Computer Science

As Maryland's first ABET-accredited undergraduate Computer Science program, we provide a solid mathematical and theoretical computing foundation, as well as the latest technical knowledge to prepare students for the evolving, challenging needs of the global workforce in the 21st century. In addition to foundational courses in software engineering, operating systems, database systems and computer networks, the Computer Science program provides students with a variety of advanced, upper-level courses ranging from theory of computation, object-oriented methodologies, computer graphics, web technologies, mobile application development, network security and software quality assurance and testing. Computer science graduates have the knowledge and skills to excel in different capacities, such as database system administrator, software engineers, systems analysts and web application developers.

Computer Security track

Addressing the critical need of a skilled cybersecurity workforce, the undergraduate Computer Science program offers a track in computer security, established in 2002 as one of the first institutions in the nation offering such a program. The track features an innovative curriculum, building on solid core computer science courses, with plenty of opportunities for hands-on experience. The graduates in this track have the knowledge and skills needed to design and build dependable systems and develop secure applications. All of the courses in the track are conducted in a state-of-the-art, isolated computer security laboratory. In June 2014, the track earned Towson University a Center of Academic Excellence in Cyber Operations designation by the National Security Agency. Towson University has also been among the first institutions designated as a Center of Academic Excellence in Information Assurance Education by the National Security Agency and the Department of Homeland Security.

Software Engineering Track

In Fall 2014, the Computer Science program began offering a track in Software Engineering. Specialized software engineering courses are built upon core computer science courses, with a strong hands-on component. The track emphasizes key skills in requirements engineering and modeling, software quality assurance and testing, and software design and development. It provides students with the opportunity to work on semester-long, real-world software development projects. The graduates in this track have the knowledge and skills needed to design, develop, and test secure software applications.

For more information, contact Dr. Shiva Azadegan (sazadegan@towson.edu) or visit
http://cis1.towson.edu/~cisweb/academics/undergraduate-programs/b-s-computer-science/