Software Engineering
+ College of Arts and Sciences

Saint Louis University is a world-class Catholic, Jesuit institution educating nearly 13,000 students on two dynamic, urban campuses - in St. Louis, Missouri, and Madrid, Spain. Founded in 1818, the University is now celebrating its bicentennial.

With a legacy of innovative academics and research, compassionate health care and faithful service, Saint Louis University attracts a diverse community of scholars who push intellectual boundaries in pursuit of creative, meaningful ways to impact the world, striving to serve a higher purpose and seek a greater good.

OVERVIEW >>

Saint Louis University’s master’s in software engineering is designed to prepare students interested in developing high quality, large-scale software systems. Students learn to develop and create design strategies using hands-on projects and modern software tools to gain knowledge, skills and experience. Students gain critical design strategies that allow for continual innovation throughout their careers. Guided by outstanding professors, much of the learning is team based and in small classes. SLU’s computer science faculty has earned national and international recognition for teaching and research.

Careers in software engineering can be highly rewarding, provide great compensation and excellent work environments. Positions in this field include software developer, computer systems analyst, computer network architect, web developer, database administrator and information security analyst and are regularly found on “best jobs” lists.

The curriculum consists of 30 credit hours of coursework including the following:

- CSCI 5030 Principles of Software Development
- SCI 5050 Computing and Society
- CSCI 5300 Software Engineering
- At least three additional Software Engineering courses
- Additional selections chosen from among the following categories: Theory, Systems, Compilers and Languages, Large Scale Systems, Knowledge/Information Systems, Advanced Applications
- CSCI 5960 Capstone Project

DEGREES & PROGRAMS >>
- Master of Science (M.S.) in Software Engineering
- Master of Science (M.S.) in Computer Science

APPLICATION REQUIREMENTS >>
- Application form and fee (if applicable)
- Transcript(s)
- GRE scores
- Three letters of recommendation
- Résumé or curriculum vitae
- Professional goal statement

ADMISSION CRITERIA >>
A bachelor’s degree in computer science, mathematics, statistics or closely related field
Undergraduate GPA above 3.0 (students with less than a 3.0 may be provisionally admitted). International students whose native language is not English must provide evidence of English language proficiency by submitting their TOEFL or IELTS results.

Minimum scores required:
- TOEFL PBT 550
- TOEFL IBT 80
- IELTS 6.5
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FACULTY
Ted Ahn, Ph.D., bioinformatics and high-performance computing
Erin Wolf Chambers, Ph.D., algorithms and computational geometry
Flavio Esposito, Ph.D., network virtualization, edge computing
David Ferry, real-time systems
Jason Fritts, Ph.D., computer graphics, image processing, virtual reality
Michael Goldwasser, Ph.D., algorithms, computer science education
David Letscher, Ph.D., computational topology, data science
Kevin Scannell, Ph.D., machine learning, natural-language processing
Jacob Sukhodolsky, Ph.D., software engineering

SLU faculty are outstanding, both for their advanced knowledge of the field and their enthusiasm in guiding students through their own discovery and exploration.

The St. Louis region has a strong computer science ecosystem, including technical operations for many Fortune 500 companies, as well as a vibrant start-up community, including incubators such as CORTEX and T-REx, near to SLU’s campus.

Graduate-level courses are taught in labs or small lectures, providing extensive one-on-one interaction with faculty, including opportunities for collaborative research.

FINANCIAL SUPPORT
Saint Louis University’s Department of Computer Science offers merit-based graduate assistantships for full or partial tuition in addition to a stipend for living expenses. The department also offers a limited number of tuition-only scholarships to help lessen students’ financial burden. The deadline to apply is Feb. 1 for consideration for the following fall semester.

There are also many opportunities for students to receive funding through external research grants that are managed directly by individual faculty.

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