



#### **BTECH DEGREE – CODE #1505**

Robin Torpey, Program Coordinator

Email address: [torpeyr1@alfredstate.edu](mailto:torpeyr1@alfredstate.edu)

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.

A laptop computer is required for students entering the information technology: network administration program. Laptop specifications are available at [www.alfredstate.edu/required-laptops](http://www.alfredstate.edu/required-laptops).

#### **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 – 100 percent are employed

#### **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, SAT and/or ACT scores with a recommended combined reading/writing SAT score of 1080 or a composite ACT score of 21.

**INFORMATION TECHNOLOGY: NETWORK ADMINISTRATION - BTECH DEGREE**

TYPICAL EIGHT-SEMESTER PROGRAM

<b>First</b>			
CISY	1023	Intro to Information Tech	3
CISY	1113	Computer Programming I	3
COMP	1503	Freshman Composition	3
	xxx3	Gen Ed - Soc Science Elective	3
	xxx3	Gen Ed Elective	3
			15
<b>Second</b>			
CISY	2133	Computer Programming II	3
CISY	2143	Microcomputer Systems I	3
LITR	xxx3	Literature Elective	3
MATH	xxx3	College Algebra or Higher*	3
CISY	2153	Database Appl and Programng I	3
			15
<b>Third</b>			
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
<b>Fourth</b>			
CISY	4053	Linux/Unix Admin and Scripting	3
CISY	4723	Essentials of Info Security	3
SPCH	1083	Effective Speaking	3
CISY	xxx3	Concentration Elective	3
CISY	5203	Network Administration	3
	xxx3	General Education Elective	3
			18
<b>Fifth</b>			
BUAD	3153	Fundamentals of Management	3
	xxx3	Open Elective - Upper**	3
COMP	5703	Technical Writing II	3
	xxx3	General Education Elective	3
	xxx3	Professional Elective - Upper	3
	xxx3	General Education Elective	3
			18
<b>Sixth</b>			
CISY	7003	Project Management	3
CISY	6703	Network Design Concepts	3
CISY	xxx3	Professional Elective - Upper	3
	xxx3	Professional Elective	3
	xxx3	Concentration Elective	3
			15
<b>Seventh</b>			
CISY	8303	Sftw Intgtn & Interoperability	3
CISY	8603	Seminar Critical Issues in IT	3
	xxx3	Professional Elective - Upper	3

xxx3	Open Elective - Upper (LAS recommended)	3
xxx3	Open Elective - Upper	3
		15

<b>Eighth</b>			
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