

Outcomes

October 14, 2013

Outcomes Common to CS, SE and CE

Outcome C-1: Graduates are proficient in using data structures and algorithms. They understand how to implement them, when to apply them, and the abstractions associated with their use.

Outcome C-2: Graduates understand the foundations of computer architecture.

Computer Science Outcomes

Outcome CS-1: Graduates are able to develop solutions to significant computing problems.

Outcome CS-2: Graduates will have a thorough understanding of the theory and constructs of programming languages.

Outcome CS-3: Graduates understand the theoretical foundations of computation.

Outcome CS-4: Graduates understand the principles and components of operating systems.

Outcome CS-5: Graduates have proficiency in the mathematical skills needed in computer science (viz. discrete mathematics, basic probability and statistics, basic differential and integral calculus).

Outcome CS-6: Students understand the fundamentals of net-centric computing.

Software Engineering Outcomes

Outcome SE-1: Graduates are able to develop solutions to significant software development problems.

Outcome SE-2: Graduates will be able to provide internal and external software documentation.

Outcome SE-3: Graduates are able to function effectively on teams to accomplish a common goal.

Outcome SE-4: Graduates understand software project lifecycles and development processes, and can follow standard processes.

Outcome SE-5: Graduates can elicit and write software specifications.

Outcome SE-6: Graduates understand principles of software quality assurance and testing, and can test software effectively.

Computer Engineering Outcomes

Outcome CE-1: Graduates will have the ability to apply knowledge of mathematics, science, and engineering.

Outcome CE-2: Graduates will have the ability to design and conduct experiments, as well as to analyze and interpret data.

Outcome CE-3: Graduates will have the ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety manufacturability and sustainability.

Outcome CE-4: Graduates will have the ability to function on multidisciplinary teams.

Outcome CE-5: Graduates will have the ability to identify, formulate, and solve engineering problems.

Outcome CE-6: Graduates will have an understanding of professional and ethical responsibility.

Outcome CE-7: Graduates will have the ability to communicate effectively.

Outcome CE-8: Graduates will have recognition of the need for, and an ability to engage in life-long learning.

Outcome CE-9: Graduates will have knowledge of contemporary issues as they relate to computer engineering practice.

Outcome CE-10: Graduates will have an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Programmer, Certificate of Completion Outcomes

Outcome CC-1: Graduates are able to develop solutions to moderately complex computing problems.

Outcome CC-2: Graduates have proficiency in discrete mathematics.

Outcome CS-3: Students understand the fundamentals of net-centric computing.

