NETWORK SECURITY ADMINISTRATION A.A.S.

60 Semester Credit Hours; Curriculum: 0148

The Network Security Administration degree program provides a foundation in network security and provides students with the knowledge and skills necessary to obtain positions as cybersecurity analysts and technical security support personnel.

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

Code	Title	Hours
General Education Requirements:		
See the list of IAI General Education Courses for more information		
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 (recommended)	
EGL 212	Technical Writing Applications	
SPE 103	Effective Speech (recommended)	
Area B — Mathematics		
One course from Area B		3
MAT 114	Applied Mathematics I (or higher)	
Area C — Science		
One course from a science discipline		3
PHY 101	Applied Physics (recommended)	
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		**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
or CIS 103	Computer Software and Concepts	
CIS/CNS 228	Linux I	3
CNS 105	Networking Essentials	3
CNS 110	Windows Client Desktop 1	3
CNS 170	Principles of Information Security	3
CNS 172	Network Defense and Countermeasures	3
CNS 173	Cybersecurity Operations Analysis	3
CNS 174	Introduction to Computer Forensics	3
CNS 176	Network Security	3
CNS 178	Ethical Hacking	3
Any other CNS course not taken previously:		3
CSC 157	Python Computer Science I	3
ELT 130	Microcomputer Hardware Systems	3
Select one of the following electives:		3
CIS 118 or higher or any CSC or any ELT course not taken previously		
Total Hours		**42**

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 competency in using basic computer hardware, and operating systems.
2. Demonstrate basic understanding of network security.
3. List basic steps for hardening computers.
4. Utilize Linux command tools.
5. Assess technical vulnerabilities, implement cybersecurity and information assurance best practices.
6. Discuss defense mechanisms in complex IT infrastructure.
7. Present conclusions effectively, orally and in writing.