

## Shaping the future of engineering education through socially contextualised and industry-connected learning

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### WORKSHOP MODE

In-person only.

### OVERVIEW OF WORKSHOP

The Engineering Futures Initiative has been established by the Australian Council of Engineering Deans to provide a practical and helpful focal point for driving changes to engineering education recommended by the [Engineer 2035 review](#). The initiative is focusing its first activities on supporting expansion of industry-connected Project Based Learning, with emphasis on learning experiences that help students develop deeper understanding of the human and social contexts of engineering. In this workshop we will explore the varied interpretations of 'human/social context' in engineering and how these can be supported through industry-connected projects.

### ACTIVITIES

Participants will explore a range of known definitions of human and social contexts in engineering, current approaches to education, and a proposed framework for defining and delivering industry-connected projects. Participants will then relate these to their own experience, practices, and curriculum to collectively refine the proposed framework. There will be a focus on sharing pedagogical practices and tools that address the challenges and amplify the positive experiences in project-based learning.

### TARGET AUDIENCE

This workshop is intended for engineering educators, practitioners, and affiliates who have an interest in sociotechnical skills development, industry practice, and the future of engineering education. Experienced and inexperienced educators and professionals are equally welcome!

### OUTCOMES

Participants will:

- Articulate ways to make visible (and or expand) the human-social contexts of projects.
- Evaluate a framework for designing and delivering industry-connected projects.
- Exchange practices and tools to enhance their project methodology.

Participants will also influence the approach taken by the Engineering Futures Initiative in 2024 and future years to influence engineering curricula at a national level.

### KEYWORDS

Project based learning, social context of engineering, project pedagogy.

### PRESENTERS' BACKGROUNDS

**Tom Goldfinch** is Associate Dean (Teaching and Learning) at the University of Sydney, and former President of the Australasian Association for Engineering Education. Tom has been designing and delivering large-scale PjBL units for over 10 years and chairs the Steering Committee for the Engineering Futures Initiative.

**Justine Lawson** is currently the Lead Coordinator for the first implementation phase of ACED's 2035 report. She has led and co-led teaching and learning initiatives in engineering education for 10 years including Final Year Projects, studio teaching and development of performance standards in assessment.