

## Program Specialty Areas Requirements

Students must complete a minimum of 29 credits in specialty areas. Choose from the following list. In addition to the list below, any DNET course not listed as a core requirement and most CTEC courses can be used with permission of DNET full-time faculty.

CTEC	230	Intro to Net Security	5 credits
CTEC	104	Customer Support	3 credits
CTEC	150	Intro to LANs	2 credits
CTEC	121	Intro to Programming	5 credits
CTEC	140	Intro to UNIX	5 credits
CTEC	122	HTML Fundamentals	3 credits
CTEC	250	Windows Admin	5 credits
CTEC	271	Managing Win 2003	5 credits
CTEC	272	Maintaining Win 2003	3 credits
CTEC	181	Intro to Database	5 credits
DNET	261	CISCO Net Security 1	6 credits
DNET	271	CISCO Net Security 2	6 credits

**TOTAL OF ABOVE TO EQUAL A MINIMUM OF 90 CREDITS (including related instructional requirements)**

## Career Employment Opportunities

Large and small employers from across the Portland/SW Washington communities work closely with and rely on the Clark College Data Networking & Telecommunications (DNET) department to deliver extensive hands-on leading edge network technology training, preparing a well-prepared workforce for the high-tech job skills that are in demand. Some of our more prominent area employers include:

- New Edge Networks (EarthLink)
- Integra Telecom
- Infinity Internet
- Verizon Business
- Time Warner Telecom
- Umpqua Bank
- Providence Health
- And others...

Upon completion of a DNET course of study our students are prepared to begin new careers in technology, or advance in their current technology-related positions. Some job titles include:

- Network administrator
- Network technician
- Telecom/network engineer
- And others...

## College Abilities

Clark College has identified six college-wide abilities that help students apply what they learn. The core abilities are taught across the curriculum and students continually practice and improve their skills in the six areas.

### Communication

The ability to understand and deliver written, spoken and visual communication clearly and accurately.

### Critical Thinking/Problem Solving

The ability to formulate, evaluate and synthesize facts, data, ideas, assumptions, values and points of view.

### Effective Citizenship

The ability to identify community issues; evaluate and respect various opinions and values; and articulate one's own perspective.

### Global/Multicultural Perspectives

The ability to identify, analyze and demonstrate how culture shapes world perceptions, values and behaviors.

### Lifelong Learning

The ability to set and revise goals, access resources and assume responsibility for one's own learning.

### Information/Technology

The ability to identify resources; retrieve and manage data; interpret, evaluate and use information; and adapt to changing technologies.



Clark College does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, sexual orientation, gender identity, gender expression, political affiliation, creed, disabled veteran status, marital status, honorably discharged veteran or Vietnam-era veteran status in its programs and activities.



# Data Networks & Telecommunications



- High demand for program graduates
- Associate in Applied Science Degree in Data Networks & Telecommunications – Two-year program\*
- Associate in Applied Technology in CISCO Network Administrator – Two-year program\*
- Certificate of Achievement in CISCO Certified Network Associate

\* Both the AAS and AAT degrees offer transfer options to a 4-year degree through EWU, available at the Clark College campus



# Data Networks & Telecommunications

Designed to meet the ever-changing needs of the IT (information technology) field, the Data Networks and Telecommunications (DNET) programs include extensive hands-on, real-world scenario-based learning in planning, designing, implementing, maintaining and troubleshooting small- to large-scale computer networks.

In-demand training for careers as a network administrator, network engineer and network support specialist in all aspects of modern computer networks from traditional data, video conference, voice over IP telephone, wireless networks and network security.

We are a Cisco Network Academy authorized by Cisco Systems, a leader in the networking industry. The Data Networks and Telecommunications (DNET) department offers training towards obtaining several well-recognized industry certifications, including:

- Cisco CCNA
- Cisco CCNA Wireless
- Cisco CCNA Security
- Cisco CCNA Voice
- Cisco CVOICE
- and others...

Our various Data Networks and Telecommunications (DNET) programs are designed with entry points for both the student just starting a new career and the computer networking or telecommunications professional looking for an opportunity to improve and update their skills and achieve industry certifications. Classes are offered at convenient times for working people: days, nights, weekends.

We invite you to visit our Web site for more information and contact us with your questions and to schedule a tour of our classroom and leading-edge lab facility.

[www.clark.edu/dnet](http://www.clark.edu/dnet)  
[dnet@clark.edu](mailto:dnet@clark.edu)

## Program Preparation:

Math and English proficiency tests are required of all students before entry into the applied science degree program.

Students must complete all major area courses with a minimum grade of "C" or better in order to successfully complete the program and earn the award.

## Data Networks & Telecommunications

*Associate in Applied Science Degree*

### General Education Requirements

CMST&	230	Small Group Communication	5 credits
ENGL	098	Writing Fundamentals	5 credits
	or 135	Technical Report Writing I	5 credits
PHSC	101	General Physical Science (F, W, Sp)	5 credits
	or		
PHYS&	100	Physics for Non-Science Majors(W, Sp)	5 credits
		Health Requirement & PE Activity	3 credits
		Social Science Requirement	3 credits

### Major Area Requirements

BTEC	149 -	Computer Application Essentials	3 credits
CTEC	230	Introduction to Network Security	5 credits
DNET	121	CISCO CCNA 1: Network+ & CCNA Network Basics	6 credits
DNET	199	Cooperative Work Experience	2 credits
DNET	211 -	TELECOM 1: Basic Telecommunications	6 credits
DNET	212	TELECOM 2: Voice Over IP (VoIP) Essentials	6 credits
DNET	220	Intro to Network Services: Windows and Linux	5 credits
DNET	231	CISCO CCNA 2: Routers & Routing Basics	6 credits
DNET	241	CISCO CCNA 3: Switching Basics & Advanced Routing	6 credits
DNET	251	CISCO CCNA 4: WAN Technologies	6 credits
ELEC	107	A+ PC Core Hardware Technologies Electives*	5 credits 3 credits
		MATH 095 Eligibility (as determined by ASSET Test)	0-5 credits

**Minimum Credits Required 90 credits**

*(including General Education Requirements)*

*\*Contact an advisor for recommended electives.*

Refer to the Degree & Certificate Requirements section in the Clark College Catalog to identify the courses needed to satisfy the General Education Requirements.

## CISCO Certified Network Associate (CCNA)

*Certificate of Achievement*

### Major Area Requirements

DNET	121	CISCO CCNA 1: Network+ & CCNA Network Basics	6 credits
DNET	231	CISCO CCNA 2: Routers & Routing Basics	6 credits
DNET	241	CISCO CCNA 3: Switching Basics & Advanced Routing	6 credits
DNET	251	CISCO CCNA 4: WAN Technologies	6 credits

**Total Credits Required 24 credits**

Note: Students will be required to have access to the Internet to complete their course work.

This is a suggested curriculum. Students should consult the program advisor.

## CISCO Network Administrator

*Associate in Applied Technology*

The Associate in Applied Technology degree (AAT) is designed for students who wish to complete a program with a specific vocational career objective. To meet academic residency requirements, students must complete 30 of their last 45 credits at Clark College. Students are required to maintain a cumulative grade point average of 2.00 to receive this degree.

### Core Requirements

Students must complete a minimum of 46 credits in core requirements. All courses in the list below MUST be taken and passed with a 'C' or better.

DNET	121	CISCO CCNA 1	6 credits
DNET	231	CISCO CCNA 2	6 credits
DNET	241	CISCO CCNA 3	6 credits
DNET	251	CISCO CCNA 4	6 credits
DNET	211	Telecom I	6 credits
DNET	212	Telecom II	6 credits
DNET	199	Coop Work Exp.	2 credits
DNET	220	Advanced OS	5 credits

*Continued* →

[www.clark.edu](http://www.clark.edu)

For more information, see the Clark College Catalog or contact the Technology Programs Advisor at (360) 992-2309 or by email at [bvogler@clark.edu](mailto:bvogler@clark.edu)  
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