

Bachelor of Science: Information Technology

Minor: Computer Science, Information Technology, Game Development and Web Development Certificate: Cybersecurity Certificate

The Bachelor of Science in Information Technology focuses on application support, including network, security, and database. Upon graduation, these students may choose to work as cybersecurity specialists, network managers or technicians, system administrators, database administrators or web developers. Employers recommend one or more internships to be successful and competitive when entering this field.

Career types associated with Information Technology

(Is this a good fit for you? Are you a...)

- Investigative "Thinker"
- Conventional "Organizer"
- Social "Helper"

Related skills, values, and qualities

- Ability to adapt to constant change
- Proficiency in reading, writing, and thinking, questioning, and analyzing
- Proficiency in problem solving
- Ability to think logically and organize
- Proficiency with computers
- Aptitude for accuracy and detail
- Strong math background
- Ability to work under pressure
- Ability to concentrate for long periods of time

Courses Information Technology majors typically enjoy

- Algebra, Trigonometry, Calculus
- Computer Programming
- Computer Science
- Criminal Justice
- Information Technology
- Networking
- Cyber Security
- Web Development

Common interests of Information Technology majors

- Working with computers, software, gaming
- Troubleshooting and repairing electronic equipment
- Completing puzzles or playing games of strategy
- Solving logic problems
- Participating in Computer Science or related clubs
- Working part-time or volunteering in a technology store/department
- Reading computer or technology publications

For more information about the major

Contact the Computer Science and Information Technology Department, 256 Old Main, 610-683-4340, or visit www.kutztown.edu/csit CSITDepartment@kutztown.edu

KU Majors related to Information Technology

Mathematics, Communication Design, Applied Digital Arts, Criminal Justice

For More Information on Computer Science/IT careers or to speak to a Career Counselor, contact KU Career Development Center 113 Stratton Administration Center * 610-683-4067 * careerhelp@kutztown.edu * www.kutztown.edu/careercenter

FOUR STEPS TO SUCCESS

EXPLORE DISCOVER EXPERIENCE IMPLEMENT

1st YEAR

Enroll in the Career

- Exploration Certificate.
 Attend info sessions to learn about career development and personal branding.
- Take a career assessment to identify and confirm interests.
- Get involved in campus clubs and organizations.
- Develop basic workplace skills through jobs or volunteer work.
- Talk with professors, family, and friends about career ideas.
- Conduct informational interviews with professionals working in fields of interest.
- Develop a relationship with your professors and faculty advisor.

- Meet with CDC career coach.
- Attend info sessions to learn about resume writing, and externships.
- Confirm your choice of major and consider options for double major or minor.
- Research careers of interest.
- Complete a job shadowing (externship) experience.
- Seek meaningful employment or volunteer work in a field related to your major.
- Explore options for undergraduate research and study abroad.
- Write a resume and have it reviewed by the CDC.
- Manage your online presence.

- 3RD YEAR
- Enroll in the Career Success Certificate.
- Complete an internship and/or undergraduate research.
- Attend info sessions about internships, interviewing, job search strategies, and grad school.
- Build a LinkedIn profile and continue to monitor your online presence.
- Complete a mock interview.
- Build skills through research projects, part-time employment, and volunteer work.
- Participate in employer panels, site visits & networking events.
- Attend internship & job fairs.
- Take on a leadership role in a student organization or work.
- Consider graduate school options and prepare for admissions tests.

4^{TH} YEAR

- Attend your Senior Kick-off session and other info sessions to prepare for job search/grad school.
- Update your resume and LinkedIn profile.
- Create cover letter drafts.
- Gain experience through internships and/or undergraduate research.
- Secure references for job/grad school applications.
- Create your "30 second" commercial/elevator pitch.
- Meet with CDC to develop job search strategies.
- Research employers.
- Network with professionals through events and social media.
- Join a professional organization in your discipline.
- Attend the senior etiquette luncheon or dinner.
- Participate in job fairs and on-campus interviewing.

Sample Career Titles

Information Technology majors can be found working in a wide variety of career fields. Here are just some career titles that may be of interest. Please note that some jobs may require further education and training. To learn more about these careers, visit http://online.onetcenter.org or www.bls.gov/oco.

Application/Programmer Computer Programmer **Computer Installation Specialist Computer Service Technician Computer Systems Analyst** Cryptographer/Cryptologist Cybersecurity Specialist Data/Database Analyst Data Centre Technician Data Scientist Database Administrator Data Communications/Security Analyst Educator/Trainer **Employee Relations Specialist** End-User Computing Manager Engineering Lab Technician **Environmental Technologist** Information Scientist Information Technology Consultant Information Security Analyst

Information Technology Specialist Information Systems Developer Information Systems Manager Information Technology Manager Information Technology Specialist Internet Developer ISO Specialist LAN/Logistics Manager Machine Programmer Multimedia Developer Network Administrator/Manager Network Engineer **On-Line Services Manager Operating Systems Programmer Operations Manager/Analyst** PC Support Specialist Product Development/Line Manager Product Forecaster/Estimator **Production Support Specialist** Programmer: Engineering & Sci.

Python Developer Quality Assurance Analyst SAS Programmer Senior Analyst Programmer Software Application Integrator Software Development Specialist Software Engineering Specialist Software Package Developer Software Support Tech/Specialist Systems Administrator/Analyst Systems Consultant Systems Programmer Systems Technical Manager **Technical Writer** User Support Analyst **UI Programmer** Web Developer Web Designer

2ND YEAR

Common Internship Sites and Employers

Information Technology majors often find internships and employment in the following fields/industries.

- Banks & Investment Firms
- Business & Industry
- Colleges/Universities
- Consulting Firms
- Federal, State & Local
- Healthcare

Handshake

- International Agencies
- Manufacturing
- Military
- Research & Development

Versum Materials

Zulily

Telecommunications

Handshake is the primary online resource for preparing and connecting students and alumni with employers. www.kutztown.edu/handshake

Useful Websites for Information Technology Majors

Whether you are researching related career fields, applying for internships or jobs, or planning to join a professional association, these websites are for you!

| Industry/Employment Information | Professional Associations | Related Area Employers |
|--|--|---|
| Computer Jobs www.computerjobs.com | Agile Alliance https://www.agilealliance.org/ | Air Products Andesa Services |
| Computer Work www.computerwork.com | ASIS International https://www.asisonline.org/ | Armstrong World Industries B. Braun Medical Inc. Brenntag |
| Dice www.dice.com | Association for Computing Machinery www.acm.org | Brentwood Industries Clark Associates Computer Aid Inc |
| IEEE jobs.ieee.org | Association of IT Professionals www.aitp.org | Deloitte US Delivery Center Fidelity Information Services |
| Internet Society www.internetsociety.org | Association for Women in Computing www.awc-hq.org | Gateway Ticketing Hershey Entertainment & Resorts Kutztown University |
| Just Tech Jobs www.justtechjobs.com | Computer Society www.computer.org | Lehigh Valley Health Network LeverX Listrak Inc. |
| Tech America www.techamerica.org | IT Association of America www.itaa.org | Liquid Interactive Lutron Electronics |
| LinkedIn Jobs www.linkedin.com/jobs | Institute of Electrical & Electronics Engineers www.ieee.org (job postings too) | Neo Pangea Olympus Oracle |
| U.S. Bureau of Labor Statistics | International Assoc. for Technology in Education www.iste.org | Penn Interactive Penske |
| https://www.bls.gov/ooh/computer-and- information-technology/home.htm | | PPL Electric Utilities SAP St. Luke's University Health Network |
| Production Hub | | UHS of Delaware, Inc. |

Production Hub www.productionhub.com/jobs

Building Your Resume for a Career in Information Technology

Building a strong resume for your career field starts long before you ever start your job search. Employers want to hire graduates who not only have the necessary educational background but also have experience applying that knowledge.

Inez Information Technology

iinfo000@live.kutztown.edu, www.linkedin.com/in/inez, 555-555-5555

PROFILE

Interested in working for an IT department as an Information Technology Specialist.

TECHNICAL COMPETENCIES

- Operating Systems: Windows, Linux
- Programming Languages: C++, Java, Python
- Web Languages: HTML, JQuery, PHP
- QUALIFICATIONS
 - Fluent in Spanish and English
 - Experience communicating with diverse populations
 - · Strong interpersonal and problem solving skills

EDUCATION

| B.S. Kutztown University of Pennsylvania | Kutztown, PA |
|--|-----------------------|
| Major: Information Technology | Dec 20xx |
| GPA: 3.73 Dean's List | Fall 20xx-Spring 20xx |

Related Courses: UNIX Scripting and Administration, IT Systems, Information Security, Server-Side Web Development, Software Engineering I and II, Computing Systems Integration

INTERNSHIP & EXTERNSHIP EXPERIENCE

Computer Media LLC

Multimedia Developer Intern

- Assisted with code development for graphic and animation films
- Tested and debugged various multimedia applications
- Created code documentation for audio recordings
- Presented multimedia programming language to company stakeholders Student Extern
- Observed process of code development and troubleshooting techniques
- Attended "Tech Talk" focused on analysis and design for new applications

RELATED EXPERIENCE

Kutztown University ResNet Helpdesk

Student Support Staff Member

- Assist with Adware/Spyware and Trojan removal
- Perform anti-virus installation, system updates and system restorations
- Complete troubleshooting tasks related to data recovery and printer/scanner issues
- Aide in security procedures such as student password changes
- Communicate effectively with ResNet staff and students

CAMPUS INVOLVEMENT & PROFESSIONAL DEVELOPMENT

| Member, Kutztown Technology Association |
|--|
| Member, Phi Kappa Phi National Honors Fraternity |
| Member, American Computer Scientists Association (ACSA) |
| Volunteer, Special Olympics, Kutztown University |
| Recipient, Career Success Certificate, Kutztown University Career Development Center |
| Recipient, Career Exploration Certificate, Kutztown University Career Development Center |

WORK EXPERIENCE

Best Buy

Sales Consultant

- Answered technology-related inquiries regarding desktops, laptops and tablets
- · Communicated with diverse staff to provide positive customer experience
- · Resolved issues and complete customer returns

Fall 20xx-Present Fall 20xx-Present Fall 20xx-Present Spring 20xx & 20xx Spring 20xx Fall 20xx

Wyomissing, PA Summers 20xx-20xx

Learn more about your field and develop the necessary skills for employment by gaining hands-on experience through internships.

Utilize summer breaks to acquire valuable experience via volunteer or employment opportunities related to your major.

Develop professionally through campus involvement and professional memberships. This illustrates responsibility, leadership abilities and time management skills.

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Allentown, PA

Spring 20xx

Sept 20xx

Kutztown, PA

Fall 20xx-Present