

**Title:** Hands-On Cryptography

**Presenter:** Casey W. O'Brien, Director, National CyberWatch Center

**Topics include:**

- Working with Classical Cryptographic techniques
- Fundamentals of modern cryptographic algorithms
- Common attacks against encrypted data
- Common implementations
- Plenty of hands-on exercises (e.g., Verifying the integrity of downloaded files; Creating public/private key pairs; Working with encrypted messages; etc.)

**Who should attend:** This course will significantly benefit those teaching the following courses:

- Cisco Networking Academy
- CompTIA Security+
- CompTIA Network+
- Information Systems Security
- Network Security
- UNIX/Linux Operating Systems Administration
- VPN technologies.

**Prerequisites:** A willingness to learn and get your hands dirty.

**Presenter:** Casey W. O'Brien is the Director of the National CyberWatch Center, headquartered at Prince George's Community College in Maryland. Casey's major teaching and research interests include: cyber exercise design and delivery, scalable and cost-effective information security laboratories, and network security curriculum design and delivery, especially for two- and four-year faculty. Casey coordinates the CyberWatch Mid-Atlantic Collegiate Cyber Defense Competition. The CCBC team won the 3rd Mid-Atlantic CCDC in 2008, placed 2nd in 2010, and was the first community college in the country to qualify for the 2008 National CCDC. Casey has worked as a database administrator, senior network engineer, Web application programmer, and UNIX/Windows system administrator for both public- and private sector organizations before transitioning into a full-time faculty position.