



Research in Engineering Education Symposium & Australasian Association for Engineering Education Conference

5 – 8 December, 2021 - Perth, WA



WORKSHOP

Engineering Futures 2035: Implementing the Vision

Carl Reidsema ^a, Roger Hadgraft ^b, and Sally Male ^c

University of Queensland ^a, University of Technology Sydney ^b, The University of Melbourne ^c

Corresponding Facilitator's Email: c.reidsema@uq.edu.au

WORKSHOP MODE

Hybrid during Perth business hours.

OVERVIEW OF WORKSHOP

This workshop will explore the development of pilot curriculum projects aligned to key recommendations from the recently completed Australian Council of Engineering Deans (ACED) led review of Engineering Education: Engineering Futures 2035. These recommendations (represented by eight Work Packages) aim to significantly increase students' professional practice experiences and learning outcomes through enhanced collaboration with other universities, industry and the community.

ACTIVITIES

A brief overview of the main recommendations of the report will be presented (5-10 minutes). Participants will then work in breakout rooms, and at the conference venue, to refine and scope the current draft Work Packages, and then prioritise and plan potentially feasible pilot projects aligned to these work packages. Main outcomes will be shared in a plenary session.

TARGET AUDIENCE

All conference attendees are welcome. We are particularly keen to see those who have an interest in an aspect of the 2035 report and who are keen to engage in the conversation on how outcomes might be delivered by working collaboratively across universities.

OUTCOMES

Participants will gain an enhanced understanding of the 2035 report's recommendations as well as insight and opportunities to collaborate in the processes that ACED and the ACED Associate Dean Learning and Teaching Network (ADLTN) are proposing to assist Engineering Schools in achieving the Engineering Futures 2035 vision. Participants will have opportunities to collaborate and make significant contributions to the operational planning and future activities of ACED and the ADLTN towards identifying curriculum exemplar projects for funding in 2022-23.

REFERENCES

Engineering 2035 website: <https://aced.edu.au/index.php/engineering-2035>

KEYWORDS

Engineering 2035, curriculum change, industry collaboration, social impact, digital engineering

PRESENTERS' BACKGROUNDS

Carl Reidsema is a mechanical engineer known widely for his work in advancing professional practice in engineering education through large scale hands-on active learning through design and the flipped classroom.

Roger Hadgraft is a civil engineer with more than 25 years of experience in improving engineering education. He has published many papers on problem- and project-based learning (PBL), and the use of online technology to support student-centred learning.

Sally Male is Director of the Teaching and Learning Laboratory, Faculty of Engineering and IT, The University of Melbourne, and Editor-in-Chief of the *Australasian Journal of Engineering Education*