

**BS CS - Management Track**  
**Degree Program Assessment Plan**  
**(Approved by the CS faculty on November 22, 2013)**

**Degree Program: BS CS Management Track (346003BS)**  
**Department or School: Computer Science**  
**College: Buchtel College of Arts & Sciences**  
**Assessment Coordinator: Dr. Chien-Chung Chan**  
**Department Chair or School Director: Dr. Yingcai Xiao**  
**Semester of this Program Update: F13**

**Program Mission and Goals:**

The mission of this program is to produce students in the Department of Computer Science at the University of Akron who are proficient in academic skills leading to employment in Computer Science and related fields or admission to Computer Science graduate programs. The objective is to graduate students within eight semesters of full-time academic work.

**Previous Program Modifications:**

This track of B.S. in C.S. was created in Fall 2011.

**Student Learning Outcomes:** List the learning outcomes, that is, what students know and are able to do by the time they graduate. Use blue font to show commonalities for different degrees. That is, those degrees with the same learning outcome but in different degree programs within a unit.

1. Students will demonstrate fundamental knowledge and skills in Computer Science.
2. Students will be able to apply the knowledge and skills in solving computing problems.
  - a. Students will be able to analyze the requirements of computing problems.
  - b. Students will be able to design and implement solutions to computing problems.
3. Students will be able to communicate effectively about computing solutions.
4. An understanding of professional, ethical, legal, security and social issues and responsibilities.
5. An ability to function effectively on teams to accomplish a common goal.
6. An understanding of processes that support the delivery and management of information systems within a specific application environment.

**Assessment Plan:** Outline the procedure followed to demonstrate what students are learning and how well they are learning it in relation to the learning outcomes.

Learning Outcome 1: Students will demonstrate fundamental knowledge and skills in Computer Science.



Rubric for Learning Outcome 3:

0	1	2	3	4	
Unacceptable	Poor	Acceptable	Good/Solid	Exemplary	Score
Quality of the poster presentation and/or project demonstration is poor, with lack of detail or professional presentation.	Quality of the poster presentation and/or project demonstration is fair, with much room for improvement in content and professional presentation.	Quality of the poster presentation and/or project demonstration is fair, with room for improvement in content.	Quality of the poster presentation and/or project demonstration is good.	Quality of the poster presentation and/or project demonstration is excellent.	
Very poor oral communication skills, with little ability to answer any questions or participate in a discussion with reviewers.	Poor oral communication skills, with ability to answer some questions and participate at a low level of discussion with reviewers.	Acceptable oral communication skills, with ability to answer most questions and participate in a moderate level of discussion with reviewers.	Good oral communication skills, with ability to answer questions and participate in a high level of discussion with reviewers.	Excellent oral communication skills, with ability to answer questions and participate in a rigorous level of discussion with reviewers.	

Learning Outcome 4. An understanding of professional, ethical, legal, security and social issues and responsibilities.

Topics of ethics, legal and social impact in Computer Science are addressed in the Association of Computing Machinery (ACM) Code of Ethics (<http://www.acm.org/about/code-of-ethics>) and the Institute of Electrical and Electronics Engineers (IEEE) Computer Society Software Engineering Code of Ethics and Professional Practice ([http://www.computer.org/portal/web/certification/resources/code\\_of\\_ethics](http://www.computer.org/portal/web/certification/resources/code_of_ethics)).

Students will answer a set of common content questions in the gateway course 3460:490 Senior Seminar.

Rubric for Learning Outcome 4: Questions will be scored as correct/incorrect such that student average question and overall scores can be used to establish benchmarks and for longitudinal comparisons.

Learning Outcome 5. An ability to function effectively on teams to accomplish a common goal.

Rubric for Learning Outcome 5: Students work together and present a group project in the required course 3460:480 Software Engineering.



**Data Collection Plan:** Describe who will collect data and/or when the data will be collected by course or year.

Learning Outcome 1, 2, 3, 4 and 6: Data will be collected when students take the gateway course 3460:490 Senior Seminar. This is typically spring of year 4.

Learning Outcome 5: Data will be collected when students take the required course 3460:480 Software Engineering. This is typically spring of year 3 or 4.