COMPUTER NETWORKING AND SYSTEMS A.A.S.

60 Semester Credit Hours; Curriculum: 0142

The Computer Networking and Systems associate degree program is designed to provide students with the knowledge and skills necessary to obtain a position in Networking.

Note: *Refer to* IAI General Education Courses *page for guidelines on General Education course selection.*

Code	Title	Hours
General Education Requirements:		
Area A — Communications		
EGL 101	Composition I	3
Select one of the following:		3
EGL 102	Composition II	
EGL 111	Introduction to Business and Technical Writing	
EGL 212	Technical Writing Applications	
SPE 103	Effective Speech	
Area B — Mathematics		
Select one course from Area B (Mathematics)		3
MAT 114	Applied Mathematics I (or higher)	
Area C — Science		
No course required		0
Area D — Social and Behavioral Sciences		
One course from a social or behavioral science discipline		3
Area E — Humanities/Fine Arts		
One course from a humanities or fine arts discipline		3
Area F — Global Studies [1]		
One course that satisfies Global Studies requirement		0-3
GBS 101	Introduction to Global Business (recommended)	
Area G — U.S. Diversity Studies [2]		
One course that satisfies U.S. Diversity Studies requirement		0-3
Total Hours		**15**

[1] *Students may take a Global Studies course that satisfies both Area F and another Area requirement.*
[2] *Students may take a U.S. Diversity Studies course that satisfies both Area G and another Area requirement.*

Code	Title	Hours
Major Requirements		
CIS 101	Introduction to Computer Information Systems	3
or CIS 103	Computer Software and Concepts	
CNS 105	Networking Essentials	3
CNS 108	Introduction to Cloud Services	3
CNS 110	Windows Client Desktop 1	3
CNS 141	Cisco Introduction to Networks	3
CNS 142	Cisco Switching, Routing, and Wireless Essentials	3
CNS 143	Cisco Enterprise Networking, Security, and Automation	3
CNS 176	Network Security	3
CNS 193	Cloud Computing	3
CNS/CIS 218	Linux Essentials	3
CNS 221	Enterprise Cloud Services 1	3
CNS 222	Hybrid Server I	3
CNS 223	Hybrid Server II	3
CSC 157	Python Computer Science I	3
Electives: Take additional courses to complete the 60-credit hours required for a degree		3
Select from CIS (118 or higher), CSC or ELT courses not taken previously		
Total Hours		**45**

Due to rapid changes in information technology, we are frequently updating our certificate and degree programs to better prepare you for the job market. Please consult the CNS department chair for help with your pathway.

Note: Students can obtain credit for prior learning through evaluation by Oakton faculty for any of the third-party IT certifications.

Program Learning Outcomes

1. Demonstrate basic knowledge of computer hardware and software.
2. Demonstrate basic knowledge of a router and a switch.
3. Administer and maintain a computer network.
4. List basic steps in troubleshooting a network.
5. Utilize Microsoft tools.
6. Present conclusions effectively, orally and in writing.