

Le Moyne College									
Chemistry Major, typical program for B.S. + M.S. Chemical Engineering									
Fall of first-year is an even # year: 2018, 2020, etc.									
Revised 12/17/19									
CREDIT	FIRST-YEAR		SOPHOMORE		JUNIOR		SENIOR		
	F	S	F	S	F	S	F	S	
MAJOR REQUIREMENTS									
CHEMISTRY									
CHM 151*	3	3							
CHM 151L*	1	1							
CHM 152*	3	3							
CHM 152L*	1	1							
CHM 223*	3		3						
CHM 223L*	1		1						
CHM 224*	3			3					
CHM 224L*	1			1					
CHM 311	4				4				
CHM 320/322	4					4			
CHM 327*	3						3		
CHM 331*	1						1		
CHM 328*	3							3	
CHM 332*	1							1	
CHM 280	1			1					
CHM 435	3				3				
CHM 460	3						3		
CHM Elective***									
MAJOR SUPPORT									
MATHEMATICS									
MTH 145*	4	4							
MTH 146*	4	4							
MTH 245*	4		4						
MTH 304*	4			4					
MTH 311*	3						3		
BIOLOGY									
BIO 191	4		4						
PHYSICS									
PHY 105*	3	3							
PHY 103*	1	1							
PHY 106*	3	3							
PHY 104*	1	1							
PHY 333*	3					3			
CORE REQUIREMENTS									
ENGLISH/SOC SCI/HIST/RELIG/PHILOS									
COR 100	3	3							
WRT 101 (WI)	3	3							
ENG 210 (WI)	3			3					
ENG 310	3					3			
HST 110	3		3						
HST 111	3			3					
REL	3					3			
THE	3							3	
PHL 110 (WI)	3	3							
PHL 210	3				3				
EAC 1	3						3		
EAC 2	3							3	
Soc Sc	3			3					
IDS	3							3	
COR 400	3							3	
VPA	1	1							
Diversity									
ADDITIONAL MASTERS PREREQUISITES**									
CHEMICAL ENGINEERING									
SYRE 326/ECS 326†	3				3				
SYRE 231H/CEN 231	3		3						
SYRE 333H/CEN 333	3				3				
SYRE 341H/CEN 341	4					4			
SYRE 587/CEN 587	3						3		
TOTAL CREDITS	135	18	16	18	18	16	17	16	16

* Satisfies pre-requisites for admission to masters program

** Taken at Syracuse University

***CHM elective (3 credits) is satisfied by ECS 326 or CEN 587

† ECS 326 is required again - effective Fall 2019

(proposals differ in placement of physical chemistry; junior or senior year (offered every other year))

Le Moyne College		Chemistry Major, typical program for B.S. + M.S. Chemical Engineering								
Fall of first-year is an odd # year: 2019, 2021, etc		Revised 12/17/19								
		CREDIT	FIRST-YEAR		SOPHOMORE		JUNIOR		SENIOR	
			F	S	F	S	F	S	F	S
MAJOR REQUIREMENTS										
CHEMISTRY										
CHM 151*	Chemical Principles I	3	3							
CHM 151L*	Chemical Principles I Lab	1	1							
CHM 152*	Chemical Principles II	3		3						
CHM 152L*	Chemical Principles II Lab	1		1						
CHM 223*	Organic Chemistry I	3			3					
CHM 223L*	Organic Chemistry I Lab	1			1					
CHM 224*	Organic Chemistry II	3				3				
CHM 224L*	Organic Chemistry II Lab	1				1				
CHM 311	Analytical Chemistry	4							4	
CHM 320/322	Instrumental Chemistry	4								4
CHM 327*	Physical Chemistry I	3				3				
CHM 331*	Physical Chemistry I Lab	1				1				
CHM 328*	Physical Chemistry II	3					3			
CHM 332*	Physical Chemistry II Lab	1					1			
CHM 280	Scientific Literature	1			1					
CHM 435	Inorganic Chemistry	3				3				
CHM 460	Biochemistry	3							3	
CHM elective***										
MAJOR SUPPORT										
MATHEMATICS										
MTH 145*	Calculus I	4	4							
MTH 146*	Calculus II	4		4						
MTH 245*	Calculus III	4			4					
MTH 304*	Differential Equations(spring)	4				4				
MTH 311*	Intro Probability Theory (fall)	3							3	
BIOLOGY										
BIO 191	General Biology I	4			4					
PHYSICS										
PHY 105*	General Physics I	3	3							
PHY 103*	General Physics I Lab	1	1							
PHY 106*	General Physics II	3		3						
PHY 104*	General Physics II Lab	1		1						
PHY 333*	Computational Physics (every other spring)	3				3				
CORE REQUIREMENTS										
ENGLISH/SOC SCI/HIST/RELIG/PHILOS										
COR 100	First Year "Big Ideas" Seminar	3	3							
WRT 101 (WI)	Critical Writing	3	3							
ENG 210 (WI)	Major Authors	3			3					
ENG 310	Literature & Culture	3							3	
HST 110	World Civ I	3			3					
HST 111	World Civ II	3				3				
REL	Religious Studies	3					3			
THE	Theology	3							3	
PHL 110 (WI)	Intro to Philosophy	3		3						
PHL 210	Moral Philosophy	3				3				
EAC 1	Encountering another culture	3						3		
EAC 2	Encountering another culture	3							3	
Soc Sc	from: ANT, CJS, ECO, EDU, PSC, PSY, or SOC	3					3			
IDS	Core Interdisciplinary Studies	3					3			
COR 400	Senior Seminar	3							3	
VPA	Visual & Performing Arts- 0-3 credit course or designation	1		1						
Diversity	One course with DIV designation (double dip!)									
ADDITIONAL MASTERS PREREQUISITES**										
CHEMICAL ENGINEERING										
SYRE 326/ECS 326†	Engineering Materials, Properties, and Processing (fall)	3				3				
SYRE 231H/CEN 231	Mass and Energy Balances (fall)	3			3					
SYRE 333H/CEN 333	Fluid Transport (fall)	3				3				
SYRE 341H/CEN 341	Fundamentals of Heat and Mass Transfer (spring)	4					4			
SYRE 587/CEN 587	Chemical Reaction Engineering (fall)	3							3	
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