

BS/MBA CHEMICAL ENGINEERING

Course Guide for students starting CE prior to Fall 2016
[Students entering Fall 2016 or later should refer to their Undergraduate Catalog](#)

First Year

Fall Semester	Credit Hrs	Spring Semester	Credit Hrs.
MTH 141 Calculus I	4	MTH 142 Calculus II	4
CHE 107 Chemistry I ^	4	PHY 107 Physics I	4
EAS 140 Engineering Principles	3	CHE 108 Chemistry II ^	4
ENG 101 or 201 Writing **	3	EAS 230 Engineering Computations	3
General Education %	3	EAS 202 Engineering Impact on Society ^^	1
Total Credits	17	Total Credits	16

Library Skills *

Second Year

MTH 241 Calculus III	4	MTH 306 Differ. Equations	4
PHY 108 Physics II	4	CHE 204 Organic Chemistry II or BIO 205	3
PHY 158 Physics II Lab	1	BIO 201 Cell Biology	4
CHE 201 Organic Chemistry I	5	CE 304 CE Thermodynamics	4
CE 212 Fundamental Principles of CE	4	ENG 201 Writing 2 or Humanities **	3
Total Credits	18	Total Credits	18

Third Year

CHE 334 Phys. Chem. II	3	CE 433 Materials Science & Engineering	3
CE 329 Chemical Reaction Engineering	3	CE 318 Transport Processes II	4
CE 317 Transport Processes I	4	CE 328 Chem. Engr. Lab II	2
CE 327 Chem. Engr. Lab I	4	CE 407 Separations	3
CE 341 Applied CE Math	3	General Education %	3
Total Credits	17	Total Credits	18

MBA applications are due by May 1 of third year

Summer

2 General Education Classes %

Fourth Year

First Semester MBA Core @	15	Second Semester MBA Core @	10
CE 434 Chemical Systems & Control	3	CE Technical Elective ***	3
Total Credits	18	CE Technical Elective ***	3
		Total Credits	16

MBA Electives - may include internship @	12	Fourth Semester MBA Core @	2
CE 404 CE Product Design	4	MBA Electives @	9
CE 427 Che. Engr. Lab III	2	CE 408 Chem. Engr. Plant Design	4
Total Credits	18	CE 428 Chem Engr. Lab IV	2
		Total Credits	17

- Pr. Indicates a prerequisite for the course. Not all prerequisites are noted.
- * Library Skills Test is required for all students entering UB in Fall of 1997 and thereafter.
See the Library Skills website at <http://ublib.buffalo.edu/libraries/units/ugl> or go to room 107 in UGL.
 - ** ENG 101 and ENG 201 and Humanities as determined by placement: SAT/ACT, AP, TOEFL, or transfer credit. SAT verbal 400-570 = ENG 101 and then 201, 580-720 = ENG 201 and Humanities (%), 730-800 = Exempt from Writing Skills but need Humanities (%).
 - *** Please see department manual or website for details on CE technical electives and general technical electives. The 200+ technical elective requirement for the standard BS in chemical engineering is not required when students complete this combined degree.
 - ^ CHE 101-102 OR CHE 105-106 may be substituted for CHE 107-108.
 - ^^ EAS 202 Engineering Impact on Society is required for students entering UB Engineering as freshman beginning with the fall 2011 catalog year.
 - % World Civilizations I and II, American Pluralism or approved cognate, Social & Behavioral Science, Arts, and Humanities (if not required to complete ENG 101-201 sequence).
 - @ Contact the School of Management for advisement on core MBA requirements and electives