



## Design based curriculum reform within engineering education

### Project Information

**Year Funded:**

2008

**Grant (ex GST):**

\$220000

**Project Status:**

Ongoing

**Program:**

Priority Projects

**Project Keywords:**

CDIO, Community of practice, Curriculum frameworks, Engineering design pedagogy, Engineering education, Project-based learning

**Project Discipline:**

Engineering and Technology

### Institutions

- **The University of New South Wales** (Lead)
- Queensland University of Technology
- The University of Melbourne
- The University of Sydney

### Project Leader

- Dr Carl Reidsema  
The University of New South Wales

### Project Outcome

A detailed comparative study of engineering curricula at four Australian Engineering Faculties will inform renewal of Australian engineering curriculum. A community of practice supported by AaeE, EA and ACED, provides the strategic and political support necessary to develop and sustain the critical mass required in advancing much needed curriculum reform.

### Project Methodology

The project will be led by chief investigators from lead and partner institutions and will work in close liaison with the Australian Council of Engineering Deans, Engineers Australia, the Australasian Association for Engineering Education (AAEE) and selected ALTC Fellows and project leaders. An inter-institutional action research program will include the design of survey tools, focus group schemas and investigation methodologies to map and compare curriculum structures with respect to engineering graduate attributes, student learning styles, learning outcomes; and activities with respect to the Conceive Design Implement Operate (CDIO) Initiative Syllabus. Regional forums will be conducted to establish the community of practice through stakeholder validation, using the design process as a basis for designing potential curriculum models which address the integration of in-depth technical and professional competencies through project-based learning in context, and as a means of disseminating the project outcomes and addressing identified staff development issues.

The information on this project's page was correct at the time of funding. Changes may have occurred since.

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**Links:**

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