

BIOMEDICAL ENGINEERING, MINOR (0122)

Western Sydney University Minor Code: 0122

Available to students in other Western Sydney University programs?
No

The Biomedical Engineering minor includes elements from the bioelectronics, biomechanical and biomechatronic specialisations. This allows students to undertake multidisciplinary study within engineering, which combines knowledge from electronics, chemical, materials, mechanical and mechatronic engineering with the life sciences of medicine, biology and molecular biology. Graduates will be equipped with professional skills to work in biomedical industry as engineers, with a good understanding of multidisciplinary principles and practices.

Location

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

Minor Structure

This minor is only available to students enrolled in Bachelor of Engineering (Honours) (3740) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-honours/>) and Bachelor of Engineering Advanced (Honours) (3771) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-advanced-honours/>).

Structure 2022 - Autumn 2025

This structure applies to students who commenced from Autumn 2022 - Autumn 2025. If you commenced in Spring 2025 or later, please refer to the relevant Structure for details.

Students must complete 4 subjects as follows.

Subject	Title	Credit Points
HLTH 2003	Biomechanics	10
ENGR 3004	Biomedical Signals and Data Analysis	10
ENGR 4038	Biomedical Electronics	10
BIOS 1035	Anatomy and Physiology in Health	10
Total Credit Points		40

Structure Spring 2025

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

Students must successfully complete 40 credit points from the subjects listed below.

Subject	Title	Credit Points
Students must complete the following:		
ENGR 3004	Biomedical Signals and Data Analysis	10
ENGR 4038	Biomedical Electronics	10
Select two of the following:		20
PHYS 3008	Biomedical Physics	
BIOS 1035	Anatomy and Physiology in Health	

HLTH 2003 Biomechanics

Total Credit Points 40

Equivalent Subjects

The subjects listed below count towards completion of this program for students who passed these subjects in 2020 or earlier.

BIOS 1022 Introduction to Human Biology, replaced by BIOS 1035 Anatomy and Physiology in Health

Bachelor of Engineering (Honours) (3740) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-honours/>)

Bachelor of Engineering Advanced (Honours) (3771) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-advanced-honours/>)