

# BS Mechanical Engineering Suggested Four Year Plan

## 2021-2022 Catalog

(09/01/2021)

CS 1336 is required of students with no prior programming experience  
**Not For Credit in ECS**  
**C- or better needed**

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

### Freshman Fall (16 SCH)

<b>Description</b>	<b>Course No</b>
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)

<b>Description</b>	<b>Course No</b>
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)

<b>Description</b>	<b>Course No</b>
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)

<b>Description</b>	<b>Course No</b>
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)

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

### Junior Spring (17 SCH)

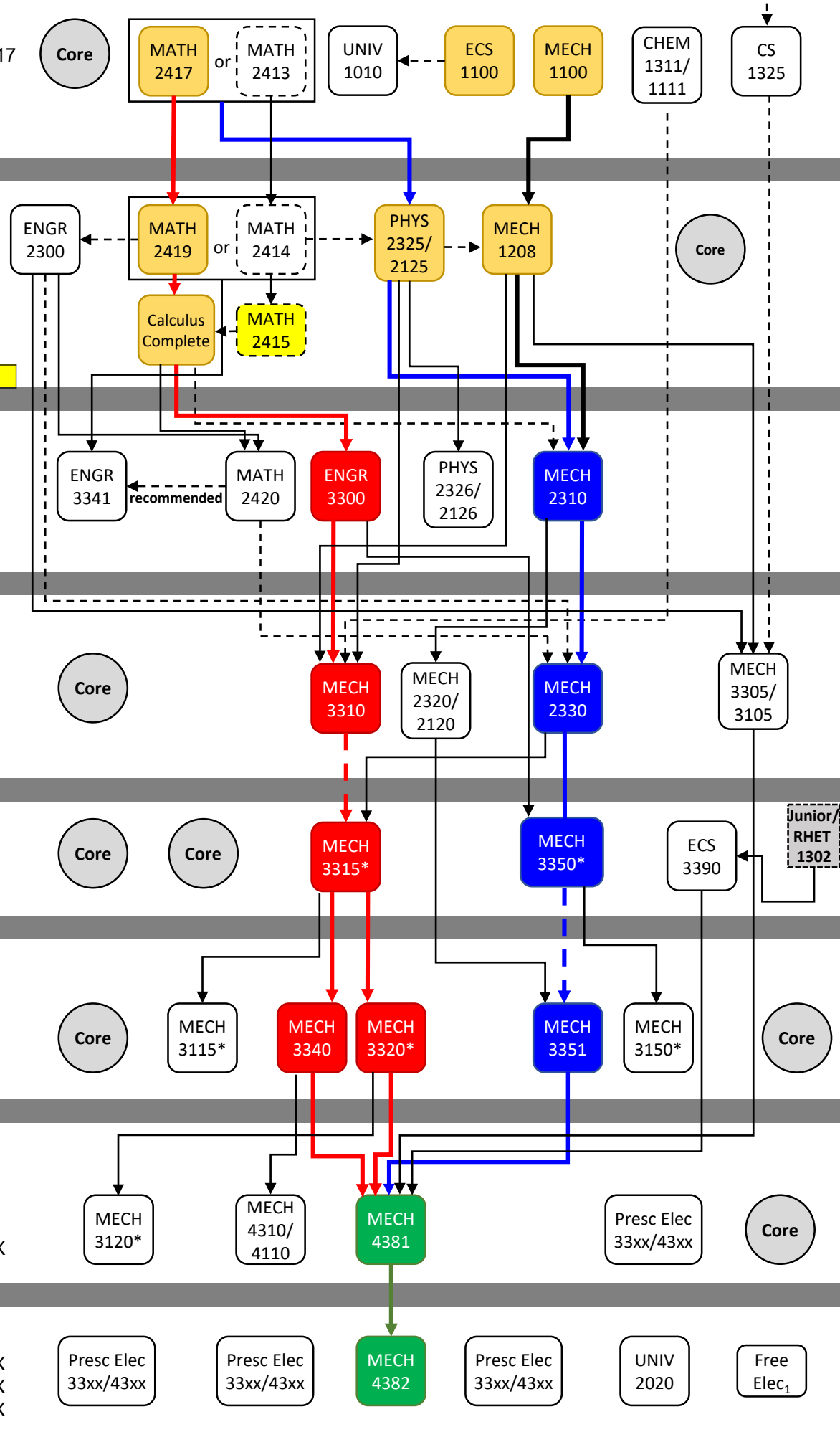
<b>Description</b>	<b>Course No</b>
Fluid Mechanics Lab	MECH 3115
Kinematics & Dynamics Lab	MECH 3150
Heat Transfer	MECH 3320
Design of Mechanical Systems	MECH 3351
Systems Dyn Modeling & Analysis	MECH 3340
6 hours CORE: choices below	

### Senior Fall (14 SCH)

<b>Description</b>	<b>Course No</b>
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 33XX/43XX
3 hours CORE: choices below	

### Senior Spring (15 SCH)

<b>Description</b>	<b>Course No</b>
Senior Design Project II	MECH 4382
Prescribed Elective	MECH 33XX/43XX
Prescribed Elective	MECH 33XX/43XX
Prescribed Elective	MECH 33XX/43XX
Free Elective	See Advisor
Core Curriculum Assessment	UNIV 2020



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

\* Take LAB next long semester  
 1 May use lower level free elective – 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 (Red Arrow)

→ Pre-requisite (Blue Arrow)

→ Pre- or Co-requisite (Black Arrow)