



CHEMISTRY

Chemistry majors develop skills in critical thinking, laboratory techniques, and the clear expression of ideas. Chemistry is a great choice if you are planning a career in the chemical industry or if you intend to pursue graduate studies in business, education, or the health sciences.

\$5,000

SCHIDLAPP SCHOLARSHIP

Open to incoming freshmen majoring in biology, chemistry, computer science, or math. Based on academic talent and location. The deadline to apply is January 31. Download an application at msj.edu/aid-forms.

100%

CAREER OUTCOMES RATE

100% of Biomedical & Natural Sciences graduates were successfully employed, enrolled in graduate studies, or volunteering within six months of graduation. The knowledge rate for this survey was 80%.

HANDS-ON EXPERIENCE

HANDS-ON EXPERIENCE

Under the guidance of faculty, Chemistry students participate in research. Students have the opportunity to present their work at regional professional meetings. Cooperative education provides real-world experience in industrial settings or research labs in Greater Cincinnati, often leading to full-time positions for our students.



FURTHER YOUR EDUCATION

Students interested in preparing for a career in health care at the graduate level are encouraged to work with their academic advisor to identify a career path that aligns with their goals.



CAREERS IN CHEMISTRY

DOCTOR

FORENSIC
SCIENTIST

LAB TECHNICIAN

PHARMACIST

PHYSICIAN
ASSISTANT

RESEARCH
SCIENTIST



SCAN TO FIND:

- Featured courses
- Program requirements and more!



MOUNT ST. JOSEPH UNIVERSITY®

SCHOOL OF ARTS & SCIENCES

Office of Admission
513-244-4531 | 800-654-9314
msj.edu | admission@msj.edu

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CHEMISTRY MAJOR, BUSINESS CONCENTRATION - 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	COM 100/ ENG 101	3	Ethics	Code CE
CHE 111A Gen. Chem. I Lab	1	SOC 103 Our Social World	3	Experiential Learning	Code EXP
CHE 111R Gen. Chem. I Rec	0	Core requirement	3	Core Capstone	Code CCP
MTH 174 Statistics	3	ECO 211 Macro- or ECO 212 Micro-		HUMANITIES	
CORE 115 Common Ground	3	Economics	3	Speech (COM 100)	Code C
COM 100/ENG 101	3			Writing (ENG 101)	Code C
SECOND YEAR-SEMESTER #1		SECOND YEAR-SEMESTER #2		Literature (ENG)	Code CL
CHE 211 Organic Chemistry I	3	CHE 212 Organic Chemistry II	3	Art or Music	Code CAM
CHE 211A Organic Chem I Lab	1	CHE 212A Organic Chem II Lab	1	History	Code CH
PHY 201 General Physics I	3	CHE 200 Chem. Soph. Seminar	1	Religious Studies	Code CR
PHY 201A Gen. Physics I Lab	1	PHY 202 General Physics II	3	Philosophy	Code CP
ACC 213 Principles of Accounting-		PHY 202A Gen. Physics II Lab	1	SCIENCES	
Financial	3	MGL 300 Management/Organizational		Biology/Chemistry/Physics + Lab	Code CN
CED 220 Foundations of		Behavior	3	Mathematics	Code CMA
Professionalism	1	Core requirement	3	SOC 103 Our Social World	Code CS
Core requirement	3			Choose one discipline:	
THIRD YEAR-SEMESTER #1		THIRD YEAR-SEMESTER #2		ECO 212 Microeconomics	Code CEP
CHE 314 Inter. Analytical Chem	3	CHE 315 Instrumental Analysis	3	PSY 103 Psychology	Code CEP
CHE 314A Inter. Analytical		CHE 315A Instrum. Analysis Lab	1	<u>NOTES</u>	
Chem Lab	1	CHE 300 Chem. Junior Seminar	1	Prerequisites:	
CHE 325 Biochemistry I	3	MKT 300 Principles of Marketing	3	Chemistry- College preparatory high school	
CHE 325A Biochem. I Lab	1	Core requirement	3	chemistry or the successful completion of a	
FIN 300 Corporate Finance	3	Choose one Major Elective:		placement test.	
Core requirement	3	CHE 326 Biochemistry II with Lab	3	Math- Three years of college preparatory	
Core requirement	3	CHE 326A Biochemistry II Lab	1	high school mathematics including	
		CHE 360 Intermed. Inorg. Chem	3	functions.	
		CHE 360A Inter. Inorg. Chem Lab	1	120 credit hours minimum needed to	
FOURTH YEAR-SEMESTER #1		FOURTH YEAR-SEMESTER #2		graduate	
Core requirement	3	CHE 400 Chem. Seminar &		*Students must have an appropriate math	
Core requirement	3	Capstone	1	placement before enrolling in MTH 193 and	
Core requirement	3	Core Capstone	3	CHE 111.	
Elective	3	Elective	3	**Curriculum Guide does not replace	
		Elective	3	advising by a faculty member within the	
		Elective	3	Chemistry program**	
The Business Concentration provides students with training in both chemistry & the foundations of business, which prepares students to work in numerous industries (eg. chemical, pharmaceutical, flavor, and cosmetic industries). The concentration also provides students with an opportunity to apply to MBA programs.					

CHEMISTRY MAJOR, RESEARCH & INDUSTRY - 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. I 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
THIRD YEAR-SEMESTER #1		THIRD YEAR-SEMESTER #2		Mathematics	Code CMA
CHE 314 Inter. Analytical Chem	3	CHE 315 Instrumental Analysis	3	SOC 103 Our Social World	Code CS
CHE 314A Inter. Analytical Chem Lab	1	CHE 315A Instrum. Analysis Lab	1	Choose one discipline:	
CHE 325 Biochemistry I	3	CHE 360 Intermed. Inorg. Chem	3	ECO 212 Microeconomics	Code CEP
CHE 325A Biochem. I Lab	1	CHE 360A Int Inorganic Lab	1	PSY 103 Psychology	Code CEP
Core requirement	3	CHE 300 Chem. Junior Seminar	1	<u>NOTES</u>	
Core requirement	3	Core requirement	3	Prerequisites:	
Core requirement	3	Core requirement	3	Chemistry- College preparatory high school chemistry or the successful completion of a placement test.	
FOURTH YEAR-SEMESTER #1		FOURTH YEAR-SEMESTER #2		Math- Three years of college preparatory high school mathematics including functions.	
CHE 350 Physical Chemistry I	3	CHE 355 Physical Chem. II	3	120 credit hours minimum needed to graduate	
CHE 350A Phys. Chem I Lab	1	CHE 355A Phys. Chem II Lab	1	*Students must have an appropriate math placement before enrolling in MTH 193 and CHE 111.	
CHE 390 Research Problems in Chemistry	1	CHE 400 Chem. Seminar & Capstone	1	**Curriculum Guide does not replace advising by a faculty member within the Chemistry program**	
Elective	3	Core Capstone	3		
Elective	3	Elective	3		
Elective	3	Elective	3		
The Research and Industry Concentration will prepare students to work in many different laboratory settings (eg. private, academic, and government labs). This concentration is also excellent preparation for PhD programs in multiple fields (eg. chemistry, biochemistry, chemical engineering, and biomedical engineering).					



MOUNT ST. JOSEPH UNIVERSITY®

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www.msj.edu

Mount St. Joseph University ("the University") is committed to providing an educational and employment environment free from discrimination or harassment on the basis of race, color, national origin, religion, sex, age, disability, sexual orientation, gender identity, veteran status or other minority or protected status. This commitment extends to the University's administration of its admission, financial aid, employment, and academic policies, as well as the University's athletic programs and other University-administered programs, services, and activities.

The University has designated the Vice President of Compliance Risk and Legal Affairs/General Counsel/Title IX Coordinator, (513) 244-4393, as the individual responsible for responding to inquiries, addressing complaints, and coordinating compliance with its responsibilities under Title IX of the Education Amendments of 1972 and other related federal and state civil rights laws. The University has designated the Chief Human Resources Officer, (513) 244-4979, as the individual responsible for responding to inquiries, issues, or complaints relating to discriminatory, harassing, or retaliatory conduct related to race, color, national origin, religion, age, disability, veteran status or any other legally protected status. The University has designated the Associate Provost for Academic Affairs, (513) 244-4614, as the individual responsible for responding for addressing formal complaints regarding compliance with its responsibilities under Section 504 of the Rehabilitation Act of 1973. 09-WO-002903