

Contact: Diana Gonzalez

**BACHELOR OF SCIENCE PROGRAM IN COMPUTER SCIENCE
ACCREDITATION REPORT AT IOWA STATE UNIVERSITY**

Action Requested: Receive the accreditation report for the Bachelor of Science Program in Computer Science in the Department of Computer Science in the College of Liberal Arts and Sciences at Iowa State University.

Executive Summary: The Bachelor of Science Program in Computer Science (1) addressed the standards and criteria defined by the accrediting body and the deficiencies identified in the previous site visit; and (2) was evaluated by a peer review team. The program was accredited for a period of four years; the maximum period possible is six years. There were no deficiencies, weaknesses, or concerns found. This report addresses the Board of Regents Strategic Plan priority to provide “educational excellence and impact” as well as Goal #8 – “Iowa’s public universities and special schools shall be increasingly efficient and productive.”

Background:

- ◇ **Description of Program.** The Bachelor of Science Program in Computer Science is designed to prepare students for positions as computer scientists and software developers in industry and government or for graduate study in computer science and related fields. Program objectives provide students an understanding of the basics of computer science, develop their proficiency in the practice of programming and computing, and prepare them for continued professional development.
- ◇ **Purpose of Accreditation.** An accredited educational program is recognized by its peers as having met state and national standards for its development and evaluation. To employers, graduate schools, and licensure, certification, and registration boards, graduation from an accredited program signifies adequate preparation for entry into the profession. In fact, many of these groups require graduation from an accredited program as a minimum qualification. Accreditation is also intended to protect the interests of students, benefit the public, and improve the quality of teaching, learning, research, and professional practice.
- ◇ **Accrediting Agency.** The accrediting body is the Computer Accreditation Commission of ABET.
- ◇ **Review Process.** The Computer Science Program was evaluated under the General Criteria (students; program educational objectives; student outcomes; continuous improvement; curriculum; faculty; facilities; and institutional support) and the Computer Science Program Criteria. The program was previously evaluated in 2009-2010. As a result of that accreditation action, the institution was required to submit an Interim Report in 2011. The Department addressed concerns from the 2009-2010 site visit and outlined the steps taken to address the concerns.
- ◇ **On-Site Team Report.** A site visit was not required. A peer review team evaluated the department’s responses to the previous concerns and determined that the program satisfied all General and Program Criteria.

◇ Weakness Previously Identified by the Visiting Team.

- ⇒ *Continuous Improvement.* “Due to the incompleteness of the assessment cycle for the new set of program educational objectives, the effectiveness of the revised assessment process to assess achievement of programs objectives and program outcomes remains to be seen.”
- ☑ Actions taken: The program has completed a full cycle in assessing program educational objectives. Achievement of objectives is assessed mainly with a survey of individuals who graduated from the program within five years.
 - ☑ Evaluation: The program has completed the assessment cycle for the program educational objectives.
 - ☑ Status: *The weakness has been resolved.*

◇ Concerns Previously Identified by the Visiting Team.

- ⇒ *Program Educational Objectives.* Because of the newness of the formation of the external advisory board as an element in obtaining constituency input, the effectiveness of the external constituency input remains to be evaluated.
- ☑ Actions taken: The program has effectively completed a full cycle in assessing program educational objectives incorporating input from and consultations with all constituencies including the External Advisory Board.
 - ☑ Evaluation: The input of the external constituency provided was beneficial to the program.
 - ☑ Status: *No longer a concern.*
- ⇒ *Facilities.* Computer science student lab access is restricted due to the increasing use of the labs by non-CS students. As a result, space for student teamwork is limited and inappropriate.
- ☑ Actions taken: The department has set up two dedicated collaboration spaces for students. Only computer science students can reserve the two spaces in advance via a departmental online reservation system.
 - ☑ Evaluation: The dedicated collaboration spaces provide appropriate facilities for student teamwork.
 - ☑ Status: *No longer a concern.*

- ◇ Accreditation Status. In August 2012, the Computer Accreditation Commission of ABET awarded continued accreditation to the Bachelor of Science Program in Computer Science in the College of Liberal Arts and Sciences at Iowa State University for a period of four years. No additional actions or changes are required prior to the next accreditation cycle.