Computer Science

+ College of Arts and Sciences

**Degree(s)**

- Bachelor of Arts (B.A.) in computer science
- Bachelor of Science (B.S.) in computer science
- Accelerated Bachelor of Arts and Master of Science (B.A./M.S.) in computer science and bioinformatics
- Accelerated Bachelor of Science and Master of Science (B.S./M.S.) in computer science and bioinformatics
- Minor in computer science

**Program Overview**

Computer science is an exciting, rapidly developing field that has vast influence on modern society. Computer science encompasses a broad range of theory and applications. Due to the emphasis on problem-solving skills, computer science is an excellent major for students going into many fields, including technology, business, medicine and law.

The department of mathematics and computer science at Saint Louis University offers a Bachelor of Arts and a Bachelor of Science in computer science. The B.A. curriculum includes a broad liberal arts study and can be combined with a second major or minor in fields such as art, criminal science or psychology. The B.S. is designed for students who want a greater technical depth of study, and it can be paired with other science, mathematics and engineering programs.

The accelerated program allows SLU undergraduate computer science majors to earn both a bachelor’s degree and a master’s degree in five years. Students combine a B.A. or B.S. in computer science with a master’s degree in bioinformatics and computational biology.

Computer science courses are taught in small sections to allow for the best dialogue between the instructor and the students. Courses are taught in computer classrooms, emphasize practice as well as theory and often involve substantial group work.

**About the Faculty**

The computer science faculty excel both in teaching and research, having received teaching awards at the university, state or national levels, and with active research programs with both national and international recognition.

**Curriculum**

Our computer science program is designed to give students an overview of this broad field as well as to develop lifelong skills and knowledge related to the many branches of computer science. Classes are small and taught by enthusiastic professors using hands-on projects and group work. Both the B.A. and B.S. programs provide a rigorous, comprehensive study that adopts national standards and are regularly updated to reflect the rapid developments in the field of computing.

The B.A. requires 12 courses in computer science and four mathematics courses. It is a good choice for the student who wants more focus on the broader impact of computing in society.

The B.S. requires 14 computer science courses and six mathematics courses. It is a good choice for students who desire more technical depth in the field.

**Required courses:**
- Introduction to Computer Science
- Introduction to Object-Oriented Programming
- Data Structures
- Computer Architecture
- Computer Ethics
- Object-Oriented Software Design
- Operating Systems
- Capstone Project

**Additional offerings:**
- Algorithms
- Programming Languages
- Software Engineering
- Network Programming
- Computer Graphics
- Artificial Intelligence
- Databases
- High-performance Computing
- Computer Security

**Contact**

Department of Mathematics and Computer Science
314-977-2444
mathcs@slu.edu

**Graduate Programs**

- Accelerated Bachelor of Arts or Bachelor of Science and Master of Science (B.A./M.S. or B.S./M.S.) in computer science and bioinformatics

For a full listing of graduate programs, visit graduate.slu.edu.

**Learn More** For course listings and more information about our faculty, visit cs.slu.edu/undergrad-cs.

**OFFICE OF ADMISSION, ONE NORTH GRAND BLVD., ST. LOUIS, MO 63103**
(800) SLU-FOR-U • (314) 977-2500 • admitme@slu.edu • www.slu.edu • beabilliken.com

**Revised** April 2015
Admission Requirements
Freshman: All applications are thoroughly and carefully reviewed. Solid academic performance in college preparatory course work is a primary criterion in reviewing a freshman applicant’s file. College admission test scores (ACT or SAT) are used as an additional indicator of the student’s ability to meet the University’s academic requirements and to qualify the student for certain University scholarship programs. To be considered for admission to any Saint Louis University undergraduate program, the applicant must be approaching graduation from an accredited high school or have an acceptable score on the General Education Development (GED) test.

Transfer: Applicants must be a graduate of an accredited high school or have an acceptable score on the GED. An official high school transcript and official test scores are required only of those students who have attempted fewer than 24 transferable semester hours (or 30 quarter hours) of college credit. Those having completed 24 hours or more of college credit need only submit a transcript from previously attended college(s). In reviewing a transfer applicant’s file, the office of admission holistically examines the student’s academic performance in college-level coursework as an indicator of the student’s ability to meet the academic rigors of Saint Louis University.

Scholarships and Financial Aid
There are two principal ways to help finance a Saint Louis University education:
+ Scholarships: awarded based on academic achievement, service, leadership and financial need.
+ Financial Aid: provided in the form of grants and loans, some of which require repayment.

For priority consideration for merit-based scholarships, applicants should apply for admission by Dec. 1 and complete a Free Application for Federal Student Aid (FAFSA) by March 1.

For information on other scholarships and financial aid, visit the student financial services office online at finaid.slu.edu.

Internships and Careers
In recent years, SLU computer science students have held paid internships with the following organizations:
+ Anheuser-Busch/InBev
+ Apple
+ Aquinas Institute of Theology
+ Archway
+ Asynchrony
+ Boeing
+ Centene
+ Central Institute for the Deaf
+ CERN
+ Certified NETS
+ Citi
+ Concordia Seminary
+ Control Microsystems
+ Digital Concepts
+ Distribution Management Inc.
+ Express Scripts
+ Garmin
+ Hyland Software
+ Lickenborck Technologies
+ Lift Worldwide
+ MasterCard
+ Savvis
+ Scottrade
+ SLU’s Information Technology Services
+ Sosh
+ TALX Corporation
+ Ungerboeck

Our students have also gone on to take permanent positions with:
+ Amazon
+ Anheuser-Busch/InBev
+ Archway
+ Boeing
+ Booz Allen Hamilton
+ Bullhorn
+ Centene
+ Citi
+ Cofactor Genomics
+ Distribution Management
+ Dotomi
+ FactSet Research Systems
+ Monsanto
+ Pinterest
+ SLU’s Center for Digital Humanities
+ Ungerboeck

Contact
Department of Mathematics and Computer Science
314-977-2444
mathcs@slu.edu

Graduate Programs
+ Accelerated Bachelor of Arts or Bachelor of Science and Master of Science (B.A./M.S. or B.S./M.S.) in computer science and bioinformatics
For a full listing of graduate programs, visit graduate.slu.edu.

Learn More For course listings and more information about our faculty, visit cs.slu.edu/undergrad-cs.

Revised April 2015