

Cisco Networking Technology

Lakeland's Cisco Networking Technology degree blends networking technology and information systems coursework, emphasizing secure configuration of both operation systems and network infrastructure. The course topics for this concentration include Microsoft Windows together with Linux/Unix management and security, as well as network security via Cisco Academy training. These elements are brought together by stressing information assurance and secure network design.

A certificate is also available.

Gainful Employment	Program Name	Program Type	Area of Study
	Cisco Network Security (9438) , AAS (https://catalog.lakelandcc.edu/degree-certificate-programs/cnet/9438/)	Degree	CNET
	Cisco Network Security Certificate (4254) (https://catalog.lakelandcc.edu/degree-certificate-programs/cnet/4254/)	Certificate	CNET

CNET 1050 Voice and Data Cabling

2 Credits

This course is designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, and physical and logical networks, as well as signal transmission. Students will develop skills in reading network design documentation, part list set up and purchase, pulling and mounting cable, cable management, choosing wiring closets, and patch panel installation and termination as well as installing jacks and cable testing. This hands-on, lab-oriented course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively in group environments.

(3.5 contact hours: 1.25 lecture, 2.25 lab)

CNET 1100 Cisco Networking Technology I

2 Credits

This is the first course in a four-course sequence designed to provide students with skills needed to design, build, and maintain small to medium size networks. This course helps students prepare for the Cisco Certified Networking Associate Exam.

(3.5 contact hours: 1.25 lecture, 2.25 lab)

CNET 1200 Cisco Networking Technology II

2 Credits

Prerequisite: CNET 1100 (can be taken concurrently).

This is the second course in a four-course sequence designed to provide students with skills needed to design, build, and maintain small to medium size networks. This course helps students prepare for the Cisco Certified Networking Associate Exam.

(3.5 contact hours: 1.25 lecture, 2.25 lab)

CNET 1300 Cisco Networking Technology III

2 Credits

Prerequisite: CNET 1200.

This is the third course in a four-course sequence designed to provide students with skills needed to design, build, and maintain small to medium size networks. This course helps students prepare for the Cisco Certified Networking Associate Exam.

(3.5 contact hours: 1.25 lecture, 2.25 lab)

CNET 1735 Cisco Cyber Operations

3 Credits

Prerequisite: ITON 1748, ITON 2250, CNET 1100; or permission of instructor.

This course introduces students to the tasks, and responsibilities of an associate-level security analyst working in a security operations center (SOC). Topics will include cyber security specific features of both Windows and Linux operating systems, an overview of network infrastructure, as well as descriptions of various attack vectors. Also included are principles of cryptography, security monitoring, and intrusion data analysis. This course will help to prepare students to pass the Implementing Cisco Cybersecurity Operations Exam. This course is cross-listed as ITON1735 Cisco Cyber Operations. Students who have taken the course under the alternative course ID should not take this course.

(5 contact hours: 1 lecture, 4 lab)

CNET 2720 Cisco Network Security: Managing Security

3 Credits













Prerequisite: CNET 1200.

This course is designed to provide students with the skills necessary to design, install, and support Cisco Security Solutions. It focuses on building and maintaining Cisco security solutions, including standalone firewall products and IOS software features. This course helps students prepare for the Cisco Certified Network Associate Security (CCNA Security) certification exam.

(5 contact hours: 2 lecture, 3 lab)

Cisco Network Security (9438)

Associate of Applied Science Degree

Course	Title	Credit Hours
First Semester		
BUSM 1300	Introduction to Business	3
ENGL 1110 or ENGL 1111	English Composition I (A) ¹ or English Composition I (B)	3
ENGR 1000 & ITIS 1030 or ITIS 1007	Introduction to Engineering Technology  or Principles of Information Technology and Computer Science	3
FYEX 1000	First Year Experience	1
ITCS 1011 or ITON 1205	History of Computing or Network+ and Networking Essentials	2
1st 8 weeks		
CNET 1100	Cisco Networking Technology I 	2
2nd 8 weeks		
CNET 1200	Cisco Networking Technology II 	2
Credit Hours		16
Second Semester		
ITCS 1010	Programming Logic 	3
ITIS 1355	Security+ and Security Essentials 	3
ITON 1748	Linux Administration I 	3
ITON 2250	Installation, Storage, and Compute with Windows Server 2016 	2
MATH 1650	College Algebra	4
Credit Hours		15
Third Semester		
CNET 1735	Cisco Cyber Operations 	3
COMM 1050 or COMM 1150	Fundamentals of Public Speaking ² or Fundamentals of Interpersonal Communications	2
ITCS 1870	Python Programming I 	3
ITON 1758	Linux Administration II 	3
PHYS 1610	General Physics I	5
Credit Hours		16
Fourth Semester		
CNET 2720	Cisco Network Security: Managing Security 	3
ENGL 1121	English Composition II-Technical Focus	3
MATH 1550	Statistics	4
Select course(s) from the Social and Behavioral Sciences Electives list		
OR		
Select course(s) from the Arts and Humanities Electives list		3
1st 8 weeks		
CNET 1300	Cisco Networking Technology III 	2
Credit Hours		15
Total Credit Hours		62

¹ English course selection is based on placement test results (ENGL 1111 English Composition I (B) is 4 credits, only 3 credits apply to the degree).

² Students may substitute either COMM 1000 Effective Public Speaking or COMM 1100 Effective Interpersonal Communications. One of these 3 credit courses may be required for students transferring to a four-year college.



This course is designated as a technical course in the program. Students must earn a "C" grade or higher in the course to fulfill the college's graduation requirements policy.

Electives

Course	Title	Credit Hours
Arts and Humanities		
ARTS 1120	Art Appreciation	3
ARTS 2220	Survey of Art I	3
ARTS 2230	Survey of Art II	3
ENGL 2250	Survey of American Literature I	3
ENGL 2260	Survey of American Literature II	3
ENGL 2280	Survey of British Literature I	3
ENGL 2290	Survey of British Literature II	3
HUMX 1100	Introduction to Humanities	3
HUMX 1200	The American Experience in the Arts	3
MUSC 1200	Music Appreciation	3
MUSC 1215	World Music	3
MUSC 1800	Popular Music: Rock, Jazz, Country, and Hip-Hop	3
MUSC 2200	Music History and Literature I	3
MUSC 2250	Music History and Literature II	3
PHIL 1500	Introduction to Philosophy	3
PHIL 2000	Comparative Religion	3
PHOT 1000	History of Photography	3
Social and Behavioral Sciences		
ANTH 1160	Introduction to Cultural Anthropology	3
ECON 1150	Basic Economics	3
ECON 2500	Principles of Macroeconomics	3
ECON 2600	Principles of Microeconomics	3
GEOG 1500	Introduction to Geography	3
GEOG 1600	World Regional Geography	3
HIST 1150	Western Civilization I: Antiquity Through the Reformation	3
HIST 1250	Western Civilization II: Age of Revolution Through the Present	3
HIST 2150	U.S. History: Colonization Through Reconstruction	3
HIST 2250	U.S. History: Reconstruction to the Present	3
POLS 1300	U.S. National Government	3
POLS 2500	Modern Political Ideologies	3
PSYC 1500	Introduction to Psychology	3
SOCY 1150	Principles of Sociology	3

Cisco Network Security Certificate (4254)

Course	Title	Credit Hours
CNET 1100	Cisco Networking Technology I	2
CNET 1200	Cisco Networking Technology II	2
CNET 1300	Cisco Networking Technology III	2
CNET 1735	Cisco Cyber Operations	3
CNET 2720	Cisco Network Security: Managing Security	3
ENGR 1000	Introduction to Engineering Technology	2
ITCS 1011	History of Computing	2
ITIS 1355	Security+ and Security Essentials	3
ITIS 2355	Security Investigation and Penetration Studies	3
ITON 1748	Linux Administration I	3
Total Credit Hours		25