

ONLINE Bachelor's Degree Programs

# CharterOak STATE COLLEGE

A Higher Degree of **Online** Learning

## Bachelor of Science Degree Cyber Security



Online, Affordable, Accredited

# Cyber Security Major

## The Program

You've heard about the data breaches at major retailers and banks. The "hacked" list keeps getting longer every day. Do you want to be part of the rapidly expanding solution to these and other cyber crimes? Charter Oak has exactly the right program for you with our Bachelor of Science degree in Cyber Security. Arm yourself with the skills, knowledge, and abilities to be part of the cyber security protection and prevention workforce today!

Developed by experts in this critical Information Technology field, Charter Oak's online bachelor's degree in Cyber Security prepares students for success in IT Security, Cyber Security, Information Assurance, and Information Systems Security. Security Specialists, Data Security Analysts, and Web Application Developers are critical to facing the challenges of the entire cyber security landscape. Our program is structured to provide a professional education with a comprehensive curriculum that is designed for students with a background in computers.

**The median annual wage for Information Security Analysts in 2020 was \$103,590. Jobs in this field are expected to grow 33% between now and 2023.**

*Bureau of Labor Occupational Outlook Handbook, December 2021*

### Graduates with a degree in Cyber Security will have learned to:

- Explain the landscape, key terms, and concepts related to the many layers of information systems security
- Explore and explain the fields of digital forensics and cyber policy analysis
- Create policies and standard operating procedures for organizations that are ethically, morally, and legally sound
- Identify and critically assess issues and concepts related to the protection of information and systems
- Use risk management principles to assess threats, vulnerabilities, countermeasures, and impact contributors of risk in information systems
- Illustrate and explain fundamental architectures of networks and the Internet





## The Cyber Security Major Curriculum

### Major Requirements

- Introduction to Computer Science
  - Networking & Data Communications
  - Fundamentals of Information Systems Security
  - Legal Issues in Information Security
  - Managing Risk in Information Systems
  - Security Policies & Implementation
  - Auditing IT Infrastructure for Compliance
  - Access Controls, Authentication & PKI
  - Fundamentals of Network Security
  - Systems Forensics, Investigations & Response
  - Hacker Techniques, Tools & Incident Handling
  - Security Strategies for Web Apps & Social Networking
  - Cyber Security Capstone
- Two of the following:***
- Security Strategies in Windows OS/Applications
  - Security Strategies in Linux OS/Applications
  - Cyberwarfare





## Academic Requirements

### *Bachelor of Science Degree*

- General education: Minimum of 40 credits
- Major: Minimum of 45 credits
- Elective credits: To bring the total to 120 credits
- 30 credits must be at the upper level
- At least 60 of the 120 credits need to be in liberal arts subjects

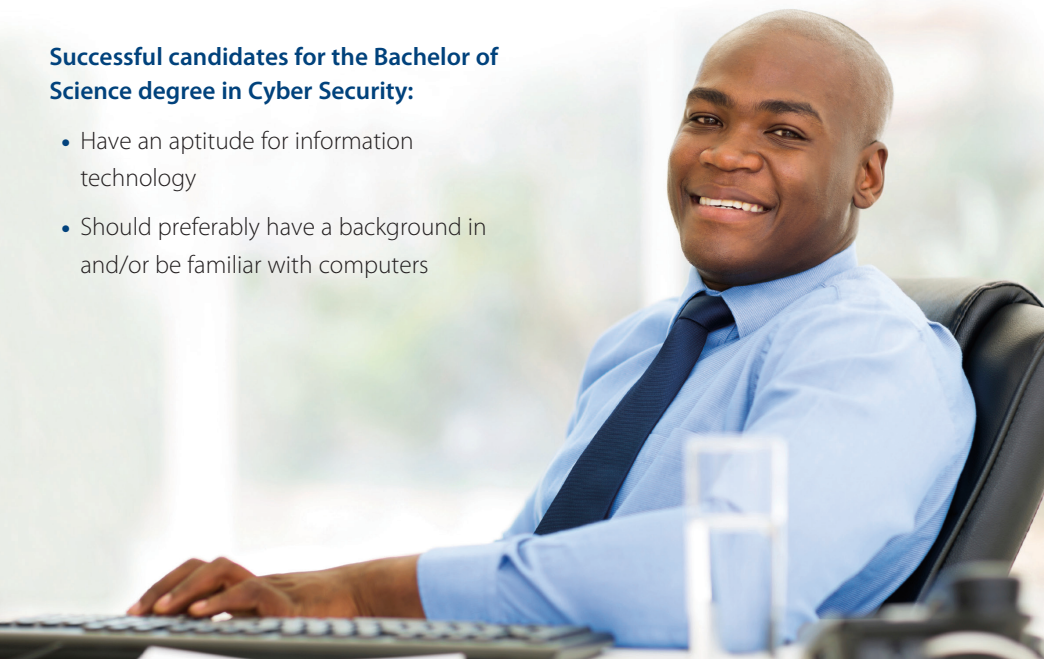
### *Academic Residency*

**Cornerstone:** All students must successfully complete the three-credit Cornerstone Seminar (IDS 101) usually during their first term.

**Capstone:** Students preparing to graduate with a bachelor's degree must complete the Cyber Security Capstone at Charter Oak State College with a grade of "C" or higher.

### **Successful candidates for the Bachelor of Science degree in Cyber Security:**

- Have an aptitude for information technology
- Should preferably have a background in and/or be familiar with computers



*"Cyber Security jobs are expected to grow 12 times faster than the overall job market. This degree will provide you with the skills and knowledge to be part of the cyber security protection and prevention workforce and open up a lifetime of professional opportunities."*

**Frank J. Monaco**, Colonel (U.S. Army Retired), Cyber Security Teaching Faculty Member, Retired,  
Charter Oak State College

## Careers in Cyber Security

Cyber Security professionals work in a variety of settings dealing with the ever changing cyber threats worldwide. Cyber Security professionals hold a variety of positions including:

- Computer/Systems Security Specialist
- Cyber Security Lead
- Information Technology Forensic Analyst
- Ethical Hacker
- IT Security/Risk/Compliance Officer
- Data Security Analyst
- Cryptanalyst
- Network Security Specialist
- Web Application Developer
- Chief Information Security Officer

See [www.CharterOak.edu/csjobs](http://www.CharterOak.edu/csjobs) for brief descriptions of these positions.

### Looking for other ways to maximize your computer knowledge and skills?

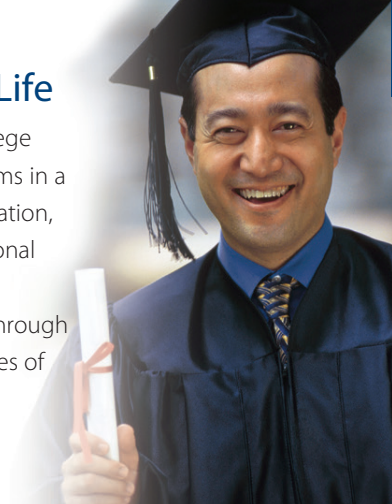
Check out our programs for Information System Studies, Project Management, or Health Information Management

*We offer an array of career-focused programs designed for busy, working adults in a variety of fields.*

**Learn more today at [www.CharterOak.edu](http://www.CharterOak.edu)**

# Advance your Career... Change your Life

Charter Oak State College is Connecticut's public online college offering associate and bachelor's degree completion programs in a number of high-demand fields including Business Administration, Health Information Management, Cyber Security, Organizational Leadership, Human Resources Management, Health Care Administration, and more. Our students complete degrees through the use of our online courses and by combining other sources of credit. Our institution is accredited by the New England Commission of Higher Education.



**Feel confident knowing that our professional  
Admissions Counselors and Academic Advisors are  
available every step of the way!**

## Contact Us

[www.CharterOak.edu](http://www.CharterOak.edu) | [admissions@charteroak.edu](mailto:admissions@charteroak.edu) | 860-515-3701

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**CharterOak**  
**STATE COLLEGE**  
A Higher Degree of **Online Learning**

A Connecticut State College accredited by the New England Commission of Higher Education.

Charter Oak State College complies with all applicable federal and state laws regarding nondiscrimination and affirmative action.