

# Prepare for Cisco Certifications

## — While working on your AAS Degree or Certificate of Achievement

The CIT Department at the College of Southern Nevada offers many courses to help you prepare for industry-recognized certifications. The courses will also fulfill requirements for AAS Degrees and Certificates of Achievement.

Cisco Systems Inc, is the world's largest networking technology infrastructure company headquartered in Silicon Valley, CA. This document presents Cisco certifications which “went live” in late February 2020, and their current associated preparatory courses.

*The course material of each class can serve only as a guide to the specific topics covered in the certification exams. Passing these classes does not guarantee that you will pass the certification exams. Additional review and practice will be required to achieve the mastery of the concepts and skills needed to pass the exams.*

(If you already hold *current* versions of these industry certifications, you may wish to use them to petition for **Non-Traditional Educational (NTE)** credit for relevant courses required for AAS degrees or Certificates of Achievement. Specific rules, procedures and limitations apply. See the Alternative Credit Options (<https://catalog.csn.edu/content.php?catoid=11&navoid=2829>) section in the online 2023–2024 General Catalog, Admissions Information for details. Scroll down to find the “Non-Traditional Education (NTE)” section.)

Refer to the online 2023-2024 Catalog for [Course Descriptions](#) and [Degree Requirements](#).

Contact [Karen Ahern](#), Networking Program Director, for more information about these certifications.

## CCNA - Cisco Certified Network Associate

According to Cisco's [CCNA website](https://www.cisco.com/c/en/us/training-events/training-certifications/certifications/associate/ccna.html) (<https://www.cisco.com/c/en/us/training-events/training-certifications/certifications/associate/ccna.html>), “Achieving the CCNA certification is the first step in preparing for a career in IT technologies. To earn CCNA certification, you pass one exam that covers a broad range of fundamentals for IT careers, based on the latest networking technologies, software development skills, and job roles.”

The CCNA certification is earned by passing Exam 200-301. This proctored, 120-minute exam validates your skills and knowledge in the following areas:

- Network fundamentals
- Network access
- IP connectivity
- IP services
- Security fundamentals
- Automation and programmability

The following courses at CSN will prepare you for the CCNA exam:

- CSCO 120 CCNA Introduction to Networks
- CSCO 121 CCNA Switching, Routing, and Wireless Essentials (Prerequisite: CSCO 120)
- CSCO 220 CCNA Enterprise Networking, Security, and Automation (Prerequisite: CSCO 121)

Each of these three courses is 4 credits, and fulfill requirements for the following:

- AAS Degree in CIT Cyber Security - Digital Forensics (CSCO 120, CSCO 121, CSCO 220: electives)
- AAS Degree in CIT Cyber Security - Network Security (CSCO 120, CSCO 121, CSCO 220: core)
- AAS Degree in CIT Networking – Network Administration (CSCO 120, CSCO 121, CSCO 220: core)
- Certificate of Achievement in Cyber Security - Digital Forensics (CSCO 120 core; CSCO 121, CSCO 220: electives)

## CCNP — Cisco Certified Network Professional Enterprise

According to Cisco's [CCNP website](https://learningnetwork.cisco.com/s/ccnp-enterprise) (<https://learningnetwork.cisco.com/s/ccnp-enterprise>) the professional level certifications validate advanced knowledge and skills. The CCNP Enterprise certification “requires passing of two exams: one that covers core enterprise technologies and one concentration exam.”

The core exam is 350-401 ENCOR: Implementing Cisco Enterprise Network Core Technologies. Passing this exam validates your knowledge of implementing core enterprise network technologies:

- dual stack (IPv4 and IPv6) architecture
- virtualization
- infrastructure
- network assurance
- security
- automation

The concentration exam is 300-410 ENARSI: Implementing Cisco Enterprise Advanced Routing and Services. Passing this exam validates your knowledge of implementing implementation and troubleshooting of advanced routing technologies and services including:

- Layer 3
- VPN services
- infrastructure security
- infrastructure services
- infrastructure automation

The following three courses at CSN will prepare you to take the two exams needed to obtain the CCNP Enterprise certification:

- CSCO 480 CCNP Enterprise – Core Networking I  
(Prerequisite CCNA certification OR completion of CSCO 221)
- CSCO 482 CCNP Enterprise – Core Networking II  
(Co-requisite: CSCO 480 or Instructor approval).

Both 480 and 482 must be taken in the same semester.

- CSCO 484 CCNP ENCOR Capstone

These three courses are each 4 credits, and each fulfills a core requirement for the

- Certificate of Achievement in Information Management - Network Infrastructure Analyst

This Certificate of Achievement is accepted as the third year of study at institutions that articulate a joint Bachelor of Applied Science degree with College of Southern Nevada.