

Associate in Applied Science in Information Technology Networking

Program Overview

Upon completion of this degree, students will gain the knowledge, skills, and abilities in networking that provide career opportunities or career advancement. This degree also provides the foundation for business and industry certifications.

To Learn More About This Program

Contact Eric Clayborn at 269-783-2153 or eclayborn@swmich.edu.

Degree Requirements

To earn this degree, students must have an overall GPA of 2.0 or higher, complete a minimum of 60 credit hours, and fulfill the course requirements of the program listed below. Students are permitted to complete a higher-level math course than shown below. Each general education course, prerequisite course, internship, and capstone course must be completed with a final grade of C or better.

Course Offerings

Students pursuing an Associate in Applied Science in Information Technology Networking may complete select courses for this program online. Courses within this program may also be offered on-site at our Dowagiac or Niles Campus.

General Education Courses

COMMUNICATIONS

| Course ID | Course | Credits |
|-----------------------|---------------------------------------|----------------|
| ENGL 103 or ENGL 103W | Freshman English 2 (or with workshop) | 3 to 4 credits |
| SPEE 102 | Fundamentals of Public Speaking | 3 credits |

MATHEMATICS

| Course ID | Course | Credits |
|-----------|------------|-----------|
| MATH 150 | Statistics | 4 credits |

Major-Specific Required Courses

| Course ID | Course | Credits |
|-----------|--------------------------------------|-----------|
| EDUC 120 | Educational Exploration and Planning | 1 credit |
| ISYS 201 | IT Support | 3 credits |
| ISYS 207 | Managing and Maintaining PCs | 4 credits |
| ISYS 271 | Networking Essentials | 3 credits |
| ISYS 272 | Configuring Windows Devices | 3 credits |
| ISYS 281 | Installing Windows Server | 3 credits |
| ISYS 282 | Linux | 3 credits |
| ISYS 283 | Administering Windows Server | 3 credits |
| ISYS 284 | Advanced Windows Server | 3 credits |
| ISYS 285 | Network Security | 3 credits |

Complete either the Employment Ready Track or the Transfer Track to Ferris State University to continue studies in Computer Information Technology

EMPLOYMENT READY TRACK

| Course ID | Course | Credits |
|----------------------|---|-----------|
| BUSI 200 | Small Business Management | 3 credits |
| BUSI 240 | Professionalism Workshop | 1 credit |
| ISYS 110 | Introduction to Computer Technology | 3 credits |
| ISYS 229 | Scripting Languages | 3 credits |
| ISYS 255 | Internships | 3 credits |
| ISYS 288 | CISCO Routers and Switches | 3 credits |
| ISYS 295 | Cybersecurity Analysis | 3 credits |
| ISYS 290 or ISYS 215 | Systems Analysis or Selected Topics in Information Technology | 3 credits |

TRANSFER TRACK TO FERRIS STATE UNIVERSITY (satisfies MTA and Ferris requirements)

| Course ID | Course | Credits |
|-----------|--|-----------|
| BISC 111 | Biological Science | 4 credits |
| ECON 202 | Microeconomics | 3 credits |
| GEOG 110 | Physical Geography | 4 credits |
| ISYS 115 | Programming Logic and Design | 3 credits |
| PHIL 210 | Introduction to Ethics | 4 credits |
| SOCI 201 | Principles of Sociology | 3 credits |
| HUMA 210 | Introduction to Non-Western Civilization | 4 credits |

Total Program Credits: 61 to 64

Additional Notes About the A.A.S. in Information Technology Networking Program Employment Ready Track

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites is listed below in the Example Course Sequence.
- This program as outlined does not meet MTA requirements. Students who want to meet MTA requirements need to take two different natural science courses, two different social science courses, and two different humanities courses. Students should consult with an advisor to ensure proper course selection of these MTA-related courses.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.

Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|---|----------------|---|
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115, ENGL 103W, ENGL 103, ENGL 104, or test scores (concurrent enrollment in ENGL 115 allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 103W: test scores ENGL 103: ENGL 115 or test scores (concurrent enrollment allowed) |
| ISYS 110 Intro to Computer Technology | 3 credits | None |
| ISYS 207 Managing and Maintaining PCs | 4 credits | None |
| ISYS 271 Networking Essentials | 3 credits | ISYS 207 (concurrent enrollment allowed) |
| ISYS 201 IT Support | 3 credits | None |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|--|-----------|---|
| BUSI 200 Small Business Management | 3 credits | ENGL 115, ENGL 103W, ENGL 103, ENGL 104, or test scores (concurrent enrollment in ENGL 115 allowed) |
| ISYS 229 Scripting Languages | 3 credits | None |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |
| ISYS 281 Installing Windows Server | 3 credits | ISYS 207 and ISYS 271 |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|---------------------------------------|-----------|---|
| ISYS 272 Configuring Windows Devices | 3 credits | ISYS 281 |
| ISYS 283 Administering Windows Server | 3 credits | ISYS 281 |
| ISYS 288 CISCO Routers and Switches | 3 credits | ISYS 271 |
| ISYS 284 Advanced Windows Server | 3 credits | ISYS 281 |
| ISYS 285 Network Security | 3 credits | ISYS 207 (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|---|-----------|---|
| BUSI 240 Professionalism Workshop | 1 credit | None |
| ISYS 290 Systems Analysis or ISYS 215 Selected Topics in Information Technology | 3 credits | ISYS 290: ISYS 110 and ISYS 207 ISYS 215: None |
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| ISYS 255 Internship | 3 credits | BUSI 240 (concurrent enrollment allowed) |

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|---------------------------------|-----------|---|
| ISYS 295 Cybersecurity Analysis | 3 credits | ISYS 285 |
| ISYS 282 Linux | 3 credits | None |

Additional Notes About the A.A.S. in Information Technology Networking Transfer Track to Ferris State University

- A prerequisite course may be needed prior to enrollment in some courses within this program. Specific prerequisite requirements are listed in the Course Description section in the Course Catalog. A summary of the prerequisites is listed below in the Example Course Sequence.
- This program as outlined meets MTA requirements.
- Courses taken out of sequence may delay a student's ability to complete the program in a timely manner. Please consult your advisor regularly.
- Each student should submit a graduation application at least one full semester before he/she plans to graduate.
- This program is subject to change. Students should consult with their advisor for program updates.

Example Course Sequence

The following is a sample of a semester-by-semester approach to completing this program.

FIRST SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|---|----------------|---|
| EDUC 120 Educational Exploration and Planning | 1 credit | ENGL 115, ENGL 103W, ENGL 103, ENGL 104, or test scores (concurrent enrollment in ENGL 115 allowed) |
| ENGL 103 or ENGL 103W Freshman English 2 (or with workshop) | 3 to 4 credits | ENGL 103W: test scores ENGL 103: ENGL 115 or test scores (concurrent enrollment allowed) |
| SOCI 201 Principles of Sociology | 3 credits | ENGL 115, ENGL 103W, ENGL 103, ENGL 104, or test scores (concurrent enrollment in ENGL 115 allowed) |
| ISYS 207 Managing and Maintaining PCs | 4 credits | None |
| ISYS 271 Networking Essentials | 3 credits | ISYS 207 (concurrent enrollment allowed) |
| ISYS 201 IT Support | 3 credits | None |

SECOND SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|------------------------------------|-----------|---|
| MATH 150 Statistics | 4 credits | MATH 101, MATH 102, or test score |
| GEOG 110 Physical Geography | 4 credits | None |
| PHIL 210 Introduction to Ethics | 4 credits | ENGL 103 or ENGL 103W |
| ISYS 281 Installing Windows Server | 3 credits | ISYS 207 and ISYS 271 |

THIRD SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|---------------------------------------|-----------|---|
| ISYS 272 Configuring Windows Devices | 3 credits | ISYS 281 |
| ISYS 283 Administering Windows Server | 3 credits | ISYS 281 |
| ISYS 115 Programming Logic and Design | 3 credits | None |
| ISYS 284 Advanced Windows Server | 3 credits | ISYS 281 |
| ISYS 285 Network Security | 3 credits | ISYS 207 (concurrent enrollment allowed) |

FOURTH SEMESTER

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|---|-----------|--|
| BISC 111 Biological Science | 4 credits | None |
| ECON 202 Microeconomics | 3 credits | None (concurrent enrollment in ECON 201 not recommended) |
| SPEE 102 Fundamentals of Public Speaking | 3 credits | None |
| HUMA 210 Introduction to Non-Western Civilization | 4 credits | ENGL 103 or ENGL 103W |

| Courses | Credits | Prerequisites (Minimum Grade of C Required) |
|----------------|-----------|---|
| ISYS 282 Linux | 3 credits | None |