

INTRODUCTION

Our reliance on computing resources has made it essential to our lives, at home and at work. The Computing discipline has undoubtedly influenced advances in science, engineering, business, medicine, arts, and various other areas of our society and civilization. Since its formation in 1988, the Computer Science and Information Systems (CSIS) program at Stockton has continuously been striving to provide our students a suitable learning environment to develop their lifelong learning skills and prepare them for a challenging and rewarding professional career in the field of Computing.

While the discipline of computing continues to present challenging career opportunities for graduates to play an important role in shaping the future, the discipline itself has undergone significant changes over the past twenty years. In order to align with the dynamics in the field of computing, offering a single B.S. in Computer Science & Information Systems is not sufficient. According to the Accreditation Board for Engineering and Technology (ABET), the field of computing has evolved into three distinct but interrelated sub-disciplines: computer science, information systems, and information technology. Vesse and colleagues (2005) note computer science, and information systems as two of the primary sub-disciplines in the field of computing. While CS professionals design and develop novel software solutions to computing problems in a broad range of disciplines, such as the sciences, engineering, aerospace, and entertainment, IS professionals focus on the development and alignment of technical and organizational goals for design, development, implementation and management of technology in organizational settings.

Computer Science graduates have opportunities to work in a variety of careers, including analytics manager, database developer, information assurance analyst, research & development engineer (it), telecommunications network engineer, network architect, software architect, video game designer, etc. Computer Information Systems graduates have opportunities to work in variety of careers, including analytics manager, database administrator, it program manager, it security consultant, network administrator, systems analyst, web analyst, etc. It is important for us to prepare our students to be capable, responsible, and focused professionals in computer science, or computer information systems, based on their interests and career goals, while providing them the benefits of our liberal arts curriculum.

According to Vesse and colleagues (2005), computer science, and information systems have certain elements in common with distinguishable goals, and because of their interrelated nature, it is important that they share knowledge with each other. We are proposing to offer two separate degrees in the same program: i) B.S. in Computer Science (CS), and ii) B.S. in Computer Information Systems (CIS) for several reasons: First, it is a more accurate representation of what the CSIS program offers. Second, the conceptual framework for this is based upon that put forth by ABET, which recognizes computer science, and information systems as two interrelated sub-disciplines in the field of Computing and individually accredits each of them. We desire to pursue ABET accreditation. ABET accredits CS degrees and they accredit CIS degrees (among others). Third, two external consultants (*one an expert in ABET CS accreditation, and the other an expert in CIS accreditation*) brought in for our most recent 5-year review considered it a necessity that we restructure ourselves to offer a B.S. in CS and a B.S. in CIS. Fourth, various institutions in the state of New Jersey offer the two degrees separately. The Dean of School of Business strongly supports our plan of offering two separate degrees (*B.S. in CS, and B.S. in CIS*) instead of a single degree (*B.S. in CSIS*) with two concentrations (*Letters of support attached*). Both BSNS and MATH programs also support our proposed degree structures (*Letters of support attached*).

Since each of CS and CIS has their own curricular requirements and distinct ABET accreditation criteria, it is important to have coordinators who are focused on the unique issues associated with each. Our proposed coordinator structure, and proposed responsibilities, are identical to those specified for the Business Studies program in the current Coordinator agreement. Specifically, we propose:

(a) CSIS Program Coordinator: Fulfill all duties of Stockton Program Coordinators as specified in the current Coordinator agreement, and serve as Coordinator for their own degree (CS or CIS). Since the B.A. degree does not have concentrations, they will also handle all issues pertaining to the B.A. degree. Responsibility for issues pertaining to neither track specifically (e.g., concerning service courses) will also be included among the responsibilities of the CSIS program coordinator.

(b) CS or CIS Coordinators: Responsibilities of CS or CIS coordinator will be identical to those outlined for track coordinators of the business studies program in the current coordinator agreement.

Our goal is to provide students with a set of courses that give them broad competency in computing, and focused competency in computer science, or information systems depending on their interests and career choices. we aim to equip students with the knowledge, skills and abilities necessary for job opportunities or graduate studies in computer science, or computer information systems. our students would benefit from the in-depth and adequate knowledge about computer science or computer information systems in order to be sufficiently ready, more competitive and more productive after graduation.