CYBERSECURITY FIVE-YEAR ACCELERATED DEGREE BACHELOR OF ARTS AND MASTER OF SCIENCE PROGRAM

A five-year degree program is offered in Cybersecurity at Fairfield University's School of Engineering and Computing, leading to a Bachelor of Arts in Computer Science and a Master of Science in Cybersecurity. This program embraces the educational objectives of the BA in Computer Science program, as well as those of the graduate program in Cybersecurity.

A degree in cybersecurity is more important than ever in today's digital world. With cyber threats evolving rapidly, organizations across all industries require skilled professionals to protect sensitive information, secure their networks, and defend against cyberattacks. Graduates of the program master, the technical expertise, tools, and theoretical understanding needed to address modern cyber threats. Moreover, information security products and services are rapidly increasing, and cybersecurity jobs are predicted to grow seven times faster than the national average job growth.

Students from the BA in Computer Science

Students having achieved a 3.0 GPA, may apply to the Master's degree program at the end of their third year. Students follow the standard undergraduate curriculum for the first three years, and then complete the BA baccalaureate degree requirements (122 credits) during their fourth year. During this final year, students may enroll in up to two graduate courses that are above and beyond their undergraduate degree requirement. These graduate courses may not be applied towards the undergraduate degree. After receiving the baccalaureate degree, students will take an additional eight courses (for a total of ten courses) to complete the MS degree requirements in the fifth year.

Requirements

Code	Title	Credits
All Requirements for BA in Computer Science [1]		122
Required Courses		
SWEG 5530	Introduction to Information Security	3
SWEG 6404	Network Security	3
SWEG 6530	Applications and Data Security	3
SWEG 6599	Ethical Hacking	3
Concentration Courses		
Complete two courses in one of the following concentration areas:		6
Management Concentration		
SWEG 5417	Security Management	
SWEG 5440	Vulnerability Management	
SWEG 6448	Server Management	
Technical Concentration		
SWEG 5349	Cloud Computing	
SWEG 5420	Systems Security	
SWEG 5335	Digital Forensics	
Electives Courses		
Select two additional graduate-level electives from the following: [2]		6
SWEG 5301	Software Engineering Methods	
SWEG 5302	Software Design Methods	
SWEG 5322	Visual Analytics	
SWEG 5355	Artificial Intelligence	
SWEG 5360	Machine Learning	
SWEG 5521	Information Visualization	
SWEG 6461	Pattern Recognition	
SWEG 6518	Data Mining and Business Intelligence	
SWEG 6596	Network Routing and Switching	
Capstone Sequence		
SWEG 6961	Capstone Professional Project I	3
SWEG 6962	Capstone Professional Project II	3
Total Credits		**152**

1. Requirements are the same as those for the BA in Computer Science. The two graduate courses, to be taken during the final year of undergraduate study, are in addition to the required 122 credits for the BA, and will be applied to the graduate degree.
2. Electives may be chosen from courses listed, SWEG 5990 Independent Study, or any other graduate-level course from a concentration or another area, under advisement of the academic advisor and department chair.

Note: A minimum of 30 credits must be completed at the graduate level.