

KU Mechanical Engineering Curriculum



(Total credit hours for degree: 128 – see back for details)

Student Name: _____

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Fall (16 hrs)	Spring (17 hrs)	Fall (17 hrs)	Spring (17 hrs)	Fall (15 hrs)	Spring (15 hrs)	Fall (15-17 hrs)	Spring (14-16 hrs)
ME 101 ME Seminar	ME 208 Intro. Digital Comp. Methods in M.E. Co: MATH 125	ME 211 Statics and Intro to Mechanics Pr: PHSX 210 (211 or 201)	ME 311 Mechanics of Mat'ls Pr: ME 211 (210), MATH 126 (C-)	ME 307 Engr. Materials Lab Pr: CHEM 150, ME 228 Co: ME 306, ME 311	ME 628 Mech. Design Pr: ME 311	Technical Elective (List 1) (ME 627 ³ if Capstone Option B – FSAE) (ME 633 ⁵ if Capstone Option C – BIO)	Technical Elective (List 1) ★
Fall - 1 cr	Fall, Spr - 3 cr	Fall, Spr - 3 cr	Fall, Spr - 3 cr	Fall Only - 2 cr	Spring only - 3 cr	Fall Only - 3 cr	Fall, Spr - 3 cr
ME 228 Computer Graphics Co: MATH 104	MATH 126* Calculus II Pr: MATH 125	MATH 127 Calculus III Pr: MATH 126	MATH 290 Elementary Linear Algebra Pr: MATH 126	ME 508 Num. Analysis Pr: ME 208, MATH 220, MATH 290	ME 501 Mech. Engr. Design Process Pr: ME 228, ME 311	Capstone Design Option: (AE6) A - ME 640 ¹ → B - N/A → C - ME 640 ¹ →	Capstone Design Option: (AE6) A - ME 641 ² (Gen/EcoHawks) B - ME 642 ⁴ (JMS) C - ME 643 ⁶ (BIO)
Fall, Spr - 3 cr	Fall, Spr, Su - 4 cr	Fall, Spr, Su - 4 cr	Fall, Spr, Su - 2 cr	Fall Only - 3 cr	Fall, Spr - 2 cr	0-2 cr	2-4 cr
MATH 125* (GE1.2) Calculus I Pr: see catalog	MATH 365 or 526 Statistics Pr: see catalog	ME 312 Basic Engr Thermo Pr: PHSX 210 (211 or 201), MATH 126 (C-)	ME 412 Thermal Systems Pr: ME 312	ME 510 (CPE 511) Fluid Mechanics Pr: ME 211 (201), ME 312, MATH 127	ME 612 Heat Transfer Pr: ME 312, ME 510, MATH 220	ME 455 ME Meas. & Exp. Pr: ME 208, ME 307, ME 320, MATH 365 Co: ME 612, EECS 318	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1)
Fall, Spr, Su - 4 cr	Fall, Spr, Su - 3 cr	Fall, Spr, Su - 3 cr	Fall, Spr - 3 cr	Fall, Spr - 3 cr	Fall, Spr, Su - 3 cr	Fall, Spr - 4 cr	Fall, Spr, Su - 3 cr
CHEM 150 (GE3N) Chemistry for Engineers	PHSX 210* + 216 (GE1.1) Gen. Physics I Pr: MATH 125 Co: MATH 126 Co: PHSX 210 for PHSX 216	PHSX 212 + 236 Gen. Physics II Pr: PHSX 210 (211 or 201), MATH 126 Co: PHSX 212 for PHSX 236	MATH 220 Applied Differential Equations Pr: MATH 126	ME 320 + 321 Dynamics / Lab Pr: ME 211 (201), MATH 220, MATH 290 Co: ME 320 for ME 321	EECS 316 + 318 Circuits, Electronics and Instrumentation Pr: 8 cr of PHSX, MATH 220 Co: EECS 316 for EECS 318	ME 682 System Dynamics and Control Systems Pr: ME 320	General Elective (List 2) ★
Fall, Spr - 5 cr	Fall, Spr, Su - 3+1 cr	Fall, Spr, Su - 3+1 cr	Fall, Spr, Su - 3 cr	Fall, Spr - 3+1 cr	Spring only - 3+1 cr	Fall only - 3 cr	Fall, Spr, Su - 3 cr
ENGL 101 Written Comm (GE2.1) Pr: see catalog	ENGL 102 Written Comm (GE2.1) Pr: ENGL 101	ME 306 Science of Materials Pr: CHEM 150	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1) Fall, Spr, Su - 3 cr	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1)	ME 661 Finite Element Method for Stress Analysis Pr: ME 311, MATH 220 MATH 290	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1) Fall, Spr, Su - 3 cr	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1)
Fall, Spr, Su - 3 cr	Fall, Spr, Su - 3 cr	Fall, Spr, Su - 3 cr	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1) Fall, Spr, Su - 3 cr	Fall, Spr, Su - 3 cr	Spr, Su - 3 cr	General Elective (List 2) ★	Fall, Spr, Su - 3 cr

NOTE : If Course A is a pre-/co-requisite for Course B, and if Course B is a pre-/co-requisite for Course C, then Course A is a pre-/co-requisite for Course C.

Pr = Prerequisite; Co = Corequisite; cr = semester credit hour

★ = Taken in any order as long as any pre- and co-reqs are met

Capstone Design Footnotes (see back for detailed tracks)

- ¹ Fall, Spring -- Pr: ME 501, ME 628
- ² Fall, Spring -- Pr: ME 640 (2 cr), ME 501, ME 510, ME 628 Co: ME 412, ME 455
- ³ Fall Only -- Pr: Instructor's Permission Counts as List 1 Elect.
- ⁴ Spring Only -- Pr: ME 501, ME 627, ME 628 Co: ME 412, ME 455
- ⁵ Fall Only -- Pr: ME 311, ME 320 Counts as List 1 Elect.
- ⁶ Fall, Spring -- Pr: ME 640 (2 cr), ME 501, ME 628, ME 633 Co: ME 455

* A grade of "C-" or better is required by the Math and Physics Departments for these courses and courses substituted for these courses to satisfy pre- and co-requisites.

**GE3S must be ECON 104, 142, or 144. AE5.1 must be CE 610 (Junior or Senior Year).