

**Major Required Courses (46 credits)**

**Chemical Engineering Core**

- \_\_\_\_\_ (1) CHE 20000 ChE Sophomore Seminar
- \_\_\_\_\_ (4) CHE 20500 ChE Calculations
- \_\_\_\_\_ (4) CHE 21100 Intro ChE Thermodynamics
- \_\_\_\_\_ (1) CHE 30000 ChE Junior Seminar
- \_\_\_\_\_ (3) CHE 30600 Design of Staged Separation Processes
- \_\_\_\_\_ (3) CHE 32000 Statistical Modeling & Quality Enhancement
- \_\_\_\_\_ (4) CHE 34800 Chemical Reaction Engineering
- \_\_\_\_\_ (4) CHE 37700 Momentum Transfer
- \_\_\_\_\_ (4) CHE 37800 Heat & Mass Transfer
- \_\_\_\_\_ (1) CHE 40000 ChE Senior Seminar
- \_\_\_\_\_ (3) CHE 42000 Process Safety Management
- \_\_\_\_\_ (4) CHE 43500 ChE Laboratory
- \_\_\_\_\_ (4) CHE 45000 Design & Analysis of Processing Systems
- \_\_\_\_\_ (3) CHE 45600 Process Dynamics & Control
- \_\_\_\_\_ (3) Chemical Engineering Selective

**Other Departmental Courses (84 credits)**

**First Year Engineering Core**

- \_\_\_\_\_ (4) CHM 11500 General Chemistry I ♦ *(satisfies Science Selective for core)*
- \_\_\_\_\_ (4) CHM 11600 General Chemistry II ♦ *(satisfies FYE Science Selective) (satisfies Science Selective for core)*
- \_\_\_\_\_ (2) ENGR 13100 Transforming Ideas to Innovation I ♦ *(satisfies Information Literacy for core)*
- \_\_\_\_\_ (2) ENGR 13200 Transforming Ideas to Innovation II ♦
- \_\_\_\_\_ (4) MA 16500 Analytic Geometry and Calculus I ♦ *(satisfies Quantitative Reasoning for core)*
- \_\_\_\_\_ (4) MA 16600 Analytic Geometry and Calculus II ♦
- \_\_\_\_\_ (3) Oral Communication Selective ♦ *(satisfies Oral Communication for core)*
- \_\_\_\_\_ (4) PHYS 17200 Mechanics or ENGR 16200 Honors Creativity and Innovation in Engineering Design II ♦
- \_\_\_\_\_ (3) Written Communication Selective ♦ *(satisfies Written Communication for core)*

**ChE Science, Technology, Engineering, Math Core**

- \_\_\_\_\_ (3) Biology Selective
- \_\_\_\_\_ (3) CHM 26100 Organic Chemistry I
- \_\_\_\_\_ (1) CHM 26300 Organic Chemistry Laboratory I
- \_\_\_\_\_ (3) CHM 26200 Organic Chemistry II
- \_\_\_\_\_ (1) CHM 26400 Organic Chemistry Laboratory II
- \_\_\_\_\_ (3) CHM 37000 Physical Chemistry
- \_\_\_\_\_ (6) Engineering Selective
- \_\_\_\_\_ (4) MA 26100 Multivariate Calculus
- \_\_\_\_\_ (3) Math Selective I
- \_\_\_\_\_ (3) Math Selective II
- \_\_\_\_\_ (3) PHYS 24100 Electricity & Optics
- \_\_\_\_\_ (3) Technical Selective

**ChE General Education Selective Core (select from list)**

- \_\_\_\_\_ (3) Behavioral Social Science Selective *(satisfies Human Cultures: Behavioral Social Science for core)*
- \_\_\_\_\_ (3) Humanities Selective *(satisfies Human Cultures: Humanities for core)*
- \_\_\_\_\_ (3) Science, Technology & Society Selective *(satisfies Science, Technology & Society for core)*
- \_\_\_\_\_ (3) General Education Selective
- \_\_\_\_\_ (6) Upper Level General Education Selective

**Electives (0-9 credits)**

- \_\_\_\_\_ (3) Elective *(for students who complete a course that fulfills both Science, Technology & Society and Technical Selective)*
- \_\_\_\_\_ (0-6) Elective *(for students who complete a course that fulfills both Humanities/Behavioral Social Science/ Science, Technology & Society and Upper Level General Education Selective)*

♦ **Critical Course**

**University Core Requirements:**

<i>Human Cultures: Humanities</i>	Humanities Selective	<i>Science, Technology &amp; Society</i>	Science, Technology & Society Selective
<i>Human Cultures: Behavioral/Social Science</i>	Behavioral Social Science Selective	<i>Written Communication</i>	Written Communication Selective
<i>Information Literacy</i>	ENGR 13100	<i>Oral Communication</i>	Oral Communication Selective
<i>Science Selective</i>	CHM 11500	<i>Quantitative Reasoning</i>	MA 16500
<i>Science Selective</i>	CHM 11600		

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**The student is ultimately responsible for knowing and completing all degree requirements.**

**Degree Works is knowledge source for specific requirements and completion.**

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**Suggested Arrangement of Courses** (please see your academic advisor for other options creating your plan of study):

Credits	Fall 1st Year	Prerequisite
4	CHM 11500 ◆	MA 16500
2	ENGR 13100 ◆	
4	MA 16500 ◆	ALEKS score of 85 or SAT Math score of 650 or ACT Math score of 29
3	Written Communication Selective ◆	
<b>13</b>	<b>Total Credits</b>	

Credits	Spring 1st Year	Prerequisite
4	CHM 11600 ◆	CHM 11500
2	ENGR 13200 ◆	ENGR 13100
4	MA 16600 ◆	MA 16500
4	PHYS 17200 or ENGR 16200 ◆	MA 16500
3	Oral Communication Selective ◆	
<b>17</b>	<b>Total Credits</b>	

Credits	Fall 2nd Year	Prerequisite
1	CHE 20000	Fall Only
4	CHE 20500	ENGR 13100, PHYS 17200, MA 16500, CHM 11600
3	CHM 26100	Fall Only CHM 11600
1	CHM 26300	Fall Only CHM 26100
4	MA 26100	MA 16600
3	PHYS 241	PHYS 17200, MA 16600
<b>16</b>	<b>Total Credits</b>	

Credits	Spring 2nd Year	Prerequisite
4	CHE 21100	CHE 20500, MA 26100
3	CHE 32000	CHE 20500, Math Selective I
3	CHM 26200	Spring Only CHM 26100
1	CHM 26400	Spring Only CHM 26300 CHM 26200
3	Math Selective I	MA 26100
3	Behavioral Social Science Selective	
<b>17</b>	<b>Total Credits</b>	

Credits	Fall 3rd Year	Prerequisite
3	CHE 30600	CHE 21100
4	CHE 37700	CHE 21100, Math Selective II
3	CHM 37000	CHE 21100, CHM 11600, MA 26100, PHYS 24100
3	Math Selective II	Math Selective I
3	Biology Selective	
<b>16</b>	<b>Total Credits</b>	

Credits	Spring 3rd Year	Prerequisite
1	CHE 30000	Spring Only
4	CHE 37800	CHE 37700
4	CHE 34800	Math Selective I, CHE 21100, CHM 26100
3	Technical Selective	
3	Engineering Selective	
3	General Education Selective	
<b>18</b>	<b>Total Credits</b>	

Credits	Fall 4th Year	Prerequisite
1	CHE 40000	Fall Only CHE 45600
3	CHE 42000	Fall Only CHE 37700, 34800, 37800
4	CHE 43500	CHE 30600, 32000, 34800, 37800
3	CHE 45600	Fall Only CHE 34800, 37800
3	Humanities Selective	
3	Upper Level General Education Selective	
<b>17</b>	<b>Total Credits</b>	

Credits	Spring 4th Year	Prerequisite
4	CHE 45000	CHE 30600, 37800, 42000, 43500, 45600
3	Chemical Engineering Selective	
3	Engineering Selective	
3	Science, Technology & Society Selective	
3	Upper Level General Education Selective	
<b>16</b>	<b>Total Credits</b>	

Concurrent prerequisites are listed in *italics*

◆ Critical Course

**130 Credits required for graduation**

2.0 overall and major (Chemical Engineering Core) GPA required for Bachelor of Science degree

Students must earn a "C" or better in CHE 20500 to enroll in any other CHE course

Students must earn a "C-" or better in all other CHE major required courses (Chemical Engineering Core)

Students may take the ChE General Education Selective Core courses for a letter grade or pass/ no pass option

3 credits of CHE 41100, 41200, 49800 or 49900 may be used to complete the Chemical Engineering Selective

3 credits of CHE 41100, 41200, 49800, or 49900 may be used to complete the Engineering or Technical Selective

Students may not use credit in the following courses to fulfill CHE Degree requirements:

ABE 20100, ABE 21000, ABE 30800, ABE 37000, IE 23000, IE 33000, ME 30900, ME 31500

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