Accrediting Software Engineering Courses

Leon Sterling
Department of Computer Science and Software Engineering, University of Melbourne
leon@cs.mu.oz.au

Abstract

Australia has been a pioneer in recognising software engineering as an engineering discipline, requiring appropriate standards in education and training. For over 10 years, the Institution of Engineers, Australia has been making accreditation visits to departments offering engineering degrees with a software engineering stream.

The Australian Computer Society has a long history of accrediting IT courses in Australia. For the past three years, the option has been available for joint accreditation visits by both the Institute of Engineers, Australia and the Australian Computer Society. The process is insufficiently understood by the broader Software engineering community.

The requirements for accreditation of software engineering degrees are derived from the requirements for other engineering degrees, and requirements to provide IT content. Typically, the requirements involve an aspect of broad engineering education, including mathematics, and a specialisation in the relevant discipline. Further, subjects in a degree programme are required to impart certain skills and knowledge as well as to prepare engineers for their professional life.

The aim of this panel is to report on accreditation processes and experience. The panel will bring together software engineering educators and members of accrediting bodies in order to help de-mystify the process of accreditation. It should help answer key questions about curriculum design and subject delivery.