

ELEC 6005 APPLIED PROJECT IN NEUROMORPHIC ENGINEERING (PART-TIME)

Credit Points 40

Coordinator Bharath Ramesh (<https://directory.westernsydney.edu.au/search/name/Bharath Ramesh/>)

Description This 40-credit point year-long subject over two semesters (20 credit points each semester) provides a capstone experience to students enrolled in the Master of Applied Neuromorphic Engineering (in the part-time offering). Students work on an industry-oriented project that has a practical application and outcome. Having the intention to go into industry, this subject provides opportunities for students to explore a relevant problem that can be completed in one year. Students will gain valuable experience and industry insights.

School Graduate Research School

Discipline Electrical And Electronic Engineering And Technology

Student Contribution Band HECS Band 2 20cp

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

Level Postgraduate Coursework Level 6 subject

Pre-requisite(s) INFO 7001 - Advanced Machine Learning
ELEC 6003 - Neuromorphic Accelerators
COMP 6001 - Neuromorphic Algorithms and Computation
COMP 6002 - Neuromorphic Sensing

Equivalent Subjects ELEC 6001 - Applied Project in Neuromorphic Engineering

Restrictions

Students must be enrolled in 8124 Master of Applied Neuromorphic Engineering.

Learning Outcomes

After successful completion of this subject, students will be able to:

1. Propose a feasible project plan in Neuromorphic Engineering
2. Appraise new opportunities in Neuromorphic Engineering with creativity and initiative
3. Systematically and critically analyse data and information sources that are related to the identified industry-oriented problem aiming to enhance the capabilities of the neuromorphic system
4. Effectively communicate a novel solution and its potential to both specialist and non-specialist audiences by utilising a variety of multimedia formats that fit the purpose
5. Execute an industry-oriented project with practical application and outcomes in the area of Neuromorphic Engineering

Subject Content

- Project scoping
- Project proposal and plan
- Project execution and evaluation
- Stakeholder engagement
- Effective communication and negotiation

- industry standards
- Processes and considerations for commercialisation

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
Report	1,000 words	5	N	Individual
Portfolio	2,000 words or equivalent	20	N	Individual
Presentation	15 minutes	10	N	Individual
Applied Project	4,000 words or equivalent	50	Y	Individual
Proposal	5 mins or 1,200 words (or equivalency)	15	N	Individual

Teaching Periods

Autumn (2024)

Penrith (Kingswood)

On-site

Subject Contact Bharath Ramesh (<https://directory.westernsydney.edu.au/search/name/Bharath Ramesh/>)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ELEC6005_24-AUT_KW_1#subjects)

Spring (2024)

Penrith (Kingswood)

On-site

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ELEC6005_24-SPR_KW_1#subjects)