

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 (15 hrs)	Spring (17 hrs)	Fall (17 hrs)	Spring (17 hrs)	Fall (15 hrs)	Spring (15 hrs)	Fall (16-18 hrs)	Spring (14-16 hrs)
ME 228 Computer Graphics Co: MATH 104 Fall, Spr - 3 cr	ME 208 Intro. Digital Comp. Methods in M.E. Co: MATH 125 (116 or 121) Fall, Spr - 3 cr	ME 211 Statics and Intro to Mechanics Pr: PHSX 210 (211 or 201) Fall, Spr - 3 cr	ME 311 Mechanics of Mat'ls Pr: ME 211 (210) Co: MATH 220 Fall, Spr - 3 cr	ME 320 + 321 Dynamics / Lab Pr: ME 211 (201), MATH 220, MATH 290 Co: ME 320 for ME 321 Fall, Spr - 3+1 cr	ME 628 Mech. Design Pr: ME 311 Spring only - 3 cr	ME 682 System Dynamics and Control Systems Pr: ME 320 Fall only - 3 cr	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1) Fall, Spr, Su - 3 cr
CHEM 150 (130, 170) (GE3N) Chemistry for Engineers Fall, Spr - 5 cr	PHSX 210* + 216 (GE1.1) Gen. Physics I Pr: MATH 125 (116 or 121) Co: MATH 126 (122) Co: PHSX 210 for PHSX 216 Fall, Spr, Su - 3+1 cr	PHSX 212 + 236 Gen. Physics II Pr: PHSX 210 (211 or 201) Co: PHSX 212 for PHSX 236 Fall, Spr, Su - 3+1 cr	ME 312 Basic Engr Thermo Pr: PHSX 210 (211 or 201) Co: MATH 127 (122) Fall, Spr, Su - 3 cr	ME 412 Thermal Systems Pr: ME 312 Fall, Spr - 3 cr	ME 510 (CPE 511) Fluid Mechanics Pr: ME 211 (201), ME 312, MATH 127 (122) Co: MATH 220 Fall, Spr - 3 cr	ME 612 Heat Transfer Pr: ME 312, MATH 220 Co: ME 510 (CPE 511) Fall, Spr, Su - 3 cr	Adv. Engr. Elective (List 1) or General Elective (List 2) ★ Fall, Spr, Su - 3 cr
MATH 125* (GE1.2) Calculus I Pr: see catalog Fall, Spr, Su - 4 cr	MATH 126* Calculus II Pr: MATH 125 (116 or 121) Fall, Spr, Su - 4 cr	MATH 127 Calculus III Pr: MATH 126 Fall, Spr, Su - 4 cr	MATH 220 Applied Differential Equations Pr: MATH 126 Fall, Spr, Su - 3 cr	ME 508 Num. Analysis Pr: ME 208, MATH 220, MATH 290 Fall, Spr - 3 cr	ME 661 Finite Element Method for Stress Analysis Pr: ME 311, MATH 220, MATH 290 Spr, Su - 3 cr	ME 455 ME Meas. & Exp. Pr: ME 208, ME 311 Co: ME 320, ME 510, ME 612, EECS 318, MATH 365 Fall, Spr - 4 cr	Adv. Engr. Elective (List 1) ★ Fall, Spr, Su - 3 cr
	Statistics MATH 365 or 526 Pr: see catalog Fall, Spr, Su - 3 cr	ME 306 Science of Materials Pr: CHEM 150 (130 or 170) Fall, Spr, Su - 3 cr	MATH 290 Elementary Linear Algebra Pr: MATH 126 Fall, Spr, Su - 2 cr	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1) Fall, Spr, Su - 3 cr	EECS 316 + 318 Circuits, Electronics and Instrumentation Pr: 8 cr of PHSX, MATH 220 Co: EECS 316 for EECS 318 Spring only - 3+1 cr	Adv. Engr. Elective (List 1) or General Elective (List 2) ★ Fall, Spr, Su - 3 cr	KU Core** ★ (GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1) Fall, Spr, Su - 3 cr
Written Comm (GE2.1) ENGL 101 Pr: see catalog Fall, Spr, Su - 3 cr	Written Comm (GE2.1) ENGL 102 Pr: ENGL 101 Fall, Spr, Su - 3 cr	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	ME 307 Engr. Materials Lab Pr: CHEM 150 (130 or 170) Co: ME 228, ME 306, ME 311 Fall only - 2 cr	ME 501 Mech. Engr. Design Process Pr: ME 311, ME 312 Co: ME 228, ME 307 Spring only - 2 cr	Capstone Design Option: A - ME 640 ¹ + List 1 ¹ → B - ME 627 ³ → C - ME 640 ¹ + 633 ⁵ → 3-5 cr	Capstone Design (AE6) Option: A - ME 641 ² (Gen/EcoHawks) B - ME 642 ⁴ (FSAE) C - ME 643 ⁶ (Biomech) 2-4 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

* 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 PHIL 160, 161, or 180.

KU Core** ★
(GE2.2, GE3H, GE3S, AE4.1, AE4.2, or AE5.1)
Fall, Spr, Su - 3 cr

Capstone Design Footnotes (see back for detailed tracks)

- ¹ Fall, Spring -- Pr: ME 640 (2 cr), ME 501, ME 510, ME 628 Co: ME 412, ME 455
- 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 Co: ME 412, ME 455
- ⁴ Spring Only -- Pr: ME 501, ME 627, ME 628 Co: ME 412, ME 455
- ⁵ Fall Only -- Pr: ME 311, ME 320 Co: ME 412, ME 455
- ⁶ Fall, Spring -- Pr: ME 640 (2 cr), ME 501, ME 628, ME 633 Co: ME 455