



Alfaisal University
Bachelor of Mechanical Engineering
Study Plan Summary
Effective: Fall 2024

4-Year Curriculum: 134 Credit Hours Total

Freshman Year - Fall Semester		
Course Code	Course-Title	CRHs
CHM 102	Introduction to Chemistry	3
CHM 102 L	Introduction to Chemistry Lab	1
MAT 101	Calculus I	3
PHU 103	Mechanics and Waves for Engineers	3
PHU 103 L	Mechanics and Waves for Engineers Lab	1
ENG 101	University Writing I	3
ARB 101	Arabic Language I	2
Total		16

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	Material Science and Engineering	3
ME 201 L	Material Science and Engineering Lab	1
MAT 112	Calculus II	3
PHU 124	Electromagnetism and Optics for Engineers	3
PHU 124 L	Electromagnetism and Optics for Engineers Lab	1
ISL 101	Islamic Studies I	2
Total		17

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 for Engineers	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

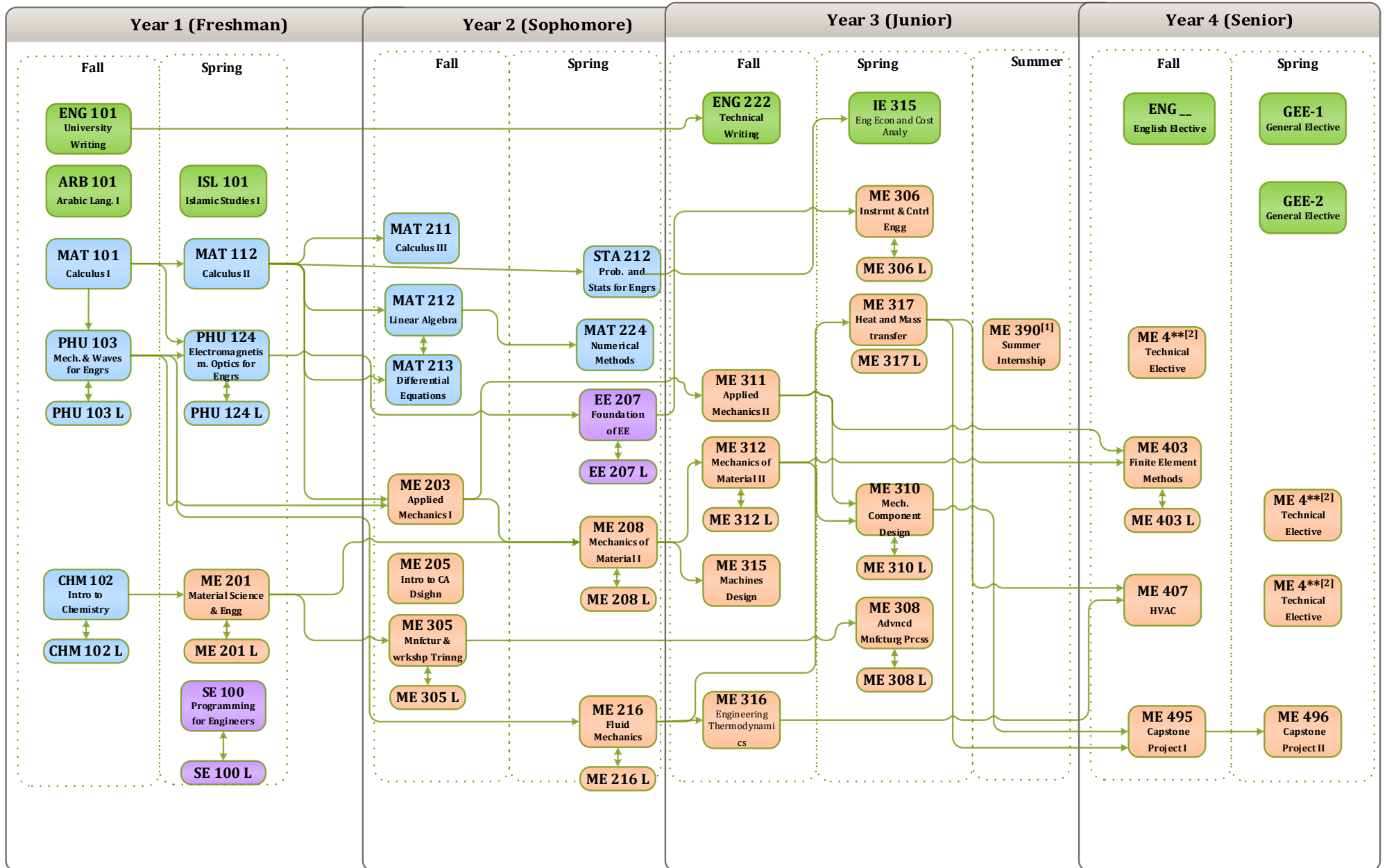
Junior Year - Spring Semester		
Course Code	Course-Title	CRHs
ME 306	Instrumentation and Control Engineering	3
ME 306 L	Instrumentation and Control Engineering Lab	1
ME 308	Advanced Manufacturing Processes	3
ME 308 L	Advanced Manufacturing Processes Lab	1
ME 310	Mechanical Component Design	3
ME 310 L	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	1
Total		19

Junior Year - Summer Semester		
Course Code	Course-Title	CRHs
ME 390	Mechanical Engineering Summer 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
ENG __	English Elective	3
Total		16

Senior Year - Spring Semester		
Course Code	Course-Title	CRHs
ME 496	Mechanical Engineering Capstone Project II	3
ME 4 __	Technical Elective	3
ME 4 __	Technical Elective	3
__	General Education Elective	2
__	General Education Elective	2
Total		13

**Alfaisal University – Bachelor of Mechanical Engineering
Prerequisites Chart (Effective Fall 2024)**



GEE 1&2: Please check the list of courses & prerequisite list on the website

