

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Networking and Security Management Academy
Associate in Business Degree

Curriculum Code: 1453 (Effective Fall 2011 – Summer 2016)

Networking technology binds computers and connects people with information. Students learn to design and create 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. The Networking & Security Management Academy focuses on technical competencies as well as communication with users, management, and project planning skills. Students will be able to choose from four areas of concentration that parallel current high demand technical specialties such as: Network & Computer Systems Administrator; Information Security Specialist; Certified Cisco Network Administrator (CCNA); and Computer & Information Systems Manager. Students will be prepared for industry certification exams. The courses in this curriculum have been validated by the Information Assurance Courseware Evaluation (IACE) Review Committee to meet all the elements of the Committee on National Security Systems (CNSS) National Training Standard NSTISSI 4011: Information Systems Security Professionals, as evaluated by subject experts from the National Security Agency (NSA). **Not all courses in this program transfer to all colleges.** Students planning to transfer should see an academic advisor before enrolling in any course.

PREREQUISITES

Students should see *Course Descriptions* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

INFORMATION

Contact the Computer Information Technologies Program, Gannon Building, Room 131, telephone number (517) 483-9612 (Website: www.lcc.edu/cit/networking/) or Academic Advising Department, Gannon Building, Room 212, telephone number (517) 483-1904.

REQUIREMENTS (See Note 1)

CODE	TITLE	TOTAL: 49 CREDITS CREDIT HOURS
BUSN118	Introduction to Business	3
CITD 250	Database Concepts (See Note 1)	3
CITF 125	IT Best Practices & Policies	3
CITF 140	Information Technology Ethics	3
CITF 200	Info Sys Tech/Problem Solving	3
CITF 240	IT Project Management	3
CITN 220	Networking Fundamentals (See Note 1)	3
CITN 225	Routing Protocols and Concepts	3
CITN 230	Linux/UNIX Operating System (See Note 1)	3
CITN 280	IT Security Foundations	3
HUMS 214	World Civilizations from 1600	4
ISCI 131	Integrated Science – Physical	4
MATH 121	Precalculus I	4
SPCH 110	Oral Comm in the Workplace	3
WRIT 121	Composition I	4

LIMITED CHOICE REQUIREMENTS**TOTAL: 12-17 CREDITS**Complete the indicated number of credits from **EACH CHOICE** listed below.**CHOICE 1: General Education Core Areas****0 Credits***(See General Education Core Requirements for information on how to fulfill these requirements.**Core area proficiency exams, where appropriate, are available for each core area.)*

Communication Core Area (See Note 2)	0
Global Perspectives and Diversity Core Area (See Note 2)	0
Mathematics Core Area (See Note 2)	0
Science Core Area (See Note 2)	0
Writing Core Area (See Note 2)	0

CHOICE 2: Networking Specialty Track (Choose one Subchoice)**12 - 17 Credits****Subchoice 2A: Enterprise/Infrastructure Specialty**

CITF 225	IT Service Implementation	3
CITN 115	Home Technology Integration	5
CITN 222	Wireless Networking & Security (See Note 1)	3
CITN 224	Convergence Technologies (See Note 1)	3
CITN 228	VoIP Fundamentals	3

Subchoice 2B: Network Systems Management Specialty

CITF 225	IT Service Implementation	3
CITN 222	Wireless Networking & Security (See Note 1)	3
CITN 235	Internet Srvcs Admin+Hardening	3
CITN 250	Microsoft Network Server (See Note 1)	3
CITN 255	Advanced Microsoft Server	3

Subchoice 2C: Information Security Management Specialty

CITF 250	Info Security & Risk Mgmt	3
CITF 280	Virtual Machine Environments	3
CITN 235	Internet Srvcs Admin+Hardening	3
CITN 244	Securing Networking Devices	3
CITN 282	Computer Forensics	3

Subchoice 2D: Cisco Certified Network Associate Specialty

CITN 228	VoIP Fundamentals	3
CITN 240	LAN Switching and Wireless	3
CITN 244	Securing Networking Devices	3
CITN 245	Assessing the WAN	3

MINIMUM TOTAL**61****NOTES:**

1. In order to be accepted to the Networking and Security Management Academy and meet the prerequisite for certain Computer Information Technology (CIT) courses in this curriculum, students must (1) have department approval and (2) have completed the Information Technology Foundations Certificate of Completion (0766) or demonstrate equivalent skills by having the CompTIA A+ Certification or by passing proficiency exams with an 80% score. See an advisor in the Computer Information Technologies Program for specific information.
2. Students completing "REQUIREMENTS" have fulfilled the requirements for this Core area.
3. For graduation from this degree, a student must have earned a minimum 2.5 in all courses.

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

Subchoice 2A: Enterprise/Infrastructure Specialty

I	II	III	IV
CITF 125	CITN 225	BUSN 118	CITF 240
CITN 220	CITN 230	CITF 140	CITN 115
HUMS 214	ISCI 131	CITF 200	CITN 224
WRIT 121	SPCH 110	MATH 121	CITN 280

V

CITD 250
CITF 225
CITN 222
CITN 228

Subchoice 2B: Network Systems Management Specialty

I	II	III	IV
CITF 125	CITN 225	BUSN 118	CITF 240
CITN 220	CITN 230	CITF 140	CITN 235
HUMS 214	ISCI 131	CITF 200	CITN 250
WRIT 121	SPCH 110	MATH 121	CITN 280

V

CITD 250
CITF 225
CITN 222
CITN 255

Subchoice 2C: Information Security Management Specialty

I	II	III	IV
CITF 125	CITN 225	BUSN 118	CITF 240
CITN 220	CITN 230	CITF 140	CITF 280
HUMS 214	ISCI 131	CITF 200	CITN 235
WRIT 121	SPCH 110	MATH 121	CITN 280

V

CITD 250
CITF 250
CITN 244
CITN 282

Subchoice 2D: Cisco Certified Network Associate Specialty

I	II	III	IV
CITF 125	CITF 200	CITD 250	BUSN 118
CITF 140	CITN 230	CITF 240	CITN 244
CITN 220	CITN 225	CITN 228	CITN 245
HUMS 214	ISCI 131	CITN 240	CITN 280

WRIT 121

SPCH 110

MATH 121