



Computer Networking Technology A.B.

Career Community: Computer Technology and Networking

Curriculum Code: 1453

Effective: Fall 2025 – Summer 2030

Purpose of the Major

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.

Major Required Courses

Course Code	Course Title	Credit / Billing Hours
ACAD 100	First-Year Experience	1 / 1
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

Course Code	Course Title	Credit/ Billing Hours
CITP 110	Intro to Programming-Python	4 / 4
CITS 110 or	Helpdesk Support Specialist	3 / 3
COMM 110 or	Communication in the Workplace	3 / 3
COMM 120 or	Dynamics of Communication	3 / 3
COMM 130 or	Fundamentals Public Speaking	3 / 3
COMM 200 or	Small Group Communication	3 / 3
COMM 240 or	Interpersonal Communication	3 / 3
COMM 260 or	Nonverbal Communication	3 / 3
ENGL 122 or	Composition II	4 / 4
ENGL 132	Honors Composition II	4 / 4
CITS 125	Computer Support: A+ Cert Prep	6 / 6
ENGL 121 or	Composition I	4 / 4
ENGL 124 or	Technical Writing	3 / 3
ENGL 127 or	Business Writing	3 / 3
ENGL 131	Honors Composition I	4 / 4
MATH 120 or	College Algebra	4 / 4
MATH 126 or	Precalculus	5 / 5
MATH 141 or	Calculus with Applications	4 / 4
STAT 170 or	Introduction to Statistics	4 / 4
STAT 215	Intro to Probability and Stats	4 / 4

Notes:

ACAD 100 may be waived when students meet one of the following College-approved waiver criteria:

- Completion of 12 college-level credits with minimum grades of 2.0 shown on the LCC transcript (including transfer, if applicable), or
- Employment in the field of, or a field related to, the degree being sought, or
- For Health Careers students, successful completion of CHSE 100.

Students wishing to waive ACAD 100 should contact their advisor.

Students following specific articulation agreements with Eastern Michigan University in Cybersecurity choose STAT 170 or with Northwood University in Cybersecurity choose MATH 120. All other students considering future transfer should choose the highest MATH or STAT course into which they place to maximize options.

Major Required Courses, Limited Choice – Humanities and Fine Arts or Social Sciences or Applied Social Sciences - *Select one as recommended or select one from [LCC General Education Applied Degrees](#): Humanities and Fine Arts or Social Sciences or Applied Social Sciences. A minimum grade of 2.0 is required for General Education courses.*

Course Code	Course Title	Credit/ Billing Hours
ANTH 270	Cultural Anthropology	3 / 3
ARTS 102	2D Design	3 / 4
ECON 201	Principles of Economics-Micro	4 / 4
ECON 202	Principles of Economics-Macro	4 / 4
GEOG 200	World Regional Geography	4 / 4
MGMT 234	Diversity in the Workplace	3 / 3
POLS 201	Intro to Political Science	3 / 3
SOCL 120	Introduction to Sociology	4 / 4

Note: Students considering future transfer, choose ANTH 270, GEOG 200, POLS 201, or SOCL 120.

Major Required Courses, Limited Choice – Natural Sciences or Applied Sciences and Technology Lab - *Select one lab course as recommended or select one from [LCC General Education Applied Degrees](#): Natural Sciences or Applied Sciences and Technology Lab. A minimum grade of 2.0 is required for General Education courses.*

Course Code	Course Title	Credit/ Billing Hours
BIOL 120	Environmental Science	4 / 6
CHEM 135	Chemistry in Society	4 / 5
GEOL 230	Environmental Geology	4 / 6
ISCI 131	Integrated Physical Science	4 / 6
PHYS 120	The Art of Physics	4 / 5

Note: Students considering future transfer to Central Michigan University choose BIOL 120.

Major Required Courses, Limited Choice – *Select three or four courses, 9 credits minimum.*

Course Code	Course Title	Credit/ Billing Hours
AVAU 100	Drone Flight Orient.-FAA Exam	2 / 2.5
AVAU 150	Drone Maintenance	2 / 3
CITD 250	Database Concepts	3 / 3
CITF 120	Operating Systems Concepts	3 / 3
CITF 240	IT Project Management	3 / 3
CITI 100	AI Foundations	3 / 3
CITI 120	Data Analysis with Python	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 285	IT Professional Internship	3 / 3

General Education – Applied Degrees

- English Composition or Applied English
Major Required Courses will meet this requirement.
- English Composition (second course)/Communication or Applied Communication
Major Required Courses will meet this requirement.
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences
Major Required Limited Choice Courses will meet this requirement.
- Mathematics or Applied Mathematics
Major Required Courses will meet this requirement.
- Natural Sciences Lab or Applied Sciences and Technology Lab
Major Required Limited Choice Courses will meet this requirement.

Additional Credits

After completing the course and credit requirements as noted on this pathway, students who fall short of the 60-credit minimum required for an Associate Degree may select any course(s) needed to reach 60 credits, except those courses noted in number 7 in the [Institutional Requirements for Associate Degrees](#). Students are encouraged to use Degree Works and meet with an Advisor to ensure all requirements are met and for course recommendations.

Minimum Total Credit Hours

60 credits / 61 billing hours

Recommended Course Sequence

Semester I
ACAD 100
CITF 110
CITP 110
CITS 125 – Milestone course
MATH 120 or MATH 126 or MATH 141 or STAT 170 or STAT 215

Semester II
CITF 140
CITN 220 (First 8 weeks)
CITN 225 (Second 8 weeks)
CITN 230
ENGL 121 or ENGL 124 or ENGL 127 or ENGL 131

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

Semester IV
BUSN 118
CITS 110 or COMM 110 or COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132
Limited Choice - Humanities and Fine Arts or Social Sciences or Applied Social Sciences
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 titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.