

Computer IT Security and Networking

Diploma (D103)

Required Courses

Required Discipline Courses (56 credits)

COMP 1125 A+.....	5 cr
COMP 1126 Network+.....	4 cr
COMP 1127 Security+.....	4 cr
COMP 1128 IT Documentation and Support.....	4 cr
COMP 1129 IT Careers.....	3 cr
COMP 1131 Microsoft Word Comprehensive.....	4 cr
COMP 1132 Microsoft Access Comprehensive.....	4 cr
COMP 1133 Microsoft PowerPoint Comprehensive.....	3 cr
COMP 1134 Microsoft Outlook Comprehensive.....	1 cr
COMP 1135 Microsoft Excel Comprehensive.....	4 cr
COMP 2161 Command Line and Scripting.....	4 cr
COMP 2162 Server Administration and Management.....	4 cr
COMP 2163 Network and Security Analysis.....	4 cr
COMP 2164* Cloud Architecture, Deployment & Security ..	4 cr
COMP 2165 Project Management.....	4 cr

*Denotes Prerequisites

GRADUATION REQUIREMENT - 56 CREDITS

Description

The CLC Computer IT Security and Networking Diploma is designed to train students with the skills and character needed to be successful IT professionals in today’s job market. The program includes a variety of IT concepts and methods used today in emerging technologies and security. Including switches, routers, firewalls, endpoints, servers, and networking equipment, students will learn skills needed to be successful in the design, implementation, troubleshooting, communication, and management of IT networking architecture and security in a professional business environment. Students will also learn key fundamentals of front-end work in relation to troubleshooting and training end-user requests related to Office 365 Applications.

The curriculum will engage student learning as well as build character and confidence with team building, communication skills, and training in end-user support and customer service. CLC computer technology instructors are industry-certified professionals with years of experience in the classroom and industry.

Outcomes

By completing this program, students will achieve the following learning outcomes:

- Describe the concepts of computer hardware and system components;
- Design, configure, and implement various networking architectures utilizing best practices, and security methods;
- Design, configure, harden, and implement endpoint and server operating systems;
- Effectively establish secure networking connections between endpoints, applications, services, and local/cloud-based server systems;
- Understand, design, and collaborate on current IT standards and policies in relation to acceptable use, data classification, incident handling, disaster recovery, business continuity, and security awareness;
- A thorough understanding of emerging technology, applications, hardware, concepts, and methodology;
- Locate, evaluate, and properly utilize tools and resources appropriate to a computer technology professional;
- Apply appropriate business processes and security standards to identify, evaluate, and mitigate risk; and
- Communicate effectively with technical and non-technical audiences.

Pre-Program Requirements

Some courses may require students to meet College Placement Levels in reading, writing, and/or math. See an advisor for more information.

Graduation Requirements

In addition to the program requirements, students must meet the following conditions in order to graduate:

- College Cumulative GPA Requirement: cumulative grade point average (GPA) of credits attempted and completed at CLC must be at least 2.0;
- College Technical Core GPA Requirement: cumulative GPA of credits attempted and completed towards the technical core of the diploma or degree must be at least 2.0;
- Residency Requirement: students must complete 25% of their credits at Central Lakes College.

Career & Transfer

IT professionals work together to design and improve existing networking and security communication between systems and support end-user technologies to increase productivity in any business environment. They lead the way through the planning and development of new systems using knowledge of hardware, software, and best networking and security practices. IT professionals are not “one size fits all,” especially when it comes to business. Different companies have different needs. IT professionals use skills from multiple areas to plan, design, implement, secure, or troubleshoot applications, endpoint communication, and cloud-based or server-based systems on a networking level.

Certification

This program will prepare students for the following certifications from CompTIA:

A+, Network+ and Security+, Linux+, Cloud+, CySA+, Project+, and Microsoft Azure/Office Certifications. Students are encouraged to pursue certifications; however, they are not required for program completion and require additional costs per exam. Certification educational discounts are available to CLC Students through CompTIA and Microsoft.

Academic Plan

Semester One (16 credits)

COMP 1125	A+	5 cr
COMP 1126	Network+.....	4 cr
COMP 1127	Security+.....	4 cr
COMP 1129	IT Careers.....	3 cr

Semester Two (16 credits)

COMP 1131	Microsoft Word Comprehensive	4 cr
COMP 1132	Microsoft Access Comprehensive	4 cr
COMP 1133	Microsoft PowerPoint Comprehensive	3 cr
COMP 1134	Microsoft Outlook Comprehensive	1 cr
COMP 1135	Microsoft Excel Comprehensive.....	4 cr

Semester Three (12 credits)

COMP 2161	Command Line and Scripting.....	4 cr
COMP 2162	Server Administration and Management.....	4 cr
COMP 2163	Network and Security Analysis	4 cr

Semester Four (12 credits)

COMP 1128	IT Documentation & Support	4 cr
COMP 2164*	Cloud Architecture, Deployment & Security	4 cr
COMP 2165	Project Management.....	4 cr