

## How does curriculum mapping help with changing expectations?

Helen Fairweather<sup>a</sup>; Montserrat Ros<sup>b</sup>;

William S P Robertson<sup>c</sup>, Rajendran Parthiban<sup>d</sup>, William McBride<sup>e</sup>, Ean Tat Ooi<sup>f</sup>; Duncan  
Campbell<sup>a</sup>, Ray Eaton<sup>g</sup>; Karen Whelan<sup>h</sup>; Alan Henderson<sup>i</sup>; Bernadette Foley<sup>a</sup>

*Engineers Australia<sup>a</sup>, University of Wollongong<sup>b</sup>, The University of Adelaide<sup>c</sup>, Monash University<sup>d</sup>, University of  
Newcastle<sup>e</sup>, Federation University Australia<sup>f</sup>, Macquarie University<sup>g</sup>, Queensland University of Technology<sup>h</sup> University  
of Tasmania<sup>i</sup>*

---

### OVERVIEW OF WORKSHOP

When students graduate from a fully accredited engineering program, they are deemed to have met an 'entry-to supervised' competence. The level of competence to be attained is expressed through the generic Stage 1 Competency Standards that are upheld by Engineers Australia (2013). These Standards are a generic statement that outlines the professional competencies expected of a graduate when first entering professional practice. Engineers Australia define the graduate capabilities as the learning outcomes that are demonstrated by graduates, and which incorporate these Stage 1 Competency Standards.

### ACTIVITIES

The workshop will focus on the development of program specification and curriculum (AP1 and AP5 of the accreditation criteria (Engineers Australia, 2017)). Participants will work through the expectations of the accreditation visit panel at all points of the accreditation process (review of self-study report, during the visit and responding to related mandatory requirements or recommendations). Several tools and techniques will be demonstrated and made available to participants to explore using their own data.

### TARGET AUDIENCE

The audience for this workshop are academics and learning and teaching designers interested in understanding the best practice approaches for curriculum mapping.

### OUTCOMES

Engineers Australia is the only authorised entity in Australia to deliver accreditation as a signatory to the International Engineering Alliance, specifically through the Washington, Sydney and Dublin Accords for the levels of Professional Engineer, Engineering Technologist and Engineering Associate, respectively. The purpose of this workshop is to inform the process of specification of an engineering program through the prism of learning outcomes, graduate capabilities and the Stage 1 Competency Standards (commonly referred to as curriculum mapping).

### REFERENCES (OPTIONAL)

Engineers Australia. (2013). Stage 1 Competency Standard for Professional Engineer. <https://www.engineersaustralia.org.au/sites/default/files/2022-07/stage-1-competency-standard-professional-engineer.pdf>

Engineers Australia. (2017). Accreditation Standard – Higher Education AMS-STD-10. <https://www.engineersaustralia.org.au/sites/default/files/2022-07/accreditation-management-system-2019-accreditation-standard-higher-education.pdf>

### KEYWORDS

Accreditation, competency mapping, engineering program specification, outcomes-based evaluation.

### PRESENTERS' BACKGROUNDS

The presenters for this workshop have experience in engineering education across many decades and also in the Engineers Australia accreditation process. To support academics in addressing the accreditation criteria, a working group was established in 2023 with representatives from seven universities. This workshop will present the outputs, outcomes and insights of this working group and collate the experiences of education providers.