

Faculty of Engineering**ASPIRE Summer Research Program 2026-2027**

Project Title: Development of next generation neurobionics

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Objective

Brain–machine interfaces use brain signals, such as EEG, to enable communication between the brain and external devices such as robotic arms. These are designed to aid people who may not be able to move their limbs.

Bionic eyes aim to restore functional vision in people with blindness by electrically stimulating the visual system.

Project Details

I am open to supervising projects in either brain–machine interfaces (EEG-based neural decoding and control) or vision processing for next-generation bionic eye systems. Projects can involve signal processing, machine learning, neuroscience, embedded systems, or experimental design, depending on the student's interests and background.

Rather than offering a fixed project, I am happy to work with successful candidates to develop a project that aligns with their interests, skills, and career goals while contributing to ongoing research within the laboratory.

My projects typically require programming experience and some analytical skills or interest in learning these skills.