

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:		
<i>Area A — Communications</i>		
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	
<i>Area B — Mathematics</i>		
Select course from Area B (Mathematics)		3-4
MAT 114	Applied Mathematics I (or higher)	
<i>Area C — Science</i>		
Select one course from a science discipline		3
PHY 101	Applied Physics (recommended)	
<i>Area D — Social and Behavioral Sciences</i>		
One course from a social or behavioral science discipline		3
<i>Area E — Humanities/Fine Arts</i>		
One course from a humanities or fine arts discipline		3
<i>Area F — Global Studies</i> ¹		
One course that satisfies Global Studies requirement		0-3
GBS 101	Introduction to Global Business (recommended)	
<i>Area G — U.S. Diversity Studies</i> ²		
One course that satisfies U.S. Diversity Studies requirement		0-3
Total Hours		18

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
CNS 105	Networking Essentials	3
CNS 110	Windows Client Desktop 1	3
CNS 150	Windows Client Desktop 2	3
CNS 170	Principles of Information Security	3
or CNS 176	Network Security	
CNS 172	Network Defense and Countermeasures	3
CNS 174	Introduction to Computer Forensics	3
Select at least twelve credit hours from the following:		12

Nine credit hours from any CNS courses not taken previously	
CIS 118	Linux Operating System (or higher)
or any CSC or ELT courses	
Select one of the following nine credit hour tracks:	
	9
Total Hours	42

Code	Title	Hours
<i>Cisco Track</i>		
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
Total Hours		9

Code	Title	Hours
<i>Microsoft Track</i>		
CNS 111	Windows Server 1	3
CNS 114	Windows Server 2	3
CNS 116	Windows Server 3	3
Total Hours		9

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.