



Department of New and Renewable Energies
educational subjects with units for 2021-2022

1st Stage

1 st course			2 nd course		
no	Subject	Units	no	Subject	Units
1	Analytical Chemistry1	4	1	Analytical Chemistry2	4
2	D.C circuit	4	2	A.C circuit	4
3	Geoscience 1	3	3	Geoscience 2	3
4	Mechanics	4	4	Optics	4
5	Mathematic	3	5	Mathematic	3
6	Mat lab	2	6	Mat lab 2	2
7	Human Rights	1	7	Democracy	1
8	Arabic	1	8	English	1
		22			22

2nd Stage

1 st course			2 nd course		
no	Subject	Units	no	Subject	Units
1	Analog Electronics	4	1	Organic Chemistry	4
2	Geothermal Energy	3	2	Material Science	4
3	Inorganic Chemistry	3	3	Digital Electronics	4
4	Mathematic	3	4	Static	3
5	Organic Chemistry	4	5	industrial chemistry	3
6	Thermodynamic	4	6	Metrology	3
				mat lab	2
		21			23



3rd Stage

1 st course			2 nd course		
no	Subject	Units	no	Subject	Units
1	Mathematical Modeling	3	1	Advance Solar Cell	3
2	Electronic Measurements and Control	4	2	Energy Economics	2
3	Energy Sources	3	3	Energy Storage	4
4	Environment Pollution	3	4	Petroleum Chemistry	4
5	Hydrology	2	5	Wind Energy	4
6	Solar Cell	4	6	Occupational safety	2
		19			17

4th Stage

1 st course			2 nd course		
no	Subject	Units	no	Subject	Units
1	Biomass Energy	3	1	Grid Connection Systems	3
2	Hydropower	3	2	Graduation Project	2
3	Nanomaterials	4	3	Large Solar Energy Systems	3
4	Nuclear Energy	3	4	Nanoenergy	4
5	Solar Irradiance	2	5	Photo Chemistry	3
6	Small Solar Energy Systems	4	6	Selective Course	2
			7	Professional Ethics	2
		19	8	health education	2
					21