

COMPUTER INFORMATION SYSTEMS, B.S.

Saint Louis University's Bachelor of Science in Computer Information Systems will help you prepare for your career with innovative, diverse, technology-based organizations in the ever-changing field of computer science and IT.

This program is part of our School for Professional Studies and provides you with the knowledge and skills needed to compete in today's market.

As part of the School for Professional Studies, this 120-credit degree program offers future and current leaders like you a flexible option to meet your personal career goals. With six accelerated, eight-week terms each year provided by SLU online, you can begin working toward your degree at any time, making advanced education more accessible for working professionals.

Faculty

As a student in the School for Professional Studies at Saint Louis University, you'll learn from exceptional faculty who are leading experts in their fields. They bring real-world knowledge to the classroom and are dedicated to your professional success. Learn more on our faculty page (<https://www.slu.edu/professional-studies/contact-us/faculty/>).

By taking only two extra courses, you can add a certificate with an emphasis in data analytics or cybersecurity, providing you with expertise that is in demand in modern organizations.

Careers

A computer information systems degree can prepare students for advanced studies or employment in the ever-changing field of computer science and information technology.

According to the U.S. Bureau of Labor Statistics, the computer science and database industry is expected to grow by 12% through the year 2024, adding 488,500 new jobs. Job opportunities within this field have a broad range of salaries.

Students in the data analytics concentration may pursue a career as a market research analyst, data analyst or in business intelligence. Students learn how to collect, analyze, interpret and present information obtained from data drawn from multiple, often disparate sources of organizational data.

Students in the cybersecurity concentration may pursue a career as a cybersecurity analyst, web developer, computer network architect or information assurance engineer. Students gain the skills needed to secure an organization's information assets and ensure that data can be created, accessed and modified by only those with the requisite privileges. Upon completion, students will be prepared for employment opportunities in various businesses and organizations.

Tuition

Tuition	Cost Per Credit
Undergraduate Tuition	
Standard Tuition	\$650
Active Duty/Veteran (TA eligible or GI Bill); First Responders	\$295

Additional charges may apply. Other resources are listed below:

Net Price Calculator (<https://www.slu.edu/financial-aid/tuition-and-costs/calculator.php>)

Information on Tuition and Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition/>)

Miscellaneous Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/fees/>)

Information on Summer Tuition (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer/>)

Scholarships and Financial Aid

There are two principal ways to help finance a Saint Louis University education:

- **Scholarships:** Scholarships are awarded based on academic achievement, service, leadership and financial need. The School for Professional Studies offers numerous scholarships (<https://www.slu.edu/professional-studies/becoming-a-student/tuition-scholarships-aid/>) and awards specifically for new students.
- **Financial Aid:** Financial aid is provided in the form of grants and loans, some of which require repayment.

To determine eligibility for financial assistance, submit the Free Application for Federal Student Aid (FAFSA) early for maximum consideration. FAFSA is available online at <https://studentaid.gov/h/apply-for-aid/fafsa> (<https://studentaid.gov/h/apply-for-aid/fafsa/>).

For information on other scholarships and financial aid, visit the student financial services office online at <https://www.slu.edu/financial-aid> (<https://www.slu.edu/financial-aid/>).

Active Military and Veterans and First Responders

Honorably discharged veterans, active-duty military members, reserve members and first responders qualify for a reduced tuition rate of \$295 per credit hour for any undergraduate program offered through the School for Professional Studies.

Learning Outcomes

1. Graduates will be able to analyze a problem and identify and define the computing requirements appropriate to its solution. (ABET-1)
2. Graduates will be able to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline. (ABET-2)
3. Graduates will be able to communicate effectively with a range of audiences about technical information. (ABET-3)
4. Graduates will be able to make informed judgments in computing practice based on legal and ethical principles. (ABET-4)
5. Graduates will be able to function effectively on teams to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables. (ABET-5)

Requirements

Admission Requirements

- Completed application
- High school diploma or composite GED score of at least 2250
- Minimum transfer cumulative GPA of 2.5 (unless qualified for conditional admittance)
- Official transcript from the most recent institution attended

Upon admission, a new student must successfully complete a virtual meeting with their academic coach to be enrolled in first-term coursework.

The School for Professional Studies welcomes adult learners who are seeking an undergraduate education after life circumstances interrupted their educational journey. Adult life circumstances, for the purposes of admission, would include individuals with at least one of the following characteristics:

- Delayed enrollment in post-secondary education
- Attends part-time for at least part of the academic year
- Works full-time (35 hours or more/week) while enrolled
- Is financially independent
- Has dependents other than a spouse
- Is a single parent
- Has other demands that make traditional education less feasible

Program Requirements

Code	Title	Credits
University Undergraduate Core (https://catalog.slu.edu/academic-policies/academic-policies-procedures/university-core/) 32-35		
Major Requirements		
CIS 1375	Information Systems and Technology	3
CIS 1600	Introduction to Programming	3
CIS 2300	Data-Driven Decision Making	3
CIS 2775	Discrete Methods and Models	3
CIS 2875	Principles of Data Analysis	3
CIS 3000	System Analysis and Design	3
CIS 3150	Workplace Ethics	3
CIS 3250	Cybersecurity Principles	3
CIS 3300	Database Analysis and Design	3
CIS 3850	Analytics and Visualizations	3
CIS 4100	Technology Strategy and Decision Making	3
CIS 4700	Advanced Database Systems	3
CIS 4800	Computer Information Systems Capstone Experience (repeatable for credit)	3
Optional Certificate		0-6
Students can earn the Computer Information Certificate by taking 2 additional courses in one of the following focus areas. (https://catalog.slu.edu/colleges-schools/professional-studies/computer-information-systems-certificate/)		
Cyber Security		
CIS 4300	The Fundamentals of Computer Forensics	
CIS 4600	Cyber Threats and Defense	
Data Analytics		

Major Requirements

Cyber Security

Data Analytics

CIS 4250	Survey of Machine Learning	
CIS 4750	Data Mining	
General Electives		34-49
Total Credits		120

Continuation Standards

Students must maintain a 2.00 GPA and receive a C or better in all major classes.

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Course	Title	Credits
Year One		
Spring		
Spring 1		
CORE Requirement		3
CORE Requirement		3
Spring 2		
CIS 2300	Data-Driven Decision Making	3
CORE Requirement		3
Credits		12
Summer		
CORE Requirement		3
CORE Requirement		3
Credits		6
Fall		
Fall 1		
CIS 1375	Information Systems and Technology	3
CORE Requirement		3
Fall 2		
CIS 1600	Introduction to Programming	3
CORE Requirement		3
Credits		12
Year Two		
Spring		
Spring 1		
CIS 3250	Cybersecurity Principles	3
CORE Requirement		3
Spring 2		
Social Science elective or CIS Certificate (optional)		3
CORE Requirement		3
Credits		12
Summer		
Humanities Elective		3

CIS 3150	Workplace Ethics	3
Credits		6
Fall		
Fall 1		
CIS 3000	System Analysis and Design	3
CORE Requirement		3
Fall 2		
CIS 3300	Database Analysis and Design	3
CORE Requirement		3
Credits		12
Year Three		
Spring		
Spring 1		
General Elective or CIS Certificate (optional)		3
CIS 3850	Analytics and Visualizations	3
Spring 2		
CIS 4700	Advanced Database Systems	3
CORE Requirement or CIS Certificate (optional)		3
Credits		12
Summer		
General Elective		3
General Elective		3
Credits		6
Fall		
Fall 1		
CORE Requirement		3
Natural Science elective or CIS Certificate (optional)		3
Fall 2		
CIS 4100	Technology Strategy and Decision Making	3
General Elective		3
Credits		12
Year Four		
Spring		
Spring 1		
CORE Requirement or CIS Certificate (optional)		3
General Elective		3
Spring 2		
CIS 4800	Computer Information Systems Capstone Experience	3
General Elective		3
Credits		12
Summer		
General Elective		3
General Elective		3
Credits		6
Fall		
Fall 1		
General Elective or CIS Certificate (optional)		3
General Elective or CIS Certificate (optional)		3
Fall 2		
General Elective or CIS Certificate (optional)		3

General Elective or CIS Certificate (optional)	3
Credits	12
Total Credits	120

2+SLU

2+SLU programs are formal transfer agreements for students seeking an associate degree at a partner institution.

- Computer Information Systems, B.S. (Jeffco 2+SLU) (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/2pluslu/jeffco/computer-information-systems/>)
- Computer Information Systems, B.S. (STLCC 2+SLU) (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/2pluslu/stlcc/computer-information-systems/>)