

ENGINEERING MECHANICS, BS

FOUR-YEAR PLAN

FOUR-YEAR PLAN SAMPLE FOUR-YEAR PLAN

First Year

Fall	Credits Spring	Credits
CHEM 109 ¹	5 E M A 201 ³	3
MATH 221	5 MATH 222	4
Communications A	3 M E 231	3
E M A 200 or M E 201 ²	3 M S & E 350	3
or Liberal Studies Elective	Liberal Studies Elective or M E 201 ²	3
16		16

Second Year

Fall	Credits Spring	Credits
MATH 234	4 MATH 320	3
PHYSICS 202	5 Technical Elective	3
E M A 202 ⁴	3 M E 361	3
E P 271	3 E M A 303 ⁴	3
E P D 275 or COM ARTS 105	2 E M A/M E 307 ⁴	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 ⁵	3 Experimental Mechanics Course ⁶	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 ⁷	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 E M A 200 or M E 201 are preferred introduction to engineering options. E M A 200 is offered in the fall only. M E 201 can be taken in the first or second semester. If a student begins in another engineering major, other introduction to engineering courses can count for the introduction to engineering requirement.

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.