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| **Course Name:** Renewable energy |  |

**Course Description**

The course provides an introduction toRenewable energy and its applications. Also provides the basic physics equations of Major course topics include )

**Course Intended Outcomes:**

At the end of the course, students are expected to learn: the different between the renewable energy and the *Alternative Energy* and all the type of renewable energy (*Advantages* and disadvantage) causes and nature of motion of the atmosphere on all scales. This course aims to build a fundamental set of physical principles and meteorology elements to generate solar and wind …..energy and their applied in local and global

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| **Week** | **Topes Covered** |  |  |
| 1 | Types of Energy |  |  |
| 2 | Energy resources are generally distinguished |  |  |
| 3 | Applications of renewable energies |  |  |
| 4 | Wind Energy  |  |  |
| 5 | Solar radiation, Atmosphere Influence on Solar Radiation |  |  |
| 6 | Solar Power  |  |  |
| 7 | Efficiency of solar cell, Exercises. |  |  |
| 8 | First Exam |  |  |
| 9 | Geothermal power |  |  |
| 10 | Dry steam, flash steam and binary cycle systems |  |  |
| 11 | Hydro Power |  |  |
| 12 | Tidal Power |  |  |
| 13 | Biomass Burning |  |  |
| 14 | Discussion and video |  |  |
| 15 | Second Exam |  |  |

**Course Outline:**