CharterOak℠
STATE COLLEGE

Degrees Without Boundaries

Bachelor of Science Degree
Cyber Security

**Advancing the nation's workforce
one graduate at a time**

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 new 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 new 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 2012 was $86,170. Jobs in this field are expected to grow 37% between now and 2022.

Bureau of Labor Occupational Outlook Handbook, 2014-2015

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 and 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 and PKI

Fundamentals of Network Security

Systems Forensics, Investigations and Response

Hacker Techniques, Tools and Incident Handling

Security Strategies for Web Apps and 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
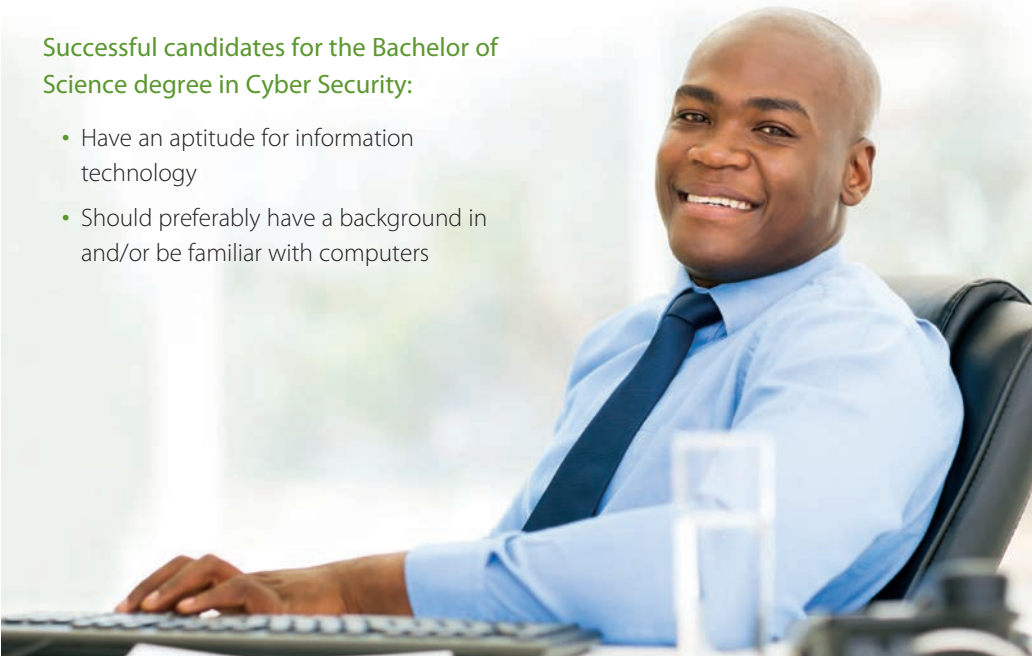- At least *60* of the 120 credits need to be in liberal arts subjects

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

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 for brief descriptions of these positions.

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 Cyber Security, Health Information Management, Health Care Administration, as well as many other workforce relevant programs of study. Our students complete degrees by taking online courses and combining other sources of credit. Our institution is accredited by the New England Association of Schools and Colleges.

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

Contact Us

www.CharterOak.edu/Cybersecurity // admissions@charteroak.edu // 860-515-3701

Charter Oak State College, 55 Paul J. Manafort Drive, New Britain, CT 06053-2150

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A Connecticut State College accredited by the New England Association of Schools and Colleges

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

12/2016