Technological Innovation on Renewable Energy Sources

By Damascus University

Website: http://desire-elearning.gju.edu.jo/login/index.php

Over the academic year, 20-30 Students

Learning Objectives

Upon successful completion of this course students should be able to:

- Understand and determine the different technological kinds of RES, their advances, their ecnomic and social impact and the potential.
- Identify the challenges and opportunities associated with any kind of innovation in the Renewable Energy Sector
- Provide strategies, tools and approaches to further improve the current status of innovation, find job in industrial renewable energy sector

Course outline

Upon successful completion of this course students should be able to:

- Introduction to technological Innovations of RES
- Chapter 2: Introduction to Photovoltaics
- Chapter 3: Solar electric-PV Cell types
- Chapter 4: Solar electric part-PV Cell TYPES 2
- Chapter 5: BIPV-BAPV systems
- Chapter 6: Grid connected-Stand Alone PV system
- Chapter 7: Intro to Solar Thermal technologies
- Chapter 8: Solar thermal technologies -Types
- Chapter 9: Solar thermal part-Solar Ponds
- Chapter 10: Solar thermal-Cost Analysis
- Chapter 11: Wind Energy-Introduction
- Chapter 12: Wind turbine types
- Chapter 13: Wind turbine types 2
- Chapter 14: Wind Farm Connections with the Grid Technologies
- Chapter 15: Basic Wind Energy calculations
- Chapter 16: Wind Energy Economics
- Chapter 17: Moon tide energy

- Chapter 18: Hydro power part1
- Chapter 19: Hydro power part2