

Bachelor of Science in Computer Information Systems and Technology (CIST)

A minimum of 120 credits are required, 30 of which must be upper-level.

General Education Requirements

Competencies (A minimum grade of C- is required in courses taken to satisfy competency requirements, and a minimum grade of C- is required for any course to transfer from JBC.) Some courses may also count toward major requirements.

Written Literacy

ENG 0101 English Composition I

ENG 0102 English Composition II

-JBC: ENG 151 and ENG 252

Mathematics

Please note that the major requires Applied Calculus

-JBC: MA 242

The Human Experience: The Human Experience, Pitt-Bradford's General Education Program comprises these five subcategories: Arts and Letters; Behavioral, Economics, and Political Sciences; History, Culture, and Philosophical Inquiry; Physical, Life, and Computational Sciences; and Physical Education.

Students are required to complete two courses designated as "Global" part of the human experience curriculum.

-JBC: BUS 476, ECO 343

Arts and Letters

9-10 credits

Must include at least one course in literature, and at least one course in the creative, fine, and performing arts.

- **Literature (GE: Literature)**
- **Creative, Fine, and Performing Arts (GE: Arts)**
- **Foreign Languages (GE: Language)**

Behavioral, Economics, and Political Sciences

9 credits

Courses must be selected from at least two different categories (the categories are behavioral science, economics, and political science).

Behavioral Sciences (GE: Behavioral Sciences)

-JBC: PSY 424, SOC 242, SOC 343

Economics (GE: Economics)

-JBC: ECO 242, ECO 343

Political Science (GE: Political Science)

History, Culture, and Philosophical Inquiry

9 credits

Note: at least one History course is required, and two areas must be met.

- **History (GE: History/Euro-American or GE: History/Non-Western)**
- **Cultures (GE: Cultures/Euro-American or GE: Cultures/Non-Western)**
- **Philosophical Inquiry (GE: Philosophy/Euro-American or GE: Philosophy/Non-Western)**

Physical, Life, and Computational Sciences

9-12 credits

Must include one course each in physical sciences and life sciences, one of which must have a laboratory.

Physical Sciences (GE: Physical Sciences)

Life Sciences (GE: Life Sciences)

Computational Sciences (GE: Computational Sciences)

-JBC: MA 242

Physical Education

2-3 credits

One course in the Department of Physical Education (GE: Physical Education).

Major Requirements

A minimum grade of C- is required for any course to transfer from JBC. *Some of these courses may also fulfill the Pitt-Bradford general education requirements above.*

COURSES WITHIN THE MAJOR

Course Requirements in the Major

CIST 0150 Programming Fundamentals

CIST 0161 Technology of Computing

-JBC: IT 235

CIST 0163 Introduction to Web Technology

-JBC: IT 234

CIST 0165 Networking I

CIST 0166 Networking II

CIST 0261 Computer Security

CIST 0262 Systems Administration

CIST 0265 Information Structures

CIST 1307 Database Design and Management

-JBC: IT 233

CIST 1310 Systems Analysis and Design

CIST 1311 Electronic Commerce

CIST 1325 Introduction to Supply Chain Management

CIST 1408 Project Management in Information Technology

-JBC: MT 466

CIST 1499 CIS&T Internship

CIST 1451 Capstone

Choose 4 approved electives or select a concentration (Systems and Networking Administration, Application Software Development, and Cybersecurity and Digital Forensics)

(See advisor for other approved electives)

CIST 1301 Advanced Web Technologies

CIST 1320 User Interface Design

CIST 1326 Digital Forensics

CIST 1327 Intrusion Detection and Response

CIST 1328 Network Security and Cryptography

CIST 1341 Linux Operating System

CIST 1342 Host Scripting

CIST 1344 Virtualization and Cloud Technologies

CIST 1401 Information Assurance

CIST 1415 Data Mining

CIST 1421 Mobile Application Programming

CIST 1422 Game Programming

CIST 1432 Ethical Hacking

CIST 1431 Multimedia Introduction and Application

CIST 1443 Network and Systems Admin Practicum

EST 1301 Sensors and Automation

-JBC: IT 131, IT 232

Other required courses

MATH 0133 Statistics

-JBC: MA 343