



MOUNT ST. JOSEPH  
UNIVERSITY

## Biochemistry - Research Industry Major – Bachelor of Science

FIRST YEAR-SEMESTER #1		FIRST YEAR- SEMESTER #2		UNIVERSITY CORE	
BIO 111 Principles of Biology I	4	CHE 112 General Chemistry II	3	COMMON GOOD	
BIO 111A Prin. of Biology I Lab	0	CHE 112A Gen. Chem II Lab	1	CORE 115 Common Ground	Code COR
BIO 111R Prin. of Bio I Recitation	0	CHE 112R Gen. Chem. II Rec	0	Justice & the Common Good	Code JCG
CHE 111 General Chemistry I	3	MTH 194 Calculus II	4	Ethics	Code CE
CHE 111A Gen. Chem. I Lab	1	COM 100/ ENG 101	3	Experiential Learning	Code EXP
CHE 111R Gen. Chem. I Rec	0	SOC 103 Our Social World	3	Core Capstone	Code CCP
MTH 193 Calculus I	4	Core requirement	3	HUMANITIES	
CORE 115 Common Ground	3			Speech (COM 100)	Code C
SECOND YEAR-SEMESTER #1		SECOND YEAR-SEMESTER #2		Writing (ENG 101)	Code C
CHE 211 Organic Chemistry I	3	CHE 212 Organic Chemistry II	3	Literature (ENG)	Code CL
CHE 211A Organic Chem I Lab	1	CHE 212A Organic Chem II Lab	1	Art or Music	Code CAM
PHY 201 General Physics I	3	CHE 200 Chem. Soph. Seminar	1	History	Code CH
PHY 201A Gen. Physics I Lab	1	PHY 202 General Physics II	3	Religious Studies	Code CR
CED 220 Foundations of Professionalism	1	PHY 202A Gen. Physics II Lab	1	Philosophy	Code CP
COM 100/ENG 101	3	Core requirement	3	SCIENCES	
Core requirement	3	Core requirement	3	Biology/Chemistry/Physics + Lab	Code CN
				Mathematics	Code CMA
				SOC 103 Our Social World	Code CS
THIRD YEAR-SEMESTER #1		THIRD YEAR-SEMESTER #2		Choose one discipline:	
CHE 350 Physical Chemistry I	3	CHE 326 Biochemistry II	3	ECO 212 Microeconomics	Code CEP
CHE 350A Phys. Chem I Lab	1	CHE 326A Biochemistry II Lab	1	PSY 103 Psychology	Code CEP
CHE 325 Biochemistry I	3	CHE 355 <sup>#</sup> or elective	3		
CHE 325A Biochemistry I Lab	1	CHE 355A <sup>#</sup>	1		
Core requirement	3	CHE 300 Chem. Junior Seminar	1		
Core requirement	3	BIO 305/305A or 310/310A			
Core requirement	3	or 320/320A	4		
		Core requirement	3		
FOURTH YEAR-SEMESTER #1		FOURTH YEAR-SEMESTER #2		<u>NOTES</u>	
CHE 314 Inter. Analytical Chem	3	CHE 315 <sup>#</sup> or 360 or elective	3	Prerequisites:	
CHE 314A Inter. Analytical Chem Lab	1	CHE 315A <sup>#</sup> or 360A or elective	1	Chemistry- College preparatory high school chemistry or the successful completion of a placement test.	
Core requirement	3	CHE 390 Research Problems in Chemistry	1	Math- Three years of college preparatory high school mathematics including functions.	
Core Capstone	3	CHE 400 Chem. Seminar & Capstone	1	120 credit hours minimum needed to graduate	
Elective	3	BIO 305/305A or 310/310A or 320/320A	4	*Students must have an appropriate math placement before enrolling in MTH 193 and CHE 111.	
<p>#Students take CHE 315/315A Instrumental Analysis with lab or CHE 355/355A Physical Chem. II with lab or CHE 360/360A Int. Inorganic Chem. with lab</p> <p>Students choose two from BIO 305 Microbiology; BIO 320 Genetics; BIO 310/310A Cell Biology with lab</p>				**Curriculum Guide does not replace advising by a faculty member within the Chemistry program**	