



WORKSHOP

Navigating Remote Delivery of Capstone Project(s) to Achieve Equitable Learning Outcomes Within Higher Education

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WORKSHOP MODE

Hybrid mode during Perth business hours

OVERVIEW OF WORKSHOP

The final year capstone project is a major milestone for any student completing an engineering degree irrespective of discipline. With the disruption of the Covid-19 pandemic, all design project(s) courses since 2020 have resulted in innovative additions and modifications to existing course activities to be inclusive of the diverse learning environment of the cohort. This includes the capability of running industry-linked projects on-line to cater for both face-to-face and remote distance students and industry sponsors, restricted by border closures and time zones.

The significant number of students, staff and industry impacted by the Covid-19 imposed restrictions necessitated course adjustment and in some redesign of final capstone project courses. This was a common challenge amongst all Engineering disciplines across Australasia. The purpose of the proposed workshop is to share and collaborate learnings based on the capstone project(s) or similar courses to improve engagement, student experience and learning outcomes moving forward.

ACTIVITIES

Group facilitated discussion will be conducted based on various capstone project courses experienced during the Covid-19 era across institutions. Case studies will be provided by workshop facilitators and followed by semi-structured group facilitated discussions.

TARGET AUDIENCE

Education collaborators who are involved or interested in project-based learning, work-integrated learning, authentic assessment, team-based learning, and design to capstone projects. No prior knowledge is needed to participate.

OUTCOMES

Participants will:

1. Gain an understanding of the key capstone design learning outcomes
2. Share examples of design project implementation based on first-hand experience
3. Identify commonalities, pros, cons, sticking points and resolutions
4. Discuss lessons learned from remote distance involvement of students and industry sponsors
5. Establish best practice design project framework for various teaching modes

KEYWORDS

Capstone project, design project, project-based learning, authentic assessment

PRESENTERS' BACKGROUNDS

Dr Sarah Grundy leads design courses at the School of Chemical Engineering (CHEM), UNSW.

Mr Wesley Moss is a doctoral candidate and educator, who has facilitated capstone engineering design units at UWA for a number of years. He has experience engaging with students and industry sponsors both remotely and face-to-face.

Dr Daniel Egger is an education focused academic at UNSW Sydney. He teaches mechanical design from 1st year to 4th year and loves how empowered students feel after prototype testing.

Professor Dilusha Silva leads capstone projects at the School of Electrical Engineering, UWA.

Associate Professor Pierre Le-Clech leads capstone projects at School of CHEM, UNSW.

Dr Andrew Guzzomi is the unit coordinator of the capstone projects within the Department of Mechanical Engineering at UWA and was awarded an AAUT citation in 2020.