IEEE-CS/ACM
Computing Curriculum Software Engineering Volume Project

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Workshop Summary

In this workshop the CCSE Steering Committee members will report on the Volume’s progress and the process by which the Volume is being created, and solicit feedback from the session’s audience on the Volume’s effectiveness.

The Software Engineering Volume is part of the IEEE-CS/ACM Computing Curriculum effort that began in the Fall of 1998 when individuals from the IEEE Computer Society and the ACM formed a Steering Committee and began work on the Computer Science Volume. This Steering Committee came to the conclusion that the area of computing had gone beyond the boundaries of computer science and that one volume could not effectively cover the newer areas that had been developed. It was decided to split the Computing Curriculum effort into several volumes; to cover Computer Engineering, Software Engineering, and Information Systems. The Steering Committee continued to work on the Computer Science Volume and appointed others to work on the other volumes.

Work on the Software Engineering Volume began in 1998 with the Software Engineering Education Project (SWEEP) which produced a draft set of accreditation guidelines for software engineering published in the IEEE-CS Computer April 1998 issue. In the Fall of 2001, SWEEP was replaced by the Steering Committee for the Computing Curriculum Software Engineering (CCSE) Volume and work began on the Volume in earnest in the Spring of 2002 with the assignment of knowledge area volunteers to develop the initial software engineering education knowledge (SEEK): Foundations, Requirements, Design, Construction, Maintenance, Process, Quality, and Management. In March and May 2002, workshops were held at the Conference on Software Engineering Education and Training and the International Conference on Software Engineering. The former produced the initial SEEK and the latter helped to refine it. In June 2002, a workshop was held in Chicago of the knowledge area and other
volunteers to help to improve the initial SEEK draft. This led to the addition of Software Testing and Professional Practice to the SEEK. An internal review was conducted of the SEEK by the CCSE Steering Committee and noted software engineering experts. Released for public review in August 2002, the SEEK is undergoing further refinement. In October 2002, the pedagogy volunteers begin their work after having participated in the SEEK public review.

Two of the hallmarks of the CCSE effort by the Steering Committee are the public review process and the inclusion of as many professionals from as many countries as possible. Volunteers from Australia, Brazil, Canada, France, Germany, Hong Kong, Israel, Italy, Japan, Netherlands, New Zealand, Singapore, Spain, Taiwan, Thailand, Turkey, United Kingdom, United States, and Yugoslavia are involved and remain involved as more the Volume is completed. These volunteers represent the sectors of education, commerce, and industry as well as their professional societies.