



OUTSTANDING CTE PROGRAM - POSTSECONDARY
CYBERSECURITY DEGREE PROGRAM
Frederick Community College

Dr. Andy Yao's goal was to build the Cybersecurity degree under Computer & Information Science (CIS) program at Frederick Community College (FCC). This was in response to the demands from the cybersecurity job market, both statewide and nationally.

To ensure alignment to current industry standards and to signal the preparation of graduates, the Frederick Community College cybersecurity program aligns to several professional certifications, including CompTIA A+, CompTIA Network+, CompTIA Security+, Certified Ethical Hacker (CEH), and Certified Information System Auditor (CISA). Students have access to a range of stackable certifications to show progress.

To develop the program, Dr. Yao secured a \$731,613 TAACCCT grant from DOL to fund this new program as well as the building of Cyber & Network labs necessary to deliver the program courses. The Cyber & Network labs use a combination of workstations and cloud-based technology to prolong the lifetime of the classroom equipment and to allow the remote access by students and faculty.

Dr. Yao also practices "active advising" and creates an academic profile/plan for every cybersecurity student and most other CIS students. Dr. Yao also hosted two Cyber Days to raise the awareness and interest of cyber technologies and cybersecurity for high school students.

As a result, enrollment for the CIS program grew 35% between Spring 2015 and Spring 2016 from 888 to 1,206. The number of CIS adjunct faculty jumped from 11 in Spring 2014 to 33 in Spring 2016. FCC is now looking for more space or larger classrooms in order to accommodate the growth in CIS program. The "active advising" enabled 94% of CIS students to complete Spring 2016 class registration by 12/31/2015, a month before Spring 2016 semester started.