

Approved by the Graduate Faculty of the Institute, November 19, 2010

Program Objectives- MS in CSS

Program educational objectives are broad statements that describe the career and professional accomplishments that the program is preparing its graduates to achieve.

The program objectives for the MS degree in CSS are necessarily broad, owing to the wide variety of its students. Some students are research-oriented and plan to further their education in a Ph.D. program. Other students who want to broaden and deepen their knowledge and skill set to aid in professional development. Based on these diverse student needs the goals of the program are that graduates will:

- have the necessary skills and knowledge to independently conduct investigative work in selected sub-areas of computing/technology;
- have a broad understanding of the technologies and theories supporting the architecture and construction of software systems;
- be able to pursue successful careers or subsequent postgraduate studies while adapting to emerging technologies;
- be able to analyze issues and synthesize solutions to computing-related problems;
- be able to use their communication skills while working in team environments.

Program Educational Outcomes- MS in CSS

Program educational outcomes are statements that describe what students are expected to know and be able to do by the time of graduation. The outcomes expected by those earning the MS degree in CSS are:

- An ability to apply knowledge of theoretical foundations in computer science; **(assessed in TCSS 543 or 540)**
- An ability to use current techniques, skills, and tools necessary for computing practice; **(assessed in TCSS 558)**
- An ability to analyze a problem, to assess and articulate its requirements, to design, to implement, and to evaluate a computer-based system; **(assessed in TCSS 558)**
- An ability to communicate effectively in both oral and written forms; **(assessed in TCSS 598)**
- An ability to participate effectively in team projects **(assessed in TCSS 558)**
- A recognition of the need for and an ability to engage in self-directed learning and continuing professional development. **(assessed in TCSS 598)**