

# Network Administration

(Academic Plan code 1101017079 subplan code 110101701)

The Network Administration option provides the knowledge and skills needed to design, set-up, maintain, and expand networked systems. The curriculum provides specific training in Novell, Nortel, Cisco, and/or Microsoft network systems. Upon completion of the option/certificate the graduate will be qualified to take industry designed and recognized certification examinations. Employment opportunities include entry-level positions in installation and administration of local and wide area networks in medium to large businesses and organizations and computer network administration positions in small businesses.

Students entering this program will need to have basic computer skills such as would be obtained through the CIS 100 course (Introduction to Computers) or equivalent.

**General Education Core courses:**

- ENG 101 *Writing I*
- ENG 102 *Writing II*
- Oral Communication Course
- Social Interaction Course
- Heritage/Humanities Course
- MA 109/MT 109/MT 150 *College Algebra*
- PH 171 *Applied Physics* OR PHY 217 *Applied Industrial Physics* OR PHY 152 *Introduction to Physics II* and PH 162 *Introduction to Physics Laboratory II*

**Technical Core courses:**

- CIS 120 *Program Design and Development*
- ET 107 *Computer Applications for Technicians* OR CIS 130 *Microcomputer Applications*
- ET 232 *Software Maintenance* OR CIS 110 *Operating Systems Concepts*
- ET 234 *Hardware Maintenance*
- NIS 160 *Networking Core Technologies\** OR IT 120 *Cisco Internetworking I\*\**
- IT 170 *Introduction to Database Design*
- IT 132 *Web Page Development* OR IT 130 *Web Site Design and Production*
- Beginning Level Programming Language Course (*IT 147 will not satisfy this requirement*)

\* recommended for Microsoft Networking tracks

\*\* recommended for Cisco Networking tracks

**Network Admin Option courses:**

Choose from **one** of the following four options:

**Cisco Associate (CCNA) Option**

- IT 122 *Cisco Internetworking II*
- IT 220 *Cisco Internetworking III*
- IT 222 *Cisco Internetworking IV*
- NIS 213 *Administering Microsoft Windows Server* or NIS 230 *UNIX Administration*
- Technical Electives (6 credit hours—two courses)

**Cisco Professional (CCNP) Option**

- IT 280 *Cisco CCNP I Advanced Routing*
- IT 282 *Cisco CCNP II Remote Access*
- IT 284 *Cisco CCNP III Switching*
- IT 286 *Cisco CCNP IV Internetwork Troubleshooting and Support*
- Technical Electives (6 credit hours—two courses)

**Microsoft MCSA Option**

- NIS 211 *Administering Microsoft Windows Professional*
- NIS 213 *Administering Microsoft Windows Server*
- NIS 214 *Supporting Windows Network Infrastructure*
- MCSA Track Elective (3 hours)
- Technical Elective (6 credit hours—two courses)

**MCSA Track Elective Courses**

- NIS 216 *Implementing and Administering Microsoft Windows Directory Services*
- NIS 246 *Microsoft SQL Server System Administration*
- NIS 245 *Designing a Secure Microsoft Windows Network*
- NIS 262 *Microsoft Internet Security and Acceleration Server (ISA)*
- NIS 264 *Implementing and Managing Microsoft Exchange Server*
- IT 210 *Operating System Support* AND
- IT 215 *Application Support*

**Microsoft MCSE Option**

- NIS 211 *Administering Microsoft Windows Professional*
- NIS 213 *Administering Microsoft Windows Server*
- NIS 214 *Supporting Windows Network Infrastructure*
- NIS 216 *Implementing and Administering Microsoft Windows Directory Services*
- NIS 244 *Designing a Windows Networking Services Infrastructure*
- NIS 242 *Designing a Windows Directory Services Infrastructure* OR NIS 245 *Designing a Secure Microsoft Windows Network*
- MCSE Track Elective (3 hours)
- Technical Elective (3 hours)

**MCSE Track Elective Courses**

- NIS 242 *Designing a Windows Directory Services Infrastructure\**
  - NIS 245 *Designing a Secure Microsoft Windows Network\**
  - NIS 246 *Microsoft SQL Server System Administration*
  - NIS 262 *Microsoft Internet Security and Acceleration Server (ISA)*
  - NIS 264 *Implementing and Managing Microsoft Exchange Server*
  - IT 250 *Introduction to Security*
- \* must be different than course chosen above

**Programming courses selected from the following:**

- CIS 143 *COBOL Programming*
  - CIS 148 *Visual Basic I*
  - CIS 149 *Java Programming I*
  - CIS 155 *C/C++ Programming I*
  - CS 115 *Introduction to Computer Programming*
  - IT 147 *SQL Programming (cannot fulfill technical core requirement)*
  - NIS 150 *Introduction to Perl Scripting*
  - NIS 152 *Javascript*
- Course approved by program coordinator

For additional information contact:  
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