IOWA | Chemical and Biochemical Engineering

BUSINESS FOCUS AREA

Summary

The business focus area equips chemical engineering students with essential skills in finance, economics, accounting, marketing, law, and management, providing a strong foundation for navigating the commercial and organizational aspects of engineering work. By integrating this business training with technical expertise, students gain a competitive advantage in manufacturing, consulting, corporate operations, and leadership roles.

Focus Area Requirements

In addition to the core chemical engineering requirements, you must choose a focus area and complete 12 s.h. toward that focus area. ***Within this focus area there is an option to earn a business administration minor.*** If you feel another course would fit within this requirement, you must get approval from the department undergraduate director to have it count.

Business Administration Minor Earned

The undergraduate minor in business administration requires at least 36 s.h., including at least 12 s.h. offered by the Tippie College of Business. These courses can fall within the chemical engineering degree by fulfilling 10 s.h. of core classes, 12 s.h. of focus area electives, 11 s.h. of general education electives, and 3 s.h. of your required free elective. See minor for details. Below are recommended courses to complete the minor without additional credit hours needed. To discuss alternative possible routes for this minor, please see your advisor.

Required Focus Area Elective 3 s.h. (pick one from list below)

Offered	Course	s.h.
S	ISE:2500 Engineering Economy (recommended)	3
F/S	FIN:3000 Introductory Financial Management	3

Focus Area Electives 9 s.h. (pick three of the following for focus area, must take all for minor)

Offered	Course	s.h.
ALL	ACCT:2100 Intro to Financial Accounting (P: sophomore or higher standing)	3
ALL	ACCT:2200 Managerial Accounting (P: ECON:1100 & ACCT:2100 & MATH:1550)	3
ALL	MGMT:2000 Introduction to Law (P: sophomore or higher standing)	3
ALL	MGMT:2100 Introductions to Management (P: sophomore or higher standing)	3

Required Free Electives 3 s.h.

Offered	Course	s.h.
ALL	Pick from Focus Area list to complete the minor	3

Required General Education Electives 11 s.h. (possible courses that align with this focus area)

Offered	Course	s.h.
ALL	ECON:1100 Principles of Microeconomics	4
ALL	ECON:1200 Principles of Macroeconomics	4
ALL	MKTG:3000 Introduction to Marketing Strategy	3

Statistics Requirement 3 s.h. (possible courses that align with this focus area)		
Offered	**Course**	**s.h.**
F/S	STAT:2020 Probability and Statistics for Engineers	3

Other Electives that Align with this Focus Area

In addition to the focus area electives listed above, you will be required to complete the following electives to complete your degree: the Advanced Chemistry Elective (3 s.h.), the Advanced Chemistry Lab Elective, the Advanced Science Elective (3 s.h.), the Engineering Be Creative General Education Elective (3 s.h.), and the Cultural Perspectives, Values, & Society General Education Elective (3 s.h.). ***These do not count toward your focus area electives.*** Below are lists of possible courses to fulfill these requirements that align with this focus area.

Advanced Chemistry Elective 3 s.h. (possible courses that align with this focus area)		
Offered	**Course**	**s.h.**
ALL	CHEM 3000+ level	3
ALL	BMB 3000+ level	3

Advanced Chemistry Lab Elective 3 s.h. (possible courses that align with this focus area)		
Offered	**Course**	**s.h.**
F/S	CHEM:2210 Fundamentals of Chemical Measurements Lab	3
F/S	CHEM:2220 Organic Chemistry Lab	3
S	CHEM:2240 Organic Chemistry for Majors Lab	3

Advanced Science Elective 3 s.h. (possible courses that align with this focus area)		
Offered	**Course**	**s.h.**
S-EVEN	CBE:5425/CEE:5115 Atmospheric Chemistry and Physics	3
F-EVEN	CBE:5315 Polymer Chemistry	3
ALL	See Advanced Science list	3

Cultural Perspectives, Values, & Society Gen Education Elective 3 s.h. (possible courses that align with this focus area)		
Offered	**Course**	**s.h.**
F/S	WRIT:2100 Writing and Community Outreach	3