

COMPUTER SCIENCE

PROGRAM CATALOG





SLU VISION-MISSION

"Saint Louis University is envisioned as an excellent missionary and transformative educational institution zealous in developing human resources imbued with Christian Spirit and who are creative, competent and socially involved. "

SCHOOL VISION-MISSION

The School of Accountancy, Management, Computing and Information Studies (SAMCIS) is envisioned as the center of excellence in Business, Management, and Information Technology Education, committed to the creative, competent, and Christian formation of individuals, who can be agents of progress in the changing local and international business and information technology environments.

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

Three to five years after graduation, graduates of the BS in Computer Science Program are expected to:

1. formulate innovative solutions to complex computing problems and requirements using the principles of research, mathematics and computing sciences;
2. engage in corporate and community-based advocacies that address social problems to positively impact the society;
3. contribute to the advancement of the computer science discipline by augmenting existing domain knowledge; and
4. exemplify Christian values in the practice of one's computing profession while working ethically and with integrity.

PROGRAM LEARNING OUTCOMES (PLO)

Graduates of the BS in Computer Science program are expected to:

1. integrate knowledge of computing, science, mathematics and other domains in the appreciation of the Computer Science discipline;
2. solve real-world computing problems within constraints of time, cost and resources by employing critical thinking skills;
3. apply mathematical foundations, algorithmic principles and computer science theories in the modeling and design of computer-based systems;
4. evaluate solutions and systems for complex computing problems with considerations on public health and safety, cultural, societal and environmental impact;
5. utilize the appropriate tools, techniques and resources in the provision of computing solutions;
6. communicate effectively knowledge and ideas to the computing community and society at large across a wide range of contexts and media;
7. function effectively as an accountable individual and as a team player in a multicultural and multidisciplinary environment;
8. act in accordance with social, legal, and ethical responsibilities as CS professional, with recognition of the local and global impact of technology to individuals, organizations and society;
9. adapt to new and emerging technologies in the pursuit of continuing professional growth; and
10. practice Christian, Louisian and Filipino values in their personal and professional endeavors and actively participate in the service of the community.



CURRICULUM

	Course No.	Course Descriptive Title	Units	Pre-requisite
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FIRST YEAR	1st Semester			
	CS 111	Introduction to Computing	2	
	CS 111L	Introduction to Computing (Lab)	1	
	CS 112	Computer Programming 1	2	
	CS 112L	Computer Programming 1 (Lab)	1	
	CS 113	Discrete Structures	3	
	GMATH	Mathematics in the Modern World	3	
	GART	Art Appreciation	3	
	GHIST	Readings in Philippine History	3	
	FIT HW	Physical Activity Towards Health and Fitness (Health and Wellness)	2	
	CFE 101	God's Journey with His People	3	
	TOTAL UNITS		23	
SECOND YEAR	2nd Semester			
	CS 121	Digital Logic Design	3	CS 111
	CS 122	Computer Programming 2	2	CS 112
	CS 122L	Computer Programming 2 (Lab)	1	CS 112
	CS 123	Architecture and Organization	2	CS 112
	CS 123L	Architecture and Organization (Lab)	1	CS 112
	GSELF	Understanding the Self	3	
	GPCOM	Purposive Communication	3	
	GENVI	Environmental Science	3	
	FIT CS	Physical Activity Towards Health and Fitness (Combative Sports)	2	
	CFE 102	Christian Morality in Our Times	3	
	TOTAL UNITS		23	
THIRD YEAR	3rd Semester			
	CS 211	Data Structures	2	CS 112, CS 113, CS 212 (co-requisite)
	CS 211L	Data Structures (Lab)	1	CS 112, CS 113, CS 212 (co-requisite)
	CS 212	Operating Systems	2	CS 123, CS 211 (co-requisite)
	CS 212L	Operating Systems (Lab)	1	CS 123, CS 211L (co-requisite)
	CS 213	Human Computer Interaction	3	CS 122
	GSTS	Science, Technology, and Society	3	
	GRVA	Reading Visual Art	3	
	NSTP-CWTS 1	Foundations of Service	3	
	FIT OA	Physical Activity Towards Health and Fitness (Outdoor and Adventure)	2	
FOURTH YEAR	CFE 103	Catholic Foundation of Mission	3	
	TOTAL UNITS		23	
	4th Semester			
	CS 311	Applications Development	2	CS 122
	CS 311L	Applications Development (Lab)	1	CS 122
	CS 312	Web Systems Development	2	CS 211
	CS 312L	Web Systems Development (Lab)	1	CS 211
	CS 313	Software Engineering	3	CS 131, CS 221
	CS 314	Social and Personal Development in the ICT Workplace	3	CS 111, GSELF
	CS 315	Technology-Assisted Presentation and Presentation	3	CS 111, GPCOM
	CSM 316	Numerical Methods for Computer Science	3	CS 132
	CFE 105A	CICM in Action: Justice, Peace, and Integrity of Creation, Indigenous Peoples, and Interreligious Dialogue	1.5	CFE 103, CFE 104
	TOTAL UNITS		19.5	
FOURTH YEAR	4th Semester			
	CS 331	Practicum	6	4th year standing
	TOTAL UNITS		6	
	4th Semester			
	CS 321	Artificial Intelligence	3	CS 132, CS 211
	CS 322	Data Science	2	CS 221
	CS 322L	Data Science (Lab)	1	CS 221
	CS 323	Modeling and Simulation	2	CS 132, CS 211
	CS 323L	Modeling and Simulation (Lab)	1	CS 132, CS 211
	CS 324	Methods of Research in Computer Science	3	3rd year standing
	CS 325	Structure of Programming Languages	3	CS 211
	CFE 105B	CICM in Action: Environmental Planning and Management and Disaster Risk Reduction Management	1.5	CFE 105A
	TOTAL UNITS		16.5	
FOURTH YEAR	4th Semester			
	CS 106A	Embracing the CICM Mission	1.5	CFE 105B
	CS 411	CS Thesis 1	3	CS 324
	CS 412	Information Assurance and Security	3	core courses
	CS 413	Professional Practice and Cyberethics	3	GETHICS, CS 231
	CSE	Elective 1	3	3rd year standing
	CSE	Elective 2	3	3rd year standing
	TOTAL UNITS		16.5	
	4th Semester			
	CS 421	CS Thesis 2	3	CS Thesis 1
	CS 422	Distributed Computing	3	4th year standing
	FOR LANG 1	Foreign Language 1	3	
	CSE	Elective 3	3	4th year standing
	CSE	Elective 4	3	4th year standing
	TOTAL UNITS		16.5	
FOURTH YEAR	4th Semester			
	CS 10	Advanced Computer Architecture	3	3rd year standing
	CS 11	Advanced Operating Systems	2/1	3rd year standing
	CS 12	Advanced Networking and	2/1	3rd year standing
	CS 13	Advanced Information Management	3	3rd year standing
	CS 14	Advanced Software Engineering	3	3rd year standing
	CS 15	Data Mining	2/1	3rd year standing
	CS 16	Design and Analysis of Algorithms	3	3rd year standing
	CS 17	Operations Research	3	3rd year standing
	CS 18	Machine Learning	3	3rd year standing
	CS 19	Compiler Design	3	3rd year standing
	CS 20	Advanced Security Concepts	3	3rd year standing
	CS 21	Multimedia Systems	2/1	3rd year standing
	CS 22	Advanced Applications Development	2/1	3rd year standing
	CS 23	Computer Graphics	2/1	3rd year standing
	CS 24	Game Design and Development	2/1	3rd year standing
	CS 25	UX Design and Concepts	3	3rd year standing
	CS 26	Field Trips and Seminars	3	3rd year standing
	CS 27	System Resource Management	3	3rd year standing
	CS 28	Current Trends 1	3	3rd year standing
	CS 29	Current Trends 2	3	3rd year standing
	CS 30	Special Topics 1	3	3rd year standing
	CS 31	Special Topics 2	3	3rd year standing
	CS 32	Information Technology Certification	3	3rd year standing

ADMISSION POLICIES

Saint Louis University welcomes local and foreign students alike, subject to University admission Policies, requirements, and academic standards and pertinent laws of the Republic of the Philippines

Undergraduate Freshman Students

- All undergraduate freshman applicants must pass the SLU College Entrance Examination (SLU-CEE) and must qualify within the slots duly determined for their chosen course. The regular SLU-CEE is conducted during weekends from the middle of October up to the middle of December. Admission for the first semester starts at the middle of April.



Transfer Students

- SLU admits transferees in all courses except Bachelor in Medical Laboratory Science subject to their compliance with pertinent requirements and guidelines. They must undergo a Qualifying Examination (QE) and if qualified, will take the Personality Test and Interview. Foreign students applying as transferee are subject to the English Proficiency Test (EPT) rule.

Graduate Program Students

- The applicant must have finished the prerequisite degree/s prior to acceptance to the Graduate Program;
- For a Master's degree, the applicant must have a Baccalaureate degree from an institution of recognized standing
- For a Doctorate degree, the applicant must have a Master's degree in related fields from an institution of recognized standing.

Foreign Students

- Foreign students should apply not later than 6 months before the start of the academic term. Moreover, they should be in Baguio City at least 4 weeks before the start of classes of the academic term for them to take the EPT as well as SLU-CEE / QE / GPPE, and Personality Test.
- Foreign students applying for the first time either in the undergraduate or graduate program should initially possess satisfactory proficiency in English and have passed the EPT as well as the pertinent entrance examination and Personality Test. Before enrolling, they undergo Preadmission Processing at the Student Affairs Office.
- Foreign students must secure a valid Student Visa. There are two options in securing a Student Visa. For related information, consult Foreign Student section of the Registrar's Office.

SCHEDULE OF FEES

FIRST YEAR TUITION FEE AS OF AY 2022 - 2023		
COURSE	PARTIAL	FULL
BS COMSCI	P 17,800.00	P 37,906..00
FEES LISTED PER SEMESTER AND ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE		



JOB OPPORTUNITIES (WHERE DOES THE PROGRAM TAKE YOU?)

- Web Developer
- Computer Programmer
- Information Security Analyst
- Database Administrator
- Software Developer
- Software Engineer
- Computer Forensic Analyst

CONTACT INFO

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