



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

Academic Year  
**2011 - 2012**

## Computer Information Systems Network Design and Administration

CIS Coordinator  
408-864-8877  
Bldg. F5 Rm. F511

Business & Computer  
Systems Division  
Bldg. L1 Rm. L14  
408-864-8797

Counseling Center  
Student & Community  
Services Bldg. 2nd Fl.  
408-864-5400

Career Services Info.  
Student & Community  
Services Bldg. 2nd Fl.  
408-864-5400

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

### Certificate of Achievement Level Requirements

A minimum "C" grade in each major course.

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

### Certificate of Achievement-Advanced Level Requirements

1. A minimum "C" grade in each major course.
2. Demonstrated proficiency in English and mathematics as evidenced by eligibility for EWRT 1A 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 (31-42 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 requirements. Each major course must be completed with a minimum "C" grade.  
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.

Major courses for certificates and degrees must be completed with a letter grade unless a particular course is only offered on a pass/no-pass basis.

## Network Administration

### Certificate of Achievement

This certificate program 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.

*Student 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.

*Complete:*

CAOS 90GA\* Computer Literacy I (PC) 2

\* Based on previous experience or knowledge, student may substitute another CAOS course of equal or greater unit value with departmental approval.

*Complete one (1) course from:*

CAOS 102L Microsoft Windows I (Windows XP) (I) 1

CAOS 102M Microsoft Windows I (Windows Vista) (I)

*Complete the following:*

CIS 108 Personal Computer Security Basics 4  
or CAOS 108

CIS 66 Intro. to Data Communication & Networking 5

CIS 3 Business Information Systems 4.5

CIS 170F Windows 7 Administration 4.5

Total Units Required . . . . . 21

## Network Administration

### Certificate of Achievement-Advanced

#### A.A. Degree

This achievement-advanced certificate and degree program 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. In addition, the Achievement-Advanced certificate offers training in programming, network management, UNIX and PERL to aid in understanding more complex networking problems that occur in business enterprises.

*Student 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 15AG Intro. to Computer Programming Using C 4.5

CIS 15BG Intermediate Problem Solving in C 4.5

CIS 18A Introduction to UNIX/LINUX 4.5

CIS 66 Intro. to Data Communication & 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 (1) course from: 4.5  
 CIS 18B Advanced UNIX/LINUX (4.5)  
 CIS 33A Programming in PERL (4.5)  
 Complete one (1) course from: 4.5-5  
 CIS 31 Operating System Concepts (5)  
 CIS 170F Windows 7 Administration (4.5)  
 Total Units Required . . . . . 40.5-41

**Recommended Course Sequence**

1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
CIS 15AG	CIS 15BG	CIS 18B or 33A	CIS 67B
CIS 18A	CIS 66	CIS 67A (CIS 170F)	CIS 75A (CIS 31)

**A.A. Degree**

Meet the A.A./A.S. degree requirements.

Major Complete the course requirements for the Network Administration  
 Cert. of Achievement-Advanced 40.5-41 units  
 GE General Education (31-42 units)  
 Electives Elective courses req'd. when major units plus GE units total is less than 90  
 Total Units Required . . . . . 90 units

**Recommended Course Sequence**

1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	5th Qtr	6th Qtr
CIS 15AG	CIS 15BG	CIS 18B or 33A	CIS 67A	(CIS 170F)	
CAOS 151G	CIS 18A	CIS 66	CIS 67B or (CIS 31)		CIS 75A