

# 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 Bachelor 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](mailto: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 Workplace Writing or WR-227Z Technical Writing
- 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:

- explain basic troubleshooting processes and procedures from initial diagnosis to final documentation and reporting;
- explain and demonstrate how to interact and communicate effectively with people of different technical backgrounds and professional positions;

- operate, install, manage, and troubleshoot major desktop operating systems;
- identify, install, and troubleshoot computer and network hardware components;
- understand fundamental network technologies and implement a basic local area network;
- exhibit good teamwork skills and serve as effective members of project teams;
- 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

### First Year

Fall Term		Credits
CS-140	Introduction to Operating Systems	4.00
CS-227	Computer Hardware & Repair	4.00
WR-101 or WR-227Z	Workplace Writing or Technical Writing	4.00
<b>Credits</b>		<b>12</b>

### Winter Term

CS-151	Networking 1	4.00
CS-228	Computer OS Maintenance & Repair	4.00
CS-240W	Windows Desktop Administration	3.00
<b>Electives (p. 2)</b>		3.00-5.00
<b>Credits</b>		<b>14-16</b>

### Spring Term

CS-152	Networking 2	4.00
CS-225	Computer End User Support	3.00
CS-240L	Linux Administration I	4.00
CS-279W	Windows Server Administration	4.00
<b>Credits</b>		<b>15</b>

### Summer Term

CS-125H	HTML & Web Site Design	4.00
CS-280	Computer Science/CWE	3.00
<b>Computation requirement</b>		3.00
<b>Human Relations requirement</b>		3.00-4.00
<b>Credits</b>		<b>13-14</b>

### Second Year

Fall Term		Credits
CS-135DB	Microsoft Access	3.00
CS-153	Networking 3	4.00
CS-280	Computer Science/CWE	3.00
<b>PE/Health/Safety/First Aid requirement</b>		1.00

<b>Electives (p. 2)</b>		3.00-4.00
<b>Credits</b>		<b>14-15</b>
<b>Winter Term</b>		
CS-240M	macOS Administration	3.00
CS-275	Database Design	3.00
CS-284	Network Security	3.00
CS-288W	Windows Network Administration	4.00
<b>Credits</b>		<b>13</b>
<b>Spring Term</b>		
CS-280	Computer Science/CWE	3.00
CS-297N	Networking Capstone	4.00
<b>Electives (p. 2)</b>		4.00
<b>Credits</b>		<b>11</b>
<b>Total Credits</b>		<b>92-96</b>

## Electives

Code	Title	Credits
BA-101Z or BA-103	Introduction to Business Business Strategies for Computer Consultants	3.00-4.00
BA-120	Project Management Fundamentals	4.00
BA-264	Project Management Tools	3.00
FYE-101	First Year Experience Level I	2.00
WR-227Z	Technical Writing	4.00
Any CS course numbered CS-125 or higher not included in the program		3.00-4.00

## Careers

Career opportunities include:

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