Information System (IS) is a combination of information technology and people's activities using that technology to support operations, management, and decision-making. In a broad sense Information Systems refers not only to the information and communication technology (ICT) an organization uses, but also to the way in which people interact with this technology in support of business processes.

Information Systems majors at Pitt-Bradford take courses in Networking, Web Application, Web Databases, Programming and Systems Analysis to acquire the skills necessary and apply them to a business problem or situation. Students receive hands-on experiences by taking computers and servers apart and rebuilding them, learning all about networking on the CISCO equipment, constructing dynamic web sites, and working with Microsoft’s current product set including SQL Server and Visual Studio.

**REQUIRED SKILLS**

- Active Listening
- Math
- Critical Thinking
- Research & Reporting
- Communication (Written & Oral)
- Computer Knowledge
- Problem Solving

**POSSIBLE EMPLOYERS**

- Corporations
- Industries
- Consulting Firms
- School Systems
- Marketing Firms
- Banks
- Governmental Agencies
- Media Production Companies

**EMPLOYMENT OPPORTUNITIES**

<table>
<thead>
<tr>
<th>Analyst/Programmer</th>
<th>Applications Programmer</th>
<th>Auditor</th>
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<tbody>
<tr>
<td>Communications Specialist</td>
<td>Computer Security Analyst</td>
<td>Consultant</td>
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<tr>
<td>CQI Production Manager</td>
<td>Data Communications Analyst</td>
<td>Data Security Analyst</td>
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<tr>
<td>Distribution Manager</td>
<td>Engineering Specialist</td>
<td>Information Systems Developer</td>
</tr>
<tr>
<td>Information Systems Manager</td>
<td>Internet Developer</td>
<td>Internet Marketing Analyst</td>
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<tr>
<th>Inventory Control Specialist</th>
<th>Inventory Manager</th>
<th>Investment Analyst</th>
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<tr>
<td>Logistics Manager</td>
<td>Management Analyst</td>
<td>Market Research Analyst</td>
</tr>
<tr>
<td>Materials Manager</td>
<td>Medical Systems Designer</td>
<td>Mortgage Researcher</td>
</tr>
<tr>
<td>Network Administrator</td>
<td>On-Line Services Manager</td>
<td>Operating Systems Programmer</td>
</tr>
<tr>
<td>Operations Researcher</td>
<td>Operations Manager</td>
<td>Plant Manager</td>
</tr>
</tbody>
</table>

Product Development Manager  
Product Forecaster/Estimator  
Production Line Manager  
Production Scheduler/Planner  
Purchasing Agent/Manager  
Quality Assurance Analyst  
Records Management Analyst  
Relocation Analyst  
Software Tester  
Systems Programmer  
Systems Technical Manager  
Technical Sales Rep  
Telecommunications Manager  
Urban Planner  
Web Master

*Some occupations may require additional training, certification and/or education*
The Information Systems major consists of a 60-credit curriculum leading to an Associate of Science degree. Consistent with the overall mission of the University of Pittsburgh at Bradford, the Information Systems major includes a liberal arts general education.

**COURSE REQUIREMENTS IN THE MAJOR**
- CIST0150 Fundamentals of Programming
- CIST0161 Technology of Computing
- CIST0162 Survey of Information Technology
- CIST0163 Introduction to Web Programming
- CIST0165 Networking I
- CIST0166 Networking II
- CIST0205 Web Application Development
- CIST0209 Introduction to Web Databases
- CIST0261 Computer Security
- CIST0262 Systems Administration

**OTHER REQUIRED COURSES**
- ENG 0101 English Composition I
- ENG 0102 English Composition II
- MATH 0135 Discrete Mathematics

**GENERAL EDUCATION COURSES**
Six courses over the four human experience areas with at least one course in each area, and at least one course must be a physical or life science with laboratory.

Students interested in pursuing the four year degree in Computer Information Systems and Technology should take MATH 0098 Algebra II.

**PROFESSIONAL ORGANIZATIONS**
- Association for Information Systems [www.aisnet.org](http://www.aisnet.org)
- Association for Information Technology Professionals [www.aitp.org](http://www.aitp.org)
- The Data Management Association (DAMA) [www.dama.org](http://www.dama.org)
- Information Systems Audit and Control Association [www.isaca.org](http://www.isaca.org)
- The Information Systems Security Association (ISSA)® [www.issa.org](http://www.issa.org)

**FIND OUT MORE ABOUT CAREERS IN INFORMATION SYSTEMS AT:**
- Computing Degrees and Careers [www.computingcareers.acm.org](http://www.computingcareers.acm.org)
- Tech-Centric [www.tech-centric.net](http://www.tech-centric.net)
- Occupational Outlook [www.stats.bls.gov/oco/ocos042.htm](http://www.stats.bls.gov/oco/ocos042.htm)
- Career Services [www.upb.pitt.edu/career.aspx](http://www.upb.pitt.edu/career.aspx)