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 students the opportunity to earn marketable industry certifications and will prepare students for entry-level positions in the field.

The Cybersecurity and Networking certificate program is available for students in the traditional, in-person format as well as partially or fully online.

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 realworld 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 100 English Composition I: Integrated Reading and Writing *OR* **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)



114