



## **Computer Networking Technology A.B.**

Career Community: Computer Technology and Networking

Curriculum Code: 1453

Effective: Fall 2023 – Summer 2028

Revised: 5/3/23

### **Description**

Networking technology binds computers and connects people with information, and information security seeks to protect this information. Students learn to design, create, and administer efficient information technology networks of data, voice, image, and video communications. Students learn to provide the technical management and support to keep systems running 24/7, and to safeguard the data they control. This degree focuses on technical competencies, as well as communication with users, management, and project planning skills. Students will be prepared to earn several industry-respected certifications. Students completing this curriculum may also be eligible to apply for certificates of completion in Cisco Certified Network Associate Certification Preparation (CCNA) (1469) and in Information Technology Foundations (0766). Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

### **Milestone**

In addition to the required General Education courses in Math and English, completion of CITS 125 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

### **Contact Information**

For further information, including career options, course substitutions and waivers, etc., contact the Computer Information Technologies Program in the West Campus Building, Room M103, telephone number 517-267-6406 or Student Services West Campus, West Campus Building, Room M016, telephone number 517-267-5452.

### **General Education – Applied Degrees, Recommended Courses**

(For the full list of options, see [General Education](#))

- English Composition or Applied English – *Select one*  
ENGL 127, Business Writing, 3 credits / 3 billing hours
- English Composition (second course)/Communication or Applied Communication – *Select one*  
CITS 110, Helpdesk Support Specialist, 3 credits / 3 billing hours  
COMM 110, Communication in the Workplace, 3 credits / 3 billing hours  
COMM 120, Dynamics of Communication, 3 credits / 3 billing hours  
COMM 130, Fundamentals Public Speaking, 3 credits / 3 billing hours

- Humanities and Fine Arts or Social Sciences or Applied Social Sciences – *Select one*  
MGMT 234, Diversity in the Workplace, 3 credits / 3 billing hours
- Mathematics or Applied Mathematics – *Select one*  
STAT 170, Introduction to Statistics, 4 credits / 4 billing hours
- Natural Sciences Lab or Applied Science and Technology Lab – *Select one*  
ISCI 131, Integrated Physical Science, 4 credits / 6 billing hours

### Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
BUSN 118	Introduction to Business	3 / 3
CITF 110	Intro Computer Info Systems	3 / 3
CITF 140	Information Technology Ethics	3 / 3
CITN 220	Introduction to Networks	3 / 3
CITN 225	Switch Route Wireless Essentials	3 / 3
CITN 230	Linux Operating System	3 / 3
CITN 240	Ent Networking Sec Automation	3 / 3
CITN 280	IT Security Foundations	3 / 3
CITP 110	Intro to Programming-Python	4 / 4
CITS 125	Computer Support: A+ Cert Prep	6 / 6

### Program of Study Required Courses, Limited Choice – *Select three*

Course Code	Course Title	Credit / Billing Hours
CITD 250	Database Concepts	3 / 3
CITF 120	Operating Systems Concepts	3 / 3
CITF 240	IT Project Management	3 / 3
CITN 222	Wireless Networking & Security	3 / 3
CITN 250	Microsoft Network Server	3 / 3
CITO 100	Cloud Foundations with AWS	3 / 3
CITO 120	Cloud Architecting with AWS	3 / 3
CITS 230	Computer Virtualization	3 / 3
CITS 285	IT Professional Internship	3 / 3

### Minimum Total Credit Hours

60 credits / 62 billing hours

### Recommended Course Sequence

Semester I
Gen Ed – Mathematics or Applied Mathematics
CITF 110
CITP 110
CITS 125 – Milestone course

Semester II
Gen Ed - English Composition or Applied English
CITF 140
CITN 220 (First 8 weeks)
CITN 225 (Second 8 weeks)
CITN 230

Semester III
Gen Ed - Natural Sciences Lab or Applied Science and Technology
CITN 280
CITN 240
Limited Choice

Semester IV
Gen Ed – English Composition (second course)/ Communication or Applied Communication
Gen Ed - Humanities and Fine Arts or Social Sciences or Applied Social Sciences
BUSN 118
Limited Choice
Limited Choice

*LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.*