

# Information Assurance & Cyber Defense

This program provides a basic foundation of knowledge in the computing area and the ability to apply computer theory to business applications. Graduates find employment in organizations ranging from small firms to large corporations as computing technicians, providers of help desk services and software trainers.

The Information Systems associate degree is a great way to enter the work force with a degree under your belt. It will also benefit you by applying towards a four-year business degree should you choose to go that path later in life.

Job opportunities in the technology areas are diverse and growing in number. Graduates of NMU's program find employment in organizations ranging from small firms to large corporations. People-oriented career paths lead to positions as computer consultants, analysts, trainers, help desk managers, and high tech marketers. Alternate careers as software programmers, database managers, Internet specialists, and network administrators tie technical skills to the support and use of computer systems.

## Skills and Competencies

As in most other fields, strong interpersonal communication and organizational skills are a must for a professional. Other valuable skills and competencies specific to the professions are: a commanding knowledge of relevant application software, technical reporting ability, the ability to work independently or with project teams, and systems design capabilities.

## Course Work

This degree includes the following courses as part of the program requirements, and specific major requirements along with general education and graduation requirements.

### Core Courses

- CIS100 Computer Concepts (2 cr.)
- IS116 Cybersecurity Fundamentals (4 cr.)
- CIS226 Intro. To Networks and Security (4 cr.)
- CIS250 Systems Analysis and Design (4 cr.)
- IS236 Cybersecurity Foundations (4 cr.)

#### Elective

*Choose one course from the following:*

- CS101 Web Site Construction (4 cr.)
- CS120 Computer Science I (4 cr.)
- CIS155 Software Development I (4 cr.)
- CIS222 Quantitative Business Problem Solving (4 cr.)

### Business Electives

- ACT230 Fundamentals of Financial Accounting (4 cr.)
- Elective

*Choose two courses from the following:*

- MGT221 Legal Environment of Business (4 cr.)
- MKT230 Introduction to Marketing (4 cr.)
- MGT240 Organizational Behavior and Management (4 cr.)

### Other Required Courses

- EN111 College Composition I (4 cr.)

#### Communication Elective

*Choose one course from the following:*

- EN211 College Composition II (4 cr.)
- SP100 Public Address (4 cr.)
- LDR100 Effective Communication in the Workplace (4 cr.)

### General Electives (6 cr.)

#### \*Recommended Courses:

- DATA109 Introduction to Statistics (4 cr.)
- PL182 Computer, Information, and Technology Ethics (4 cr.)
- SP110 Interpersonal Communication (4 cr.)

## Career Development

You should begin the resume-building process as soon as you can. The Academic and Career Advisement Center can assist you with career planning, while Career Services will help you fine tune your resume and look for jobs related to your field. In the meantime, the more hands-on experience you have, the better the chances are that you will find a job. Becoming involved in a professional related internship is a way to develop your professional skills and gain experience. Your academic course work is important as well, so be sure to maintain a high grade point average.

## Additional Considerations

Information Assurance and Cyber Defense is an Associate of Business degree requiring 60 credits to complete. Ideally, this would take two years at 32 credits a year. This would work out to 16 credits a semester.

## Job Outlook

Jobs in the computing field are expected to continue to grow in the coming years, up to 7 percent. Average salaries range from \$30,000 to \$40,000.

# Potential Careers

NMU's Information Systems Program prepares students for employment in the following careers:

- Database Administrator
- E-Business Consultant
- End User Trainer
- Information Systems
- Interface Designer
- Network Administrator
- Software Support Technician
- Systems Analyst
- Technical Sales Representative
- Technology Consultant
- Technology Support Specialist
- Training Development Consultant
- Web Developer

# Additional Resources and Information

For Career Planning and Opportunities:  
Academic & Career Advisement Center  
3302.1 C.B. Hedgcock  
906-227-2971  
103 Jacobetti Complex  
906-227-2283  
[www.nmu.edu/acac](http://www.nmu.edu/acac)

College of Business  
301 Cohodas  
906-227-2960  
[www.nmu.edu/business](http://www.nmu.edu/business)

For Job Search, Resume and Career Information:  
Career Services  
3302.3 C.B. Hedgcock  
906-227-2800  
[www.nmu.edu/careers](http://www.nmu.edu/careers)

For Information about NMU Student Organizations Associated with this Major Contact:  
Center for Student Enrichment  
1206 University Center  
906-227-2439  
[www.nmu.edu/cse](http://www.nmu.edu/cse)

Internet Resource Links:  
[www.careers.org](http://www.careers.org)  
[www.bls.gov](http://www.bls.gov)

For Career Information with National Organizations:  
[www.iacis.org](http://www.iacis.org) -International Assoc. of Computer Information Systems



**NORTHERN MICHIGAN  
UNIVERSITY**

The Academic & Career Advisement Center  
2022



What to do with  
a major in...

**Information Assurance  
& Cyber Defense**

Associate's Degree

