Computing technology has been a major driving force behind the widespread digital transformation. Eastern offers a bachelor’s degree in computer science that seeks to develop students who have the professional and technical skills needed to adapt and succeed in the fast-changing global landscape. Foundational knowledge in computing is coupled with intellectual capabilities to apply computing to problem-solving in the real world. Critical thinking and adaptive learning are fostered both inside and outside the classroom.

The computer science program is built around a set of the core foundational subjects based on the most recent recommendation from the IEEE Computer Society and the Association for Computing Machinery (ACM), the two most prominent organizations for computing professionals. In addition to this foundation, students can concentrate on a focused area such as computational science, hardware architecture, net-centric computing or software development. Through participation in various internship programs, students practice what they learn from their classes while acquiring invaluable job experience.

The computer science faculty has a strong commitment to teaching and professional development. An active research program has been maintained in diverse areas including bioinformatics; computer gaming; data engineer-

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**CAREER OPTIONS**

According to the U.S. Bureau of Labor Statistics (www.bls.gov/emp/), the demand for computing and information technology professionals will grow by nearly 25 percent through 2020. Connecticut Labor Department data released in summer 2006 (www.ctdol.state.ct.us/lmi/misc/fastest.htm), indicates that the second fastest growing occupation for 2006-16 to be in computer software development. The data also indicates that eight of the fastest growing occupations within the State of Connecticut for 2006-16 require postsecondary education in the computing field. Some of the technical opportunities in computing include:

- Computer, data, and network security
- Programming
- Systems administration
- Systems analysis
- Data and information engineering
- Database design and administration
- Digital media production
- Network administration
- Network systems or data communications analysis
- Software engineering
- Web design and development
- Cloud Computing
- Embedded and mobile apps
- Bioinformaticians
ing; data mining; distributed computing; embedded computing; Internet computing; medical imaging; modeling and simulation; networking; signal and image processing; operating systems; software architecture; software engineering; software reliability; and video compression. Students have many opportunities to benefit from faculty research work and expertise throughout their program of study.

Regardless of the discipline, knowledge and skills in computing offer students a competitive advantage in a world where digital technology is pervasive. Emerging interdisciplinary fields such as bioinformatics, healthcare information systems, computer forensics, eCommerce and digital media rely heavily on computing. In recent years, students have pursued individualized majors in computer and graphics design, computer engineering sciences and cognitive neuroscience.

**STUDENT SUCCESS**

Graduates from the computer science program have established a well-deserved reputation among employers in the region over the years. They can be found in local businesses, such as Computer Sciences Corporation, IBM, Sonalyst, Pfizer and United Technologies. Computer science students from Eastern have also continued their undergraduate or graduate studies at other universities such as University of California Berkley, University of Connecticut, Rensselaer Polytechnic Institute and Rochester Institute of Technology.

In the fall semester of 2011 Cigna partnered with Eastern Connecticut State University to create an on-campus internship available to Computer Science and Business Information Systems majors. In the program, students have the opportunity to work with Cigna professionals from a variety of different areas within Cigna’s IT organization. Through this work, students get the chance to apply what they’ve learned in class to real world problems.

The program has been a success because of the dedication of the Cigna employees and the quality candidates from Eastern. Many of the graduated students who have been involved with the program now work full-time for Cigna. In today’s economy, a solid education and meaningful work experience are essential for success, both of which are provided at Eastern.