



4-Year Curriculum: 137 Credit Hours Total

Freshman Year - Fall Semester		
Course Code	Course-Title	CRHs
COE 100	Student Orientation and Academic Success	1
CHM 101	General Chemistry I	3
CHM 101 L	General Chemistry I Lab	1
MAT 101	Calculus I	3
PHU 103	Physics I	3
PHU 103 L	Physics I Lab	1
ENG 101	University Writing	3
AI 102	AI for everyone: Foundation and Applications	3
Total		18

Freshman Year - Spring Semester		
Course Code	Course-Title	CRHs
SE 100	Programming for Engineers	3
SE 100 L	Programming for Engineers Lab	1
ME 201	Materials Science and Engineering	3
ME 201 L	Materials Science and Engineering Lab	1
MAT 112	Calculus II	3
PHU 124	Physics II	3
PHU 124 L	Physics II Lab	1
Total		15

Sophomore Year - Fall Semester		
Course Code	Course-Title	CRHs
ME 203	Applied Mechanics I: Statics	3
ME 205	Introduction to Computer Aided Design	3
ME 305	Manufacturing and Workshop Training	3
ME 305 L	Manufacturing and Workshop Training Lab	1
MAT 211	Calculus III	3
MAT 212	Linear Algebra	3
MAT 213	Differential Equations	3
Total		19

Sophomore Year - Spring Semester		
Course Code	Course-Title	CRHs
ME 208	Mechanics of Materials I	3
ME 208 L	Mechanics of Materials I Lab	1
ME 216	Fluid Mechanics	3
ME 216 L	Fluid Mechanics Lab	1
EE 207	Foundations of Electrical Engineering	3
EE 207 L	Foundations of Electrical Engineering Lab	1
MAT 224	Numerical Methods	3
STA 212	Probability and Statistics	3
Total		18

Junior Year - Fall Semester		
Course Code	Course-Title	CRHs
ME 311	Applied Mechanics II: Dynamics	3
ME 312	Mechanics of Materials II	3
ME 312 L	Mechanics of Materials II Lab	1
ME 315	Machine Design	3
ME 316	Engineering Thermodynamics	3
ENG 222	Technical Writing	3
Total		16

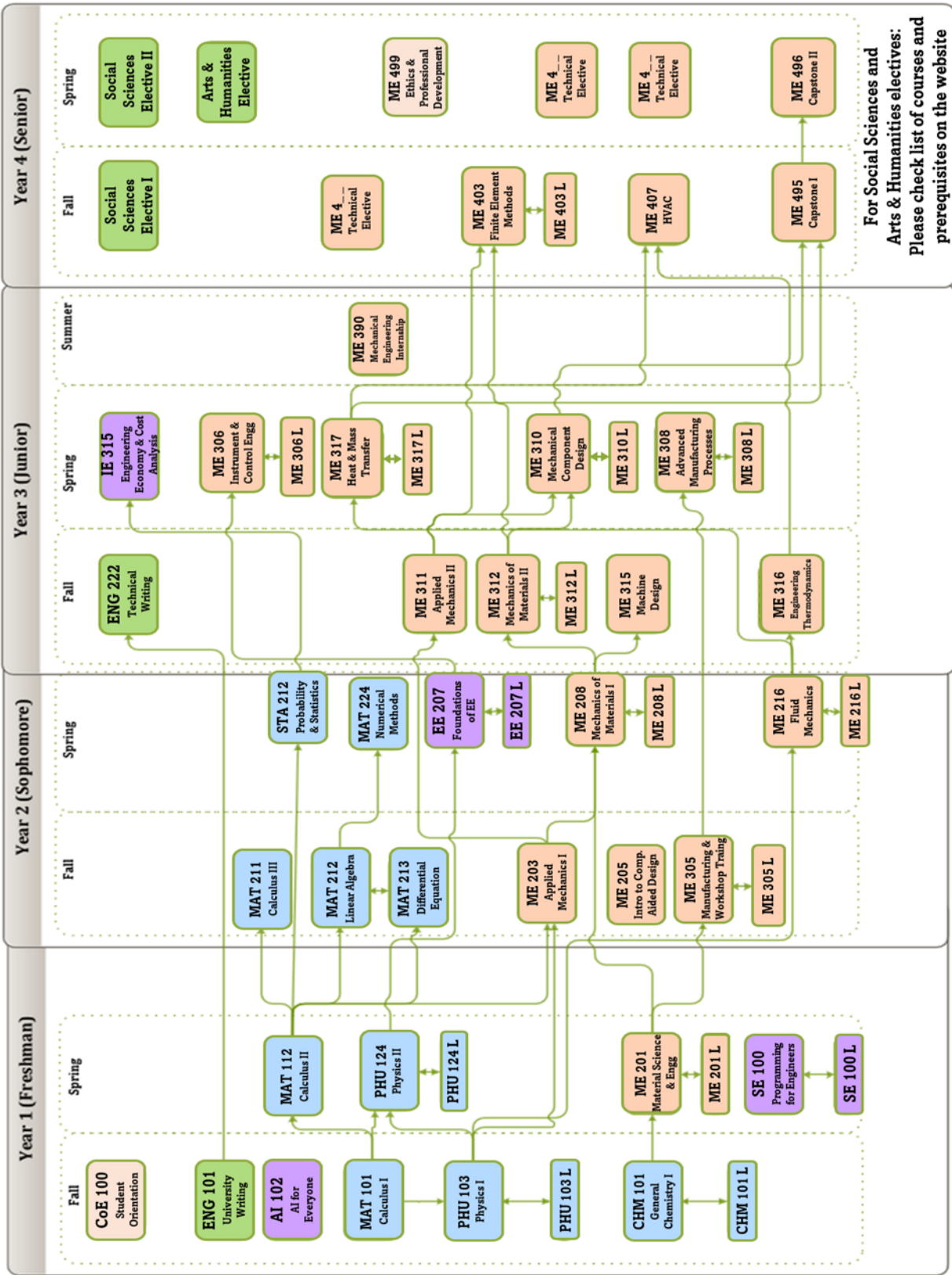
Junior Year - Spring Semester		
Course Code	Course-Title	CRHs
ME 306	Instrumentation and Control Engineering	3
ME 306 L	Instrumentation and Control Engineering Lab	1
ME 308	Advanced Manufacturing Processes	3
ME 308 L	Advanced Manufacturing Processes Lab	1
ME 310	Mechanical Component Design	3
ME 310 L	Mechanical Component Design Lab	1
ME 317	Heat and Mass Transfer	3
ME 317 L	Heat and Mass Transfer Lab	1
IE 315	Engineering Economy and Cost Analysis	3
Total		19

Junior Year - Summer Semester		
Course Code	Course-Title	CRHs
ME 390	Mechanical Engineering Internship	0
Total		0

Senior Year - Fall Semester		
Course Code	Course-Title	CRHs
ME 403	Finite Element Methods	3
ME 403 L	Finite Element Methods Lab	1
ME 407	Heating, Ventilation, and Air-Conditioning	3
ME 495	Mechanical Engineering Capstone Project I	3
ME 4	Technical Elective	3
	Social Sciences Elective I	3
Total		16

Senior Year - Spring Semester		
Course Code	Course-Title	CRHs
ME 499	Ethics and Professional Development	1
ME 496	Mechanical Engineering Capstone Project II	3
ME 4	Technical Elective	3
ME 4	Technical Elective	3
	Social Sciences Elective II	3
	Arts and Humanities Elective	3
Total		16

**Alfaisal University – Bachelor of Mechanical Engineering**  
**Prerequisites Chart (Effective Fall 2026)**



**For Social Sciences and Arts & Humanities electives: Please check list of courses and prerequisites on the website**