

College of Arts & Sciences
Computer Science Department
Assessment Plan
Prepared by Terri B. Blevins

**Degree Program(s)
Assessed**

B.S. Computer Science
M.S. Computer Science
PhD Computer Science

Mission of the Computer Science Department

The Computer Science Department has the responsibility of assessing three programs: The Bachelor of Science, the Master of Science and the Doctorate of Philosophy in Computer Science. The mission of the department is

- To educate students in all program levels in order to provide them with the knowledge, experience, and ethics to become members of the computing profession;
- To pursue research projects in computer science in order to extend the present state of knowledge in the computing field;
- To serve as an initial and continuing source of education in the field of computer science.

The department's goals are:

- To offer programs that attract and motivate students and prepare them for careers related to computer science;
- To offer a well-rounded education to undergraduates requiring general and liberal education along with technical skills needed to compete in the job market;
- To provide programs for graduate students that will prepare them for industry or the educational setting upon graduation
- To utilize technology in programs that are used in industry

Desired Outcomes for undergraduate Computer Science students:

By the time students graduate with a B.S in Computer Science, they are expected to:

1. Demonstrate an understanding of the basic concepts of computer science in 3 areas: Theory, software development, ethics and social responsibility,
2. Demonstrate technical skills, critical thinking skills, plus written and verbal communication skills;
3. Be prepared to gain employment or advance to graduate studies in the field of computer science;
4. Express positive feedback on their experience as undergraduate majors in the Department of computer Science

Methods of Assessment for undergraduates:

Graduating Senior Survey: We will conduct a survey of a sample of graduating seniors to assess their views on curriculum, facilities, advising, instruction, and job placement. The overall goal will be to identify program strengths and areas for improvement, track career plans of graduates, and assess the level of satisfaction among students. (Outcomes 3 & 4)

Alumni Survey: We will design and distribute a survey to a selected sample of program alumni to find out how their program of study and the faculty prepared them for a career in computer science and/or graduate studies and social development. (Outcomes 2, 3, & 4)

Employer evaluations: The Computer Science department will collect evaluations from the employers of students enrolled in the Industrial Practice class. This evaluation will ask the employer to assess the student's job performance, knowledge of computer science, quality of work, communication skills and ability to work with peers. (Outcomes 1, 2, & 3)

Regional and national competitions: The Computer Science department will evaluate feedback on students who participate in regional and national programming competitions. (Outcome 2)

Student coursework: All Computer Science undergraduates are required to complete a capstone course, CS 4883, a class which emphasizes the ethical and social responsibility of the professional. A term paper and oral presentation are required. Students are also required to work cooperatively, and use research skills and communication skills. Additionally, students are required to take a Technical Writing course and CS 3443, CS 4343 and 4323, which requires many technical and analytical skills needed in the field of computing. (Outcomes 1 & 2)

Desired Outcomes for Graduate Students in Computer Science:

1. Develop research projects that further development in the field of computer science and/or solve industry problems
2. Demonstrate a broad understanding of information appropriate to computer science
3. Engage in collaborative efforts to plan and conduct research
4. Disseminate research findings to appropriate audiences
5. Gain employment in the computer science profession
6. Provide feedback on their education experiences in the Department of Computer Science

Methods of Assessment for Graduate Students:

Thesis/Dissertation: Each graduate student is required to present their thesis to their graduate committee. This thesis/dissertation defense is considered the "capstone" experience for graduate students. Reasons for students not passing will be reported and discussed. (Outcomes 1, 2, 3, & 4)

Alumni Survey: The Office of University Assessment conducts a survey of alumni of graduate programs. This information will be reviewed by faculty to assess program. (Outcomes 5 & 6)

Research presentations: Information will be reported for students that have papers or projects accepted for presentation at conferences, or published in professional journals. (Outcomes 1, 3, & 4)

Uses of Assessment

The faculty of the Computer Science Department will be provided a copy of the findings and summary of the annual assessment report. The faculty will have the opportunity to discuss the findings, and to make recommendations as a part of a continuing improvement process. It is expected that some program revisions, in both course content and degree requirements could be made as a result of this analysis. On an informal basis, faculty will have the opportunity to share with each other what they know about students and whether or not they are meeting our desired learning outcomes.