SAINT LOUIS UNIVERSITY
BAGUIO CITY, PHILIPPINES

GEODETIC ENGINEERING
PROGRAM CATALOG

SCHOOL OF ENGINEERING AND ARCHITECTURE

SLU VISION-MISSION

We envision Saint Louis University as an excellent missionary and transformative educational institution zealous in developing locally responsive, globally competitive, and empowered human resources who are creative, competent, socially involved, and imbued with Christian spirit.

SCHOOL VISION-MISSION

The School of Engineering and Architecture (SEA) envisions herself as an exemplary educational institution for engineering and architecture dedicated to elevating instruction, research, and extension to a higher level of competence and creativity committed to shaping the socio-technical environment founded on Christian values.

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

Three to five years after graduation, alumni of the Architecture and Engineering Programs are expected to:

1. demonstrate technical competence in the analysis of problems and design of systems, keeping in mind the technical, professional, societal, environmental, economic, and ethical dimensions of any solution;
2. apply their talents and full potentials in the practice of their profession guided by the Christian tenets of
3. honesty, service, dedication and a deep sense of moral responsibility;
4. pursue advanced education, research and development, and other creative efforts in science and technology; and;
5. participate actively to address social, technical and business challenges vital to national progress and development.

PROGRAM LEARNING OUTCOMES (PLO)

Graduates of the BS in Geodetic Engineering program are expected to:

1. apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems;
2. conduct investigations of complex engineering problems using research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions;
3. design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations;
4. function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings;
5. compose substantiated conclusions after the analysis of complex engineering problems using first principles of mathematics, natural sciences, and engineering sciences to identify, formulate, and research relevant literature;
6. apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice;
7. communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions;
8. evaluate the sustainability and impact of professional engineering work in the solution of complex engineering problems in societal and environmental context;
9. demonstrate the ability to engage in independent and life-long learning in the broadest context of technological change;
10. apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems;
11. create appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering problems with an understanding of the limitations;
12. apply knowledge and understanding of engineering management principles and economic decision-making to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments;
13. demonstrate competence in at least one focus area of geodetic engineering practice and apply such knowledge to provide solutions to actual problems; and
14. practice Christian values in their personal and professional endeavors as Louisians in the service of the CICM mission.

CURRICULUM

FIRST YEAR

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
1st Semester			
CFE 101	God's Journey with His People	3	
GRVA	Reading Visual Art	3	
GETHICS	Ethics	3	
EnggMath 1	Pre-calculus	4	
GE 1111	General Surveying 1	2	
GE 1111L	General Surveying 1 (Lab)	1	w/after GE 1111
GE 1121	Computer-Aided Drafting	1	
GE 1121L	Computer-Aided Drafting (Lab)	1	W/after GE 1121
GE 1131	Computer Fundamentals and Programming	1	
GE 1131L	Computer Fundamentals and Programming (Lab)	2	w/after GE 1131
FIT HW	Physical Activity Towards Health and Fitness (Health and Fitness)	2	
NSTP-CWTS 1	Foundations of Service	3	
	TOTAL UNITS	**26**	

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
2nd Semester			
CFE 102	Christian Morality in our Times	3	
GIT	Living in the IT Era	3	
GMATH	Mathematics in the Modern World	3	
GSELF	Understanding the Self	3	
EnggMath 2	Differential Calculus	4	EnggMath 1
GE 1211	General Surveying 2	2	GE 1111
GE 1211L	General Surveying 2 (Lab)	2	w/after GE 1211
FIT CS	Physical Activity Towards Health and Fitness (Combative Sports)	2	
	TOTAL UNITS	**22**	

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
Short Term			
EnggMath 4	Integral Calculus	4	EnggMath 2
EnggPhys	Physics for Engineers	3	EnggMath 2
EnggPhysL	Physics for Engineers (Lab)	1	w/after EnggPhys
	TOTAL UNITS	**8**	

SECOND YEAR

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
1st Semester			
CFE 103	Catholic Foundation of Mission	3	
GART	Art Appreciation	3	
GHIST	Readings in Philippine History	3	
GSTS	Science, Technology, and Society	3	
EnggMath 5	Differential Equations	3	EnggMath 4
EnggMath 3	Engineering Data Analysis	3	GMATH
GE 2101	Engineering Mechanics	3	EnggPhys
GE 2111	Engineering Surveys	2	GE 1121
GE 2111L	Engineering Surveys (Lab)	2	w/after GE 2111
FIT AQ	Physical Activity Towards Health and Fitness (Aquatics)	2	
	TOTAL UNITS	**27**	

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
2nd Semester			
CFE 104	CICM Missionary Identity	3	CFE 103
GENTREP	The Entrepreneurial Mind	3	GPCOM
GPCOM	Purposive Communication	3	
GCWorld	The Contemporary World	3	
GRIZAL	The Life and Works of Rizal	3	
GE 2211	Geodetic Geodesy	3	GE 1211
GE 2221	Cartography	1	GE 2111
GE 2221L	Cartography (Lab)	2	w/after GE 2221
FIT OA	Physical Activity Towards Health and Fitness (Outdoor and Adventure Activities)	2	
	TOTAL UNITS	**23**	

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
Short Term			
GE 2231	Survey Camp (120 hrs)	1	GE 2111
NSTP-CWTS 2	Social Awareness and Empowerment for Service	3	NSTP-CWTS 1
	TOTAL UNITS	**4**	

CURRICULUM

THIRD YEAR

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
1st Semester			
CFE 105A	CICM in Action : Justice, Peace and Integrity of Creation; Indigenous Peoples; and Interreligious Dialogue	1.5	CFE 103, CFE 104
GE 3111	Photogrammetry	2	GE 2221
GE 3111L	Photogrammetry (Lab)	2	w/after GE 3111
GE 3121	Physical Geodesy	3	GE 2211
GE 3131	Land Administration and Management	3	
GE 3141	Introduction to the Laws on Private and Public Lands	2	
GE 3151	Hydrographic Surveying	2	GE 2111
GE 3151L	Hydrographic Surveying (Lab)	1	w/after GE 3151
GE 3161	Theory of Errors and Adjustments	3	EnggMath 4
GE 3171	Remote Sensing	2	EnggPhys
GE 3171L	Remote Sensing (Lab)	2	w/after GE 3171
	TOTAL UNITS	**23.5**	

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
Short Term			
GE 3271	Geodetic Engineering Immersion/ OJT (240 hours minimum)	3	GE 3211
	TOTAL UNITS	**3**	

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
2nd Semester			
CFE 105B	CICM in Action : Environmental Planning and Management, and Disaster Risk Reduction Management	1.5	CFE 105A
GE 3211	Satellite Geodesy	3	GE 3121
GE 3221	Geodetic Surveying	2	GE 3121
GE 3221L	Geodetic Surveying (Lab)	2	w/after GE 3221
GE 3231	Geodetic Computations & Adjustments	2	GE 3161
GE 3231C	Geodetic Computations & Adjustments (Computation)	2	w/after GE 3231
GE 3241	Property Surveys	3	GE 2211
GE 3241L	Property Surveys (Lab)	2	w/after GE 3241
GE 3251	Geodetic Engineering Laws, Obligations and Contracts, Ethics	2	GE 3141
GE 3261	Geographic Information Systems	1	GE 2221
GE 3261L	Geographic Information Systems (Lab)	2	w/after GE 3261
Techno 101	Technopreneurship 101	2	GENTREP
Techno 101L	Technopreneurship 101 (Lab)	1	w/after Techno 101
	TOTAL UNITS	**25.5**	

FOURTH YEAR

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
1st Semester			
CFE 106A	Embracing the CICM Mission	1.5	CFE 105B
GE 4111	Safety Management	1	
GE 4121	Geodetic Engineering Elective	3	
GE 4131	Methods of Research	1	
GE 4141	Land Use Planning and Development	2	GE 3261
GE 4141D	Land Use Planning and Development (Design)	1	w/after GE 4141
GE 4151	Electrical and Electronics Engineering for GE	3	
GE 4161	Principles of Geology	3	
GE 4171	Land Registration Laws	3	GE 3141
GE 4181	Engineering Economics	3	GE 3271
	TOTAL UNITS		
TOTAL PROGRAM UNITS		**201**	

Course No.	Course Descriptive Title	Units	Co/Pre-requisite
2nd Semester			
CFE 106B	Embracing the CICM Mission	1.5	CFE 106A
GE 4211	Public Land Laws & Laws on Natural Resources	3	GE 3141
GE 4221	Special Studies in Geodetic Engineering	1	GE 4131
GE 4221L	Special Studies in Geodetic Engineering (Lab)	2	w/ after GE 4221
GE 4231	Geodetic Engineering Board Review	1	GE 4121
GE 4241	Environmental Science and Engineering	3	
GE 4251	Advanced Information & Communications Technology	3	
GE 4261	Engineering Management	3	GE 4181
	TOTAL UNITS	**17.5**	

NOTE 1. The maximum load a graduating student allowed to enroll is regular load plus 6 units (Regular Semester); regular load plus 3 units (Short term)

2. The year level is based on the 70% of the subjects enrolled in the current term
3. Regular students are those with no advanced and back subjects based on the checklist
4. Required units:201

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 / GPEE, 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 GEODETIC Engg	P 16,600.00	P 35,447.00
FEES LISTED PER SEMESTER AND ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE		

JOB OPPORTUNITIES AND FUTURE PROSPECTS

- Land Surveyor
- Photogrammetric Engineer
- GIS Specialist
- Remote Sensing Specialist
- Land Development Engineer
- Land Administration Specialist
- Land Valuation Specialist
- Planning Engineer
- Construction/Industrial Surveyor
- Mine Surveyor
- Mapping Specialist

CONTACT INFORMATION

Engr. Yuriko Lynn A. Suba, MAEHP
BSGE Department Head
(074) 4432001, loc. 317
ylasuba@slu.edu.ph
+639257404913

Mr. Alexander J. Pascua
SEA Head Secretary
(074) 4432001, loc. 242
ajpascua@slu.edu.ph

Ms. Graciel A. Tampican
BSGE Evaluator
(074) 4432001, loc. 243
gatampican@slu.edu.ph