

BIOMEDICAL ENGINEERING, CONCENTRATION (0122)

Western Sydney University Concentration Code: 0122

Previous Code: SM3091.1

Available to students in other Western Sydney University programs?

No

The Biomedical Engineering concentration 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

Concentration Structure

This concentration is only available to students enrolled in Bachelor of Engineering (Honours) (<https://hbook.westernsydney.edu.au/archives/2024-2025/programs/bachelor-engineering-honours/>) or Bachelor of Engineering - Electrical, Mechanical and Robotics & Mechatronics majors (<http://handbook.westernsydney.edu.au/hbook/course.aspx?course=3689.2>) only.

From 2024, please refer to Biomedical Engineering, Minor (0122) (<https://hbook.westernsydney.edu.au/archives/2024-2025/majors-minors/biomedical-engineering-minor/>) . This minor is available to all students 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/>).

Student must complete the following four subjects

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

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

Related Programs

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/>)