



**4-Year Curriculum: 134 Credit Hours Total**

Freshman Year - Fall Semester			Freshman Year - Spring Semester		
Course Code	Course-Title	CRHs	Course Code	Course-Title	CRHs
SE 100	Programming for Engineers	3	ME 201	Material Science and Engineering	3
SE 100 L	Programming for Engineers Lab	1	ME 201 L	Material Science and Engineering Lab	1
CHM 102	Introduction to Chemistry	3	MAT 112	Calculus II	3
CHM 102 L	Introduction to Chemistry Lab	1	PHU 124	Electromagnetism and Optics for Engineers	3
MAT 101	Calculus I	3	PHU 124 L	Electromagnetism and Optics for Engineers Lab	1
PHU 103	Mechanics and Waves for Engineers	3	ARB 101	Arabic Language and Literature I	2
PHU 103 L	Mechanics and Waves for Engineers Lab	1	ENG 112	Freshman English II	3
ENG 101	Freshman English I	3			
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>16</b>
Sophomore Year - Fall Semester			Sophomore Year - Spring Semester		
Course Code	Course-Title	CRHs	Course Code	Course-Title	CRHs
ME 203	Applied Mechanics I: Statics	3	ME 208	Mechanics of Materials I	3
ME 205	Introduction to Computer Aided Design	3	ME 208 L	Mechanics of Materials I Lab	1
ME 305	Manufacturing and Workshop Training	3	ME 216	Fluid Mechanics	3
ME 305 L	Manufacturing and Workshop Training Lab	1	ME 216 L	Fluid Mechanics Lab	1
MAT 211	Calculus III	3	EE 207	Foundations of Electrical Engineering	3
MAT 212	Linear Algebra	3	EE 207 L	Foundations of Electrical Engineering Lab	1
MAT 213	Differential Equations	3	MAT 224	Numerical Methods	3
			STA 212	Probability and Statistics for Engineers	3
<b>Total</b>		<b>19</b>	<b>Total</b>		<b>18</b>
Junior Year - Fall Semester			Junior Year - Spring Semester		
Course Code	Course-Title	CRHs	Course Code	Course-Title	CRHs
ME 311	Applied Mechanics II: Dynamics	3	ME 306	Instrumentation and Control Engineering	3
ME 312	Mechanics of Materials II	3	ME 306 L	Instrumentation and Control Engineering Lab	1
ME 312 L	Mechanics of Materials II Lab	1	ME 308	Advanced Manufacturing Processes	3
ME 315	Machine Design	3	ME 308 L	Advanced Manufacturing Processes Lab	1
ME 316	Engineering Thermodynamics	3	ME 310	Mechanical Component Design	3
ENG 222	Technical Writing	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
			ISL 101	Islamic Studies I	2
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>18</b>
Junior Year - Summer Semester					
Course Code	Course-Title	CRHs			
ME 390	Mechanical Engineering Summer Internship	0			
<b>Total</b>		<b>0</b>			
Senior Year - Fall Semester			Senior Year - Spring Semester		
Course Code	Course-Title	CRHs	Course Code	Course-Title	CRHs
ME 403	Finite Element Methods	3	ME 496	Mechanical Engineering Capstone Project II	3
ME 403 L	Finite Element Methods Lab	1	ME 4 __	Technical Elective	3
ME 407	Heating, Ventilation, and Air-Conditioning	3	ME 4 __	Technical Elective	3
ME 495	Mechanical Engineering Capstone Project I	3	IE 315	Engineering Economy and Cost Analysis	3
ME 4 __	Technical Elective	3	ARB 112	Arabic Language and Literature II	2
ISL 112	Islamic Studies II	2			
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>14</b>

# Alfaisal University – Bachelor of Mechanical Engineering Prerequisites Chart (Effective Fall 2022 )

