



Student:		ID#:	
Advisor:		Starting Semester:	Expected Graduation:

4-Year Curriculum: 142 Credit Hours Total

Freshman Year - Fall Semester				
Course Code	Course-Title	CRHs	Semester Taken	Retake/Transfer
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	3		
ARB 101	Arabic Language I	2		
Total		16		

Freshman Year - Spring Semester				
Course Code	Course-Title	CRHs	Semester Taken	Retake/Transfer
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		
ENG_ _ _	English Elective	3		
Total		18		

Sophomore Year - Fall Semester				
Course Code	Course-Title	CRHs	Semester Taken	Retake/Transfer
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	Semester Taken	Retake/Transfer
EE 207	Foundations of Electrical Engineering	3		
EE 207 L	Foundations of Electrical Engineering Lab	1		
ME 206	Thermal Fluids Engineering I	3		
ME 206 L	Thermal Fluids Engineering I Lab	1		
ME 208	Mechanics of Materials I	3		
ME 208 L	Mechanics of Materials I 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	Semester Taken	Retake/Transfer
IE 301	Operations Research I	3		
IE 304	Production and Service Systems Planning I	3		
IE 307	Work Systems Analysis & Design	3		
IE 307 L	Work Systems Analysis & Design Lab	1		
IE 309	Human Factors and Ergonomics	3		
IE 309 L	Human Factors and Ergonomics	1		
ENG 222	Technical Writing	3		
ISL 101	Islamic Studies I	2		
Total		19		

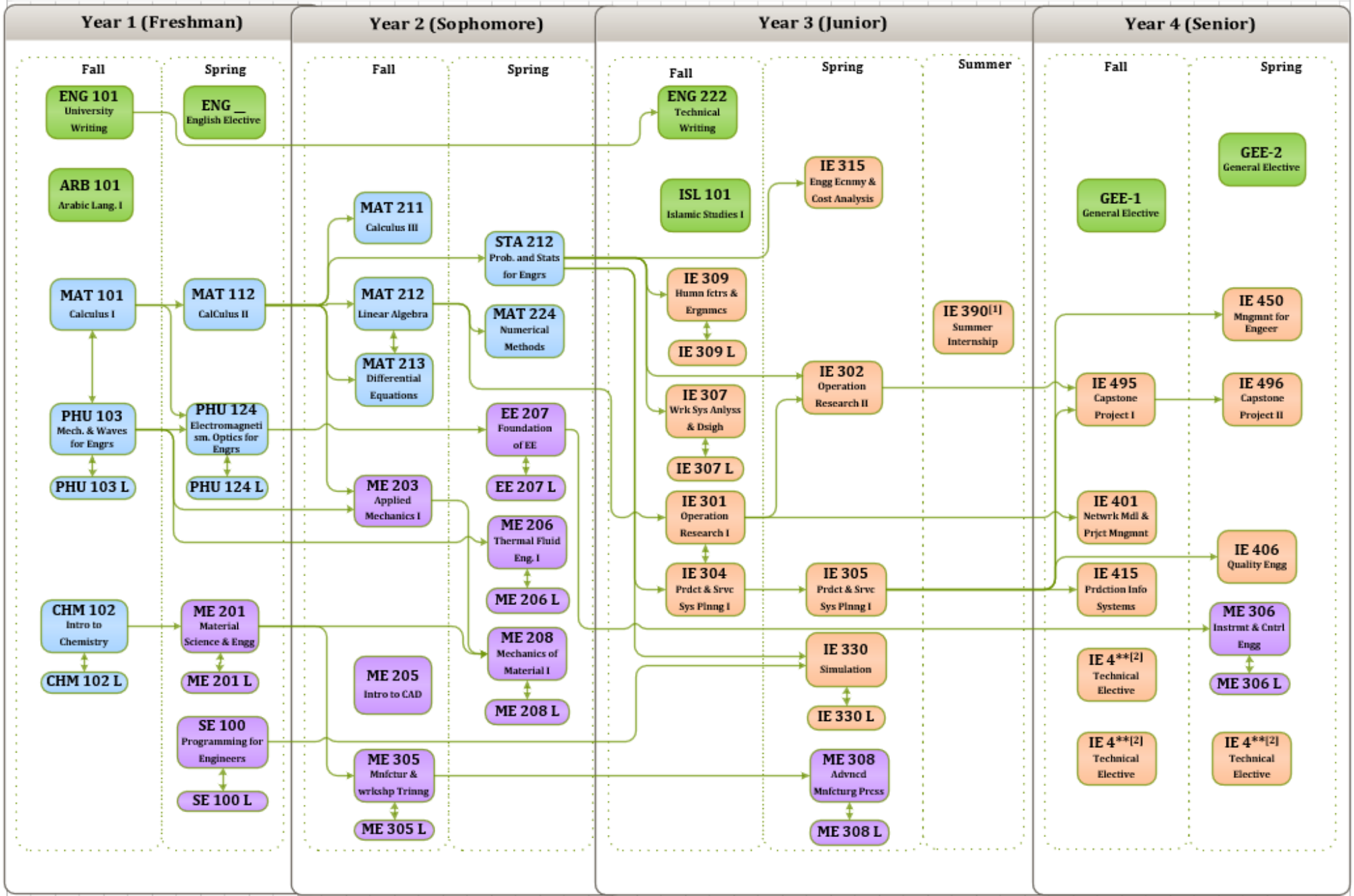
Junior Year - Spring Semester				
Course Code	Course-Title	CRHs	Semester Taken	Retake/Transfer
IE 302	Operations Research II	3		
IE 305	Production and Service Systems Planning II	3		
IE 315	Engineering Economy and Cost Analysis	3		
IE 330	Simulation	3		
IE 330 L	Simulation Lab	1		
ME 308	Advanced Manufacturing Processes	3		
ME 308 L	Advanced Manufacturing Processes Lab	1		
Total		17		

Junior Year - Summer Semester				
Course Code	Course-Title	CRHs	Semester Taken	Retake/Transfer
IE 390	Industrial Engineering Summer Internship	0		
Total		0		

Senior Year - Fall Semester				
Course Code	Course-Title	CRHs	Semester Taken	Retake/Transfer
IE 401	Network Models and Project Management	3		
IE 415	Production Information Systems	3		
IE 4_ _	Technical Elective	3		
IE 4_ _	Technical Elective	3		
IE 495	Industrial Engineering Capstone Project I	3		
_ _ _ _	General Education Elective I	2		
Total		17		

Senior Year - Spring Semester				
Course Code	Course-Title	CRHs	Semester Taken	Retake/Transfer
IE 406	Quality Engineering	3		
IE 450	Management for Engineers	3		
IE 4_ _	Technical Elective	3		
IE 496	Industrial Engineering Capstone Project II	3		
ME 306	Instrumentation and Control Engineering	3		
ME 306 L	Instrumentation and Control Engineering Lab	1		
_ _ _ _	General Education Elective II	2		
Total		18		

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



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