

COMPUTER & NETWORK ADMINISTRATION, AAS

Program Code: AAS.COMPNETADMIN

The Computer & Network Administration program prepares students for technical support careers specializing in network administration and maintenance. Students may earn either a one-year **Computer & Network Administration Certificate** or two-year AAS. The course work emphasizes development of analytical and problem-solving skills in addition to specific hardware and software configurations. Cooperative Work Experience (CWE) is supervised real-world employment that supplements the academic classroom environment.

For students interested in pursuing a bachelor's degree, the Computer & Network Administration AAS articulates to a Bachelor of Applied Science in Technology and Management at Oregon Tech.

Oregon Tech Transfer Courses

The Computer & Network Administration program, in cooperation with Oregon Tech, offers a number of transferable classes into Oregon Tech's Bachelors of Applied Technology and Management degree program. Students planning to continue their studies at a four-year college should consult an advisor to obtain the most recent transfer information.

For information contact Rick Carino, 503-594-3167, or rcarino@clackamas.edu

Outcomes

Related Instruction Outcomes

Computation

- 3 credits - See **Related Instruction** for course list
- Use appropriate mathematics to solve problems

Communication

- 1 course - WR-101 Communication Skills: Occupational Writing or WR-121 English Composition
- Read actively, think critically, and write purposefully and capably for professional audiences

Human Relations

- 3-4 credits - See **Related Instruction** for course list
- Engage in ethical communication processes that accomplish goals

Physical Education/Health/Safety/First Aid

- 1 credit - See **Related Instruction** for course list
- Use effective life skills to improve and maintain mental and physical well being

Program Outcomes

Upon successful completion of this program, students should be able to:

- demonstrate all the program learning outcomes of the **Computer & Network Administration Certificate**;
- operate, install, manage, and troubleshoot major server operating systems;

- understand advanced network technologies and implement intricate internetwork infrastructures;
- understand and demonstrate basic computer and network security principles;
- develop, implement, and document an integrated information systems project;
- communicate the importance of professional and ethical responsibilities and be aware of codes of conduct and other sources of guidance for professionally ethical decision making;
- articulate and justify technical solutions to an audience through oral, written, and graphical communication.

Requirements

Course	Title	Credits
First Year		
Fall Term		
CS-140	Introduction to Operating Systems	4
CS-160	Computer Science Orientation	4
CS-225	Computer End User Support	3
CS-227	Computer Hardware & Repair	4
Credits		15
Winter Term		
CS-151	Networking I	4
CS-228	Computer OS Maintenance & Repair	4
CS-240W	Windows Desktop Administration	3
WR-101 or WR-121	Communication Skills: Occupational Writing or English Composition	3-4
Credits		14-15
Spring Term		
CS-152	Networking II	4
CS-240L	Linux Administration I	4
CS-279W	Windows Server Administration	4
Credits		12
Summer Term		
CS-125H	HTML & Web Site Design	3
CS-280	Computer Science/CWE	3
Computation requirement		3
Human Relations requirement		3-4
Credits		12-13
Second Year		
Fall Term		
CS-135DB	Microsoft Access	3
CS-280	Computer Science/CWE	3
PE/Health/Safety/First Aid requirement		1
Electives (p. 2)		6-8
Credits		13-15
Winter Term		
CS-240M	macOS Administration	3
CS-275	Database Design	3
CS-284	Network Security	3
CS-288W	Windows Network Administration	4
Credits		13

Course	Title	Credits
Spring Term		
CS-280	Computer Science/CWE	3
CS-289	Web Server Administration	4
CS-297N	Networking Capstone	4
Electives (p. 2)		3-4
Credits		14-15
Total Credits		93-98

Electives

Code	Title	Credits
Select one of the following:		3-4
BA-101	Introduction to Business	
BA-103	Business Strategies for Computer Consultants	
BA-120	Project Management Fundamentals	
BA-131	Introduction to Business Computing	4
BT-177	Microsoft Project	3
Any computer science course numbered CS-125 or higher		3-4

Careers

Career opportunities include:

- network specialist
- computer service technician
- field engineer
- customer service engineer
- computer technician
- and PC/LAN support specialist