



Philadelphia University
Faculty of Engineering
Renewable Energy Department

Advisement Plan for Renewable Energy Department

First Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
114101	Arabic Language Skills (1)	3	114099	111101	National Education	3	----
130101	English Language Skills (1)	3	130099	130102	English Language Skills (2)	3	130101
250101	Calculus (1)	3	-----	250102	Calculus (2)	3	250101
211104	Applied Physics	3	-----	----	Selective College Course	3	----
620131	Engineering Drawing	3	-----	630263	Programming Language	3	----
620171	Engineering Workshop (1)	1	-----	620172	Engineering Workshop (2)	1	620171
Total		16		Total		16	

Second Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
630262	Engineering Analysis (2)	3	250102	640253	Engineering Skills	3	130102
610211	Electric Circuits (1)	3	211104	611301	Engineering Statistics	3	250102
630211	Logic Circuits	3	630263	620212	Dynamics	3	620211
620211	Statics	3	250101	650242	Electronics	3	610211
111100	Military Science	3	----	620213	Solid Mechanics	3	620211
				610216	Electric Circuits Lab.	1	610211
Total			15	Total		16	

Third Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
610314	Electric Machines (1)	3	610211	620324	Thermodynamics (2)	3	620323
610332	Instrumentation and Measurement	3	650242	611311	Energy Conversion and efficiency	3	610314
620320	Fluid Mechanics	3	630262	620420	Heat transfer (1)	3	620323
620323	Thermodynamics (1)	3	250102		Selective University Course	3	----
----	Selective University Course	3	----	610316	Electric Machines Lab.	1	610314
611359	Engineering Project (1)	1	620172	610336	Instrumentation and Measurement Lab.	1	610332
				610429	Fluid Mechanics Lab.	1	620320
Total		16		Total		15	

Fourth Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
611312	Energy Economics and Management	3	611311	610414	Automatic Control	3	620172
611341	Introduction to Renewable Energy	3	611311	611411	Energy Legislations	3	6100312
620414	Mechanical Vibration	3	620212	611421	Solar Thermal Energy	3	611411
630414	Embedded Systems	3	630211	611422	Photovoltaic Energy System	3	650242
----	Selective University Course	3	----	----	Selective University Course	3	----
620427	Thermal Lab.	1	620420				
Total		16		Total		15	

Fourth Year			
Summer Semester			
Course No.	Course Title	Cr. H.	Prerequisite
611458	Engineering training	0	90 Cr. H.

Fifth Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
611511	Environmental Impact of energy	3	620323	610550	Engineering Entrepreneurship	3	640253+120 Cr.H.
611521	Solar Thermal Energy Technology	3	611531	611532	Design of Wind Energy Systems	3	6100531
611531	Wind Energy Systems	3	620414	610530	Power Electronics	3	650242
----	Selective University Course	3	----	630522	Embedded Systems	3	630211
----	Selective Department Course	3	----	----	Selective Department Course	3	----
611526	Solar Energy Lab.	1	611421	611536	Wind Energy Lab.	1	6100531
611459	Engineering Project (2)	1	120 Cr. H.	611559	Engineering Project (3)	2	611459
Total		17		Total		18	