

The objective of this certificate is to provide students the knowledge and skills necessary to prepare for the Cisco Certified Network Associate (CCNA) Certification Examination. Satisfactory passing of the exam will lead to employment in entry-level positions in the small office and/or home office (SOHO) market. The CCNA Certificate indicates the ability to work in small businesses or organizations using networks that have fewer than 100 nodes. The certificate holder is able to install and configure Cisco switches and routers in multi-protocol interworking using LAN and WAN interfaces, can provide Level 1 troubleshooting service, can improve network performance and security, and can perform entry-level task in the planning, design, installation, operations, and troubleshooting of Ethernet and TCP/IP networks.

**Certificate Requirements:**

Students intending to earn a certificate from Crafton Hills College must complete no less than 50 percent of the courses required for the certificate in residence at Crafton Hills College and must earn a “C” or better in all coursework required as a part of the certificate.

**Completion of the following 16.00 units qualifies the student for the Cisco Certified Network Associate Certificate:**

Required Courses:		Units	IP	Need	Grade
CIS 140	Introduction to Networks (Cisco CCNA1)	4			
CIS 141	Basic Routing and Switching (Cisco CCNA 2)	4			
CIS 142	Advanced Routing and Switching (Cisco CCNA 3)	4			
CIS 143	WAN Technologies and Network Services (Cisco CCNA 4)	4			
<b>Total Required Units:</b>		16			

A student receiving a certificate in this field will be able to:

- Work collaboratively on a team project
- Effectively listen and ask critical questions to identify customer requests, issues and concerns
- Apply analytical and logical thinking to gathering and analyzing information, designing and testing solutions to problems, and formulating plans
- Install, configure, operate and troubleshoot simple-switched Local Area, simple-routed Wide Area Networks
- Install, configure a router, manage router IOS software, configure routing protocols, and create access lists controlling router access
- Complete a comprehensive case study incorporating single-arc OSPF, RIPv2,static routes, VLANs and 802.q trunking, Frame Relay, VLSM, DHCP, NAT and access control lists on the appropriate routers and interfaces