

COMPUTER INFORMATION SYSTEMS, CERTIFICATE

Prepare for a future with innovative, diverse, technology-based organizations in the ever-changing field of computer science and IT with a certificate in computer information systems offered through Saint Louis University's School for Professional Studies.

This certificate from SLU provides you with the knowledge and skills needed to be competitive in today's market. You can choose to specialize in data analytics or cybersecurity, providing you with expertise that is in demand in modern organizations.

As part of the Saint Louis University School for Professional Studies, this program offers enterprising adults like you a flexible option to meet your personal and career goals. With multiple start dates available, you can begin working toward your certificate at any time. All courses are offered in eight-week terms through SLU Online, 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 about the SPS faculty (<https://www.slu.edu/professional-studies/contact-us/faculty/>).

Careers

The computer and information technology industry is expected to add 317,700 new jobs each year through 2034, according to the U.S. Bureau of Labor Statistics. Job opportunities within this field have a broad range of salaries, however, this sector reported an average salary of \$105,990 in May 2024, according to the BLS.

Students in the data analytics concentration may pursue a career as a market research analyst, data analyst or in business intelligence. Learn how to collect, analyze, interpret and present information obtained from data drawn from multiple, often disparate sources of organizational data. The data analysis field is expected to grow much faster than average, with 34% growth projected by 2034 by the BLS, and median salaries of \$112,590 per year.

Students in the cybersecurity concentration may pursue a career as a cybersecurity analyst, web developer, computer network architect or information assurance engineer. Gain the skills 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, you will be prepared for employment opportunities in a variety of businesses and organizations in a field where growth is projected to be 29% by 2034 and median salary is \$124,910, according to the BLS.

Tuition

Tuition	Cost Per Credit
Undergraduate Tuition	
Standard Tuition	\$660

Active Duty/Veteran (TA eligible or GI Bill); First Responders	\$300
BJC Partnership	\$340

Additional charges may apply. Other resources are listed below:

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-current/>)

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 Office of Student Financial Services (<https://www.slu.edu/financial-aid/>).

Learning Outcomes

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

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 seeking an undergraduate education after life circumstances have interrupted their educational journeys. Adult life circumstances, for the purposes of admission, would include individuals with at least one of the following characteristics:

- Delayed enrollment in postsecondary 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
Required Courses		
CIS 1600	Introduction to Programming	3
CIS 2875	Principles of Data Analysis	3
CIS 3300	Database Analysis and Design	3
Specialization		9
Select one of the following Specializations:		
<i>Data Analytics</i>		
CIS 3850	Analytics and Visualizations	
CIS 4250	Survey of Machine Learning	
CIS 4750	Data Mining	
<i>Cybersecurity</i>		
CIS 3250	Cybersecurity Principles	
CIS 4300	The Fundamentals of Computer Forensics	
CIS 4600	Cyber Threats and Defense	
Total Credits		18

Roadmap

This roadmap is just one example of a semester-by-semester plan of study for this program. There are other plans students can and do take. The plan of study for each particular student is established in consultation with each student's academic advisor; *this roadmap does not replace academic advising appointments.*

Roadmap notes:

- This Roadmap assumes full-time enrollment unless otherwise noted.
- Courses/Milestones marked with an "!" are critical and must be completed in the semester listed in the Roadmap to ensure a timely graduation.
- Course availability and sequencing are subject to change.

Computer Information Systems Certificate with Cybersecurity Concentration

Course	Title	Credits
Year One		
Fall		
Fall 1		
CIS 1600	Introduction to Programming	3
CIS 2875	Principles of Data Analysis	3
Fall 2		
CIS 3250	Cybersecurity Principles	3
CIS 3300	Database Analysis and Design	3
Credits		12
Spring		
Spring 1		
CIS 4300	The Fundamentals of Computer Forensics	3
CIS 4600	Cyber Threats and Defense	3
Credits		6
Total Credits		18

Computer Information Systems Certificate with Data Analytics Concentration

Course	Title	Credits
Year One		
Fall		
Fall 1		
CIS 1600	Introduction to Programming	3
CIS 2875	Principles of Data Analysis	3
Fall 2		
CIS 3850	Analytics and Visualizations	3
CIS 3300	Database Analysis and Design	3
Credits		12
Spring		
Spring 1		
CIS 4250	Survey of Machine Learning	3
CIS 4750	Data Mining	3
Credits		6
Total Credits		18

Contact Us

Apply for Admission (<https://www.slu.edu/professional-studies/becoming-a-student/>)

For additional admission questions, please call 314-977-2330 or email sps@slu.edu.