

COMPUTING

DEPARTMENT OF COMPUTER SCIENCE

COLLEGE OF HEALTH, ENGINEERING AND SCIENCE



MAJORS

Computing (BS) with concentrations in:

- Computing Analytics
- Computer Science
- Computer Science with Bioinformatics
- Information Technology

MINORS

- Computing
- Cybersecurity

WHAT CAN I DO WITH A COMPUTING DEGREE?

The computer science concentration emphasizes modern approaches to software and hardware development. You'll master abstract concepts, learn practical applications of theory and gain exposure to the dynamic field of computing. This concentration prepares you for a myriad of careers in the computing field and also provides the foundation needed to pursue further graduate study. Graduates go on to pursue careers as application developers, software engineers, database administrators, software designers, and network architects.

The computing analytics concentration emphasizes the analytical skills that are increasingly requested by organizations. You'll learn recent technological advances to capture data streams, apply analytics on generated data and create visualization of the data for corporate strategic planning. Graduates are prepared for careers in the data science field such as data analyst, data scientist, business analyst, data architect and data engineer.

The information technology concentration gives you the opportunity to examine information gathering, retrieval, management and storage capabilities. Graduates are prepared for careers in computing and related fields, including IT specialist and help desk technician, website development, system analyst and more.

WHY CHOOSE COMPUTING AT SRU?

- 1. Up-to-date curriculum:** The computing curriculum is designed to easily add new areas in response to a rapidly changing computing industry. The core curriculum consists of 9 courses and each concentration includes coursework to prepare students for a career.
- 2. Quality faculty:** Instructors are full-time faculty members with Ph.D.s who use their expertise and experience to enhance the learning experience. Faculty members are also academic advisers and guide students through their program of study.
- 3. Projects and research with faculty:** Computing students have numerous research projects to select from that result in presentations at regional, state, national and international conferences. Faculty work with any interested students on both existing and new projects. In addition, students are encouraged to compete in programming and security contests.
- 4. Equipment:** The Computer Science Department is home to a variety of specialized equipment for students' coursework and extracurricular projects in robotics, parallel programming, cybersecurity, 3D visualization and numerous Internet of Things devices. Students at all levels of the programs have opportunities to work with devices such as Lego Robot, iPad, Android Phone, Raspberry Pi, Arduino, NAO Robot, 3D printer and scanner, Alexa and oculus rift goggles.
- 5. Industry experts and accreditation:** The department has an active review board that holds events for the students and provides feedback on curriculum, hardware, software and assessment. The board assists students in finding internships and jobs with mock interviews, resume workshops and industry awareness dinners. The computing degree is accredited by The Computing Accreditation Commission of ABET.

SlipperyRock
University

A member of Pennsylvania's State System
of Higher Education

EXPERIENCE THE DIFFERENCE

www.sru.edu

INTERNSHIP OPPORTUNITIES

SRU computing students have completed internships at various locations including:

- Butler Healthcare
- Mylan
- Equipment and Controls Inc.
- NT Concepts
- Creehan Inc.
- Federated Inc.
- Create Lab., CMU
- Robi Axiata Ltd.
- Sustainable Enterprise Accelerator
- Bayer
- E360Tech
- Organizational Technology Systems Inc.
- Ellwood Group Inc.
- McKesson Corporation
- Bender Consulting

CAREER OUTCOMES

Graduates have secured careers in the following areas:

- Software Engineer, Microsoft
- Systems Software Engineer, CMU Create Lab
- Software Developer, Oncology Nursing Association
- Network Programmer, Pittsburgh Supercomputing Center
- Information Security, Federator Investors
- Senior Software Engineer, Bossa Nova Robotics
- Applications Software Engineer, Komatsu Mining
- Software Architect, Truefit
- Deployment Engineer, Philips
- Technical Consultant, CGI
- IT Manager, Penn State University
- Linux System Engineer, CMU
- Quality Assurance Tester, SAE International
- Co-Site Manager, Mammoth Gamers
- IT Support Specialist, ChemADVISOR, Inc.

CLUBS AND ORGANIZATIONS

- Computing Technology Club
- Upsilon Pi Epsilon Honorary



ALUMNI SPOTLIGHT

Kelly Smith, '14

*Software engineer at Microsoft
Redmond, Washington*

"While majoring in computer science at Slippery Rock University, I was constantly impressed by the dedication of the faculty and department to providing students with experiences typically reserved for graduate programs. I cannot overstate how important small class sizes and frequent research opportunities were in landing a successful career at Microsoft."

Dan Miller, '14

*Consultant at CGI
Pittsburgh, Pennsylvania*

"Computer science at Slippery Rock University is an amazing program. My time at the SRU changed how I saw myself, giving me confidence to succeed. I was exposed to research and internships both of which helped me gain a foothold in the professional world. Since then my education has continued to provide me the tools to excel time and time again."

Dr. William Mennell, '01

BAE Systems, Boston, MA

"The SRU computer science major not only introduced me to the fascinating problems which I research today, it also prepared me with the tools to do the work. Key faculty members went out of their way to involve students in real research with real publications and conference presentations and inspired me to continue on for a Ph.D. Without them, I would likely not be in my successful BAE Systems career."

DEPARTMENT CONTACT:

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FOR MORE INFORMATION:

www.sru.edu/majors

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