

# Network Engineer - Certificate of Specialization

+If you have completed coursework at another college and/or are starting in a semester other than a Fall term, please follow up with the Counseling Department to determine if this sequence is appropriate for your academic and career goals.

**Program Description:** Design, configuration, and maintenance of LANs and WANs. Develop advanced experience in, routing, IP addressing, Cisco supported network technologies, network troubleshooting skills, WAN technologies, VLANs, OSPF, EIGRP, VoIP, WLANs, and security.

**Program SLO:** Students will be able to design, implement, maintain and troubleshoot Microsoft network devices.

**Important Information:** For students interested in earning an Associate's degree and/or transfer, please follow up with the Counseling Office for additional information @ <https://www.canyons.edu/counseling> or (661)362-3288/(661)362-3811.

\*This pathway is mapped out with the assumption that prerequisites of NETECH 151 (CCNA-1: Introduction to Networks), NETECH 152(CCNA-2: SWITCHING, ROUTING, AND WIRELESS ESSENTIALS), and NETECH 153 (CCNA-3: Enterprise Networking, Security, and Automation) have been completed.

Major courses are sequenced and **BOLDED** based on recommendations by the [Network Technologies Department](#)

**First Semester (3-6 units minimum) FA = Fall; WI = Winter; SP = Spring; SU = Summer**

Course	Title Courses	Units	Major
NETECH 251	<b>CCNP Enterprise Core (FA)</b> Pre-requisite NETECH 153	3	Major
NETECH 254	<b>Wireless Technologies (FA)</b> Pre-requisite NETECH 153	3	Major
	<b>Term Total:</b>	6	

**Second Semester (7-12 units minimum)**

Course	Title	Units	Major Courses
NETECH 253	<b>CCNP Enterprise and Routing Services (SP)</b> Pre-requisite NETECH 153 and NETECH 251 is a highly recommended preparatory course	3	Major
NETECH 259	<b>CCNA Security (SP)</b> Pre-requisite NETECH 153	3	Major
	<b>Term Total:</b>	6	

**Total Units: 12**

## Counseling Resources

Computer Networking Department: <https://www.canyons.edu/academics/networking/index.php>

Counseling Department: <https://www.canyons.edu/studentservices/counseling/index.php>

Campus Alliances: <https://www.canyons.edu/administration/ie2/equity/alliances.php> Petition for Certificate – Petitions are due in the fall/spring/summer term you will complete the requirements, and may be submitted before your last term or up until the final day of the term. Petitions must reviewed with a counselor and may be downloaded here:

[https://www.canyons.edu/resources/documents/studentservices/admissions/Petition\\_for\\_Certificate\\_of\\_Specialization.pdf](https://www.canyons.edu/resources/documents/studentservices/admissions/Petition_for_Certificate_of_Specialization.pdf)

## Career Resources

Computer Networking Career Tree: <https://www.canyons.edu/academics/networking/careertree/index.php>

California Career Zone: <https://www.cacareerzone.org/>

O\*Net Online: <https://www.onetonline.org/>

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Bureau of Labor and Statistics: [www.bls.gov](http://www.bls.gov)

## **Certification Resources**

CompTIA

CeH – Certified Ethical Hacker

MCSA – Microsoft Certification for Server Administration

CCNA – Cisco Certified Network Associate

CCNP – Cisco Certified Network Professional