



seeking accommodations are encouraged to contact OAS as early as possible.

REQUIRED EQUIPMENT

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

BTECH DEGREE – CODE #1502

Evan Enke, Program Coordinator
Email address: enkeeg@alfredstate.edu

The Bachelor of Technology degree in information technology: applications software development at Alfred State is designed to prepare you to enter the workforce as an IT professional with a special emphasis in the fast-moving field of programming and database applications. From database application to programming language sequences, including C#, Java, and C++, our expert faculty have created a curriculum to help you meet your career goals. You will also receive a sound foundation in web development, networking, 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. Upon completion of the bachelor's degree, students will be prepared to pursue a graduate degree in information technology. The computer information systems degree (AAS) at Alfred State is especially well suited for transfer into the bachelor's degree at the junior level.

OCCUPATIONAL OPPORTUNITIES

Organizations of all types and sizes need computer professionals. The primary employment field includes database administrators, programmers, and systems analysts. Due to the solid foundation in all the major fields of information technology, the job opportunities for graduates are wide and numerous. They include database administrators, software developers, network support, project managers, user support, web developers, IT managers, technical sales, and technical support staff, to name a few.

EMPLOYMENT STATISTICS

Employment and continuing education rate of 83 percent – 83 percent are employed.

RELATED PROGRAMS

[Computer Engineering Technology](#)
[Computer Information Systems](#)
[Computer Science](#)
[Cyber Security](#)
[Information Technology: Network Administration](#)
[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

INFORMATION TECHNOLOGY: APPLICATIONS SOFTWARE DEVELOPMENT - 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 |
| GLST | 2113 | Global Perspectives:Spcl Topic | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| | | | 15 |

Second

| | | | |
|------|------|-------------------------------|----|
| 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 |

Third

| | | | |
|------|------|--------------------------------|-------|
| CISY | 4033 | Networking I | 3 |
| CISY | 3223 | Intro to Web Page Development | 3 |
| CISY | 4003 | Comp Prgmng III/ Data Strctu | 3 |
| ACCT | 1124 | Financial Accounting | 4 |
| MATH | 2124 | Statistical Methods & Analysis | 4 |
| | | | OR |
| MATH | 1123 | Statistics I | 3 |
| | | | OR |
| MATH | 2163 | Discrete Mathematics | 3 |
| | | | 16-17 |

Fourth

| | | | |
|------|------|-------------------------------|----|
| CISY | 4063 | Systems Analysis & Design | 3 |
| BUAD | 3153 | Fundamentals of Management | 3 |
| SPCH | 1083 | Effective Speaking | 3 |
| | | | OR |
| SPCH | xxx3 | Effective Speaking Equivalent | 3 |
| CISY | 4723 | Essentials of Info Security | 3 |
| XXXX | xxx3 | Gen. Ed. - Natural Science | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| | | | 18 |

Fifth

| | | | |
|------|------|-----------------------------|----|
| CISY | 6503 | Object-Oriented Programming | 3 |
| COMP | 5703 | Technical Writing II | 3 |
| XXXX | xxx3 | General Education Elective | 3 |
| XXXX | xxx3 | General Education Elective | 3 |
| XXXX | xxx3 | Professional Elective | 3 |
| | | | 15 |

Sixth

| | | | |
|------|------|--------------------------------|---|
| CISY | 7003 | Project Management | 3 |
| CISY | 5403 | Database Concepts | 3 |
| XXXX | xxx3 | Professional Elective | 3 |
| XXXX | xxx3 | Concentration Elective - Upper | 3 |
| XXXX | xxx3 | Open Elective - Upper | 3 |
| XXXX | xxx3 | Professional Elective - Upper | 3 |

18

Seventh

| | | | |
|------|------|-------------------------------|----|
| CISY | 8503 | Appl Database Management | 3 |
| CISY | 8603 | Seminar Critical Issues in IT | 3 |
| XXXX | xxx3 | Open Elective | 3 |
| XXXX | xxx3 | Professional Elective - Upper | 3 |
| XXXX | xxx3 | Professional 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.

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
- 18 credit hours in core concentration
- 30 credit hours in liberal arts courses
- 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