

Advisement Plan for Alternative Energy Technology Department

First Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
114103	Communication and Contact Skills (Arabic Language)	3	114099	111101	National Education	3	----
130107	Communication and Contact Skills (English Language 1)	3	130099	130108	Communication and Contact Skills (English Language 2)	3	130107
250101	Calculus (1)	3	-----	250102	Calculus (2)	3	250101
211101	General Physics (1)	3	211102	----	General Physics (2)	3	211101
212101	General Chemistry (1)	3	-----	111100	Military science	3	----
660131	Manual Engineering Drawing	1	-----	660132	Computer Engineering Drawing	1	660131
Total		16		Total		16	

Second Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
615211	Principles of Electric Circuits	2+1	211102	615353	Drawing and reading of engineering sketches	3	660132
640253	Engineering skills	3	130108	615212	Principles of Electronic Circuits	2+1	615211
615225	Mechanics (Statics + Dynamics)	3	211101 +250102	615313	Electrical Machines	2+1	615211
330103	Entrepreneurship and Innovation	1	-----	115102	Leadership and Social Responsibility	1	
620171	Engineering workshop (1)	1	660132	615226	Fluids and Thermal sciences	3	615225 +250102
610263	Programming Language	3	-----	615322	Strength of materials	2+1	615221
	University elective	3	-----				
Total			17	Total		16	

Third Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
615311	Instrumentation and Measurement Tools	2+1	615212	615312	Automatic control systems	2	615311
615314	Electrical power systems	2	615313	615331	Internal and external combustion	2+1	615323
615323	Heat transfer	3	615334	615334	Energy conversion and storage	3	615323
615351	Occupational safety	3	615353		University elective	3	
	University elective	3		615352	Material science	3	615322
615261	Fluids and Thermals lab	1	615226	615443	Wind energy	2	615313 +615226
170101	Life Skills	1					
Total		16		Total		17	

Third Year			
Summer Semester			
Course No.	Course Title	Cr. H.	Prerequisite
615480	Engineering training	0	90 Cr. H.

Fourth Year							
First Semester				Second Semester			
Course No.	Course Title	Cr. H.	Prerequisite	Course No.	Course Title	Cr. H.	Prerequisite
615432	Conventional energy sources	3	615334	615436	Nuclear Energy	3	615432
615333	Power plants	2	615314	615437	Oil Shale	3	615432
615434	Environmental pollution	2	615331	615449	Other renewable and alternative sources	3	615226 +615323
615344	Photovoltaics	3	615212	615462	Modeling and simulation of energy systems lab	1	615344
615343	Solar thermal energy	3	615323	615463	Alternative energy workshop (1)	1	6154343 +615344
615435	Energy economics and management	3	615334	610550	Engineering entrepreneurship	3	640253
615463	Alternative energy workshop (2)	1	615341	615482	Technological project (2)	2	615481
615481	Technological project (1)	1	90 Cr Hrs				
Total		18		Total		16	