

# Everything You Ever Wanted to Know About Cybersecurity

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# AGENDA

- About Me
- UNCW College of Science and Engineering
- Cybersecurity Programs at UNCW
- Everything You Ever Wanted to Know About Cybersecurity
- Questions and Answers

## ABOUT ME

- Grew up in North Dakota
- Computer Science Professor at UNCW since 1993
- Department Chair: 2002-2005
- Co-founder of Mobile Education: 2007-2017
- Associate Provost for Research and Dean of Graduate School: 2013-2018
- Founding Dean of the College of Science and Engineering





## COLLEGE *of* SCIENCE AND ENGINEERING

- **Biology and Marine Biology**
- **Chemistry and Biochemistry**
- **Earth and Ocean Sciences**
- **Environmental Sciences**
- **Mathematics and Statistics**
- **Computer Science**
- **Physics and Physical Oceanography**
- **Psychology**
- **2+2 Engineering Program**

250 faculty/staff  
9 academic units  
3200 students

### New Engineering Programs with Focus on Entrepreneurship:

- Coastal Engineering, 2019
- Intelligent Systems Engineering, 2023
- Software Engineering, 2024

## Cybersecurity Programs at UNCW



- Cybersecurity Major (first bachelor's program in the state of North Carolina)
- Information Technology Major with Cybersecurity Concentration
- Computer Science Major with Security Concentration
- Intelligent Systems Engineering Major with Cybersecurity Concentration
- Cybersecurity Minor
- MBA with Cybersecurity Specialization



# Graduates Work for



# Cybersecurity

Cybersecurity stands as the cornerstone of modern digital safety, encompassing a comprehensive range of practices and technologies designed to protect networks, devices, programs, and data from unauthorized access or attacks.

It serves as a crucial defense mechanism against an increasingly sophisticated landscape of cyber threats, including malware, ransomware, phishing, and more.

# Cybersecurity

Understanding cybersecurity involves delving into the fundamental concepts of encryption, authentication, and authorization, along with the implementation of robust security measures such as firewalls, antivirus software, and intrusion detection systems.

With the proliferation of interconnected devices and the growing significance of data in the digital age, cybersecurity has become an indispensable discipline, ensuring the confidentiality, integrity, and availability of information in the digital realm.



# Cybersecurity

- Is the Internet safe for online shopping? What about online banking?



# Cybersecurity Awareness

Following these tips can significantly enhance your cybersecurity awareness and help you stay protected in an increasingly digital world.

- **Strong Passwords**: Use strong, unique passwords for each of your accounts.
- **Two-Factor Authentication**: Enable two-factor authentication (2FA) wherever possible, as it provides an extra layer of security.
- **Regular Updates**: Keep your software and antivirus programs updated to ensure that you have the latest security patches and protections.
- **Phishing Awareness**: Be cautious of unsolicited emails, messages, or calls asking for personal or financial information, and avoid clicking on suspicious links.
- **Secure Wi-Fi**: Secure your home or office Wi-Fi network with a strong password and encryption to prevent unauthorized access.

# Cybersecurity Awareness

Following these tips can significantly enhance your cybersecurity awareness and help you stay protected in an increasingly digital world.

- **Backup Data**: Regularly back up your data to protect it from potential loss or damage.
- **Privacy Settings**: Review and adjust privacy settings on social media platforms and other online accounts to limit the amount of personal information you share publicly.
- **Educate Employees**: If you're a business owner, educate your employees about cybersecurity best practices, including the proper handling of sensitive information.
- **Cybersecurity Training**: Stay updated on the latest cybersecurity threats and trends by attending online courses to enhance your knowledge and understanding.
- **Secure Mobile Devices**: Use strong passwords or biometric authentication methods to secure your mobile devices.

# Cybersecurity Resources

Consider checking the following sources for downloadable handouts and resources:

- **National Cyber Security Alliance (NCSA):** The NCSA provides a variety of cybersecurity resources, including tip sheets, guides, and handouts.
- **Cybersecurity & Infrastructure Security Agency (CISA):** CISA offers a range of materials that cover various aspects of cybersecurity.
- **The Federal Trade Commission (FTC):** The FTC provides educational materials and resources on cybersecurity and privacy, for both consumers and businesses.
- **[StaySafeOnline.org](https://www.staysafeonline.org):** This website, run by the National Cyber Security Alliance, offers a wealth of resources, including tip sheets and infographics.
- **SANS Institute:** The SANS Institute offers a collection of free resources, including whitepapers and posters, for cybersecurity education and awareness.

