

Computer Science and Software Engineering

PROGRAM EDUCATIONAL OBJECTIVES – COMPUTER SCIENCE

1. Develop within our graduates the level of technical proficiency needed for the professional practice of computer science.
2. Develop within our graduates the ability to effectively communicate their ideas to other practicing professionals and to the general public.
3. Instill within our graduates an appreciation for and the ability to engage in lifelong learning.
4. Instill within our graduates an appreciation for and an understanding of the need to maintain high ethical standards both as professionals as well as individuals.
5. Prepare our graduates to compete for positions in the job market and in graduate schools.

PROGRAM OUTCOMES – COMPUTER SCIENCE

1. Students will be able to analyze, formulate, and/or derive software requirements for systems or subsystems defined at a high level.
2. Students will be able to design a set of candidate solutions given a problem statement and recommend the best solution by evaluating tradeoffs and circumstances.
3. Students will be able to express a conceptual solution in a form that is executable by a computer and understandable by fellow professionals.
4. Students will be able to apply their knowledge of mathematics (particularly discrete mathematics, probability, and statistics) to the modeling, analysis, and measurement of algorithms and software artifacts.
5. Students will be able to effectively communicate their professional work to others in written, oral, and electronic forms.
6. Students will be aware of the need for and of their responsibilities regarding ethical conduct and life-long learning.
7. Students will display knowledge of contemporary issues and the impact of computer science in a global and societal context.