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

كلية الهندسة والحوسبة المتقدمة
College of Engineering and Advanced Computing

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

4-Year Curriculum: 137 Credit Hours Total.

Freshman Year - Fall Semester

Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
SE 100	Programming for Engineers	3		
SE 100 L	Programming for Engineers Lab	1		
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		
Total		**18**		

Freshman Year - Spring Semester

Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
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		
ARB 101	Arabic Language I	2		
ENG ___	English Elective	3		
Total		**16**		

Sophomore Year - Fall 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		
MAT 211	Calculus III	3		
MAT 212	Linear Algebra	3		
MAT 213	Differential Equations	3		
ISL 101	Islamic Studies I	2		
ENG 222	Technical Writing	3		
Total		**18**		

Sophomore Year - Spring Semester

Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
EE 208	Electric Circuits	3		
EE 209	Applied Electromagnetics	3		
EE 210	Digital Logic Systems	3		
EE 210 L	Digital Logic Systems Lab	1		
MAT 224	Numerical Methods	3		
STA 212	Probability and Statistics	3		
___	General Elective	2		
Total		**18**		

Junior Year - Fall Semester

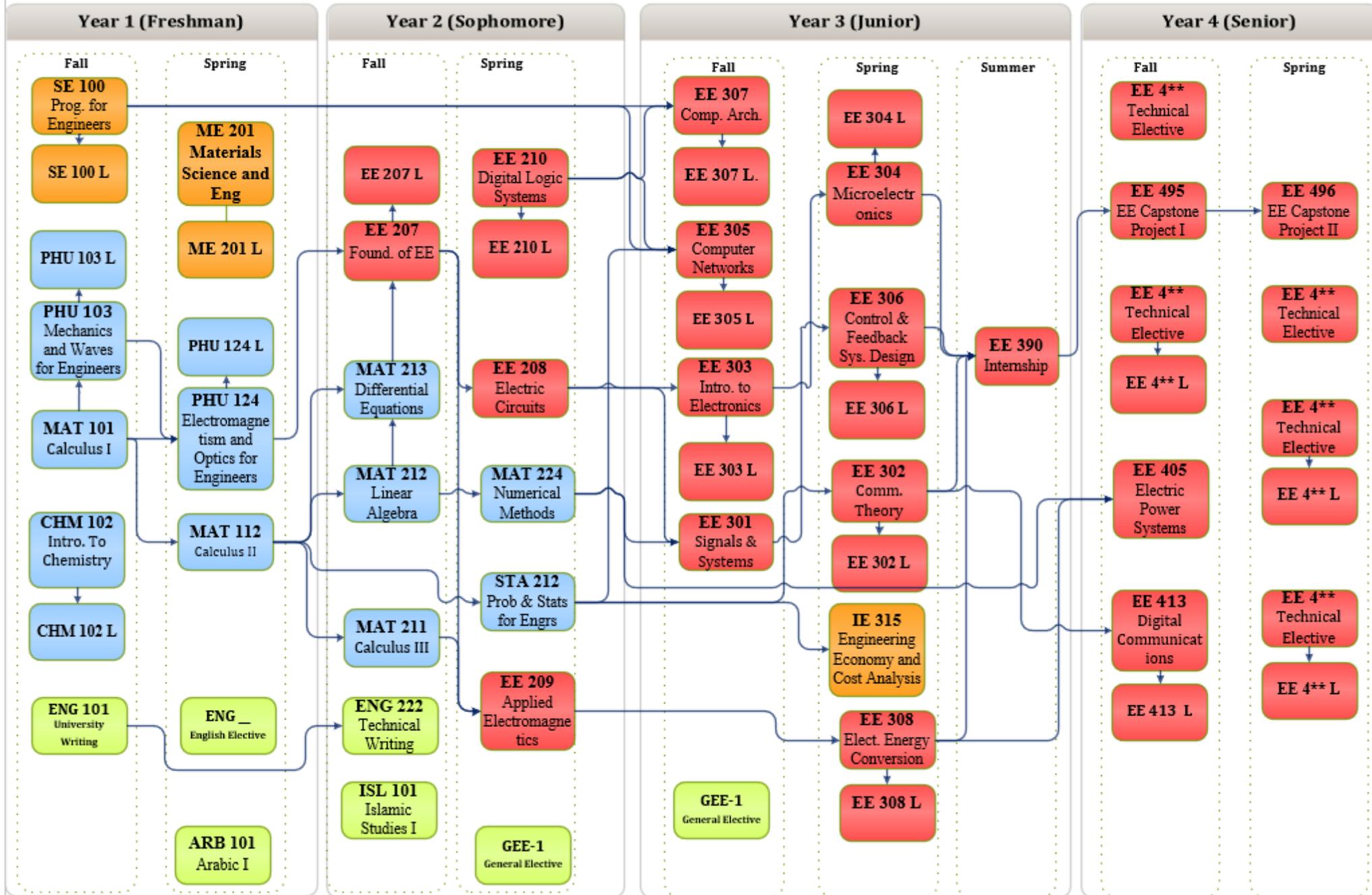| Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
EE 301	Signals and Systems	3		
EE 303	Intro to Electronics	3		
EE 303 L	Intro to Electronics Lab	1		
EE 305	Computer Networks	3		
EE 305 L	Computer Networks Lab	1		
EE 307	Computer Architecture	3		
EE 307 L	Computer Architecture Lab	1		
___	General Education Elective II	2		
Total		**17**		

Junior Year - Spring Semester

Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
EE 302	Communications Theory	3		
EE 302 L	Communications Theory Lab	1		
EE 304	Microelectronics	3		
EE 304 L	Microelectronics Lab	1		
EE 306	Control and Feedback System Design	3		
EE 306 L	Control and Feedback System Design Lab	1		
EE 308	Electrical Energy Conversion	3		
EE 308 L	Electrical Energy Conversion Lab	1		
IE 315	Engineering Economy and Cost Analysis	3		
Total		**19**		

Junior Year - Summer Semester

Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
EE 390	Electrical Engineering Summer Internship	0		
Total		**0**		

Senior Year - Fall Semester

Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
EE 495	Electrical Engineering Capstone Project I	3		
EE 405	Electric Power Systems	3		
EE 413	Digital Communications	3		
EE 413 L	Digital Communications Lab	1		
4**TE	EE Elective	3		
4**TE	EE Elective	3		
Total		**16**		

Senior Year - Spring Semester

Course Code	Course-Title	CRHs	Semester Taken	Retake/ Transfer
EE 496	Electrical Engineering Capstone Project II	3		
4**TE	EE Elective	3		
4**TE L	EE Elective Lab	1		
4**TE	EE Elective	3		
4**TE L	EE Elective Lab	1		
4**TE	EE Elective	3		
4**TE L	EE Elective Lab	1		
Total		**15**		

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

Year 1 (Freshman)		Year 2 (Sophomore)		Year 3 (Junior)			Year 4 (Senior)	
Fall	Spring	Fall	Spring	Fall	Spring	Summer	Fall	Spring

Year 1 (Freshman)

Fall:
- SE 100 – Prog. for Engineers
- SE 100 L
- PHU 103 L
- PHU 103 – Mechanics and Waves for Engineers
- MAT 101 – Calculus I
- CHM 102 – Intro. To Chemistry
- CHM 102 L
- ENG 101 – University Writing

Spring:
- ME 201 – Materials Science and Eng
- ME 201 L
- PHU 124 L
- PHU 124 – Electromagnetism and Optics for Engineers
- MAT 112 – Calculus II
- ENG __ – English Elective
- ARB 101 – Arabic I

Year 2 (Sophomore)

Fall:
- EE 207 L
- EE 207 – Found. of EE
- MAT 213 – Differential Equations
- MAT 212 – Linear Algebra
- MAT 211 – Calculus III
- ENG 222 – Technical Writing
- ISL 101 – Islamic Studies I

Spring:
- EE 210 – Digital Logic Systems
- EE 210 L
- EE 208 – Electric Circuits
- MAT 224 – Numerical Methods
- STA 212 – Prob & Stats for Engrs
- EE 209 – Applied Electromagnetics
- GEE-1 – General Elective

Year 3 (Junior)

Fall:
- EE 307 – Comp. Arch.
- EE 307 L.
- EE 305 – Computer Networks
- EE 305 L
- EE 303 – Intro. to Electronics
- EE 303 L
- EE 301 – Signals & Systems
- GEE-1 – General Elective

Spring:
- EE 304 L
- EE 304 – Microelectronics
- EE 306 – Control & Feedback Sys. Design
- EE 306 L
- EE 302 – Comm. Theory
- EE 302 L
- IE 315 – Engineering Economy and Cost Analysis
- EE 308 – Elect. Energy Conversion
- EE 308 L

Summer:
- EE 390 – Internship

Year 4 (Senior)

Fall:
- EE 4** – Technical Elective
- EE 495 – EE Capstone Project I
- EE 4** – Technical Elective
- EE 4** L
- EE 405 – Electric Power Systems
- EE 413 – Digital Communications
- EE 413 L

Spring:
- EE 496 – EE Capstone Project II
- EE 4** – Technical Elective
- EE 4** – Technical Elective
- EE 4** L
- EE 4** – Technical Elective
- EE 4** L

Note: Each EE 4** EE technical electives has its own prerequisite from the third year courses, refer to the study plan.