Academic Plan - Associate of Applied Science Computer Networking - Cyber Security

**Catalog Year: 2019/2020**

**Total Credits:60**

The Computer Network Technology program prepares individuals for jobs in the computer networking field. Students in this program gain hands-on experience with computer hardware, software and networks. Upon successful completion of the program, the student will have the needed background to prepare to take one or more of the following exams: Network+; Security+; MCTS (Microsoft Certified Technology Specialist; Security +; or CISCO CCNA.

## General Education Courses

3 Credits, BUS 217 - Business Communication & Report Writing, available fall spring summer

3 Credits, CIS 118 - Intro to PC Applications, available fall spring summer

3 Credits, COM 115 - Public Speaking\* OR COM 125 - Interpersonal Communication, available fall spring summer

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1\*, available fall spring summer

4 Credits, MAT 121 - College Algebra: GT-MA1\*, available fall spring summer

# Major Courses

3 Credits, CIS 202 - Automated Project Management: MS Project, available fall spring

3 Credits, CIS 287 - Cooperative Education, available fall spring summer

3 Credits, CNG 124 - Networking I: Network +, available fall spring summer

3 Credits, CNG 125 - Networking II: Network +, available fall spring

3 Credits, CNG 132 - Network Security Fundamentals, available fall spring

3 Credits, CNG 224 - Microsoft Windows Wireless Network, available fall spring

4 Credits, CNG 121 - Computer Technician I: A+, available fall spring summer

4 Credits, CNG 212 - Configuring Windows Server, available fall spring

# Concentration Courses

3 Credits, CIS 220 - Fundamentals of Unix, available fall spring summer

3 Credits, CNG 142 - Introduction to Cloud Computing Concepts, available fall spring

3 Credits, CNG 243 - Cloud Security and Cyber Law, available fall

3 Credits, CNG 253 - Firewalls and How They Work, available fall spring

3 Credits, Elective (See Notes for specific requirements), available fall spring summer

3 Credits, Elective (See Notes for specific requirements), available fall spring summer

# Pre-Requisites, Co-Requisites, and Recommendations

CIS 118 - Intro to PC Applications

Requirement: Students must have Windows file management skills to create file folders, rename files, delete

CNG 125 - Networking II: Network +

Pre-Requisite: CNG 124 - Networking I: Network +

CNG 132 - Network Security Fundamentals

Pre-Requisite: CNG 124 - Networking I: Network +

CNG 212 - Configuring Windows Server

Recommended: CNG 211 - Windows Configuration: (OS) or instructor's permission

CNG 224 - Microsoft Windows Wireless Network

Pre-Requisite: CNG 124 - Networking I: Network +

CNG 253 - Firewalls and How They Work

Pre-Requisite: CNG 132 - Network Security Fundamentals

# Notes

Course availability is subject to chane.

Refer to 19/20 catalog for specific requirements and important information about this degree

Recommended courses may be listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) or the Computer Networking Faculty (mark.snyder@arapahoe.edu or nina.amey@arapahoe.edu) for additional elective recommendations.

\*This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.

AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.

Elective: Choose any 6 elective credits from courses with the following prefixes (except those courses listed above): CIS, CNG, CSC, or CWB.

# Graduation Requirements

To graduate, students must apply for graduation (form available at www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

# RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

## Year 1: Fall

3 Credits, CIS 118 - Intro to PC Applications

3 Credits, CNG 124 - Networking I: Network +

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1

4 Credits, MAT 121 - College Algebra: GT-MA1

## Year 1: Spring

3 Credits, BUS 217 - Business Communication & Report Writing

3 Credits, CIS 220 - Fundamentals of Unix

4 Credits, CNG 121 - Computer Technician I: A+

3 Credits, CNG 132 - Network Security Fundamentals

3 Credits, CNG 142 - Introduction to Cloud Computing Concepts

## Year 2: Fall

4 Credits, CNG 212 - Configuring Windows Server

3 Credits, CNG 243 - Cloud Security and Cyber Law

3 Credits, CNG 253 - Firewalls and How They Work

3 Credits, COM 115 - Public Speaking OR COM 125 - Interpersonal Communication

3 Credits, Elective

## Year 2: Spring

3 Credits, CIS 202 - Automated Project Management: MS Project

3 Credits, CIS 287 - Cooperative Education

3 Credits, CNG 125 - Networking II: Network +

3 Credits, CNG 224 - Microsoft Windows Wireless Network

3 Credits, Elective

# RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

## Year 1: Fall

4 Credits, CNG 121 - Computer Technician I: A+

3 Credits, CNG 124 - Networking I: Network +

3 Credits, ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1

## Year 1: Spring

3 Credits, CIS 220 - Fundamentals of Unix

3 Credits, CNG 125 - Networking II: Network +

3 Credits, CNG 132 - Network Security Fundamentals

## Year 1: Summer

3 Credits, CIS 118 - Intro to PC Applications

3 Credits, COM 115 - Public Speaking OR COM 125 - Interpersonal Communication

## Year 2: Fall

3 Credits, CNG 142 - Introduction to Cloud Computing Concepts

4 Credits, MAT 121 - College Algebra: GT-MA1

## Year 2: Spring

4 Credits, CNG 212 - Configuring Windows Server

3 Credits, CNG 224 - Microsoft Windows Wireless Network

3 Credits, Elective

## Year 2: Summer

3 Credits, BUS 217 - Business Communication & Report Writing

3 Credits, CIS 202 - Automated Project Management: MS Project

## Year 3: Fall

3 Credits, CNG 243 - Cloud Security and Cyber Law

3 Credits, CNG 253 - Firewalls and How They Work

## Year 3: Spring

3 Credits, CIS 287 - Cooperative Education

3 Credits, Elective