

COASTAL ENGINEERING AND MANAGEMENT EDUCATION USING AN INDUSRTY AFFILIATES PROGRAM

CHARLES LEMCKERT

School of Engineering, Griffith University – Gold Coast Campus, PMB 50 Gold Coast Mail Centre,
Queensland, 9726, Australia.

E-Mail: c.Lemckert@griffith.edu.au

Industry affiliates programs, which place undergraduate students in the workplace as part of their undergraduate training program, are growing in popularity as they have been shown to enhance students learning. These programs involve collaboration between a University, an Industry partner, and - most importantly - a student. This paper outlines various aspects of a model chosen for the new Bachelor of Engineering in Coastal Engineering undergraduate degree offered through the School of Engineering at Griffith University – Gold Coast Campus and shows how, with appropriate design considerations, student-oriented tasks can lead to enhanced learning by combining practical interactions with academic pursuits in the area of coastal engineering and management.

As a consequence of the existing undergraduate course structure and timetabling limitations the Coastal Engineering Industry Affiliates Program (CEIAP) is conducted during the entire first semester (14 weeks) of the student's final academic year (4th year). During the CEIAP students work under the guidance of an Industry Partner for 4 days per week in order to gain practical work experience. They are also required to attend on-campus activities 1 day per week during which time the students attend lectures, obtain guidance from university supervisors, and at times present progress reports on their projects to other students, academics and industry partners in a common environment. The on-campus activity is designed to remind the students that they are undertaking an academic program, and not just a placement program. The academic supervisor also visits the workplace to meet with the students to assess their overall performance and offer any necessary support. These site visits also affords the opportunity for the industry partner to meet and interact with academic staff, and for the academic to view current industry practices. Before entering the CEIAP all students are required to successfully complete a preparation course aimed at enhancing their communication skills, including letter writing, interview techniques, curriculum-vitae preparation and report writing (which are all critical to the coastal engineer and manager).

Also, to be presented in this paper are the tasks and benefits for each of the partners to highlight the significance of such placement schemes in the improvement of student learning and the development of valuable student-industry-university relationships.