

Information Security

(Academic Plan code 1101017079 subplan code 1101013219)

A program of study designed to provide a solid background in information security.

Fundamentals of information security, offensive techniques, defensive techniques, and security topics such as operating system security, network security design, or other security topics are covered. This option will prepare students for entry-level positions in the areas of network security, auditing and penetration testing, firewall configuration, and computer crime investigation.

General Education Core courses:

- ENG 101 *Writing I*
- ENG 102 *Writing II*
- Oral Communication Course
- Social Interaction Course
- Heritage/Humanities Course
- MT 150 *College Algebra*
- Science Course with Lab

*All incoming freshmen are required to successfully complete GE 100 or GE 101 within their first 18 hours. Note: this does not apply to transfer students

Technical Core courses:

- CIS 120 *Program Design and Development*
- ET 107 *Computer Applications for Technicians* OR CIS 130 *Microcomputer Applications*
- Complete **one** of the following pairs of courses:
 - ET 232 *Software Maintenance* OR CIS 110 *Operating Systems Concepts* **AND**
 - ET 234 *Hardware Maintenance*
- OR**
- IT 105 *Computer Maintenance Essentials* **AND**
- IT 205 *Advanced Computer Maintenance*
- Introductory Networking Course
- 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**)

* CIS 149 or CIS 155 recommended for Game Programming Track

Beginning Level Programming Language Courses:

- CIS 143 *COBOL Programming*
- CIS 148 *Visual Basic I*
- CIS 149 *Java Programming I*
- CIS 155 *C/C++ Programming I*
- IT 147 *SQL Programming* (cannot fulfill technical core requirement)
- NIS 150 *Perl Programming I*
- NIS 152 *Introduction to JavaScript*
- CS 115 *Introduction to Computer Programming*
- IT 141 *Introduction to PHP*

Other courses approved by program coordinator**Introductory Networking Courses:**

- NIS 160 *Networking Core Technologies*
- IT 120 *Networking Fundamentals*
- IT 121 *Networking for Home and Small Business*

Information Security Option courses:

- IT 250 *Introduction to Security*
- IT 252 *Attacks and Exploits*
- IT 254 *Firewalls and Perimeter Defense*
- Security Elective (3 credit hours)
- Networking Sequence (9 credit hours)

Security Electives:

- IT 255 *Computer Forensics*
- IT 256 *UNIX/LINUX Operating System Security*
- IT 258 *Windows Operating System Security*
- IT 259 *Selected Topics in Information Security*
- NIS 245 *Designing a Secure Windows Network Topic*

Networking Sequence – Must take one complete sequence of three classes

- NIS 211 *Administering Microsoft Windows Professional: Topic* **AND**
- NIS 213 *Administering Microsoft Windows Server: Topic* **AND**
- NIS 214 *Supporting Windows Network Infrastructure Topic* **OR**
- NIS 230 *UNIX Administration* **AND**
- NIS 260 *Advanced UNIX* **AND**
- NIS 275 *Internet Servers Administration*
- OR**
- IT 122 *Routing Protocols and Concepts* **AND**
- IT 220 *LANS Switching and Wireless* **AND**
- IT 222 *Accessing the WAN*
- OR**
- IT 123 *Small to Medium Business or ISP Networking* **AND**
- IT 223 *Introducing Routing and Switching in the Enterprise* **AND**
- IT 225 *Designing and Supporting Computer Networks*

For additional information contact
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