

ENGR 3004 BIOMEDICAL SIGNALS AND DATA ANALYSIS

Credit Points 10

Legacy Code 301121

Coordinator Titus Jayarathna ([https://directory.westernsydney.edu.au/search/name/Titus Jayarathna/](https://directory.westernsydney.edu.au/search/name/Titus%20Jayarathna/))

Description This subject will cover recent advances in biomedical signal and data analysis including electrocardiography, electroencephalography, human-computer-interface, electromyography, biomedical images and spikes processing. Topics covered span from basic to advanced signal processing. This subject will have a strong practical design focus with laboratories and tutorials focused on the design of usable software packages dealing with real biomedical signals.

School Eng, Design & Built Env

Discipline Biomedical Engineering

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Pre-requisite(s) ELEC 2001 OR ENGR 2001

Assumed Knowledge

Basic programming skills.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Professional Task	3 submissions required	50	N	Individual
Practical Exam	2 hours	50	N	Individual

Teaching Periods

Sydney City Campus - Term 2 (2023)

Sydney City

On-site

Subject Contact Peter Lendrum ([https://directory.westernsydney.edu.au/search/name/Peter Lendrum/](https://directory.westernsydney.edu.au/search/name/Peter%20Lendrum/))

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=ENGR3004_23-SC2_SC_1#subjects)

Spring (2023)

Penrith (Kingswood)

On-site

Subject Contact Gaetano Gargiulo ([https://directory.westernsydney.edu.au/search/name/Gaetano Gargiulo/](https://directory.westernsydney.edu.au/search/name/Gaetano%20Gargiulo/))

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=ENGR3004_23-SPR_KW_1#subjects)

Parramatta City - Macquarie St

On-site

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=ENGR3004_23-SPR_PC_1#subjects)

Sydney City Campus - Term 1 (2024)

Sydney City

On-site

Subject Contact Titus Jayarathna ([https://directory.westernsydney.edu.au/search/name/Titus Jayarathna/](https://directory.westernsydney.edu.au/search/name/Titus%20Jayarathna/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR3004_24-SC1_SC_1#subjects)

Spring (2024)

Penrith (Kingswood)

On-site

Subject Contact Gaetano Gargiulo ([https://directory.westernsydney.edu.au/search/name/Gaetano Gargiulo/](https://directory.westernsydney.edu.au/search/name/Gaetano%20Gargiulo/))

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Parramatta City - Macquarie St

On-site

Subject Contact Titus Jayarathna ([https://directory.westernsydney.edu.au/search/name/Titus Jayarathna/](https://directory.westernsydney.edu.au/search/name/Titus%20Jayarathna/))

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Sydney City Campus - Term 3 (2024)

Sydney City

On-site

Subject Contact Peter Lendrum ([https://directory.westernsydney.edu.au/search/name/Peter Lendrum/](https://directory.westernsydney.edu.au/search/name/Peter%20Lendrum/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR3004_24-SC3_SC_1#subjects)