

# Applied Science Private University

Faculty of Engineering

Mechanical and Industrial Engineering Dept.

Study Plan

Industrial Engineering

Graduation Requirements **160 C.H.**



First Semester 2021/2022

First Semester					Second Semester					
Course #	Course	Course name	C. H	Prerequisite	Course #	Course	Course name	C. H	Prerequisite	
1501110	MATH110	Calculus 1	3	-	0810112	EE112	Calculus 2	3	1501110	
1501120	PHYS120	General Physics 1	3	-	1501220	PHYS220	General Physics 2	3	1501120	
1501121	PHYS121	General Physics Lab 1	1	1501120***	1501221	PHYS221	General Physics Lab 2	1	1501220***	
1401123	ARB123	Arabic Language 1	3	-	17200101	CHEM101	General Chemistry Lab	1	1722100	
1401124	ENG124	English Language 1	3	-	0802108	ME108	Descriptive Geometry	1	-	
1722100	CHEM100	General Chemistry	3	-	0805203	CE203	Ethics & Technical Writing	2	1401120	
0802107	ME107	Engineering Workshop	1	-	0100100	MS103	Military Science*	3	-	
					1401150	HSS150	National Education	3	-	
Total Credit Hour				17	Total Credit Hour				17	
Third Semester					Fourth Semester					
Course #	Course	Course name	C. H	Prerequisite	Course #	Course	Course name	C. H	Prerequisite	
0802205	ME205	Engineering Materials	3	1501130	0802227	ME224	Applied Mechanics	3	0802107	
0802206	ME206	Engineering Materials lab.	1	0802205***	0802228	ME225	Applied Mechanics Lab	1	0802227	
0803231	IE231	Statistics and Probability 1	3	0810112	0803232	IE232	Statistics and Probability 2	3	0803231	
0805107	CE107	Engineering Drawing	1	-	0802345	ME345	Thermal Fluid Sciences	3	0810203	
0810201	EE202	Computer Skills 2	3	Passing Skills Test	0803310	IE310	Manufacturing Processes 1	3	0802205	
0810203	EE203	Advanced Engineering Math 1	3	0810112	0810205	EE205	Principles of Electrical Eng. Lab	1	0809204	
0810204	EE204	Principles of Electrical Eng.	3	1501220	1401116	HSS 116	Islamic Education	3	-	
Total Credit Hour				17	Total Credit Hour				17	
Fifth Semester					Sixth Semester					
Course #	Course	Course name	C. H	Prerequisite	Course #	Course	Course name	C. H	Prerequisite	
0803234	IE234	Statistics & Excel Lab.	1	0803231	0803233	IE233	Object Oriented Programming for Industrial Engineering	3	0810201	
0803323	IE323	Economy and Engineering Management	3	0810112	0803331	IE331	Operations Research 2	3	0803330	
0803330	IE330	Operations Research 1	3	0803231	0803370	IE370	Quality Control	3	0803232***	
0803334	IE334	Work Measurements	3	0803231	0803312	IE312	Manufacturing Processes Lab.	1	0803310***	
0810302	EE302	Numerical Analysis	3	0810201	0802337	ME337	Discrete Mathematics		0803330	
		University mandatory (Entrepreneurship and innovation+ Leadership and social accountability+ Life skills)	3	-			University Elective Course	3	-	
Total Credit Hour				16	Total Credit Hour				16	
Seventh Semester					Eighth Semester					
Course #	Course	Course name	C. H	Prerequisite	Course #	Course	Course name	C. H	Prerequisite	
0803413	IE413	Introduction To Data Analytics And Machine Learning	3	0803233	0803439	IE439	Systems Modeling and Optimization Lab	1	0803331	
0802461	ME461	Eng. Measurements and instrumentations	3	0803310	0803457	IE457	Human Factors and Safety Eng.	3	0803334	
0802462	IE462	Eng. Measurements and instrumentations Lab.	1	0802461***	0803478	IE478	Human Factors Eng. and Time and Motion Study lab.	1	0803457***	
0803454	IE465	Automation and Control	3	0803310	0803482	IE482	Simulation	3	803330	
0803455	IE466	Automation and Control Lab.	1	0803465***	0803420	IE420	Engineering Cost accounting	3	0803323	
0803471	IE471	Production Planning and Control	3	0803330	0803565	IE565	Industrial Facility Planning	3	0803323	
		University Elective course	3				Department Elective Course	3		
Total Credit Hour				17	Total Credit Hour				17	
0803589 Engineering training (3 CH): Dept. Approval(passing 115 CH); the student must finish the required community service hours										
Ninth Semester					Tenth Semester					
Course #	Course	Course name	C. H	Prerequisite	Course #	Course	Course name	C. H	Prerequisite	
0803585	IE585	Graduation Project 1	1	Dept. Approval	0803587	IE587	Graduation Project 2	2	0803585	
0803561	IE561	Project Management	3	0803331	0803551	IE551	Computer Aided Design and Manufacturing	3	0803310	
0803570	IE570	Supply Chain Management	3	0803471***	0803556	IE556	Computer Aided Design and Manufacturing Lab.	1	0803551	
		Department Elective Course	3	0803565	0803574	IE574	Product Development and Entrepreneurship	3	0803565***	
0803583	IE583	Intelligent Systems Lab	1				Department Elective Course	3		
Total Credit Hour				11	Total Credit Hour				12	