

BACHELOR OF DESIGN AND TECHNOLOGY (3729)

Approved Abbreviation: BDes&Tech

Western Sydney University Program Code: 3729

AQF Level: 7

CRICOS Code: 041034F

This program applies to students who commenced in 2021 or later.

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

For commencement year 2020, please refer to: 3729.3 Bachelor of Design and Technology (<http://handbook.westernsydney.edu.au/hbook/course.aspx?course=3729.3>)

For commencement year 2018-2019, please refer to: 3729.2 Bachelor of Design and Technology (<http://handbook.westernsydney.edu.au/hbook/course.aspx?course=3729.2>)

Handbook Summary 2021 - 2022

The Design and Technology program provides a sound knowledge in a broad range of work-ready design skills, including thinking methods, drawing skills for creativity, design innovation, product design, human factors, design management, and 2D and 3D CAD. This program can lead to multiple career outcomes, including product design, packaging, 3D modelling, rapid prototyping with 3D printing, design for sustainability, new product-oriented Start-Up, or secondary school teaching (with additional qualifications). Fields of Study include Design Practice, Graphic Design, Cultural Studies, UX, Manufacturing, and Sustainable Futures. Students wishing to become industrial designers can articulate in the fourth year of the Bachelor of Industrial Design.

Parts of this course may be taught at the Parramatta City - Hassall St campus or at the Parramatta South campus.

Handbook Summary 2023

The Design and Technology Program is a catalyst for innovation in product design, service design and design for sustainability, drawing together an all-disciplines approach mindset highly valued by employers. It responds flexibly to the varying needs and the power of integrated design for communities, industry, entrepreneurial pursuits and design education.

The Design and Technology degree provides skills development in a broad range of work-ready design skills, including design thinking methods, drawing skills for creativity, design innovation, product design, human factors design, design management, and 2D and 3D CAD with the latest internationally recognised software. Students also work collaboratively in teams and with clients on industry projects whilst utilising the extensive Design Studio and Advanced Prototyping Workshop facilities available to them.

This program prepares students for multiple career outcomes, including product design, packaging, 3D modelling, rapid prototyping with 3D printing, design for sustainability, new product-oriented venture Start-Ups, high-level verbal and visual presentation and if preferred, secondary school teaching with additional WSU qualifications in Master of Teaching (Secondary). Studies are held at the Parramatta Engineering Innovation Hub.

Effective Design career professionals require a broad range of knowledge to allow them to connect and work with colleagues across many disciplines. To assist students to flexibly build their career

pathways, the Bachelor of Design and Technology provides elective options in order to complete a major; or one or two minors; or explore a range of free electives in areas of interest across the university.

Study Mode

Three years full-time or six years part-time.

Program Advice

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
Parramatta City Campus	Full Time	Internal	See above
Parramatta City Campus	Part Time	Internal	See above

Parts of this course may be taught at the Parramatta City - Hassall St campus or at the Parramatta South campus.

Accreditation

Graduates are eligible for membership of the Design Institute of Australia (DIA).

Admission

Assumed knowledge: any two units of English plus at least two units of Design, Design and Technology, Visual Arts, Digital Multimedia, Engineering, or Business Studies

Alternate Entry

Entry by interview in which personal aptitude, experience, and educational qualifications are taken into consideration supported by a portfolio of works. After applicants have applied, they are required to book an interview and download a questionnaire at the University's online booking system. The questionnaire provides applicants further information on how to prepare their portfolio and for the interview.

<https://admissions.westernsydney.edu.au> (<https://admissions.westernsydney.edu.au/>)

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

<http://www.uac.edu.au/>

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

Applicants who have undertaken studies overseas may have to provide proof of proficiency in English. Local 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.

International students currently completing an Australian Year 12 in or outside Australia, an International Baccalaureate in Australia or a New

Zealand National Certificate of Educational Achievement (NCEA) level 3 must apply via UAC International.	ENGR 3026	Design Thinking for Successful Brands and Products	10		
http://www.uac.edu.au/	Select two elective subjects				
All other International applicants must apply directly to the University via the International Office.			20		
Year 3					
Autumn session					
International students applying to the University through the International Office can find details of minimum English proficiency requirements and acceptable proof on their website.	ENGR 4021	Studio: Interdisciplinary Global	10		
International Office (http://www.westernsydney.edu.au/international/)	Select three elective subjects				
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.	Credit Points				
Spring session					
International Office (http://www.westernsydney.edu.au/international/)	ENGR 4022	Studio: Design Synthesis Capstone	10		
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.	Select one capstone subject from the following:				
International Office (http://www.westernsydney.edu.au/international/)	ENGR 2029	Simulation in Virtual and Augmented Realities	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 4019	Start-Up Product Launch	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 3024	Design Research Methods (Advanced)	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 4017	Design Thinking for Competitive Advantage	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 3025	Designing for Circular Economy (Advanced)	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 3028	Mentored Practice in Design Innovation	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 3031	Mentored Practice in Design (Industry)	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 2022	Design Practice: Sustainable Manufacturing	10		
International Office (http://www.westernsydney.edu.au/international/)	ENGR 4016	Design Practice: Sustainable Components	10		
Select two elective subjects			20		
Credit Points			40		
Total Credit Points			240		
Full-time mid-year intake					
Course	Title		Credit Points		
Year 1					
Autumn session					
ENGR 1046	Human Centred Design Research Methods	10			
ENGR 1039	Designing for Circular Economy	10			
ENGR 1043	Co-Designing Change with Local Communities	10			
ENGR 1038	Design Graphics: Presenting Innovation	10			
Credit Points			40		
Spring session					
ENGR 1041	Designing for User Experience (UX)	10			
ENGR 1044	Drawing Skills for Design Thinking	10			
ENGR 1040	Designing for People: Applied Ergonomics	10			
ENGR 2025	Design Graphics: Engineering Documentation	10			
Credit Points			40		
Year 2					
Autumn session					
ENGR 1042	Sustainable Materials and Smart Manufacturing	10			
ENGR 2026	Design Semantics: Exploring Product Form	10			
ENGR 2024	Design Graphics: Communication for Manufacture	10			
Select one elective subject		10			
Credit Points			40		
Spring session					
ENGR 3023	Biomechanics in Product Innovation	10			
ENGR 3026	Design Thinking for Successful Brands and Products	10			
Select two elective subjects		20			
Credit Points			40		
Autumn session					
ENGR 1043	Co-Designing Change with Local Communities	10			

ENGR 1042	Sustainable Materials and Smart Manufacturing	10	Technology Entrepreneurship, Major (0261) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/technology-entrepreneurship-major/)
ENGR 2026	Design Semantics: Exploring Product Form	10	
Select one elective subject		10	
	Credit Points	40	
Year 3			
Spring session			
ENGR 4022	Studio: Design Synthesis Capstone	10	Business Studies for Secondary Teaching, Minor (0139) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/business-studies-secondary-teaching-minor/)
Select one capstone subject from the following:		10	
ENGR 2029	Simulation in Virtual and Augmented Realities		Climate Justice, Minor (0315) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/climate-justice-minor/)
ENGR 4019	Start-Up Product Launch		Design Practice, Minor (0225) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/design-practice-minor/)
ENGR 3024	Design Research Methods (Advanced)		Eco-Socially Conscious Design and Manufacturing, Minor (0310) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/eco-socially-conscious-design-manufacturing-minor/)
ENGR 4017	Design Thinking for Competitive Advantage		Equitable Technologies, Minor (0312) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/equitable-technologies-minor/)
ENGR 3025	Designing for Circular Economy (Advanced)		Global Sustainability, Minor (0196) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/global-sustainability-minor/)
ENGR 3028	Mentored Practice in Design Innovation		Global Workplaces, Minor (0316) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/global-workplaces-minor/)
ENGR 3031	Mentored Practice in Design (Industry)		Humanitarian Action in Practice, Minor (0327) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/humanitarian-action-practice-minor/)
ENGR 2022	Design Practice: Sustainable Manufacturing		Indigenous Australian Studies, Minor (0015) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/indigenous-australian-studies-minor/)
ENGR 4016	Design Practice: Sustainable Components		Innovating, Creating and Problem Solving, Minor (0283) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/innovating-creating-problem-solving-minor/)
Select two elective subjects		20	Innovating For Humans, Minor (0288) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/innovating-humans-minor/)
	Credit Points	40	Migration and Global Change, Minor (0314) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/migration-global-change-minor/)
	Total Credit Points	240	Personal Innovation, Minor (0284) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/personal-innovation-minor/)
			Social Ecology, Minor (0215) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/social-ecology-minor/)
			Sustainable Futures, Minor (0035) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sustainable-futures-minor/)
			Urban Evolution, Minor (0313) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/urban-evolution-minor/)
			Water for Life, Minor (0311) (https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/water-life-minor/)

Minors

Western Sydney University also offers the following innovative transdisciplinary minors which we encourage those students who have elective space to consider or may choose another university wide.

Elective subjects

Students may select their electives from any program offered by the university, provided any requisite requirements are met.

Students may use their 80 credit points of elective subjects to complete a major, or two minors, or suggested Design and Technology electives or university wide electives or a combination of the above.

Two Elective subjects must be Level 3 or above.

Suggested Design and Technology Electives

Subject	Title	Credit Points	
ENGR 3024	Design Research Methods (Advanced)	10	
ENGR 4019	Start-Up Product Launch	10	
ENGR 4017	Design Thinking for Competitive Advantage	10	
ENGR 3025	Designing for Circular Economy (Advanced)	10	
ENGR 3028	Mentored Practice in Design Innovation	10	
ENGR 3031	Mentored Practice in Design (Industry)	10	
ENGR 2022	Design Practice: Sustainable Manufacturing	10	
ENGR 4016	Design Practice: Sustainable Components	10	
Total Credit Points		80	

Recommended Sequence 2021 - 2022

Students may be required to travel to different Western Sydney University campuses to complete the elements of their program.

Majors

Design Practice, Major (0225) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/design-practice-major/>)

Indigenous Australian Studies, Major (0015) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/indigenous-australian-studies-major/>)

Qualification for this award requires the successful completion of 240 credit points which include the subjects listed in the recommended sequence below.

To be eligible to graduate from this program, students are required to complete a minor from the list below.

Students must complete at least 60 credit points at Level 3 or higher.

Parts of these units may be taught at the Parramatta City - Hassall St campus or at the Parramatta South campus.

Start Year Intake

Course	Title	Credit Points		Credit Points
Year 1				
Autumn session				
ENGR 1046	Human Centred Design Research Methods	10	ENGR 1046	Human Centred Design Research Methods
ENGR 1039	Designing for Circular Economy	10	ENGR 1039	Designing for Circular Economy
ENGR 1043	Co-Designing Change with Local Communities	10	ENGR 1038	Design Graphics: Presenting Innovation
ENGR 1038	Design Graphics: Presenting Innovation	10		Credit Points
	Credit Points	40		40
Spring session				
ENGR 1041	Designing for User Experience (UX)	10	ENGR 3023	Biomechanics in Product Innovation
ENGR 1044	Drawing Skills for Design Thinking	10	ENGR 3026	Design Thinking for Successful Brands and Products
ENGR 1040	Designing for People: Applied Ergonomics	10	Select two Major, Minor or Alternate subjects	20
ENGR 2025	Design Graphics: Engineering Documentation	10		Credit Points
	Credit Points	40		40
Year 2				
Autumn session				
ENGR 1042	Sustainable Materials and Smart Manufacturing	10	ENGR 1043	Co-Designing Change with Local Communities
ENGR 2026	Design Semantics: Exploring Product Form	10	ENGR 1042	Sustainable Materials and Smart Manufacturing
ENGR 2024	Design Graphics: Communication for Manufacture	10	ENGR 2026	Design Semantics: Exploring Product Form
Select one Major, Minor or Alternate subject	10	Select one Major, Minor or Alternate subject	10	
	Credit Points	40		Credit Points
Spring session				
ENGR 3023	Biomechanics in Product Innovation	10	ENGR 4022	Studio: Design Synthesis Capstone
ENGR 3026	Design Thinking for Successful Brands and Products	10	ENGR 2029	Simulation in Virtual and Augmented Realities
Select two Major, Minor or Alternate subjects	20	Select two Major, Minor or Alternate subject	20	
	Credit Points	40		Credit Points
Year 3				
Autumn session				
ENGR 4021	Studio: Interdisciplinary Global	10	ENGR 4021	Studio: Interdisciplinary Global
Select three Major, Minor or Alternate subjects	30	Select three Major, Minor or Alternate subjects	30	
	Credit Points	40		Credit Points
			Total Credit Points	240
Autumn Alternate Subject Pool				
Two Alternate subjects must be Level 3 or above.				
Subject	Title		Credit Points	
ENGR 2022	Design Practice: Sustainable Manufacturing	10	VISU 2003	From Ochre to Acrylics to New Technologies
ENGR 2029	Simulation in Virtual and Augmented Realities	10	HUMN 1013	Contextualising Indigenous Australia (Day Mode)
Select two Major, Minor or Alternate subject	20	BUSM 3005	Creating Change and Innovation	
	Credit Points	40	BUSM 3036	Leadership and Entrepreneurship
	Total Credit Points	240		

BEHV 1018	Psychology: Human Behaviour	10
HUMN 3077	Sustainable Futures	10
ENGR 3024	Design Research Methods (Advanced)	10

Spring Alternate Subject Pool

Two Alternate subjects must be Level 3 or above.

Subject	Title	Credit Points
ENGR 3025	Designing for Circular Economy (Advanced)	10
MKTG 2002	Incubator 1: Innovation and Creativity for Entrepreneurship	10
ENGR 3028	Mentored Practice in Design Innovation	10
ENGR 4016	Design Practice: Sustainable Components	10
ENGR 4019	Start-Up Product Launch	10
BLDG 1009	Environmental Building Design	10

Majors and Minors

The Bachelor of Industrial Design is offered at Parramatta City campus only. Students may be required to travel between campuses in order to complete some subjects within specific Majors and Minors.

Majors

Design Practice, Major (0225) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/design-practice-major/>)

Technology Entrepreneurship, Major (0261) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/technology-entrepreneurship-major/>)

Minors

Business Studies for Secondary Teaching, Minor (0139) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/business-studies-secondary-teaching-minor/>)

Construction Economics, Minor (0119) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/construction-economics-concentration/>)

Culture and Society, Minor (0264) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/culture-society-minor/>)

Design Practice, Minor (0225) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/design-practice-minor/>)

Graphic Design, Minor (0073) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/graphic-design-minor/>)

Indigenous Australian Studies, Minor (0015) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/indigenous-australian-studies-minor/>)

Social Ecology, Minor (0215) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/social-ecology-minor/>)

Sustainable Futures, Minor (0035) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/sustainable-futures-minor/>)

Replaced Minors

The minor listed below counts towards completion of this Program for students who began studying this minor prior to the years indicated below.

SM1070 Cultural and Social Analysis, Minor (<http://handbook.westernsydney.edu.au/hbook/specialisation.aspx?unitset=SM1070.1>), replaced by Culture and Society, Minor in 2021 (listed above)