Retrospective on Standards for Computing Education

David L. Feinstein,
Herbert E. Longenecker, Jr.
School of Computer and Information Sciences
University of South Alabama
Mobile, Alabama 36688

Abstract

This presentation will explore the background of both standard computing curricula and accreditation for computing education. The first model computer science curriculum appeared in 1965 with the publication of "An Undergraduate Program in Computer Science – Preliminary Recommendations" in the Communications of the ACM. This was followed by a full model, Curriculum 68. Updated models followed in 1978, 1990 and most recently 2001. Information systems curriculum models have also evolved over several decades with both the ACM and DPMA supporting different efforts. The first model appeared in 1972, then in 1981, 1986, 1990, 1995 and 1997 with the most recent in 2002. The two most recent models, IS'97 and IS'2000 have been joint efforts of ACM, AIS and AITP. More recently a model curriculum for Information Technology is now available in draft form.

Accreditation of computing programs began in 1986 with accreditation of computer science programs. Currently there are about 175 accredited programs in computer science. Although there was considerable interest, it was not until 2000 that formal standards were developed for information systems. A pilot visit took place in 2001. Beginning in 2002 regular accreditation of information systems programs was initiated. Information technology is on the fast track to have a set of accreditation standards. Accreditation for computing programs was initially done through an independent agency, Computing Sciences Accreditation Board. This Board merged with ABET, formally the Accreditation Board for Engineering and Technology. This Board has several commissions with CAC (Computing Accreditation Commission) having responsibility computer science and information systems.

This paper will compare and contrast the various curriculum models and accreditation criteria and trace their development through time.

Keywords: IS curriculum, IS accreditation, curriculum models