## BTECH DEGREE – CODE #1506

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The Bachelor of Technology degree in information technology: web development at Alfred State is designed to prepare you to enter the workforce as an IT professional with a special emphasis in web development and applications. web publishing, programming, and web server administration constitute the upper level of courses. Additionally, the web is integrated across the entire program, beginning with the very first course. Through core courses, you will also be given an essential foundation in programming, database administration, networking, and microcomputer systems. And a full-semester internship will give you the hands-on experience employers are seeking.

## ADVANTAGES

Due to the solid foundation in other areas, graduates will find that job opportunities 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 this bachelor's degree at the junior level.

## OCCUPATIONAL OPPORTUNITIES

Organizations of all types and sizes need computer professionals. The primary employment field includes web administrators and developers. Due to the solid foundation in other areas, graduates will not be limited to these areas; thus, the job opportunities are wide and numerous. They include database administrators, programmers, systems analysts, network support, project managers, user support, IT managers, technical sales, 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
Digital Media and Animation
Information Technology: Applications Software Development
Information Technology: Network Administration

## 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.

## REQUIRED EQUIPMENT

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

## INFORMATION TECHNOLOGY: WEB 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

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|---|---|---|---|
| CISY | 4033 | Networking I | 3 |
| CISY | 3223 | Intro to Web Page Development | 3 |
| MATH | 2124 | Statistical Methods & Analysis OR | 4 |
| MATH | 1123 | Statistics I OR | 3 |
| MATH | 2163 | Discrete Mathematics | 3 |
| ACCT | 1124 | Financial Accounting | 4 |
| XXXX | xxx3 | Gen. Ed. - Natural Science | 3 |
| | | | 16-17 |

### Fourth

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|---|---|---|---|
| BUAD | 3153 | Fundamentals of Management | 3 |
| CISY | 4723 | Essentials of Info Security | 3 |
| SPCH | 1083 | Effective Speaking OR | 3 |
| SPCH | xxx3 | Effective Speaking Equivalent | 3 |
| CISY | xxx3 | Concentration Elective | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| XXXX | xxx3 | Open Elective | 3 |
| | | | 18 |

### Fifth

| | | | |
|---|---|---|---|
| CISY | 5303 | Web Programming I | 3 |
| XXXX | xxx3 | Gen. Ed. Elective | 3 |
| XXXX | xxx3 | Open Elective | 3 |
| COMP | 5703 | Technical Writing II | 3 |
| CISY | xxx3 | Concentration Elective | 3 |
| | | | 15 |

### Sixth

| | | | |
|---|---|---|---|
| CISY | 7203 | Web Programming II | 3 |
| CISY | 7003 | Project Management | 3 |
| CISY | 5403 | Database Concepts | 3 |
| XXXX | xxx3 | Professional Elective - Upper | 3 |
| XXXX | xxx3 | Professional Elective - Upper | 3 |
| | | | 15 |

### Seventh

| | | | |
|---|---|---|---|
| CISY | 8403 | Web Applications | 3 |
| CISY | 8603 | Seminar Critical Issues in IT | 3 |
| CISY | 6103 | Web Server Administration OR | 3 |
| CISY | 6503 | Object-Oriented Programming OR | 3 |
| XXXX | xxx3 | Open Elective - Upper** | 3 |
| XXXX | xxx3 | Open Elective - Upper** | 3 |
| XXXX | xxx3 | Professional Elective*** | 3 |
| | | | 18 |

### 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.

** Recommended: BUAD 5003 or BUAD 6113

*** Recommended: CISY 5233 - Human Computer Interaction or CISY 4053 Linux/Unix Admin & Scripting

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/general education 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