



Department of New and Renewable Energies
educational subjects with units for 2020-2021

1st Stage

| 1 st course | | | 2 nd course | | |
|------------------------|----------------------|-------|------------------------|----------------------|-------|
| no | Subject | Units | no | Subject | Units |
| 1 | Analytical Chemistry | 4 | 1 | Analytical Chemistry | 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 |
| 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 | Matlab | 2 | 5 | industrial chemistry | 3 |
| 6 | Organic Chemistry | 4 | 6 | Metrology | 3 |
| 7 | Thermodynamic | 4 | | | |
| 8 | | 23 | | | 21 |



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 | | | |
| | | 19 | | | 15 |

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 | | | 7 | Professional Ethics | 2 |
| | | 19 | | | 19 |