

## Bachelor of Science in Chemical Physics (122 Cr.)

**Four-Year Curriculum Plan** 

Suggested four-year plan for freshmen entering LMU Fall semester. Always consult LMU's Undergraduate Catalog and discuss with your academic advisor every semester prior to registering for classes. Timing of courses may deviate from this plan based on a number of factors

First Year — Fall Semester	Cr.
UACT 100 Strategies for College Success*	1
Gen. Elective- Any course of your choice*	3
ENGL 101 Composition I*	3
CHEM 111 General Chemistry I & Lab <sup>#</sup> Prerequisite: Successful completion (C- or better) of Math 105, 115, or 120, OR Math ACT sub-score of 23 or higher, Fall	4
LNCN 100 Lincoln's Life & Legacy*	1
MATH 150 Calculus I*#  Prerequisite: Successful completion (C- or better) of Math 120 or ACT subscore of 26 or higher.	4
Total Credits	16

You should be exploring opportunities to participate in service initiatives.

Second Year — Fall Semester	Cr.
Social/Behavioral Science Requirement*	3
PHYS 211 General Physics I & Lab <sup>#</sup> Prerequisite: Successful completion (C- or better) of Math 120, or a Math ACT sub-score of 26 or higher, Fall	4
PHYS 215 Applic. of Calc. to Gen. Physics#	1
CHEM 221 Organic Chemistry I & Lab <sup>#</sup> Prerequisite: Successful completion (C- or better) with lab	4
HIST Requirement*	3
Total Credits	15

Keep track of the number of 300/400 level courses you take. You need to complete at least 42 credits for graduation

Third Year — Fall Semester	Cr.
CHEM 310 Math Methods in Chemistry <sup>#</sup> Prerequisites: Successful completion (C- or better) of MATH 150, 250.	3
CHEM 331 Quantitative & Instr. Analysis# Prerequisites: Successful completion (C- or better) of CHEM 221	4
Fine Arts Requirement*	3
CHEM 397 JR Sc Sem and Writing <sup>#</sup> Prerequisites: Successful completion (C- or better) of ENGL 102 or equivalent.	1
PHYS 320 Modern Physics I & Lab <sup>#</sup> Prerequisite: successful completion of PHYS 212 and PHYS 216 with a grade of C <sup>-</sup> or better	3

 Make plans to take graduate/professional school entrance exams (e.g., DAT, GRE, MCAT, PA-CAT, OAT)

**Total Credits** 

14

Fourth Year — Fall Semester \_\_\_\_\_ Cr.

CIVX 300 American Civics\* 2

Free Elective 300/400 level 3

Free Elective 300/400 level 3

CHEM 451 Physical Chemistry I# 4

Prerequisite: Successful completion (C- or better) of CHEM 112

PHYS 350 Intro to Electronics# 4

Prerequisite: Successful completion (C- or better) of PHYS 212

Total Credits 16

• Complete the Intent to Graduate form during your Academic Advising Meeting.

First Year — Spring Semester	Cr.
ENGL 102 Composition II*	3
COSC 160 Computer Science I <sup>#</sup> Prerequisite: Successful completion (C- or better) of MATH 115 or ACT sub-score of 23 or higher	3
Ethics, Fine Arts or Humanities Req.*	3
CHEM 112 General Chemistry II & Lab <sup>#</sup> Prerequisite: successful completion of CHEM 111 with a grade of C <sup>-</sup> or better	4
MATH 250 Calculus II <sup>#</sup> Prerequisite: successful completion (C- or better) of MATH 150	4
Total Credits	17

Second Year — Spring Semester	Cr.	
PHYS 212 General Physics II & Lab#	4	
Prerequisite: Successful completion (C- or better) in PHYS 211 with lab.		
PHYS 216 Applic. of Calc. to Gen. Physics <sup>#</sup>	1	
CHEM 222 Organic Chemistry II & Lab#	4	
Prerequisite: Successful completion (C- or better) of CHEM 221 with lab		
Gen. Elective- Any course of your choice	2	
HIST Requirement*	3	
Total Credits	14	
You should be exploring opportunities to conduct research.		

Third Year — Spring Semester	Cr.		
CHEM 332 Quantitative & Instrum.			
Analysis <sup>#</sup>			
Prerequisites: Successful completion (C- or better) of CHEM 221, CHEM 331			
COMM 200 Fund Speech & Comm*	3		
Social/Behavior Science Requirement	3		
Free Elective 300/400 level	3		
Free Elective 300/400 level	3		
Total Credits	16		

- Consider taking CHEM 483 in order to progress on your mentored
- Consider taking upper level math electives, particularly if interested in graduate school.

Fourth Year — Spring Semester	Cr.
Free Elective 300/400 level	3
Free Elective 300/400 level	3
CHEM 452 Physical Chemistry II <sup>#</sup> Prerequisites: Successful Completion (C- or better) of CHEM 451	4
CHEM 460 Inorganic Chemistry <sup>#</sup> Prerequisites: Successful Completion (C- or better) of CHEM 111 and CHEM 112	3
CHEM 497 Senior Science Seminar#	1
Total Credits	14

\*LMU Core Curriculum Requirement: See LMU undergraduate catalog for details

# Major-Specific Requirement/Collateral Requirement: These courses must be passed with at least a C- or better to progress in the program. See LMU catalog for specific grade requirements.

## **Useful Contacts**

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Title	Name	Email	Phone
			number
Chair,	Dr. Kevin	Kevin.Cooper@lmunet.edu	423.869.7156
Department	Cooper		
of Chemistry			
Academic	Tagge	Taggecenter@lmunet.edu	423.869.6310
Support &	Center		
Tutoring			
Student	Jessica	Jessica.Parker@lmunet.edu	423.869.6277
Counseling	Parker		
Career			
Services	Tanya	Tanya.Vincent@lmunet.edu	423.869.7187
Counselor	Vincent		
Student	Gerald	Gerald.Branham@lmunet.edu	423.869.6611
Success	Branham		
Coordinator			

Credit Hour Requirements
In order to graduate you need to complete a minimum of 122 credit hours. At least 36 of these hours must be at the 300/400 level. It is recommended that you track your hours in each of these categories as you progress.

	# of credit hours				
Semester	Current semester	300/400	Total Earned (Add all semesters)	Total 300/400 (Add all semesters)	Cumulative GPA
1 <sup>st</sup> Yr. Fall					
1 <sup>st</sup> Yr. Spring					
2 <sup>nd</sup> Yr. Fall					
2 <sup>nd</sup> Yr. Spring					
3 <sup>rd</sup> Yr. Fall					
3 <sup>rd</sup> Yr. Spring					
4 <sup>th</sup> Yr. Fall					
4 <sup>th</sup> Yr. Spring					

Career Exploration				
Career	Description	Career Preparation – internship, research experience, coursework, etc	Career Qualifications	
			BS	
			MS	
			PhD	
			Certifications	
			BS	
			MS	
			PhD	
			Certifications	
			BS	
			MS	
			PhD	
			Certifications	
			BS	
			MS	
			PhD	
			Certifications	
			BS	
			MS	
			PhD	
			Certifications	