BS Mechanical Engineering Suggested Four Year Plan
2021 – 2022 Catalog

A grade of C- or better is required

CS 1336 is required of students with no prior programming experience
C- or better needed

CS 1336/1136 Programming Fundamentals

Freshman (16 SCH)

Description	Course No
Introduction to Engr & CS	ECS 1100
Differential Calculus or Calculu	Math 2413 or 2417
Introduction to Programming	CS 1325
Introduction to MECH I	MECH 1100
General Chemistry & Lab	Chem 1311/1111
Freshman Seminar	UNIV 1010
3 hours CORE: choices below	

CORE · Math 2417 · Math 2413 · UNIV 1010 · ECS 1100 · MECH 1100 · CS 1325 · Chem 1311 Chem 1111

Freshman (16 SCH)

Description	Course No
Introduction to MECH II	MECH 1208
Integral Calculus or Calculus II	Math 2414 or 2419
Applied Linear Algebra	ENGR 2300
Mechanics and Heat	Phys 2325
Physics Lab I	Phys 2125
3 hours CORE: Choices Below	
Calculus of Several Variables (Summer)	Math 2415

ENGR 2300 · Math 2419 · Math 2414 · Phys 2325 Phys 2125 · MECH 1208 · CORE · Calculus Complete · Math 2415

Sophomore (17 SCH)

Description	Course No
Statics	Mech 2310
Differential Equations	Math 2420
Advanced Engineering Math	ENGR 3300
Probability and Statistics	ENGR 3341
Electromagnetism and Waves	Phys 2326
Physics Lab II	Phys 2126

ENGR 3300 · Math 2420 · Recommended · ENGR 3341 · MECH 2310 · Phys 2326 Phys 2126

Sophomore (17 SCH)

Description	Course No
Mechanics of Materials Lab	MECH 2120
Mechanics of Materials	MECH 2320
Dynamics	MECH 2330
Computer Aided Design Lab	MECH 3105
Computer Aided Design	MECH 3305
Thermodynamics	MECH 3310
3 hours CORE: see below	

MECH 2320 MECH 2120 · ENGR 2300 · MECH 2330 · CORE · MECH 3310 · MECH 3305 MECH 3105

Junior (15 SCH)

Description	Course No
Prof & Tech Communication	ECS 3390
Fluid Mechanics	Mech 3315
Kinematics & Dynamics	Mech 3350
6 hours CORE: see below	

ENGR 2300 · ENGR 3300 · Junior/ Rhet 1302 · CORE · CORE · MECH 3350① · MECH 3315① · ECS 3390

Junior (17 SCH)

Description	Course No
Fluid Mechanics Lab	Mech 3115
Kinematics & Dynamics Lab	Mech 3150
Heat Transfer	Mech 3320
Design of Mechanical Systems	Mech 3351
Systems Dyn Modeling & Analysis	Mech 3340
6 hours CORE: see below	

CORE · MECH 3351 · MECH 3340 · MECH 3320 ① · MECH 3150 ① · MECH 3115 ① · CORE

Senior (14 SCH)

Description	Course No
Heat Transfer Lab	Mech 3120
Systems and Controls Lab	Mech 4110
Systems and Controls	Mech 4310
Senior Design Project I	Mech 4381
Mech Prescribed Elective (3)	Mech XXXX
3 hours CORE: see below	

MECH 4310/ 4110 · MECH 4381 · MECH 3120 ① · MECH Prescribed Elective XXXX ② · CORE

Senior (15 SCH)

Description	Course No
Senior Design II	Mech 4382
Mech Prescribed Elective (3)	Mech 33xx/43xx
Mech Prescribed Elective (3)	Mech 33xx/43xx
Mech Prescribed Elective (3)	Mech 33xx/43xx
3 hours Free Electives	See Advisor
Core Curriculum Assessment	UNIV 2020

MECH Prescribed Elective 33xx/43xx · MECH Prescribed Elective 33xx/43xx · MECH 4382 · MECH Prescribed Elective 33xx/43xx · UNIV 2020 · Free Elective ②

Core Choices

Rhet 1302	3 hours From:	3 hours From:	6 hours From:	3 hours From:
Govt 2305 Govt 2306	Ahst 1303, 1304, 2331 Arts1301 Danc 1310 Film 2332 Musi 1306 Thea 1310	Ams 2300, 2341 Huma 1301 Lit 2331 Phil 1301 Phil 1316, 1317	Hist 1301 Hist 1302 Hist 2301 Hist 2330 Hist 2332	ECON 2301 ECON 2302 PSY 2301 PSY 2314 SOC 1301 SOC 2300

① take LAB next long semester

② **May use lower level course. Consult advisor for details.**

Courses may be taken in any order, as long as prerequisites are met.

LEGEND
- Prereq Critical Path
- Pre-requisite
- Pre- or Co-requisite