

# BS Mechanical Engineering Suggested Four Year Plan

## 2020-2021 Catalog

(1/07/2020)

A grade of C- or better is required in "Major Requirements Courses"

### Freshman Fall (16 SCH)

Description	Course No
Intro to Engr & CS	ECS 1100
Intro to Mechanical Engineering I	MECH 1100
Differential Calculus or Calculus I	MATH 2413 or 2417
General Chemistry I & Lab	CHEM 1311/1111
Freshman Seminar	UNIV 1010
Intro to Programming	CS 1325
3 hours CORE: choices below	

### Freshman Spring (16 SCH)

Description	Course No
Intro to Mechanical Engineering II	MECH 1208
Integral Calculus or Calculus II	MATH 2419 or 2414
Linear Algebra for Engineers	ENGR 2300
Mechanics	PHYS 2325
Physics Laboratory I	PHYS 2125
3 hours CORE; choices below	

### Multivariate Calculus (Summer)

MATH 2415

### Sophomore Fall (17 SCH)

Description	Course No
Statics	MECH 2310
Differential Equations with Apps	MATH 2420
Advanced Engineering Math	ENGR 3300
Probability Theory and Statistics	ENGR 3341
Electromagnetism and Waves	PHYS 2326
Physics Laboratory II	PHYS 2126

### Sophomore Spring (17 SCH)

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

### Junior Fall (15 SCH)

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

### Junior Spring (17 SCH)

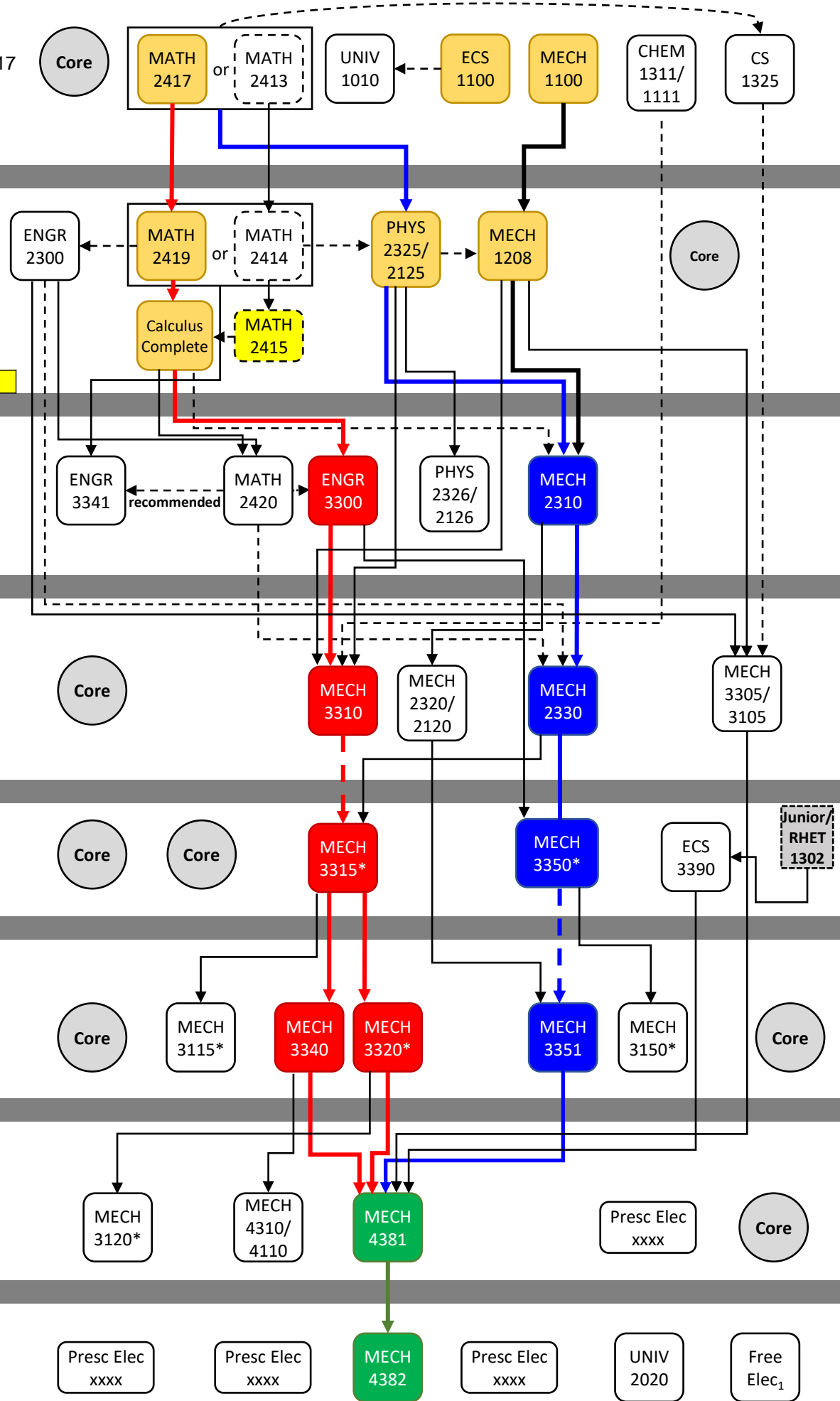
Description	Course No
Fluid Mechanics Lab	MECH 3115
Kinematics & Dynamics Lab	MECH 3150
Heat Transfer	MECH 3320
Design of Mechanical Systems	MECH 3351
Systems Dyn Modeling & Analysis	MECH 3340
6 hours CORE: choices below	

### Senior Fall (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
Prescribed Elective	MECH XXXX
3 hours CORE: choices below	

### Senior Spring (15 SCH)

Description	Course No
Senior Design Project II	MECH 4382
Prescribed Elective	MECH XXXX
Prescribed Elective	MECH XXXX
Prescribed Elective	MECH XXXX
Free Elective	See Advisor
Core Curriculum Assessment	UNIV 2020



Core Courses				
RHET 1302	3 hours from:	3 hours from:	6 hours from:	3 hours from:
	AHST 1303, DANC 1310	AMS LIT 2331	HIST 1301	ECON 2301
	1304, 2331, FILM 2332	2300, PHIL 1301	HIST 1302	ECON 2302
GOVT 2305	ARTS 1301, MUSI 1306	2341, PHIL	HIST 2301	PSY 2301
GOVT 2306	THEA 1310	HUMA 1316, 1301, 1317	HIST 2330, HIST 2332	PSY 2314, SOC 1301, SOC 2300

\* Take LAB next long semester  
 1 May use lower-level free elective or MATH 2413 – consult advisor for details  
 Courses may be taken in any order, as long as prerequisites are met. See UG catalog for complete pre/co-requisites.

**LEGEND**

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