

# BACHELOR OF ENGINEERING (HONOURS)/BACHELOR OF BUSINESS (3800)

**Effective from:** 2024

**Approved Abbreviation:** BEng(Hons)/BBus

**Western Sydney University Program Code:** 3800

**AQF Level:** 8

**CRICOS Code:** 113851F

This program applies to students who commenced in 2024 or later.

Students should follow the program structure for the session start date relevant to the year they commenced.

For commencement Year 2022, please refer to: 3728 Bachelor of Engineering (Honours)/Bachelor of Business (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-honours-bachelor-business/>)

## Handbook Summary 2024 - 2025

The Bachelor of Engineering (Honours)/Bachelor of Business double degree permits students to undertake multi-skilling and offers diverse career paths, providing high marketability in multiple engineering and business areas. The Engineering degree provides students with professional skills in each of the eight key areas students choose to study. The eight engineering Majors are Advanced Manufacturing, Civil, Construction, Electrical, Materials, Mechanical, Robotics & Mechatronics, and Sustainability Engineering. Depending on the Business Major selected, employment possibilities are available in conventional engineering industries and also in areas including Applied Finance, Economics, Human Resource Management, International Business, Management, Marketing, Sport Management and Business Analytics. Graduates will be equipped to work as engineers, with a good understanding of business principles and practices.

Engineers Australia accredits the engineering component of this program whereas the business component is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

## Handbook Summary 2026

The Bachelor of Engineering (Honours)/Bachelor of Business double degree permits students to undertake multi-skilling and offers diverse career paths, providing high marketability in multiple engineering and business areas. The Engineering degree provides students with professional skills in each of the eight key areas students choose to study. The eight engineering Majors are Advanced Manufacturing, Civil, Construction, Electrical, Materials, Mechanical, Robotics & Mechatronics, and Sustainability Engineering. Depending on the Business Major selected, employment possibilities are available in conventional engineering industries and also in areas including Applied Finance and FinTech, Economics, Human Resource Management, International Business, Management, Marketing and MarTech, Sport Management and Business Analytics. Graduates will be equipped to work as engineers, with a good understanding of business principles and practices.

Engineers Australia accredits the engineering component of this program whereas the business component is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

## Study Mode

Five and a half years full-time or eleven years part-time. The Bachelor of Engineering (Honours) is offered on Penrith and Parramatta City

Campuses. The Bachelor of Business offers a number of its majors at Bankstown, Campbelltown and Parramatta City campuses. Students may be required to travel between campuses in order to complete their subjects.

## Program Advice

Program advice ([edbe@westernsydney.edu.au](mailto:edbe@westernsydney.edu.au))

Prospective students should visit the following websites for general enquiries about this program.

Enquire about this program (<https://enquiry.westernsydney.edu.au/courseenquiry/>) | Local Admission (<https://www.westernsydney.edu.au/future/>) | International Admission (<https://www.westernsydney.edu.au/international/home/apply/admissions/>) |

## Location

Campus	Attendance	Mode	Advice
Bankstown City Campus	Full Time	Internal	See above
Bankstown City Campus	Part Time	Internal	See above
Campbelltown Campus	Full Time	Internal	See above
Campbelltown Campus	Part Time	Internal	See above
Parramatta City Campus	Full Time	Internal	See above
Parramatta City Campus	Part Time	Internal	See above
Penrith Campus	Full Time	Internal	See above
Penrith Campus	Part Time	Internal	See above

## Accreditation

**Bachelor of Engineering (Honours):** This program has full accreditation at the level of Professional Engineer at Penrith campus and Parramatta campus for five majors (Civil, Construction, Electrical, Mechanical and Robotics & Mechatronics).

This program has Provisional accreditation at the level of Professional Engineer at the Penrith and Parramatta campuses for three Majors (Advanced Manufacturing, Materials, and Sustainability).

Graduates of this program are eligible to apply for full membership of Engineers Australia. They are eligible to apply for Chartered Professional Engineering registration upon successful completion of required engineering practice period specified by Engineers Australia.

**Bachelor of Business:** Where the full recommended subject sequence of the major is satisfactorily completed: Human Resource Management is accredited with the Australian Human Resources Institute (AHSI). Applied Finance and FinTech satisfies the educational requirements for membership of the Financial Services Institute of Australasia (Finsia). Marketing and MarTech satisfies the educational requirements for recognition as a Certified Practising Marketer and eligibility for membership of the Australian Marketing Institute (AMI).

## Association to Advance Collegiate Schools of Business (AACSB)

The business component of this program is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

## Inherent Requirements

There are inherent requirements for this program that you must meet in order to complete your program and graduate. Make sure you read and understand the requirements for this program online.

### Engineering

Inherent requirements for Engineering Programs ([https://www.westernsydney.edu.au/ir/inherent\\_requirements/inherent\\_requirements\\_for\\_engineering\\_courses/](https://www.westernsydney.edu.au/ir/inherent_requirements/inherent_requirements_for_engineering_courses/)).

### Business

The School of Business developed a set of Inherent Requirements for the discipline of Accounting as part of a Western Sydney University-wide pilot. These requirements are adopted for all School of Business programs and are available at:

Inherent requirements for Accounting courses ([https://www.westernsydney.edu.au/ir/inherent\\_requirements/inherent\\_requirements\\_for\\_accounting\\_courses/](https://www.westernsydney.edu.au/ir/inherent_requirements/inherent_requirements_for_accounting_courses/))

## Work Integrated Learning

Western Sydney University seeks to enhance student learning experiences by enabling students to engage in the culture, expectations and practices of their profession or discipline. This program includes a placement or other community-based unpaid practical experience.

There is a mandatory work component required for completion of this program. Please contact the Program Advisor listed above for information.

International students should also refer to the link below for more information and a link to the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS).

Work Integrated Learning (WIL) for international students ([https://www.westernsydney.edu.au/currentstudents/current\\_students/services\\_and\\_facilities/international\\_student\\_support/working\\_in\\_australia/work\\_integrated\\_learning/](https://www.westernsydney.edu.au/currentstudents/current_students/services_and_facilities/international_student_support/working_in_australia/work_integrated_learning/))

## Admission

Eligibility for admission to the Bachelor of Engineering (Honours)/ Bachelor of Business is based on the following requirements:

- Assumed Knowledge: HSC Mathematics (Band 5 or higher), any two units of science, any two units of English.
- Recommended studies: Physics, HSC Mathematics Extension 1 or HSC Mathematics Extension 2.
- Practical Experience: A session of industrial experience is required at the end of the third or fourth year.

Applications from Australian and New Zealand citizens and holders of permanent resident visas must be made via the Universities Admissions Centre (UAC). Use the links below to apply via UAC or Western Sydney University. Applications made directly to Western Sydney do not have an application fee.

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local and International applicants who are applying through the Universities Admissions Centre (UAC) will find details of minimum English proficiency requirements and acceptable proof on the UAC website. Local applicants applying directly to the University should also use the information provided on the UAC website.

<http://www.uac.edu.au/>  
<https://westernsydney.uac.edu.au/ws/>

Overseas qualifications must be deemed by the Australian Education International - National Office of Overseas Skills Recognition (AEI-NOOSR) to be equivalent to Australian qualifications in order to be considered by UAC and Western Sydney University.

## Program Structure 2026

This structure applies to students who commenced in 2026 or later. If you commenced prior to 2026, please refer to the relevant Structure tab for details.

Qualification for this award requires the successful completion of 440 credit points.

Students who complete this award will graduate with two testamurs

- Bachelor of Engineering (Honours), with the Bachelor of Engineering major noted on the testamur, and
- Bachelor of Business, with the Bachelor of Business Major noted on the testamur.

## Engineering Component

Students must study 80 credit points of Engineering Foundation subjects plus 200 credit points of Engineering Major Core subjects in one of the Testamur majors.

### Engineering Core Subjects (80 credit points)

Subject	Title	Credit Points
ELEC 1006	Engineering Computing	10
ENGR 1011	Engineering Physics	10
ENGR 1024	Introduction to Engineering Practice	10
ENGR 1018	Fundamentals of Mechanics	10
PROC 1008	Introduction to Materials Engineering	10
ELEC 1003	Electrical Fundamentals	10
MATH 1016	Mathematics for Engineers 1	10
MATH 1019	Mathematics for Engineers 2	10
ENGR 3017	Industrial Experience (Engineering)	0
<b>Total Credit Points</b>		<b>80</b>

### Engineering Testamur Majors

Students are required to complete one of the following Engineering Testamur Majors (200 credit points)

Advanced Manufacturing, Testamur Major (T126) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/advanced-manufacturing-ug-testamur-major/>)

Civil Engineering, Testamur Major (T131) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/civil-engineering-ug-testamur-major/>)

Construction Engineering, Testamur Major (T132) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/construction-engineering-ug-testamur-major/>)

Electrical Engineering, Testamur Major (T102) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/electrical-engineering-ug-testamur-major/>)

Materials Engineering, Testamur Major (T128) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/materials-engineering-ug-testamur-major/>)

Mechanical Engineering, Testamur Major (T103) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mechanical-engineering-ug-testamur-major/>)

Robotics and Mechatronics Engineering, Testamur Major (T104) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/robotics-mechatronics-engineering-ug-testamur-major/>)  
 Sustainability Engineering, Testamur Major (T129) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sustainability-engineering-ug-testamur-major/>)

## Business Component

Students must study 80 credit points of compulsory core subjects plus 80 credit points taken as a Business Testamur major

### Business Core Subjects (compulsory 80 credit points)

Subject	Title	Credit Points	
BUSM 1050	People and Organisations	10	Advanced Manufacturing, Testamur Major (T126) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/advanced-manufacturing-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/advanced-manufacturing-ug-testamur-major/</a> )
FINC 1005	Financial Foundations	10	Civil Engineering, Testamur Major (T131) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/civil-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/civil-engineering-ug-testamur-major/</a> )
MKTG 1014	Marketing in Action	10	Construction Engineering, Testamur Major (T132) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/construction-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/construction-engineering-ug-testamur-major/</a> )
ECON 1016	Evidence-Based Decision Making	10	Electrical Engineering, Testamur Major (T102) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/electrical-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/electrical-engineering-ug-testamur-major/</a> )
BUSM 2050	Digital Transformation for Business	10	Materials Engineering, Testamur Major (T128) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/materials-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/materials-engineering-ug-testamur-major/</a> )
ECON 1017	The Future of Business	10	Mechanical Engineering, Testamur Major (T103) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mechanical-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mechanical-engineering-ug-testamur-major/</a> )
BUSM 1048	Professional Careers and Employability	10	Robotics and Mechatronics Engineering, Testamur Major (T104) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/robotics-mechatronics-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/robotics-mechatronics-engineering-ug-testamur-major/</a> )
BUSM 3084	Professional Business Experience	10	Sustainability Engineering, Testamur Major (T129) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sustainability-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sustainability-engineering-ug-testamur-major/</a> )
<b>Total Credit Points</b>		<b>80</b>	

### Business Testamur Majors

Students are required to complete one of the following Business Testamur Majors (80 credit points).

Applied Finance and FinTech, Testamur Major (T165) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/applied-finance-fintech-testamur-major/>)

Business Analytics, Testamur Major (T130) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/business-analytics-ug-testamur-major/>)

Economics, Testamur Major (T039) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/economics-ug-testamur-major/>)

Human Resource Management, Testamur Major (T041) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/human-resource-management-ug-testamur-major/>)

International Business, Testamur Major (T042) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/international-business-ug-testamur-major/>)

Management, Testamur Major (T043) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/management-ug-pg-testamur-major/>)

Marketing and MarTech, Testamur Major (T166) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/marketing-martech-testamur-major/>)

Sport Management, Testamur Major (T045) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sport-management-ug-testamur-major/>)

## Program Structure 2024-2025

This structure applies to students who commenced in 2024 - 2025. If you commenced in 2026 or later, please refer to the relevant Structure tab for details.

Qualification for this award requires the successful completion of 440 credit points.

Students who complete this award will graduate with two testamurs

- Bachelor of Engineering (Honours), with the Bachelor of Engineering major noted on the testamur, and
- Bachelor of Business, with the Bachelor of Business Major noted on the testamur.

## Engineering Component

Students must study eight Engineering Foundation subjects (80 credit points) followed by 18 Engineering Major Core subjects (200 credit points) in one of the following Bachelor of Engineering (Honours) majors.

Advanced Manufacturing, Testamur Major (T126) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/advanced-manufacturing-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/advanced-manufacturing-ug-testamur-major/</a> )
Civil Engineering, Testamur Major (T131) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/civil-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/civil-engineering-ug-testamur-major/</a> )
Construction Engineering, Testamur Major (T132) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/construction-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/construction-engineering-ug-testamur-major/</a> )
Electrical Engineering, Testamur Major (T102) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/electrical-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/electrical-engineering-ug-testamur-major/</a> )
Materials Engineering, Testamur Major (T128) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/materials-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/materials-engineering-ug-testamur-major/</a> )
Mechanical Engineering, Testamur Major (T103) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mechanical-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/mechanical-engineering-ug-testamur-major/</a> )
Robotics and Mechatronics Engineering, Testamur Major (T104) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/robotics-mechatronics-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/robotics-mechatronics-engineering-ug-testamur-major/</a> )
Sustainability Engineering, Testamur Major (T129) ( <a href="https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sustainability-engineering-ug-testamur-major/">https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sustainability-engineering-ug-testamur-major/</a> )

## Business Component

### Core Subjects (compulsory 40 credit points)

Subject	Title	Credit Points
LAWS 1001	Enterprise Law	10
BUSM 1010	Financing Enterprises	10
BUSM 1006	Enterprise Innovation and Markets	10
BUSM 1008	Enterprise Leadership	10
<b>Total Credit Points</b>		<b>40</b>

### Professional Subjects (choose 40 credit points)

The professional subjects provide a focus on careers. Students are required to complete one subject from each of the four key focus areas: numeracy, career planning, innovation, and enterprise engagement, a total of 40 credit points. Students are advised to choose subjects that will support careers in one of four areas:

- Money (for majors in Applied Finance and Economics),
- Markets (for majors in International Business, Marketing and Sport Management),
- Management (for majors in Human Resource Management and Management),
- Business Analytics (for majors in Business Analytics).

The professional subjects that are recommended for each of the Bachelor of Business testamur majors are specified in the majors.

### **Majors**

Choose 80 credit points from one primary Business major. These are testamur majors.

Use the links below to each Bachelor of Business Major see the list of Core, Professional and Major subjects required. Students should follow the recommended sequence listed under each Bachelor of Engineering (Honours) program via the links above and not the recommended sequence listed under each B Business Major.

#### **Majors for Careers in Money**

Applied Finance, Testamur Major (T038) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/applied-finance-ug-testamur-major/>)

Economics, Testamur Major (T039) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/economics-ug-testamur-major/>)

#### **Majors for Careers in Markets**

International Business, Testamur Major (T042) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/international-business-ug-testamur-major/>)

Marketing, Testamur Major (T044) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/marketing-ug-testamur-major/>)

Sport Management, Testamur Major (T045) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sport-management-ug-testamur-major/>)

#### **Majors for Careers in Management**

Human Resource Management, Testamur Major (T041) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/human-resource-management-ug-testamur-major/>)

Management, Testamur Major (T043) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/management-ug-pg-testamur-major/>)

#### **Majors for Careers in Business Analytics**

Business Analytics, Testamur Major (T130) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/business-analytics-ug-testamur-major/>)