COMPUTER SCIENCE + PSYCHOLOGY, B.A.

The most consequential technology of our era touches the human mind — recommendation systems, mental health apps, educational platforms and AI companions. The Bachelor of Arts in Computer Science + Psychology program prepares Saint Louis University students who can build that technology and understand what it actually does to people. In this SLU program, you'll develop technical depth in software engineering and machine learning alongside rigorous training in cognitive science and behavioral research.

Curriculum Overview

- Software development, algorithms, databases and machine learning
- Cognitive psychology, research methods, psychometrics and behavioral analysis
- Integrative courses: human-computer interaction, computational modeling of behavior
- Experimental design, statistical analysis and user research methods

Experiential and Applied Learning

- Research in psychology and cognitive science labs
- UX research internships with technology, design and health care organizations

Careers

- UX researcher, behavioral data scientist, HCI researcher, clinical tech specialist
- AI/ML engineer, educational technology designer, consumer insights analyst
- Typical entry salary: $65,000 – $115,000
- 95%+ employed or in graduate school within six months

Tuition

Tuition/Fee	Cost Per Year
Undergraduate Tuition	$58,960
University Fees	$1,000

Additional charges may apply. Other resources are listed below:

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

Cost of Attendance (https://www.slu.edu/financial-aid/tuition-and-costs/cost-of-attendance.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-current/tuition-summer-current.pdf)

Scholarships and Financial Aid

For more information about Saint Louis University scholarships and financial aid, please visit the Office of Student Financial Services (https://www.slu.edu/financial-aid/types-of-aid/).

Learning Outcomes

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, evaluate and test a software system that meets a given set of computing requirements.
3. Apply computer science theory, knowledge of computer systems and software development fundamentals to produce computing-based solutions.
4. Communicate effectively to both professional and general audiences in both oral and written forms.
5. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
6. Function effectively as a member of a team in developing computing technology and solving technical problems.
7. Synthesize computational and psychological knowledge to design, analyze or evaluate systems, models or interventions that account for human cognition, behavior or well-being.

Requirements

Code	Title	Credits
University Undergraduate Core (https://catalog.slu.edu/academic-policies/academic-policies-procedures/university-core/)		**32-35**
Major Requirements		**71**
Select a CSCI 10xx: Introduction to Computer Science (p. 2)		3
CSCI 1300	Introduction to Object-Oriented Programming	4
CSCI 2100	Data Structures	4
CSCI 2300	Object-Oriented Software Design	3
CSCI 2500	Computer Organization and Systems	3
CSCI 2510	Principles of Computing Systems	3
CSCI 3100	Algorithms	3
CSCI 4961	Capstone Project I	2
CSCI 4962	Capstone Project II	2
Select one Systems Elective course (p. 2)		3
Two additional 3000 or 4000 level CSCI elective courses		6
Required Mathematics Courses		
MATH 1510	Calculus I	4
MATH 1520	Calculus II	4
MATH 1660	Discrete Mathematics	3
STAT 3850	Foundation of Statistics	3
Required Computer Ethics		
PHIL 3050X	Computer Ethics	3
Psychology Requirements		
PSY 1010	General Psychology	3

Cognitive Neuroscience		*6*
Select 6 credit hours with the "PSY Cog Neuro Cluster" attribute, such as:		
PSY 3100	Brain, Mind, & Society	
PSY 3120	Cognitive Psychology	
Developmental Psychology		*3*
Select 3 credit hours with the "PSY Dev Cluster" attribute, such as:		
PSY 3210	Developmental Psych: Child	
PSY 3230	Developmental Psychology: Adolescence	
Social & Organizational Psychology		*3*
Select 3 credit hours with the "PSY Soc Org Cluster" attribute, such as:		
PSY 3300	Social Psychology	
PSY 3410	Organizational Psychology	
Mental Health and Wellbeing in Applied Contexts		*3*
Select 3 credit hours with the "PSY Health Applied Cluster" attribute, such as:		
PSY 3460	Abnormal Psychology	
PSY 3470	Occupational Health Psychology	
University Electives		**14-17**
Total Credits		**120**

Introduction to Computer Science

Code	Title	Credits
CSCI 1010	Introduction to Computer Science: Principles	
CSCI 1020	Introduction to Computer Science: Bioinformatics	
CSCI 1025	Introduction to Computer Science: Cybersecurity	
CSCI 1030	Introduction to Computer Science: Game Design	
CSCI 1040	Introduction to Computer Science: Mobile Computing	
CSCI 1050	Introduction to Computer Science: Multimedia	
CSCI 1060	Introduction to Computer Science: Scientific Programming	
CSCI 1070	Introduction to Computer Science: Taming Big Data	
CSCI 1080	Introduction to Computer Science: World Wide Web	
CSCI 1090	Introduction to Computer Science: Special Topics	

With permission, a computing-intensive course from another discipline may be substituted as long as it is not already fulfilling another requirement. Examples of such courses include:

BME 2000	Biomedical Engineering Computing
CVNG 1500	Civil Engineering Computing
STAT 3850	Foundation of Statistics

Systems Electives Courses

Code	Title	Credits
CSCI 4500	Operating Systems	
CSCI 4530	Computer Security	
CSCI 4550	Computer Networks	
CSCI 4610	Concurrent and Parallel Programming	
CSCI 4620	Distributed Computing	

Non-Course Requirements

All School of Science and Engineering B.A. and B.S. students must complete an exit interview/survey near the end of their bachelor's program.

Continuation Standards

After declaring a computer science major, students must achieve a minimum GPA of 2.00 in computer science courses by the conclusion of their second year as a major and maintain such a GPA at the conclusion of each semester thereafter. Furthermore, students should require at most two attempts to successfully complete any computer science courses required for the major (where an unsuccessful attempt is considered a "D" or "F" for courses numbered 2100 and lower, and an "F" in higher-level courses).

Students are also expected to make adequate progress in the major, typically by enrolling in at least one computer science course per semester until completing their coursework (with exceptions made for premed scholars during their first year, and all students if studying abroad or facing other such extenuating circumstances).

Program Notes

At most, three credit hours of internship with industry courses can be applied to the degree.

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.

Course	Title	Credits
Year One		
Fall		
CSCI 10XX	Introduction to Computer Science	3
MATH 1660	Discrete Mathematics	3
CORE 1700	Ultimate Questions: Philosophy	3
CORE 1000	Ignite First Year Seminar	3
CORE 1500	Cura Personalis 1: Self in Community	1

CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication	3
	Credits	**16**
Spring		
CSCI 1300	Introduction to Object-Oriented Programming	4
MATH 1510	Calculus I	4
CORE 1600	Ultimate Questions: Theology	3
PSY 1010	General Psychology	3
CORE	Equity and Global Identities: Identities in Context	3
	Credits	**17**
Year Two		
Fall		
MATH 1520	Calculus II	4
CSCI 2100	Data Structures	4
Psychology Elective		3
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
	Credits	**14**
Spring		
CSCI 2500	Computer Organization and Systems	3
CSCI 2300	Object-Oriented Software Design	3
STAT 3850	Foundation of Statistics	3
Psychology Elective		3
CORE 3800	Ways of Thinking: Natural and Applied Sciences	3
	Credits	**15**
Year Three		
Fall		
CSCI 2510	Principles of Computing Systems	3
CSCI 3000-level or 4000-level elective		3
Psychology Elective		3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
University Elective		3
	Credits	**15**
Spring		
PHIL 3050X	Computer Ethics	3
CSCI 3000-level or 4000-level elective		3
Systems Elective		3
CORE 2800	Eloquentia Perfecta 3: Creative Expression	3
Psychology Elective		3
	Credits	**15**
Year Four		
Fall		
CSCI 4961	Capstone Project I	2
CSCI 3100	Algorithms	3
CORE 4000	Collaborative Inquiry	3
Psychology Elective		3
CORE	Equity and Global Identities: Global Interdependence	3
	Credits	**14**
Spring		
CORE 4500	Reflection-in-Action	0
CSCI 4962	Capstone Project II	2
CORE 3500	Cura Personalis 3: Self in the World	1
CORE	Eloquentia Perfecta: Writing Intensive	3
University Electives		8
	Credits	**14**
	Total Credits	**120**

Madrid

SLU-Madrid students can earn the Bachelor of Arts in Computer Science + Psychology, developing technical depth in software engineering and machine learning alongside rigorous training in cognitive science and behavioral research.

Curriculum Overview

Students should consult their advisor to ensure their plan of study meets the timely offerings of the SLU-Madrid campus.

Faculty

The faculty at Saint Louis University-Madrid are experts in their respective fields. They are internationally recognized teachers, researchers and mentors. Learn about our faculty members (https://www.slu.edu/madrid/academics/faculty/faculty-profiles.php), including their education, credentials, experience and contact information.

Faculty Research

The SLU-Madrid faculty maintains robust programs of research in a variety of fields. See below for more data.

Find Faculty Research Information (https://www.slu.edu/madrid/academics/faculty/faculty-research.php)

Find Research Resources (https://www.slu.edu/madrid/academics/faculty/research-resources.php)

Admission

SLU-Madrid Application (https://www.slu.edu/madrid/apply.php)

Application Deadlines

- April 1 - Fall admission (July 1 for EU students)
- Aug. 1 - Spring admission (Nov. 1 for EU students)
- March 1 - Summer sessions (for applicants who require a student visa)
- April 15 - Summer sessions (for applicants who do not require a student visa)

Contact Us

Office of Admissions
Avenida del Valle, 34
28003 Madrid, Spain
P. (+34) 91 554 58 58
admissions-madrid@slu.edu

Office Hours: Mondays through Fridays: 9 a.m. to 6 p.m. (3 p.m. on Fridays from May 15 - Sept. 1)

Tuition and Fees

SLU-Madrid is committed to providing a quality Jesuit education at an affordable price. Tuition rates at SLU-Madrid are approximately 40% lower than at comparable private universities in the U.S.

If you have questions or would like to speak with a financial aid officer, email us at financialaid-madrid@slu.edu.

- Tuition and Fees (https://www.slu.edu/madrid/admissions/tuition-fees.php)
- Scholarships and Financial Aid (https://www.slu.edu/madrid/admissions/scholarships-financial-aid.php)

Contact Us

For more information about computer science programs, please call 314-977-6667 or email cs@slu.edu.