



21250 Stevens Creek Blvd.  
Cupertino, CA 95014  
408-864-5678  
www.deanza.edu

Academic Year  
**2019 - 2020**

Computer Information Systems  
**Network Administration**

Business, Computer Sciences and  
Applied Technologies Division  
Bldg. L1, Room L14  
408-864-8797

Counseling and Advising Center  
Student and Community  
Services Bldg., 2nd Fl.  
408-864-5400

Please visit the Counseling and Advising Center to apply for degrees and for academic planning assistance.

**Certificate of Achievement Requirements**

Completion of all major courses with a "C" grade or higher, or with a "Pass" if the course was taken on a Pass/No Pass (P/NP) basis and the "Pass" is equal to a "C" grade or higher.

Note: A maximum of six (6) quarter units may be transferred from other academic institutions.

**Certificate of Achievement-Advanced Requirements**

1. Completion of all major courses with a "C" grade or higher, or with a "Pass" if the course was taken on a Pass/No Pass (P/NP) basis and the "Pass" is equal to a "C" grade or higher.
2. Demonstrated proficiency in English and mathematics as evidenced by eligibility for EWRT 1A or EWRT 1AH or ESL 5 and eligibility for MATH 114.

Note: A maximum of 18 quarter units may be transferred from other academic institutions.

**A.A./A.S. Degree Requirements**

1. Completion of all General Education (GE) requirements (32-43 quarter units) for the A.A./A.S. degree. GE units must be completed with a minimum 2.0 GPA ("C" average).
2. Completion of all major courses with a "C" grade or higher, or with a "Pass" if the course was taken on a Pass/No Pass (P/NP) basis and the "Pass" is equal to a "C" grade or higher. Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees).

Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.

3. Completion of a minimum of 90 degree-applicable quarter units (GE and major units included). All De Anza courses must be completed with a minimum 2.0 GPA ("C" average). All De Anza courses combined with courses transferred from other academic institutions must be completed with a minimum 2.0 GPA ("C" average).

Note: A minimum of 24 quarter units must be earned at De Anza College.

**Network Administration**

**Certificate of Achievement**

This Certificate of Achievement offers studies in overseeing and maintaining Windows systems as part of a network enterprise. Students become proficient in running administrative processes on a Windows operating system. Focus is placed on organization, security and upkeep decisions as part of a larger business environment.

*Program Learning Outcomes - upon completion, students will be able to:*

- Identify computer hardware and networking components in the context of micro computers and various types of network operating systems, architectures and protocols.
- Develop and present a business improvement plan using the business decision making model and utilizing software applications in word processing, spreadsheets, or databases.

1. Meet the requirements for this certificate level.
2. Complete the following.

CIS 4	Computer Literacy	4.5
CIS 66	Introduction to Data Communication and Networking	5
CIS 67A	Local Area Networks	4
CIS 108	Personal Computer Security Basics	4.5
CIS 170F	Windows Administration	4.5
<b>Total Units Required .....</b>		<b>22.5</b>

**Network Administration**

**Certificate of Achievement-Advanced**

**A.A. Degree**

The Certificate of Achievement-Advanced and A.A. degree programs offer studies in overseeing and maintaining Windows systems as part of a network enterprise. Students become proficient in running administrative processes on a Windows operating system. Focus is placed on organization, security and upkeep decisions as part of a larger business environment. The programs include training in programming, network management, UNIX and Perl to aid in understanding more complex networking problems that occur in business enterprises.

*Program Learning Outcomes - upon completion, students will be able to:*

- Use UNIX/LINUX utilities and shell features for file manipulation and communication.
- Create algorithms and code, document, debug and test shell scripts that interact with the UNIX/LINUX OS.
- Create algorithms to solve introductory-level problems using C programming and shell scripting or Perl languages.
- Identify networking components and protocols in the context of architectures and technologies for LAN, WAN and Internet networks.

**Certificate of Achievement-Advanced**

1. Meet the requirements for this certificate level.
2. Complete the following.

CIS 18A	Introduction to Unix/Linux	4.5
CIS 22A	Beginning Programming Methodologies in C++	4.5
CIS 22B	Intermediate Programming Methodologies in C++	4.5
or CIS 22BH	Intermediate Programming Methodologies in C++ - HONORS	
CIS 66	Introduction to Data Communication and Networking	5
CIS 67A	Local Area Networks	4
CIS 67B	Introduction to Wide Area Networking	4
CIS 75A	Internet Concepts and TCP/IP Protocols	5

**Complete one course: 4.5**

CIS 18B      Advanced Unix/Linux (4.5)

CIS 33A      Programming in Perl (4.5)

**Complete one course: 4.5-5**

CIS 31      Operating System Concepts (5)

CIS 170F     Windows Administration (4.5)

**Total Units Required ..... 40.5-41**

**A.A. Degree**

*Major      Complete the Cert. of Achievement-  
Advanced requirements      40.5-41*

*GE      General Education (32-43 units)*

*Electives    Elective courses required when major  
units plus GE units total is less than 90*

**Total Units Required .....90**

*Check with the CIS department about the recommended  
sequence for completing the above courses.*