

The Public Authority for Applied Education and Training
College of Technological Studies

Department : Laboratory Technology

Program: Applied Physics

PROGRAM MAJOR SHEET

Current

Major Core Courses (42) Credits

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
75	110	General Chemistry	3	4	2	2	0	
56	160	Electricity and Magnetism	3	4	2	2	0	
56	165	Thermal Physics	3	4	2	2	0	56-113
56	166	Optics	3	4	2	2	0	
56	167	Properties of Matter	3	4	2	2	0	56-113
56	168	Instrumentation	3	5	1	4	0	76-105
56	169	Radiation Physics (1)	3	4	2	2	0	56-113
56	202	Physical Electronics	3	4	2	2	0	56-160
56	203	Modern Physics	3	4	2	2	0	56-166
56	206	Computer App. in Physics	3	5	1	4	0	56-113
56	208	Waves and Sound	3	4	2	2	0	76-106
56	260	Optical Instruments	3	5	1	4	0	56-166
56	270	Radiation Physics (2)	2	3	1	2	0	56-169
56	399	Field Training	4	0	0	0	16	56-169
			42	54	22	32	16	

General Core Courses (18) Credits

Code	No.	Course Name	Cr.	Hrs.	Theo.	Lab.	Field	Pre-req.
76	105	Mathematics (1)	3	3	3	0	0	
76	106	Mathematics (2)	3	3	3	0	0	76-105
56	113	General Physics	3	4	2	2	0	
30	102	Technical English Language	3	3	3	0	0	
30	171	Communication Skills	3	3	3	0	0	30-102
30	162	Writing Technical Reports in English	3	3	3	0	0	30-102
			18	19	17	2	0	

Total	Cr.	Hrs.
	75	88

Major Elective Courses (6) Credits

Code	No.	Course Name	Cr.	Hrs	Theo.	Lab.	Field	Pre-req.
56	152	Solid State Physics	2	2	2	0	0	56-113
76	151	Principles of Prob. and Statistics	2	2	2	0	0	76-105
76	156	Advanced Mathematics	3	3	3	0	0	76-106
75	252	Glass Blowing	1	3	0	3	0	
56	205	Biophysics	3	4	2	2	0	56-113
56	264	Laser	2	2	2	0	0	56-166
56	265	Physics Project	3	4	2	2	0	56-169, 30-102
75	284	Stores Management	1	1	1	0	0	

General Elective Courses (3) Credits

Code	No.	Course Name	Cr.	Hrs	Theo.	Lab.	Field	Pre-req.
3	112	Work Ethics and Loyalty	3	3	3	0	0	
7	141	Art Education (1)	1	2	0	2	0	
7	142	Art Education (2)	1	2	0	2	0	07-141
8	110	Physical Education	1	2	0	2	0	
10	104	Library and Research	1	2	0	2	0	
13	151	Music Education	1	2	0	2	0	
15	114	Industrial Psychology	2	2	2	0	0	
21	164	Accounting	2	2	2	0	0	
22	104	Small Business Management	2	2	2	0	0	
27	166	Industrial Economics	2	2	2	0	0	

General Culture Courses (6) Credits

Code	No.	Course Name	Cr.	Hrs	Theo.	Lab.	Field	Pre-req.
1	101	Islamic Culture	2	2	2	0	0	
75	105	Scientific Culture	2	2	2	0	0	
81	298	Industrial Safety	2	2	2	0	0	30-102
			6	6	6			