



REQUIRED EQUIPMENT

A tier 2 laptop computer is required for students entering the information technology: network administration program. Laptop specifications are available at www.alfredstate.edu/required-laptops.

BTECH DEGREE – CODE #1505

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The Bachelor of Technology degree in information technology: network administration at Alfred State is designed to prepare you to enter the workforce as an IT professional with a special emphasis in the growing field of networking. After completing the course work, you will have a strong foundation to obtain professional certification in: Cisco Certified Network Association (CCNA), CCNA Security, Microsoft Certified Technology Specialist, CompTIA A+, and Network+. Core courses will also provide you with a foundation in other essential areas, including web server administration, programming, database applications, and microcomputer systems. And a full-semester internship will give you the hands-on experience employers are looking for.

ADVANTAGES

Due to the solid foundation in all the major fields of information technology, the job opportunities for graduates are wide and numerous.

CONTINUING EDUCATION OPPORTUNITIES

Articulation agreements have been established with many community colleges and additional agreements are in development. It is possible, with careful selection of courses, to transfer from a variety of associate degrees, including computer information systems, information technology, computer science, and others. The computer information systems degree (AAS) at Alfred State is especially well suited for transfer into this degree at the junior level.

OCCUPATIONAL OPPORTUNITIES

Organizations of all types and sizes need computer professionals. Due to the solid foundation in all the major areas of computer information technology and systems, job opportunities for graduates are wide and numerous. They include network administrators, systems analysts, project managers, user support, web developers, security specialists, IT managers, and technical support staff, to name just a few.

EMPLOYMENT STATISTICS

Employment and continuing education rate of 100 percent – 88 percent are employed; 12 percent continued their education..

RELATED PROGRAMS

[Computer Engineering Technology](#)
[Computer Information Systems](#)
[Computer Science](#)
[Cyber Security](#)
[Information Technology: Applications Software Development](#)
[Information Technology: Web Development](#)

ENTRANCE REQUIREMENTS/RECOMMENDATIONS

Required: Algebra, Geometry, Algebra 2

OFFICE OF ACCESSIBILITY SERVICES

Students who believe they need a reasonable accommodation to properly participate in this program may contact Melanie Ryan in the Office of Accessibility Services. This office may be contacted by email at oas@alfredstate.edu or by phone at 607-587-4506. Please keep in mind that some accommodations may take time to implement, so students seeking accommodations are encouraged to contact OAS as early as possible.

INFORMATION TECHNOLOGY: NETWORK ADMINISTRATION - BTECH DEGREE

TYPICAL EIGHT-SEMESTER PROGRAM

| First | | | |
|----------------|------|-----------------------------------|-------|
| CISY | 1023 | Intro to Information Tech | 3 |
| CISY | 1113 | Computer Programming I | 3 |
| COMP | 1503 | Freshman Composition | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| GLST | 2113 | Global Perspectives:Spcl Topic | 3 |
| | | | 15 |
| Second | | | |
| CISY | 2133 | Computer Programming II | 3 |
| CISY | 2143 | Microcomputer Systems I | 3 |
| CISY | 2153 | Database Appl and Programng I | 3 |
| LITR | xxx3 | Literature Elective | 3 |
| MATH | xxx3 | College Algebra or Higher* | 3 |
| | | | 15 |
| Third | | | |
| CISY | 4033 | Networking I | 3 |
| CISY | 3223 | Intro to Web Page Development | 3 |
| CISY | xxx3 | Concentration Elective | 3 |
| ACCT | 1124 | Financial Accounting | 4 |
| MATH | 1123 | Statistics I | 3 |
| | | OR | |
| MATH | 2124 | Statistical Methods & Analysis | 4 |
| | | | 16-17 |
| Fourth | | | |
| CISY | 4053 | Linux/Unix Admin and Scripting | 3 |
| CISY | 4723 | Essentials of Info Security | 3 |
| CISY | 5203 | Network Administration | 3 |
| SPCH | 1083 | Effective Speaking | 3 |
| | | OR | |
| SPCH | xxx3 | Effective Speaking Equivalent | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| XXXX | xxx3 | Gen. Ed. Natural Science Elective | 3 |
| | | | 18 |
| Fifth | | | |
| BUAD | 3153 | Fundamentals of Management | 3 |
| CISY | xxx3 | Concentration Elective | 3 |
| COMP | 5703 | Technical Writing II | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| XXXX | xxx3 | Professional Elective - Upper | 3 |
| XXXX | xxx3 | Open Elective | 3 |
| | | | 18 |
| Sixth | | | |
| CISY | 7003 | Project Management | 3 |
| CISY | 6703 | Network Design Concepts | 3 |
| XXXX | xxx3 | Professional Elective - Upper | 3 |
| XXXX | xxx3 | Professional Elective | 3 |
| CISY | xxx3 | Concentration Elective | 3 |
| | | | 15 |
| Seventh | | | |
| CISY | 8303 | Sftw Intgtn & Interoperability | 3 |
| CISY | 8603 | Seminar Critical Issues in IT | 3 |

| | | | |
|------|------|---|----|
| XXXX | xxx3 | Professional Elective - Upper | 3 |
| XXXX | xxx3 | Open Elective - Upper (LAS recommended) | 3 |
| XXXX | xxx3 | Open Elective - Upper** | 3 |
| | | | 15 |

| Eighth | | | |
|---------------|------|----------------------------|----|
| CISY | 8712 | Info Technology Internship | 12 |
| | | | 12 |

*If not required, take LAS elective to complete degree requirements of three credits; otherwise take free elective.

**BUAD 5003 or BUAD 6113 recommended.

GPA of 2.5 or higher required in major courses; GPA of 2.0 minimum overall; internship is student-initiated.

Be advised that a prior felony conviction may impede a student's ability to participate in an internship and complete the program.

GRADUATION REQUIREMENTS

- 124 credit hours
- 39 credit hours in major field required courses
- 24 credit hours in professional courses
- 30 credit hours in liberal arts/general education courses
- 18 credit hours in core concentration
- A 2.5 grade point average in the major is needed for the required internship
- Other requirements as stated in college academic regulations
- Seven general education areas are required, including three of the following five: art, language, other world civilizations, American history, or western civilization