

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

# 2020 - 2021

## **Network Administration**

Business, Computer Sciences and Applied Technologies Division Bldg. L1, Room L14 408-864-8797 Find your counselor at deanza.edu/our-counselors

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.

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

## Certificate of Achievement-Advanced Requirements

- Completion of all major courses with a C grade or higher.
- Demonstrated proficiency in mathematics and English as evidenced by eligibility for MATH 114 and eligibility for any of the following: EWRT 1A, EWRT 1AH, EWRT 1AS with EWRT 1AT, or ESL 5.

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 (32-43 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 courses with 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.
- 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  |
|          | Total Units Required                   | 22.5 |

## **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<br>CIS 18B<br>CIS 33A | course:<br>Advanced Unix/Linux (4.5)<br>Programming in Perl (4.5) | 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 Certificate of Achievement                           | nt-     |  |  |
|                                    | 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 recommende                               | d       |  |  |

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