

# CYBERSECURITY AND NETWORKING

Certificate | Career Program | Department of Engineering, Physics and Technology

## Program Description

The certificate program addresses a growing challenge in private industry and government: cybersecurity. Students who complete this certificate will be educated in the basics of software/hardware, networking, system administration and network/data protection techniques. This is a hands-on program that will give student the opportunity to earn marketable industry certifications and will prepare students for entry-level positions in the field.

## Learning Outcomes

Upon successful completion of the Cybersecurity and Networking program requirements, students will be able to:

1. Plan, install, and configure computer hardware, firewalls, networking software and operating system software.
2. Read and interpret technical literature and convey technical information through verbal and written communication.
3. Analyze the legal and ethical concerns of real-world security issues.
4. Perform user accounts management and implement security groups.
5. Troubleshoot, diagnose and solve common network security issues.

## CYBERSECURITY AND NETWORKING CURRICULUM

30 credits required for Certificate

Curriculum Coordinator: Dr. Syed Rashid Zaidi

### Certificate Requirements

#### First Semester

ENG 110 English Composition I: Fundamentals of Writing and Rhetoric *OR* ENG 111 English Composition I: Writing and Rhetoric (3 Credits)

CSN 100 Introduction to Cybersecurity (3 credits)

CSN 105 Computer Hardware and Software (3 credits)

CSN 110 Network Fundamentals (3 credits)

CSN 130 Network Operating Systems I (3 credits)

#### Second Semester

COMM 11 Fundamentals of Interpersonal Communication (3 credits)

CSN 132 Network Operating Systems II (3 credits)

CSN 140 Network Scripting (4 credits)

CSN 150 Cybersecurity (4 credits)

CSN 190 Cybersecurity Project (1 credit)