminary	MATH 1021 Mathematics for Engineers Preliminary	MATH 1021 Mathematics for Engineers Preliminary
MATH 1016 Mathematics for Engineers 1	MATH 1016 Mathematics for Engineers 1	MATH 1016 Mathematics for Engineers 1
MATH 1019 Mathematics for Engineers 2	MATH 1019 Mathematics for Engineers 2	MATH 1019 Mathematics for Engineers 2
ELEC 1006 Engineering Computing	ENGR 1018 Fundamentals of Mechanics	ENGR 1018 Fundamentals of Mechanics
ENGR 1011 Engineering Physics	ENGR 1011 Engineering Physics	PROC 1008 Introduction to Materials Engineering
ENGR 1024 Introduction to Engineering Practice	ELEC 1003 Electrical Fundamentals	ELEC 1003 Electrical Fundamentals
MECH 2003 Mechanics of Materials	MECH 3008 Thermodynamics and Heat Transfer	MECH 3004 Dynamics of Mechanical Systems
CIVL 2003 Fluid Mechanics	CIVL 2003 Fluid Mechanics	ENGR 2001 Automated Manufacturing
ENGR 2035 Modern Digital Design and Development	MECH 2003 Mechanics of Materials	MECH 2001 Kinematics and Kinetics of Machines
MECH 3005 Mechanical Design	MECH 4002 Computer Aided Engineering	MECH 2003 Mechanics of Materials
MECH 3001 Advanced Dynamics	MECH 3006 Mechatronic Design	MECH 3008 Thermodynamics and Heat Transfer
PROC 2003 Materials Selection and Design	MECH 2001 Kinematics and Kinetics of Machines	MECH 3002 Advanced Mechanics of Materials
MECH 4001 Computational Fluid Dynamics	MECH 4004 Robotics	MECH 3007 Thermal and Fluid Engineering
MECH 4003 Mobile Robotics	ENGR 4041 Final Year Project 1 (UG Engineering)	ENGR 4041 Final Year Project 1 (UG Engineering)
ENGR 2024 Design Graphics: Communication for Manufacture	ENGR 4042 Final Year Project 2 (UG Engineering)	ENGR 4042 Final Year Project 2 (UG Engineering)
ENGR 4041 Final Year Project 1 (UG Engineering)	ENGR 3017 Industrial Experience (Engineering)	ENGR 3017 Industrial Experience (Engineering)
ENGR 4042 Final Year Project 2 (UG Engineering)		
ENGR 3017 Industrial Experience (Engineering)		

**The delivery mode is on campus face-to-face unless otherwise stated.**

**The subjects on offer in the above plan may be subject to change.**



## Recommended subjects for New Mechanical Engineering students in Trimester 2 and 3, 2026 and Trimester 1, 2027

### Trimester 2 2026

*MATH 1021 or MATH 1016	*Mathematics for Engineers Preliminary or Mathematics for Engineers 1
ELEC 1006	Engineering Computing
ENGR 1011	Engineering Physics

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

ENGR 1024	Introduction to Engineering Practice
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\* Students first enrol into MATH1021 and will receive information about the Maths Readiness Test from announcements on the subject's vUWS site closer to the beginning of the trimester (more information on page 3 of this document).

### Trimester 3 2026

MATH 1016 or MATH 1019	Mathematics for Engineers 1 or Mathematics for Engineers 2
ELEC 1003	Electrical Fundamentals
ENGR 1018	Fundamentals of Mechanics

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

	Elective Subject (Level 2 or higher)
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### Trimester 1 2027

MECH 2003	Mechanics of Materials
PROC 1008	Introduction to Materials Engineering
MECH 2001	Kinematics and Kinetics of Machines

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

	Elective Subject (Level 2 or higher)
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Student may also consider taking the following subject if not already completed:

MATH 1019	Mathematics for Engineers 2
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For more tailored advice, please contact the Program Convenor for your major.



## **Electrical Engineering Major**

### **Electrical Engineering Major subjects (200 credit points)**

ELEC 2001 Circuit Theory  
ELEC 2004 Electronics  
ELEC 2011 Signals and Systems  
ELEC 1001 Digital Systems 1  
ELEC 2009 Microprocessor Systems  
ELEC 2006 Engineering Electromagnetics  
ELEC 3011 Power and Machines  
ENGR 3006 Control Systems  
ELEC 3001 Communication Systems  
ELEC 3006 Electrical Machines 1  
ELEC 2007 Engineering Visualisation  
ELEC 3002 Data Communications  
ELEC 3003 Digital Signal Processing  
ELEC 3004 Digital Systems 2  
ELEC 4002 Power Electronics  
ELEC 4009 Instrumentation and Measurement  
ENGR 4041 Final Year Project 1 (UG Engineering)  
ENGR 4042 Final Year Project 2 (UG Engineering)  
ENGR 3017 Industrial Experience (Engineering) (zero credit point Subject)\*

### **Elective/ Minor subjects (40 credit points)**

Four (4) elective Subjects or Four (4) Minor subjects

Note: Electives must be Level 2 or higher (An exception applies for students completing MATH 1021 Mathematics for Engineers Preliminary. This subject will then count as one of the elective subjects)

\* Students are advised to enrol in Industrial Experience (ENGR3017) subject every session (from their session 3 onwards) until they complete the internship.



## Electrical subjects on offer in next 3 trimesters in 2026 and 2027

Trimester 2 2026	Trimester 3 2026	Trimester 1 2027
MATH 1021 Mathematics for Engineers Preliminary	MATH 1021 Mathematics for Engineers Preliminary	MATH 1021 Mathematics for Engineers Preliminary
MATH 1016 Mathematics for Engineers 1	MATH 1016 Mathematics for Engineers 1	MATH 1016 Mathematics for Engineers 1
MATH 1019 Mathematics for Engineers 2	MATH 1019 Mathematics for Engineers 2	MATH 1019 Mathematics for Engineers 2
ELEC 1006 Engineering Computing	ENGR 1018 Fundamentals of Mechanics	ENGR 1018 Fundamentals of Mechanics
ENGR 1011 Engineering Physics	ENGR 1011 Engineering Physics	PROC 1008 Introduction to Materials Engineering
ENGR 1024 Introduction to Engineering Practice	ELEC 1003 Electrical Fundamentals	ELEC 1003 Electrical Fundamentals
ELEC 1001 Digital Systems 1	ELEC 1001 Digital Systems 1	ELEC 2009 Microprocessor Systems
ELEC 2004 Electronics	ELEC 2001 Circuit Theory	ELEC 2006 Engineering Electromagnetics
ELEC 2001 Circuit Theory	ELEC 2011 Signals and Systems	ELEC 3003 Digital Signal Processing
ELEC 2011 Signals and Systems	ELEC 2007 Engineering Visualization	ELEC 3011 Power and Machines
ELEC 3001 Communication Systems	ELEC 3002 Data Communications	ENGR 3006 Control Systems
ELEC 3006 Electrical Machines 1	ELEC 3004 Digital Systems 2	ELEC 4009 Instrumentation and Measurements
ENGR 4041 Final Year Project 1 (UG Engineering)	ELEC 3011 Power and Machines	ENGR 4041 Final Year Project 1 (UG Engineering)
ENGR 4042 Final Year Project 2 (UG Engineering)	ELEC 4002 Power Electronics	ENGR 4042 Final Year Project 2 (UG Engineering)
ENGR 3017 Industrial Experience (Engineering)	ENGR 4041 Final Year Project 1 (UG Engineering)	ENGR 3017 Industrial Experience (Engineering)
	ENGR 4042 Final Year Project 2 (UG Engineering)	
	ENGR 3017 Industrial Experience (Engineering)	

**The delivery mode is on campus face-to-face unless otherwise stated.**

**The subjects on offer in the above plan may be subject to change.**



## Recommended subjects for New Electrical Engineering students in Trimester 2 and 3, 2026 and Trimester 1, 2027

### Trimester 2 2026

*MATH 1021 or MATH 1016	*Mathematics for Engineers Preliminary or Mathematics for Engineers 1
ELEC 1006	Engineering Computing
ELEC 1001	Digital Systems 1

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

ENGR 1024	Introduction to Engineering Practice
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\* Students first enrol into MATH1021 and will receive information about the Maths Readiness Test from announcements on the subject's vUWS site closer to the beginning of the trimester (more information on page 3 of this document).

### Trimester 3 2026

MATH 1016 or MATH 1019	Mathematics for Engineers 1 or Mathematics for Engineers 2
ELEC 1003	Electrical Fundamentals
ENGR 1011	Engineering Physics

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

ENGR 1018	Fundamentals of Mechanics
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### Trimester 1 2027

ELEC 2009	Microprocessor Systems
PROC 1008	Introduction to Materials Engineering
	Elective Subject (Level 2 or higher)

If a student wants to accelerate the program, they may enrol in the 4<sup>th</sup> subject as below:

ELEC 2006	Engineering Electromagnetics
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Student may also consider taking the following subject if not already completed:

MATH 1019	Mathematics for Engineers 2
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For more tailored advice, please contact the Program Convenor for your major.