Computer & Network Security Certificate

12 CREDIT HOURS

> Learn in detail how networks work, and how users behave on the network

> Gain expertise on how to protect networks—a process that includes behavioral, economic and policy understanding

> Become fluent in security topics, from technical theory to legal procedures

> Coursework is certified to meet all CNSS training standards for INFOSEC Professionals (NSTISSI No. 4011) and System Administrators (CNSSI No. 4013 Entry Level)

Required Courses:

- TLEN 5530 Applied Network Security
- TLEN 5531 Network Security Lab

Electives (Select two):

- TLEN 5410 Network Management & Operations
- TLEN 5462* Advanced Telecommunications Laboratory 2
- TLEN 5255* Computer Crime Seminar
- TLEN 5550 Computer & Network Security
- ECEN 5022 Cryptography

* CLASSROOM ONLY

Discover more! Speak to our team:

CALL: 303.492.8475  EMAIL: itp@colorado.edu
VISIT: beboulderanywhere.colorado.edu/itp
Which ITP certificate is right for you?

> **Computer & Network Security**

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> **Energy Communication Networks**

Position yourself to take advantage of opportunities in the fast-changing energy industry, as a leader who understands networking, wireless and security

Gain the fundamentals of communication systems, data communications and energy systems

Study the smart grid, cybersecurity and control technologies in detail

> **Network Architecture**

Learn how to design communications solutions based on a myriad of systems; includes theoretical and hands-on experience

Gain expertise in the fundamentals of how networks operate, how to configure these networks, and how to approach network design in a practical manner

Because our training uses commercially available products, students also may complement their certificate by seeking out vendor-specific credentials as well

> **Telecommunications Policy**

Gain expertise in the legal, political and regulatory dynamics of the Internet and communications industries

Study technology-based policy issues such as net neutrality, privacy and over-the-top video

Opens the door to fulfilling work as an Internet-based technology executive, strategic planner, or decision maker at government agencies

> **Wireless Networks & Technologies**

Position yourself to meet the growing demand for leaders who understand wireless technologies, whether it’s as a network administrator, a technician, or an upper-level manager

Master pragmatic skills in key areas of wireless networks: security and vulnerability characteristics, assessing and selecting the right product, deploying a reliable wireless network, and potential interactions between wireless products

Learn the regulatory and legal aspects of owning and operating wireless networks, as well as the cost-benefit tradeoffs between wireless and non-wireless options

Study coursework that’s specifically designed for people with technical, legal, or business backgrounds and covers a broad range of wireless and LAN issues, from technical theory to legal procedures

**Certificate Benefits:**
- Develop critical competencies in 12-18 months
- Courses delivered both on campus and online
- Graduate credit earned can apply toward a Master’s in Telecommunications
- Interaction with an industry-diverse and world-wide student body

**Interdisciplinary Telecom Program**
UNIVERSITY OF COLORADO BOULDER

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www.colorado.edu/engineering