

CS and CECS Program Outcomes

When you graduate with a CS or CECS degree we expect that you have acquired knowledge and are able to use it. We state this formally through our program outcomes. The following a-k apply to both majors:

- a) An ability to apply knowledge of computing and mathematics appropriate to the discipline;
- b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
- c) An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;
- d) An ability to function effectively on teams to accomplish a common goal;
- e) An understanding of professional, ethical, legal, security, and social issues and responsibilities;
- f) An ability to communicate effectively with a range of audiences;
- g) An ability to analyze the local and global impact of computing on individuals, organizations and society;
- h) Recognition of the need for, and an ability to engage in, continuing professional development;
- i) An ability to use current techniques, skills, and tools necessary for computing practices.
- j) An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices;
- k) An ability to apply design and development principles in the construction of software systems of varying complexity.

The following outcome applies only to CECS majors only.

- l) An ability to apply knowledge of computer science, basic science, electrical engineering, and the associated mathematics necessary to analyze and design complex electrical and electronic devices, and systems with hardware and software components.