



WORKSHOP

Sociotechnical contexts and cultures that influence the practice of early career engineers

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WORKSHOP MODE

This in-person workshop will engage participants in conversations that explore educator perceptions of the sociotechnical contexts and cultures that influence the practice of early career engineers.

OVERVIEW OF WORKSHOP

The ACED Futures 2035 project has issued a call to action for engineering educators to shift towards a greater focus on practice to better support graduate readiness for engineering work. This includes embedding a greater focus on the sociotechnical nature and contexts of engineering practice within the curriculum. But what are these sociotechnical contexts in practice? This workshop aims to collaboratively explore this question from the perspective of those who educate engineers, present some observed case study examples from practice to deepen our understanding of what these cultural and contextual factors can be, and brainstorm how we could integrate these into our teaching practice.

ACTIVITIES

This workshop will consist of focussed discussions, presentation of case studies co-constructed with early career engineers through observation and interviews, and a brainstorming session. This workshop is also a data collection activity to support the PhD research activities of the lead facilitator. Participation in this workshop is voluntary. Spoken and written contributions recorded from workshop participants will be anonymised for analysis and publication. A plain language statement and consent form will be provided and read out at the beginning of this workshop. This study has received Deakin University ethics approval SEBE-2023-74.

TARGET AUDIENCE

Any engineering educator who is interested in sharing and developing their understanding of engineering practice and how it could influence their teaching and learning practice is encouraged to join. No prior knowledge is required, and educators with different levels of experience are welcome.

OUTCOMES

Focused discussions and collaborative exploration of cases presented is anticipated to allow deeper understanding of practice contexts and cultures influencing early career engineers. The workshops will also provide an opportunity for exploring alignment of curriculum, teaching and learning practices with ACED Futures 2035 goals.

KEYWORDS

Engineering practice, sociotechnical contexts

PRESENTERS' BACKGROUNDS

Rob McHenry is a Lecturer Engineering Professional Practice with 5 years teaching experience after a decade long career in industry. Rob's PhD explores how engineering practice can inform engineering education in support of developing graduate employability. Siva and Tim are both highly experienced engineering educators with strong ties to, and experiences within, engineering practice contexts, and both supervise Rob in his PhD program.