

## Faculty of Engineering

### Summer Research Program 2023-2024

Project Title: Industry-Aligned Teamwork & Leadership Skills Development in Engineering

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### Objective

The Institution of Engineers Australia and the industries that recruit engineering graduates expect engineering schools to make teamwork and leadership an essential component of the curriculum and to produce high calibre graduate engineers that are industry-ready. Developing these skills is, however, a recognised challenge amongst engineering students and the industry. **The main objective of this project is to develop an industry inspired integrated teamwork and leadership skills development framework** to address the challenge of teaching and assessing teamwork skills development.

### Project Details

The project aims to answer the following research questions:

- How do we create goal setting and action setting processes that create individual, shared and collective responsibility? How do we measure the impact of these in outcomes?
- How do we create experiences that develop leadership and social responsibility?

Project stages:

- Guided literature review on teamwork skills, leadership, accountability and goal setting research;
- Development of a framework that will integrate accountability, motivation and social loafing theories coupled with peer evaluations, debriefing and reflection activities in order to develop students' effective team behaviour and team health;
- Development of a proposal for implementation and testing this framework

Project deliverables - a research report that will

- Summarise the project background and need in an industry relevant context;
- Describe the proposed framework, its implementation and testing.

### Prerequisites

Only students genuinely interested in engineering education research and engagement with industry are recommended to apply for this project.

**Additional Information** - Interested applicants may be required to attend an interview'.