CHEMICAL ENGINEERING
(B.S.CH.E.)

Required course work includes the university requirements (see regulation J-3 (https://catalog.uidaho.edu/general-requirements-academic-procedures/j-general-requirements-baccalaureate-degrees/)) and:

- Select one Mathematics Elective numbered 300 or greater
- Select one Communications Elective course
- Select three Humanities and Social Science Elective courses:
  - Select one Economics Elective
  - Select one Computer Science Elective in a programming language
  - Select one Humanities and Social Science Elective course
  - Select one Communications Elective course
- Select one Mathematics Elective numbered 300 or greater

Courses to total 128 credits for this degree, not counting ENGL 101, ENGL 102, MATH 170, MATH 175, MATH 275, MATH 310, PHYS 211, PHYS 212, CHEM 111, CHEM 111L, and other courses that might be required to remove deficiencies.

To be enrolled in upper-division CHE courses, a student majoring in chemical engineering must earn a grade of C or better in each of the following courses:

- CHEM 111 General Chemistry I
- CHEM 111L General Chemistry I Laboratory
- CHEM 112 General Chemistry II
- CHEM 112L General Chemistry II Laboratory
- CHEM 277 Organic Chemistry I
- CHEM 278 Organic Chemistry I: Lab
- CHEM 307 Physical Chemistry Lab
- CHEM 307L Physical Chemistry Lab
- CHEM 372 Organic Chemistry II
- CHEM 374 Organic Chemistry II: Lab
- ENGR 210 Engineering Statics
- ENGR 210L Engineering Statics
- ENGR 240 Introduction to Electrical Circuits
- ENGR 320 Engineering Thermodynamics and Heat Transfer
- ENGR 321 Engineering Thermodynamics and Heat Transfer
- MATH 170 Calculus I
- MATH 175 Calculus II
- MATH 275 Calculus III
- MATH 310 Ordinary Differential Equations
- PHYS 211 Engineering Physics I
- PHYS 212 Engineering Physics II
- Select one Chemical or Material Science Engineering Technical Elective course numbered 390 or greater
- Select one Computer Science Elective in a programming language
- Select an Economics Elective
- Select three Humanities and Social Science Elective courses:
  - Select one Communications Elective course
  - Select one Economics Elective
- Select one Mathematics Elective numbered 300 or greater

1. Must be numbered 300 or greater, excluding any 398, 498, or 598 Internship.
2. Technical Electives in Math, Science, or Engineering: must be numbered 300 or greater.

Students transferring CHE 223 or its equivalent from a university without an ABET accredited chemical engineering program must pass a test on the subject matter of this course before enrolling in upper-division CHE courses.

In addition, a passing grade is required in each of the following courses before enrolling in upper-division CHE courses:

- CHEM 111 General Chemistry I
- CHEM 111L General Chemistry I Laboratory
- CHEM 112 General Chemistry II
- CHEM 112L General Chemistry II Laboratory
- CHEM 277 Organic Chemistry I
- CHEM 278 Organic Chemistry I: Lab
- CHEM 307 Physical Chemistry Lab
- CHEM 307L Physical Chemistry Lab
- CHEM 372 Organic Chemistry II
- CHEM 374 Organic Chemistry II: Lab
- ENGR 210 Engineering Statics
- ENGR 210L Engineering Statics
- ENGR 240 Introduction to Electrical Circuits
- ENGR 320 Engineering Thermodynamics and Heat Transfer
- ENGR 321 Engineering Thermodynamics and Heat Transfer
- MATH 170 Calculus I
- MATH 175 Calculus II
- MATH 275 Calculus III
- MATH 310 Ordinary Differential Equations
- PHYS 211 Engineering Physics I
- PHYS 212 Engineering Physics II
- Select one Chemical or Material Science Engineering Technical Elective course numbered 390 or greater
- Select one Computer Science Elective in a programming language
- Select an Economics Elective
- Select three Humanities and Social Science Elective courses:
  - Select one Communications Elective course
  - Select one Economics Elective
- Select one Mathematics Elective numbered 300 or greater

A student majoring in chemical engineering may not register for upper-division CHE courses after accumulating more than four grades of D or F in UI mathematics, science, or engineering courses. Included in this number are multiple repeats in a single class or single repeats in multiple classes. A warning will be issued in writing to students who have accumulated two grades of D or F used to satisfy curricular requirements.

Students transferring CHE 223 or its equivalent from a university without an ABET accredited chemical engineering program must pass a test on the subject matter of this course before enrolling in upper-division CHE courses.

In addition, a passing grade is required in each of the following courses before enrolling in upper-division CHE courses:

- CHEM 111 General Chemistry I
- CHEM 111L General Chemistry I Laboratory
- CHEM 112 General Chemistry II
- CHEM 112L General Chemistry II Laboratory
- CHEM 277 Organic Chemistry I
- CHEM 278 Organic Chemistry I: Lab
- CHEM 307 Physical Chemistry Lab
- CHEM 307L Physical Chemistry Lab
- CHEM 372 Organic Chemistry II
- CHEM 374 Organic Chemistry II: Lab
- ENGR 210 Engineering Statics
- ENGR 210L Engineering Statics
- ENGR 240 Introduction to Electrical Circuits
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- ENGR 321 Engineering Thermodynamics and Heat Transfer
- MATH 170 Calculus I
- MATH 175 Calculus II
- MATH 275 Calculus III
- MATH 310 Ordinary Differential Equations
- PHYS 211 Engineering Physics I
- PHYS 212 Engineering Physics II
- Select one Chemical or Material Science Engineering Technical Elective course numbered 390 or greater
- Select one Computer Science Elective in a programming language
- Select an Economics Elective
- Select three Humanities and Social Science Elective courses:
  - Select one Communications Elective course
  - Select one Economics Elective
- Select one Mathematics Elective numbered 300 or greater

1. The student will apply aspects of engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
2. The student will identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

3. The student will develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

4. The student will communicate effectively with a range of audiences.