Network Technology

electronics.chemeketa.edu

The Network Technology Associate of Applied Science Degree program offers hands-on training in a rapidly growing field. Graduates of this program will be able to design, install, administer, and maintain computer networks for hardware and software.

The Networking Essentials Certificate of Completion program is wholly contained within the Network Technology associate degree and may be used as a stepping stone in the path to a network technician or computer support specialist position, then to the Network Technology degrees, or for direct entry into this field. Graduates of this program will install, configure, and support an organization's computer network, and Internet system or a segment of a network system; maintain network hardware and software; monitor network to ensure availability to all system users; and perform necessary maintenance to support network availability.

Students entering these programs must have an Intel-compatible computer (Pentium III or better), an Internet connection, and be computer literate (type approximately 20 wpm, be familiar with the Windows operating system, word processing and spreadsheets).

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. For more information, look under Cooperative Work Experience in the catalog index.

If you are already employed in the field or have a degree, some of your education and training may transfer into this program. Contact the program chair at 503.399.6506 for an appointment to assess your education/training.

Some high schools that have been certified by Chemeketa can offer selected courses to students while they are in high school. Check with your high school counselor or contact the Mid-Willamette Education Consortium at 503.399.7746 to see if your high school is certified.

For a tour of the Network Technology laboratory, visit educationwithafuture.com.

This is a fall term entry program and has special admission procedures and requirements. For information, contact the Enrollment Services (Admissions) Office at 503.399.5006.

Program outcomes

Students completing the certificate will:

- Use communication, interpersonal, and leadership skills to establish and maintain collaborative relationships with supervisors, coworkers, and customers.
- Identify and solve technology problems related to computer and network hardware or software.
- Read and interpret written materials, including manuals, technical bulletins, diagrams, schematics, and procedures to design, maintain, install, and repair computer networks.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and coworkers.
- Apply professional and environmental safety practices associated with the workplace.

Students completing the AAS will:

- Use communication, interpersonal, and leadership skills to establish and maintain collaborative relationships with supervisors, coworkers, and customers.
- Identify and solve technology problems related to computer and network hardware or software.
- Perform test procedures and use equipment and software to diagnose, install, maintain, and/or repair computer and network systems.
- Read and interpret written materials, including manuals, technical bulletins, diagrams, schematics, and procedures to design, maintain, install, and repair computer networks.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and coworkers.
- Practice skills and attitudes—individually and as a member of a team—that reflect quality management procedures and ethical behavior in the workplace.
- Apply professional and environmental safety practices associated with the workplace.

Getting started

The first step to entering this program is to take part in an assessment process, which includes taking the college's free placement test and meeting with Counseling and Career Services. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121	Keyboarding	3
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
RD090	College Textbook Reading	3
WR090	Fundamentals of Writing	4

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or the program chair at 503.399.6506. Failure to be assessed may delay your entry into program classes.

Networking Essentials Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,100; class fees, $250; student services fee, $20.50; universal fee, $246; Intel-compatible computer, $990; equipment and supplies, $150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn certificate of completion by successfully completing the 41 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ELT100	Electronics Fundamentals for Non-Majors	4
NET123	Computer Operating Systems	4
NET151	Networking Essentials	5
NET152	Network Router Configurations	5
Term 2		
CIS145	Microcomputer Hardware	4
NET153	LANs and Internetwork Design	5
Term 3		
CIS179	Introduction to Client-Server Networks	4
NET154	WAN Design	5
NET171	Fundamentals of Wireless LANs	5

Network Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,080; class fees, $410; student services fee, $53.50; universal fee, $642; Intel-compatible computer, $990; equipment and supplies, $230. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the 107 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ELT100	Electronics Fundamentals for Non-Majors	4
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra+ (or higher)	5
NET123	Computer Operating Systems	4
NET151	Networking Essentials	5
NET152	Network Router Configurations	5
Term 2		
CIS145	Microcomputer Hardware	4
CIS178I	Introduction to the Internet/World-Wide Web	3
	or	
CIS178W	Fundamentals of Web Design	5
NET153	LANs and Internetwork Design	5
SP111	Fundamentals of Public Speaking	3
WR121	English Composition—Exposition+	3
Term 3		
CIS140U	Unix/Linux	3
	or	
CIS140S	Solaris-UNIX Operating Systems	5
CIS179	Introduction to Client-Server Networks	4
NET154	WAN Design	5
NET171	Fundamentals of Wireless LANs	5
Term 4		
CIS288	Advanced Client-Server Networks	4
NET251	Advanced Routing Configuration	5
NET252	Remote-Access Networks	5
NET271	IP Telephony	4
WR227	Technical Writing	3
Term 5		
FE205B	Résumés and Job Search Correspondence	1
NET253	Multi-Layer Switching	5
NET261	Fundamentals of Network Security	5
PSY104	Psychology in the Workplace+	3
Term 6		
CIS286	Web Server Configuration and Management	4
CIS289	Advanced Network Application Support	4
	or	
NET289	Advanced Network Support	4
NET254	Network Troubleshooting	5
	Network Technology elective*	2

+Meets related instruction requirement.

***Network Technology electives:**

CIS125A	Micro Database Software-Access	3
CIS240U	Advanced Unix/Linux	4
CS162	Computer Science 2	4
CS260	Computer Science 3: Data Structures	4
CS275	Database Management	4
ELT253	Microprocessor Systems	5
ELT280	Cooperative Work Experience (see program chair)	max. 6
	Continuing Education Units (see program chair)	max. 3

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