



**Philadelphia University**  
**Faculty of Engineering**  
**Renewable Energy Department**

**Advisement Plan for Renewable Energy Department**

<b>First Year</b>							
<b>First Semester</b>				<b>Second Semester</b>			
<b>Course No.</b>	<b>Course Title</b>	<b>Cr. H.</b>	<b>Prerequisite</b>	<b>Course No.</b>	<b>Course Title</b>	<b>Cr. H.</b>	<b>Prerequisite</b>
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
<b>Total</b>		<b>16</b>		<b>Total</b>		<b>16</b>	

<b>Second Year</b>							
<b>First Semester</b>				<b>Second Semester</b>			
<b>Course No.</b>	<b>Course Title</b>	<b>Cr. H.</b>	<b>Prerequisite</b>	<b>Course No.</b>	<b>Course Title</b>	<b>Cr. H.</b>	<b>Prerequisite</b>
630262	Engineering Analysis (2)	3	250102	640253	Engineering Skills	3	130102
610211	Electric Circuits (1)	3	211104	611301	Engineering Statistics	3	650260
250202	Calculus (3)	3	250102	620212	Dynamics	3	620211
620211	Statics	3	+211101 250102	650242	Electronics	3	610216
111100	Military Science	3	----	620213	Solid Mechanics	3	620211
				610216	Electric Circuits Lab.	1	610211
<b>Total</b>			<b>15</b>	<b>Total</b>		<b>16</b>	

Third Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
611341	Introduction to renewable energy	3	211101	620427	Thermodynamics lab	3	620420
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
<b>Total</b>		<b>16</b>		<b>Total</b>		<b>15</b>	

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				
<b>Total</b>		<b>16</b>		<b>Total</b>		<b>15</b>	

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
<b>Total</b>		<b>17</b>		<b>Total</b>		<b>18</b>	