Academic Plan: Associate of Applied Science - Computer Network Technology - Network Security

# Catalog Year: 2020/2021

# Total Credits

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

* BUS 217 - Business Communication & Report Writing (3 Credits; Available all semesters)
* CIS 118 - Intro to PC Applications (3 Credits; Available all semesters)
* COM 115 - Public Speaking\* OR COM 125 - Interpersonal Communication (3 Credits; Available all semesters)
* ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1\* (3 Credits; Available all semesters)
* MAT 121 - College Algebra: GT-MA1\* (4 Credits; Available all semesters)

# Major Courses

* CIS 202 - Automated Project Management: MS Project (3 Credits; Available all semesters)
* CIS 287 - Cooperative Education (3 Credits; Available all semesters)
* CNG 121 - Computer Technician I: A+ (4 Credits; Available all semesters)
* CNG 124 - Networking I: Network + (3 Credits; Available all semesters)
* CNG 125 - Networking II: Network + (3 Credits; Available Fall and Spring semesters)
* CNG 132 - Network Security Fundamentals (3 Credits; Available Fall and Spring semesters)
* CNG 212 - Configuring Windows Server (4 Credits; Available Fall and Spring semesters)
* CNG 224 - Microsoft Windows Wireless Network (3 Credits; Available Fall and Spring semesters)

# Concentration Courses

* CIS 220 - Fundamentals of Unix (3 Credits; Available Fall and Spring semesters)
* CNG 142 - Introduction to Cloud Computing Concepts (3 Credits; Available Fall semesters)
* CNG 243 - Cloud Security and Cyber Law (3 Credits; Available Fall semesters)
* CNG 253 - Firewalls and How They Work (3 Credits; Available Fall and Spring semesters)
* Elective (See Notes for specific requirements) (3 Credits; Available all semesters)
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# Pre-Requisites, Co-Requisites, and Recommendations (grade C or better required)

Where requirements are listed as course categories (e.g. Electives, Arts/Humanities) rather than as specific courses,

please note that depending upon course choice, pre-requisites may be required.

CIS 118 - Intro to PC Applications

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

* 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
* ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1\*
  + Co-Requisite: CCR 094 - Studio 121

# Notes

* \*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.
* Course availability is subject to change.
* Elective: Choose any 6 elective credits from courses with the following prefixes (except those courses listed above): CIS, CNG, CSC, or CWB.
* In order to meet program requirements, students registered for ENG 121 or ENG 131 must also register for CCR 094 unless they can demonstrate otherwise meeting the CCR 094 standard through assessment testing, prior college coursework, or recent High School coursework. See an Advisor for details.
* 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.
* Refer to 20/21 catalog for specific requirements and important information about this degree

**Graduation Requirements**

* To graduate, students must apply for graduation [here](http://www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

# RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

## Year 1: Fall

* 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 (3 Credits)
* MAT 121 - College Algebra: GT-MA1 (4 Credits)

## Year 1: Spring

* BUS 217 - Business Communication & Report Writing (3 Credits)
* CIS 220 - Fundamentals of Unix (3 Credits)
* CNG 121 - Computer Technician I: A+ (4 Credits)
* CNG 132 - Network Security Fundamentals (3 Credits)
* CNG 142 - Introduction to Cloud Computing Concepts (3 Credits)

## Year 2: Fall

* CNG 212 - Configuring Windows Server (4 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 (3 Credits)

## Year 2: Spring

* 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 (3 Credits)

# RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

## Year 1: Fall

* CNG 121 - Computer Technician I: A+ (4 Credits)
* CNG 124 - Networking I: Network + (3 Credits)
* ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1 (3 Credits)

## Year 1: Spring

* CIS 220 - Fundamentals of Unix (3 Credits)
* CNG 125 - Networking II: Network + (3 Credits)
* CNG 132 - Network Security Fundamentals (3 Credits)

## Year 1: Summer

* CIS 118 - Intro to PC Applications (3 Credits)
* COM 115 - Public Speaking OR COM 125 - Interpersonal Communication (3 Credits)

## Year 2: Fall

* CNG 142 - Introduction to Cloud Computing Concepts (3 Credits)
* MAT 121 - College Algebra: GT-MA1 (4 Credits)

## Year 2: Spring

* CNG 212 - Configuring Windows Server (4 Credits)
* CNG 224 - Microsoft Windows Wireless Network (3 Credits)
* Elective (3 Credits)

## Year 2: Summer

* BUS 217 - Business Communication & Report Writing (3 Credits)
* CIS 202 - Automated Project Management: MS Project (3 Credits)

## Year 3: Fall

* CNG 243 - Cloud Security and Cyber Law (3 Credits)
* CNG 253 - Firewalls and How They Work (3 Credits)

## Year 3: Spring

* CIS 287 - Cooperative Education (3 Credits)
* Elective (3 Credits)