Bachelor of Science: Computer Science
Bachelor of Science: Information Technology
Minor: Computer Science, Information Technology, and Web Development

The Bachelor of Science degree in Computer Science offers students two separate tracks of study: Software Development and Information Technology. The Software Development track is the traditional computer science degree. It focuses on the fundamentals for computer science. Students who receive a degree in the Software Development track may choose to work in a variety of areas after graduation, such as application development, software engineering and software support, or go on to graduate school. The Information Technology track focuses on the broader technology areas of computer science, including design, development, implementation, support and management of computer-based information systems. Upon graduation, these students may choose to work as security specialists, network managers or technicians, system administrators or web developers. Employers recommend one or more internships to be successful and competitive when entering this field.

Career types associated with Computer Science
(Is this a good fit for you? Are you…)
Investigative - “Thinker”
Conventional - “Organizer”
Social - “Helper”

Related skills, values, and qualities
• Ability to adapt to constant change
• Proficiency in reading, writing, and thinking, questioning, analyzing and 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 Computer Science majors typically enjoy
• Algebra, Trigonometry, Calculus
• Computer Programming
• Computer Science
• Criminal Justice
• Information Technology
• Networking
• Cyber Security
• Web Development

Common interests of Computer Science majors
• Working with computers
• 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 computer Store/department
• Reading computer 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/Computer Science

KU Majors related to Computer Science
Mathematics, Physics, Communication Design

Investigative students may also be interested in:
Anthropology, Biology, Biochemistry, Chemistry, Criminal Justice, Economics*, Environmental Science, Geography, Geology, German Studies, History, International Studies*, Marine Science, Multicultural Studies*, PA German Studies*, Political Science, Psychology, Sec Edu- Math/Science, Sociology, Spanish, and Women’s Studies*

* minor only

For More Information on Computer Science 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

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.

2ND YEAR
- 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 Careers Cafe & networking programs.
- Attend internship & job fairs.
- Take on a leadership role in a student organization or work.
- Consider graduate school options and prepare for admissions tests.

4TH YEAR
- Attend your senior kick-off 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.
- 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 dinner.
- Participate in job fairs and on-campus interviewing.

Sample Career Titles
Computer Science 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
Communications Specialist
Computer Consultant
Computer Engineer
Computer Facilities Manager
Computer Installation Specialist
Computer Marketing/Sales
Computer Operator
Computer Security Analyst
Computer Service Technician
Computer Systems Analyst
CPI Production Manager
Cryptographer/Cryptologist
Cybersecurity
Database Analyst/Administrator
Data Communications/Security Analyst
Distribution Manager
Educator/Trainer
Employee Relations Specialist
End-User Computing Manager/ Technician
Engineering Lab Technician
Environmental Technologist
Hardware Sales/Service Person
Information Scientist
Information Systems Developer
Information Systems Manager
Information Technology Manager
Internet Developer
Market Analyst
ISO Specialist
LAN/Legistics Manager
Materials Controller
Meteorologist
Network Administrator/Manager
On-Line Services Manager
Operating Systems Programmer
Operations Manager/Analyst
PC Support Specialist
Product Development/Line Manager
Product Forecaster/Estimator
Production Scheduler/Planner
Production Support Specialist
Programmer: Engineering & Sci.
Software Development Specialist
Software Engineering Specialist
Software Package Developer
Software Salesperson
Software Support Tech/Specialist
Systems Administrator/Analyst
Systems Consultant
Systems Programmer
Systems Technical Manager
Technical Writer
Technology Consultant
Telecommunications Manager
Urban Planner
User Support Analyst
Value Engineer
Web Master
Common Internship Sites and Employers

Computer Science majors often find internships and employment in the following fields/industries.

- Banks & Investment Firms
- Business & Industry
- Colleges/Universities
- Consulting Firms
- Federal, State & Local
- Healthcare
- International Agencies
- Manufacturing
- Military
- Research & Development
- Telecommunications

Useful Websites for Computer Science 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 Information & Job/Internship Search Sites

- Computer Jobs
  www.computerjobs.com
- Computer World
  itjobs.computerworld.com
- Computer Work
  www.computerwork.com
- Dice
  www.dice.com
- Internet Society
  www.internetsociety.org
- Just Tech Jobs
  www.justtechjobs.com
- Tech America
  www.techamerica.org
- TechnoCentral
  www.technocentral.com
- LinkedIn Jobs
  www.linkedin.com/jobs

Professional Associations

- American Society for Info Science & Technology
  www.asis.org
- Association for Computing Machinery
  www.acm.org
- Association of IT Professionals
  www.aitp.org
- Association for Women in Computing
  www.awc-hq.org
- Computing Research Association
  www.cra.org
- IEEE
- Computer Society
  www.computer.org
- IT Association of America
  www.itaa.org
- Institute of Electrical & Electronics Engineers
  www.ieee.org
- International Assoc. for Technology in Education
  www.iste.org
Building Your Resume for a Career in Computer Science

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.

Caitlin Computer-Science
123 Employment Avenue, Kutztown, PA 19530
cccc006@live.kutztown.edu, 555-555-5555

OBJECTIVE
Entry-level position in the field of computer science with a focus on software development.

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: Computer Science/Software Development Dec 20xx
GPA: 3.73
Dean’s List Fall 20xx-Spring 20xx


INTERNSHIP & EXternship EXPERIENCE
Computer Aid, Inc. Allenwood, PA
Programming and Development Intern Spring 20xx
- Assisted with code development for tax processing system
- Tested and debugged various applications
- Created code documentation
- Presented group code summary project at annual company seminar

Student Intern Sept 20xx
- 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 Kutztown, PA
Student Support Staff Member Fall 20xx-Present
- Assisted with Adware/Spyware and Trojan removal
- Performed anti-virus installation, system updates and system restorations
- Completed 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 Fall 20xx-Present
- Member: Phi Kappa Phi National Honors Fraternity Fall 20xx-Present
- Member: American Computer Scientists Association (ACSA) Fall 20xx-Present

Volunteer
- Special Olympics, Kutztown University Spring 20xx & 20xx
- Career Success Certificate, Kutztown University Career Development Center Spring 20xx
- Career Exploration Certificate, Kutztown University Career Development Center Fall 20xx

WORK EXPERIENCE
Best Buy Wyomissing, PA
Sales Consultant Summers 20xx-20xx
- Answered technology-related inquiries regarding desktops, laptops and tablets
- Communicated with diverse staff to provide positive customer experience
- Resolved issues and complete customer returns

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

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.