

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

# Academic Year

2014 - 2015

# Computer Information Systems

# Network Administration

CIS Coordinator 408-864-8877 Bldg, F5 Rm, F5 li Business & Computer Systems Division Bldg. LI Rm. LI4 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

### Certificate of Achievement Level Requirements

A minimum "C" grade in each major course. Note: A maximum of six (6) guarter units may be transferred from other academic institutions.

#### Certificate of Achievement-Advanced Level Requirements

- I. A minimum "C" grade in each major course.
- Demonstrated proficiency in English and mathematics as evidenced by eligibility for EWRT IA 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

- 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).
- 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.

CIS 94	Computer Literacy	4.5
CIS 108	Personal Computer Security Basics	4
CIS 66	Intro. to Data Communication & Networking	5
CIS 67A	Local Area Networks	4
CIS 170F	Windows 7 Administration	4.5
	Total Units Required	22

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

## **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

Complete both CIS 15AG and 15BG, or both

- I. Meet the requirements for this certificate level.
- 2. Complete the following.

CIS 22A and CIS 22B.			
CIS 15AG	Intro. to Computer Programming Using C (4.5)		
CIS 15BG	Intermediate Problem Solving in C (4.5)		
or			
CIS 22A	Beginning Programming Methodologies in C++ (4.5)		
CIS 22B	Intermediate Programming Methodologies		
	in C++ (4.5		
<i>-</i>			
Complete the following courses:			
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)	1.5-5	
CIS 170F	Windows 7 Administration (4.5)		
CI3 170F	Total Units Required 40.	5_41	
	Total Offics Required	J-T1	

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

# 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 required when major

units plus GE units total is less than 90

Total Units Required . . . . . . . . . . . . . . . . 90 units

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