UNIVERSITY OF PITTSBURGH AT BRADFORD

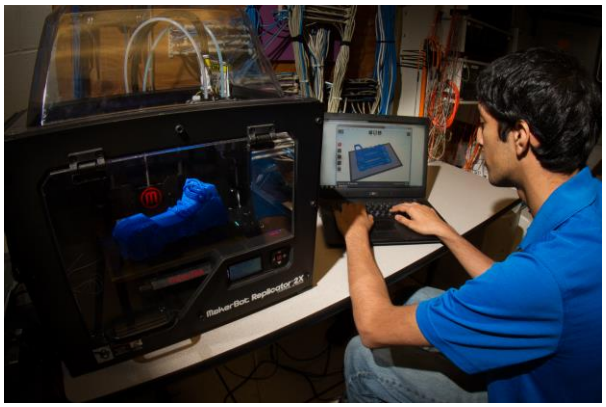
COMPUTER INFORMATION SYSTEMS & TECHNOLOGY

undergraduate program

Consistent with the overall mission of the University of Pittsburgh at Bradford, the Bachelor of Science degree in Computer Information Systems & Technology major includes a liberal arts core curriculum, much of which is taken during the first two years of study.

Employment Opportunities:

Information Systems Developer
Network Administrator/Manager
Analyst/Programmer
Information Systems Manager
On-Line Services Manager
Applications Programmer I
Operating Systems Programmer
Auditor
Internet Developer
Operations Manager
Communications Specialist
Internet Marketing Analyst
Operations Researcher
Engineering Specialist
Inventory Control Specialist
Computer Security Analyst
Inventory Manager
Plant Manager
Investment Analyst
Product Development Manager
Consultant
Product Forecaster/Estimator
Logistics Manager
Production Line Manager
Data Communications Analyst
Management Analyst
Production Scheduler/Planner
Data Security Analyst
Market Research Analyst
Purchasing Agent/Manager
Distribution Manager
Materials Controller
Quality Assurance Analyst
Materials Manager
Medical Systems Designer
Records Management Analyst
Relocation Analyst
Mortgage Researcher
Risk Analyst
Software Tester
Programmer
Systems Technical Manager
Technical Sales Rep
Telecommunications Manager
Web Master



Computer information systems & technology majors get a broad IT background. Students learn about programming applications, network development, systems design and analysis, web technologies, multimedia applications, database development, and systems administration. Students are prepared to work in a team environment and to manage and lead companies and people in the translation of information technology.

Computer information systems & technology majors at Pitt-Bradford sit in small classes and receive individual attention from industry-experienced faculty. Students gain hands-on lab experiences by working on individual and team project as well as take part in an internship, research opportunities and a capstone course that will bring it all together.

The Computer Information Systems and Technology program has three minors/concentrations. The areas, applications software development, cybersecurity and digital forensics, and systems and network administration, are concentrations for students within the CIS&T major. With the addition of a few pre-requisite courses, each area can serve as a minor for students who are not majoring in CIS&T.

Required Skills:

- Problem Solving
- Listening
- Critical Thinking
- Different Learning Strategies
- Research & Reporting
- Independence and Team Work
- Communication (Written & Oral)

Possible Employers:

- School Systems (Post-Secondary)
- Non-Profit Organizations
- Industries
- Consulting Firms
- Healthcare Administration
- Museums
- Libraries
- Colleges or Universities

PROFESSIONAL ORGANIZATIONS:

Internet Society	www.isoc.org
Independent Computer Consultants Association	www.icca.org
IEEE Computer Society	www.computer.org
Computing Research Association	www.cra.org
The Advanced Computing Systems Association	www.usenix.org

FIND OUT MORE ABOUT CAREERS IN COMPUTER INFORMATION SYSTEMS & TECHNOLOGY AT:

Vocational Information Center	www.khake.com/page17.html
(ISC) 2 Career Guide	www.isc2.org
Occupational Outlook	www.stats.bls.gov/oco/ocos042.htm
Career Services	www.upb.pitt.edu/career.aspx

University of Pittsburgh | Bradford

Computer Information Systems & Technology (BS) – Curriculum Guide

Student Name: **Advisor:**

GENERAL EDUCATION REQUIREMENTS

COMPETENCIES
(Minimum grade of C- required in all competencies)

☐ FS 0102 Freshman Seminar
(if transferring in fewer than 18 credits)

Writing
☐ ENG 0101 English Composition I
☐ ENG 0102 English Composition II

Mathematics
☐ * MATH 0098 College Algebra II or Higher *(see Major)*

THE HUMAN EXPERIENCE
☐ ***Students are required to complete two courses designated***
☐ ***as "Global"***

ARTS & LETTERS *(ONE course MUST be literature; ONE course MUST be a creative, fine or performing Arts course)*
☐ Literature
☐ Arts
☐ Literature, Arts, Language

BEHAVIORAL, ECONOMIC, & POLITICAL SCIENCES
(Two different categories must be represented))

☐
☐
☐

HISTORY, CULTURES, & PHILOSOPHICAL INQUIRY
(ONE course MUST be History, and ONE course must be Cultures or Philosophical Inquiry)

☐ HIST
☐
☐

PHYSICAL, LIFE, & COMPUTATIONAL SCIENCES
(*ONE course must be a Physical Science, ONE must be a Life Science and ONE must include a lab)*
☐ Physical Science
☐ Life Science
☐ *(See Major)*
☐ Lab

PHYSICAL EDUCATION
☐ PEDC

REQUIRED MAJOR COURSES (45 Credit Hours)
☐ CIST 0150 Programming Fundamentals *(3)*
☐ CIST 0161 Technology of Computing *(3)*
☐ CIST 0163 Intro to Web Technology *(3)*
☐ CIST 0165 Networking I *(3)*
☐ CIST 0166 Networking II *(3)*
☐ CIST 0261 Computer Security *(3)*
☐ CIST 0262 Systems Administration *(3)*
☐ CIST 0265 Data Structures &Object Oriented Programing *(3)*
☐ CIST 1307 Database Design and Management *(3)*
☐ CIST 1310 Systems Analysis and Design *(3)*
☐ CIST 1311 Electronic Commerce *(3)*
☐ CIST 1408 Project Management in Information Tech. *(3)*
☐ CIST 1341 Linux Operating System *(3)*
☐ CIST 1499 CIST Internship *(3)*
☐ CIST 1451 Capstone *(3)*

CHOOSE 4 APPROVED ELECTIVES (12 Credit Hours) or CHOOSE ONE OF THE 3 CONCENTRATIONS (Application Software Development, Cybersecurity and Digital Forensics, Systems and Network Administration)
(see advisor for other approved electives or concentrations)
☐ CIST 1301 Advanced Web Technologies *(3)*
☐ CIST 1320 User Interface Design *(3)*
☐ CIST 1325 Intro to Supply Chain Management *(3)*
☐ CIST 1326 Digital Forensics *(3)*
☐ CIST 1327 Intrusion Detection and Response *(3)*
☐ CIST 1328 Network Security and Cryptography *(3)*
☐ CIST 1342 Host Scripting *(3)*
☐ CIST 1344 Virtualization and Cloud Technologies *(3)*
☐ CIST 1401 Information Assurance *(3)*
☐ CIST 1415 Data Analytics *(3)*
☐ CIST 1421 Mobile Application Programming *(3)*
☐ CIST 1422 Game Design and Programming *(3)*
☐ CIST 1431 Multimedia Intro to Application *(3)*
☐ CIST 1432 Ethical Hacking *(3)*
☐ CIST 1443 Network and System Practicum *(3)*

OTHER REQUIRED COURSES (4 Credit Hours)
☐ MATH 0133 Statistics GE *(4)* ***OR***
ECON 0204 Statistical Methods GE *(4)*

According to your Degree Progress Report in MY.PITT.EDU upon successful completion of the current term:

You will have EARNED _____ credit hours

You NEED _____ for 120 credit hours required for graduation.

You will have earned _____ credit hours of Upper Level course work.

You NEED _____ for the 30 credit hours required for graduation.

NOTE: This guide is unofficial. Completing the requirements on this sheet does NOT guarantee degree completion. Official degree completion information can be found in **MY.PITT.EDU**. Contact your Faculty Advisor and/or the Registrar's Office with questions or concerns.

9/25/19