Computer Science Academic Learning Compact

Computer Science is a new and rapidly growing multi- and interdisciplinary field that uses advanced computing and data analysis to understand and solve complex problems. As a major in Computer Science at New College, you will work closely with faculty who have experience in the classroom, as well as, in the business world to design a personalized plan of study that combines advanced classes in areas like software engineering, computing for bioinformatics, data mining, and networks and algorithms, as well as labs, research and a senior thesis project that includes an extensive programming component. All are designed to give you a hand up when it comes to graduate school admission and career preparation.

As a Computer Science student at New College, you’ll develop advanced skills in distributed computing, mathematics, quantitative analysis, computer simulation and modeling, programming and a host of other areas, all of which are designed to prepare you for graduate school and career success.

Expected outcomes:

Expected outcomes of an area of concentration in applied mathematics are the following:

1. Demonstrate mastery of the software engineering knowledge and skills, necessary to function as a software engineer.
2. Demonstrate the ability to work independently and as part of a team to develop and deliver software products.
3. Manage project objectives to find solutions to problems which require balancing resources including time, cost, knowledge, and existing software systems.
4. Demonstrate the ability to work effectively with multiple stakeholders in a software development environment.
5. Demonstrate the ability to integrate ethical, social, legal, and economic concerns in the construction of software solutions.
6. Demonstrate the ability to absorb and effectively apply new development material as it emerges.
7. Students demonstrate critical thinking.
8. Students demonstrate ability to communicate effectively about computer science in oral presentations and written reports.

Measures to track student progress:

The applied mathematics faculty track student progress toward satisfactorily completing an area of concentration in applied mathematics using the following methods: satisfactory evaluations in required courses; a review of academic performance during the 5th semester with the Provisional Area of Concentration form; and a review of academic
performance during the 6th semester with the Thesis Prospectus form.

**Measures to demonstrate each graduate’s competencies:**

The applied mathematics faculty use the oral baccalaureate exam and the written thesis project as measures of evidence to demonstrate student competencies.