CHEMISTRY DEPARTMENT
COLLEGE OF ARTS & SCIENCES
SILLIMAN UNIVERSITY
Building Competence, Character & Faith

BACHELOR OF SCIENCE IN CHEMISTRY

with *Certificate in Chemical Technology**

(As aligned to the K+12 Program and in compliance with CHED Memorandum Order No. 47, Series of 2017)

1st YEAR

1st Semester					2nd Semester				
Subjects	**Lec**	**Lab**	**Units**	**FG**	**Subjects**	**Lec**	**Lab**	**Units**	**FG**
GE 1 (Understanding the Self)	3	0	3		GE 4 (Mathematics in the Modern World)	3	0	3	
GE 2 (Readings in Philippine History)	3	0	3		GE 5 (Purposive Communication)	3	0	3	
Chem 15 (Principles of Chemistry)	**3**	**2**	**5**		**Chem 16 (Inorganic Chemistry I)**	**2**	**1**	**3**	
Math 23C (Math Analysis I)	3	0	3		Math 24C (Math Analysis II)	3	0	3	
PE 1 (Physical Fitness & Swimming)			2		Physics I (Mechanics, Acoustic & Thermodynamics)	3	1	4	
NSTP 1 (Nat'l Services Training Program)			3		PE 2 (Physical Education)			2	
PEP 1 (Personal Enhancement Program)					NSTP 2 (Nat'l Services Training Program)			3	
					PEP 2 (Personal Enhancement Program)				
	TOTAL		19			**TOTAL**		21	

2nd YEAR

1st Semester					2nd Semester				
Subjects	**Lec**	**Lab**	**Units**	**FG**	**Subjects**	**Lec**	**Lab**	**Units**	**FG**
CHS 1 (Reading and Interpreting Hebrews Scriptures)	3	0	3		CHS 2 (Reading and Interpreting the Christian Scriptures)	3	0	3	
GE 3 (Contemporary World)	3	0	3		GE 8 (Ethics of the Christian Faith)	3	0	3	
Chem 21 (Analytical Chemistry I)	**3**	**2**	**5**		**Chem 22 (Analytical Chemistry II)**	**3**	**2**	**5**	
Chem 25 (Organic Chemistry I)	**3**	**2**	**5**		**Chem 26 (Organic Chemistry II)**	**3**	**2**	**5**	
Physics 2 (Electricity, Optics & Modern Physics)	3	1	4		**Chem 28 (Physical Chemistry I)**	**3**	**1**	**4**	
PE 3 (Physical Education)			2		PE 4 (Physical Education)			2	
	TOTAL		**22**			**TOTAL**		**22**	

3rd YEAR

1st Semester					2nd Semester				
Subjects	**Lec**	**Lab**	**Units**	**FG**	**Subjects**	**Lec**	**Lab**	**Units**	**FG**
GE 6 (Art Appreciation)	3	0	3		**Chem 34 (Physical Chemistry III)**	**3**	**0**	**3**	
Chem 31 (Analytical Chemistry III)	**3**	**1**	**4**		**Chem 38 (Biochemistry II)**	**2**	**1**	**3**	
Chem 33 (Physical Chemistry II)	**3**	**1**	**4**		**Chem 36 (Advanced Organic Chemistry)**	**3**	**0**	**3**	
Chem 37 (Biochemistry I)	**4**	**1**	**5**		**Chem 40 (Proposal/Undergraduate Thesis I)****	**1**	**0**	**1**	
GE 9 (The Life and Works of Jose Rizal)	3		3		GE 11A (Free-Elective)	3		3	
GE 10A (Whole Person Education)	3		3		GE12/CHS 3 (Ethics for Christian Life)	3		3	
	TOTAL		**22**			**TOTAL**		**16**	

4th YEAR

1st Semester					2nd Semester				
Subjects	**Lec**	**Lab**	**Units**	**FG**	**Subjects**	**Lec**	**Lab**	**Units**	**FG**
GE 7 (Science, Technology, & Society)	3	0	3		**Chem 44 (Chemistry Law Review-RA 10657)**			**(3)**	
Chem 41 (Inorganic Chemistry II)	**3**	**0**	**3**		**Chem 46 (Industrial Chemistry/Educational Tour)**	**3**	**0**	**3**	
Chem 43 (Environmental Chemistry)	**3**	**0**	**3**		**Chem 48 (Professional Engagement)*****			**3**	
Chem 49 (Undergraduate Thesis II)	**0**	**1**	**1**		**Chem 50 (Thesis Writing & Defense)**		**1**	**1**	
	TOTAL		**10**			**TOTAL**		**7**	

***Certificate in Chemical Technology** is awarded after completion of the first two (2) year-course as prescribed in the BS Chemistry curriculum. To be a registered **Chemical Technician**, one must take the national board examination for Chemical Technician which will be given by the Board of Chemistry of the Professional Regulation Commission (PRC) in accordance with the provisions of Republic Act No. 10657 known as the "Chemistry Law of the Philippines."

**Undergraduate Thesis I preliminaries during summer may commence only after a successful defense of Thesis Proposal (Chem 40) with the Department's approval.

***Chemistry 48 – Professional Engagement and/or On-The-Job Training (OJT) may be taken during the Summer Term before the fourth-year level.

Electives: Advanced Organic Chemistry/Natural Products Chemistry, Environmental Chemistry, and General Industrial/Entrepreneurial Chemistry.

Presented for Public Orientation on the 19th June 2017 in Manila, Philippines. Approved by the Academic Council on October 2017.

Jonathan E. Pa-a

LEVEL	SUBJECTS	UNITS	PREREQUISITES
I	Chem 15	5	SHS General Chem 1 & 2
	Chem 16	3	Chem 15
	Math 23C	3	SHS Precalculus & Basic Calculus
	Math 24C	3	Math 23C
	PE 2	2	PE 1
	Physics 1	4	SHS General Physics 1 & 2
	NSTP 2	3	NSTP 1
	PEP 2		PEP 1
II	Chem 21	5	Chem 15 & 16
	Chem 25	5	Chem 15
	Chem 22	5	Chem 21 & 25
	Chem 26	5	Chem 25
	Chem 28	4	Chem 21 & 25
	Physics 2	4	Physics 1
	CHS 2	3	CHS 1
	PE3	2	PE2
	PE4	2	PE3
	CHS 3		CHS 2 & 1
III	Chem 31	4	Chem 22 & 25
	Chem 33	4	Chem 28
	Chem 37	5	Chem 22 & 26
	Chem 34	3	Chem 28
	Chem 38	4	Chem 37
	Chem 36	3	Chem 26
II	Chem 41	3	Chem 16
	Chem 43	3	3rd-level core courses
	Chem 49	1	3rd-level core courses
	Chem 44	(3)	All Chemistry board Exam Subjects Review (Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Biochemistry, and Analytical Chemistry)
	Chem 46	3	3rd-level core courses
	Chem 48	3	Summer 3rd-level
	Chem 50	1	Chem 49

Updated: Effective First Semester, SY 2024-2025

ADMISSION REQUIREMENTS AND RETENTION POLICIES:

1. Applicants must be STEM or STEAM graduates from Senior High School with a minimum average grade of 85% and no grade below 80% in science and math subjects.
2. Continuing students are required to obtain a minimum grade of 2.0 in all chemistry subjects for progression.
3. If the student's grade in a pre-requisite subject is below 2.0, the student cannot enroll in higher chemistry courses.

Jonathan E. Pa-a