

## Enroll in CISCO Today

Several TUSD high schools offer CISCO programs.

Talk with your counselor and CTE teacher to determine what high school courses you need to take. You may earn Pima Community College credits for these courses as well.

Find more information about CISCO Programs at:

<http://pima.edu>  
<http://uofa.edu>  
<http://asu.edu>  
<http://nau.edu>



Prepare for your future today!



### Career and Technical Education

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## Career and Technical Education



# CISCO

*Tucson Unified School District*

**Tel: (520) 225-4652**

# TUSD's Cisco Program

Cisco is a four-semester web-based certification program that covers computer networking fundamentals, including designing, building and maintaining networks. The hands-on curriculum permits students to



Cisco Systems—  
connecting the world

access content from inside or outside the classroom, proceed through each lesson at their own pace, view video and other visual explanations of the technology and take frequent tests online to assess comprehension and retention. The program prepares students for an industry-standard career certification—Cisco Certified Networking Associate (CCNA)—and lifelong learning opportunities needed for success in the 21st century workplace.

## Semester Content

**Semester 1** is an introduction to network standards, concepts, topology and terminology including LAN's, WAN's, the OSI model, cabling IP addressing network hardware and various protocols.

**Semester 2** is an introduction to router and routing concepts and terminology including Ethernet and Token Ring frames, RIP and IGRP routing protocols, distance vector and link state routing, routing loop issues, TCP/IP addressing, and IP access lists. Students will get hands-on experience configuring Cisco routers.

**Semester 3** covers the advanced features of router and routing concepts including IPX access lists, LAN segmentation using bridges and switches, network congestion issues, cut-through and store-and-forward switches, and the operation of the Spanning Tree protocol. Students will use Cisco routers.

**Semester 4** covers the various Wide Area Network services including LAPB, Frame Relay, ISDN, HDLC, PPP, and DDR.



Configure Frame Relay LMI's, maps and subinterfaces on CISCO routers.

## Cisco Certification

Students who have completed four semesters of Cisco training may be ready to take an exam to earn certification. Cisco certification ensures high standards of technical expertise. Achieving Cisco certification, at any level, means joining the ranks of skilled network professionals who have earned respect in the industry.

## Pima Community College

Students who do not complete four semesters of Cisco training in their TUSD high school can continue the program at Pima Community College.

Source: Cisco Systems, [www.CISCO.com](http://www.CISCO.com)

## Career and Technical Education

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