

# ENGINEERING MECHANICS, B.S.

## FOUR-YEAR PLAN

### SAMPLE FOUR-YEAR PLAN

#### First Year

Fall	Credits	Spring	Credits
CHEM 109 <sup>1</sup>		5 E M A 201 <sup>3</sup>	3
MATH 221		5 MATH 222	4
Communication A		3 M E 231	3
M E 201 <sup>2</sup>		3 M S & E 350	3
or Liberal Studies Elective		Liberal Studies Elective or	3
		M E 201 <sup>2</sup>	
	16		16

#### Second Year

Fall	Credits	Spring	Credits
MATH 234		4 MATH 320	3
PHYSICS 202		5 Technical Elective	3
E M A 202 <sup>4</sup>		3 M E 361	3
E P 271		3 E M A 303 <sup>4</sup>	3
E P D 275 or COM ARTS 105		2 E M A/M E 307 <sup>4</sup>	1
		Liberal Studies Elective	3
	17		16

#### Third Year

Fall	Credits	Spring	Credits
E M A 506		3 E M A 405	3
E M A 542 or 545 <sup>5</sup>		3 Experimental Mechanics Course <sup>6</sup>	3
MATH 321		3 M E 363 or CIV ENGR 310	3
STAT 324		3 Computing Elective	3
INTEREGR 397		3 Technical Elective	2
Liberal Studies Elective		3	
	18		14

#### Fourth Year

Fall	Credits	Spring	Credits
E M A 469		3 E M A 569	3
E M A 521 <sup>7</sup>		3 EMA Elective	3
EMA Elective		3 EMA Elective	3
E C E 376 or PHYSICS 321		3-4 M E 364	3
Liberal Studies Elective		4 Liberal Studies Elective	3
	16-17		15

**Total Credits 128-129**

**1**

It is recommended that students take CHEM 109 Advanced General Chemistry for 5 credits. However, depending on their high school chemistry experience, students may substitute this with CHEM 103 General Chemistry I and CHEM 104 General Chemistry II for a total of 9 credits.

**2**

M E 201 Introduction to Mechanical Engineering can be taken in first or second semester

**3**

Students may substitute PHYSICS 201 General Physics, 5 credits, for E M A 201 Statics, 3 credits, with the approval of their advisor.

**4**

After completing E M A 201 Statics, students may take E M A 202 Dynamics and E M A 303 Mechanics of Materials/E M A/M E 307 Mechanics of Materials Lab in either order or concurrently.

**5**

Students electing E M A 545 Mechanical Vibrations instead of E M A 542 Advanced Dynamics should note that E M A 545 Mechanical Vibrations is offered in the spring semester only.

**6**

E M A 611 Advanced Mechanical Testing of Materials or E M A/M E 540 Experimental Vibration and Dynamic System Analysis or E M A/M E 570 Experimental Mechanics or E M A 522 Aerodynamics Lab. Note that E M A/M E 540 and E M A/M E 570 are typically offered in the fall. E M A 611 and E M A 522 are typically offered in the spring.

**7**

M E 563 Intermediate Fluid Dynamics may be substituted for E M A 521 Aerodynamics. Note that M E 563 is offered in the spring semester only.