Mechanical Engineering, BSE

Academic Plans

Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

Mechanical Engineering, BSE

Course	Title	Hours
First Year		
Fall		
RHET:1030	Rhetoric [a]	4
CHEM:1110	Principles of Chemistry I [a, b]	4
MATH:1550	Engineering Mathematics I: Single Variable Calculus [c, d]	4
ENGR:1100	Introduction to Engineering Problem Solving [e]	3
ENGR:1000	Engineering Success for First-Year Students [e]	1
CSI:1600	Success at Iowa	0
	Hours	**16**
Spring		
GE: Approved Course Subjects [f]		3
MATH:1560	Engineering Mathematics II: Multivariable Calculus [c]	4
MATH:2550	Engineering Mathematics III: Matrix Algebra [a]	2
PHYS:1611	Introductory Physics I [c]	4
ENGR:1300	Introduction to Engineering Computing [c]	3
	Hours	**16**
Second Year		
Fall		
GE: Diversity, Equity, and Inclusion [g]		3
MATH:2560	Engineering Mathematics IV: Differential Equations [a]	3
PHYS:1612	Introductory Physics II [a]	4
ENGR:2110	Statics [a]	2
ENGR:2120	Electrical Circuits [a]	3
ENGR:2130	Thermodynamics [a]	3
ME:2020	Mechanical Engineering Program Seminar [e]	0
	Hours	**18**
Spring		
ENGR:2710	Dynamics [a]	3
ENGR:2720	Materials Science [a]	3
ENGR:2750	Mechanics of Deformable Bodies [a]	3
ME:2200	Introduction to Mechanical Engineering Design [h]	2
ME:2300 or STAT:2020	Manufacturing Processes [i] or Probability and Statistics for the Engineering and Physical Sciences	3
Focus Area: required course [j]		3
	Hours	**17**
Third Year		
Fall		
MATH:3550	Engineering Mathematics V: Vector Calculus [c]	3
ME:2300 or STAT:2020	Manufacturing Processes [i] or Probability and Statistics for the Engineering and Physical Sciences	3
ENGR:2510	Fluid Mechanics [c]	4
ME:3351	Engineering Instrumentation [e]	2
ME:3600	Control of Mechanical Engineering Systems [e]	3
ME:3091	Professional Seminar: Mechanical Engineering [e]	0
	Hours	**15**
Spring		
GE: Engineering Be Creative [k]		3
ME:3045	Heat Transfer [h]	3
ME:3052	Mechanical Systems [h]	4
Focus Area: required or elective course [j]		3
Focus Area: elective course [j]		3
	Hours	**16**
Fourth Year		
Fall		
GE: Approved Course Subjects [f]		4
ME:4048	Energy Systems Design [e]	4
ME:4055	Mechanical Systems Design [e]	3
Focus Area: elective course or ME:4080 Experimental Engineering [j]		3
Focus Area: elective course or ME:4086 Mechanical Engineering Design Project [j]		3
	Hours	**17**
Spring		
GE: Approved Course Subjects [f]		3
ME:4080	Experimental Engineering [j]	4
ME:4086	Mechanical Engineering Design Project [j]	3
Focus Area: elective course [j]		3
Focus Area: elective course [j]		3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) [l]		
	Hours	**16**
	Total Hours	**131**

a Typically this course is offered in fall, spring, and summer sessions. Check MyUI for course availability since offerings are subject to change.

b Enrollment in chemistry courses requires completion of a placement exam.

c Typically this course is offered in fall and spring semesters. Check MyUI for course availability since offerings are subject to change.

d Enrollment in math courses requires completion of a placement exam.

e Typically this course is offered in fall semesters only. Check MyUI for course availability since offerings are subject to change.
f See General Catalog for list of approved course subjects.
g Students select a course from one of two GE CLAS Core areas: Diversity and Inclusion or Values and Culture.
h Typically this course is offered in spring semesters only. Check MyUI for course availability since offerings are subject to change.
i ME:2300 typically is offered in fall and spring sessions; STAT:2020 typically is offered in fall, spring, and summer sessions. Check MyUI for course availability since offerings are subject to change.
j Students select one of the preapproved standard focus areas or design a tailored focus area. Focus areas require at least 21 s.h. of coursework and consist of required course and electives. See General Catalog or consult an advisor for more information.
k See General Catalog for list of approved courses. Students who intend to enroll in a Be Creative course with prerequisites must request a waiver by completing the Request Prerequisite Special Permission form on MyUI.
l Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.