

# CHEMISTRY (B.S.) (COMBINED B.S./M.S. CHEMISTRY)

A Combined Degree program enables undergraduate students to enroll in graduate courses in their senior year, which can be counted towards the completion of both their Bachelor's and Master's degree requirements.

The ability to take these "swing courses" allows students to earn both their Bachelor's and Master's degrees in a shortened period of time, typically within five years. Undergraduate students interested in this option can find more information regarding program requirements on the University's Combined Programs website (<https://www.montclair.edu/combined-programs/programs-of-study/>).

## Program Requirements

Students in this program must complete the requirements for:

Chemistry Major (B.S.) (<http://catalog.montclair.edu/programs/chemistry-bs/>)

Chemistry (M.S.) (<http://catalog.montclair.edu/programs/chemistry-ms/>)

## Graduate Swing Courses

A combined degree program allows students to complete 6-12 graduate credits ("graduate swing courses") while enrolled as an undergraduate. These courses count for both their bachelor and master's degrees. Graduate swing courses will count toward undergraduate free electives, unless noted otherwise.

The Graduate Swing Courses for this program:

Code	Title	Credits
CHEM 520	Advanced Inorganic Chemistry	3
CHEM 530	Advanced Organic Chemistry	3
CHEM 540	Advanced Physical Chemistry	3
CHEM 560	Advanced Analytical Chemistry	3
<b>Total Credits</b>		<b>12</b>

## Recommended Roadmap to Degree(s)

This recommended five-year plan is provided as an outline for students to follow in order to complete their degree requirements within five years. This plan is a recommendation and students should only use it in consultation with their academic advisor.

Fifth year courses are taken at the graduate level, after matriculation into the graduate portion of this combined degree program.

### First Year

Fall	Credits	Spring	Credits
GENERAL EDUCATION: (A) New Student Seminar	1	GENERAL EDUCATION: (C2) Literature	3
GENERAL EDUCATION: (C1) Writing	3	GENERAL EDUCATION: (D) Fine and Performing Arts	3
World Language 1	3	World Language 2	3
CHEM 120	4	CHEM 121	4

MATH 122	4	MATH 221	4
<b>15</b>		<b>17</b>	

### Second Year

Fall	Credits	Spring	Credits
CHEM 220		3 GENERAL EDUCATION: (C3) Communication	3
CHEM 230		3 CHEM 231	3
CHEM 232		2 CHEM 233	2
CSIT 100		3 CHEM 310	4
PHYS 191		4 PHYS 192	4
<b>15</b>		<b>16</b>	

### Third Year

Fall	Credits	Spring	Credits
GENERAL EDUCATION: (F1) Humanities – Great Works and Their Influences		3 GENERAL EDUCATION: (F2) Humanities – Philosophical and Religious Perspectives	3
GENERAL EDUCATION: (K3) Social Science – Social Science Perspectives		3 GENERAL EDUCATION: (J) Physical Education	1
CHEM 340		3 CHEM 341	3
CHEM 370		3 CHEM 343	2
CHEM 372		2 CHEM 410	5
<b>14</b>		<b>14</b>	

### Fourth Year

Fall	Credits	Spring	Credits
GENERAL EDUCATION: (K1) Social Science – American and European History		3 GENERAL EDUCATION: (K2) Social Science – Global Cultural Perspectives	3
World Cultures		3 CHEM 495	1
CHEM 499		1 CHEM 499	2
CHEM 530		3 CHEM 520	3
CHEM 560		3 CHEM 540	3
Free Elective		3 Free Elective	1
<b>16</b>		<b>13</b>	

### Total Credits 120

### Fifth Year

Fall	Credits	Spring	Credits
Graduate Level CHEM Elective		3 Graduate Level CHEM Elective	3
Graduate Level CHEM Elective		3 Graduate Level CHEM Elective	3
Graduate Level CHEM Elective		3 CHEM 595	1
CHEM 595		1 CHEM 698	3
<b>10</b>		<b>10</b>	

### Total Credits 20