

100-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	太陽能系統工程	Serial No. / ID	1602 / EEI2040
Dept.	電機工程學系	School System / Class	大學日間部2年1班
Lecturer	蔡渙良	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(四)789 / H202	Language	Chinese

Introduction
<p>This course is to provide a basic understanding for Solar Energy Engineering: Processes and Systems that includes all areas of solar energy engineering. The material is designed to provide appropriate background to proceed into areas such as photovoltaic (PV), solar thermal, solar-related systems. The subjects includes subjects such as energy related environmental problems, solar collectors, solar water heating, solar space heating and cooling, industrial process heat, solar desalination, PV system, solar thermal power systems. The modeling of solar systems uses the artificial intelligence systems in solar energy systems modeling and performance prediction.</p>

Outline
<p>1. Introduction, 2. Environmental characteristics, 3. Solar energy collectors, 4. Performance of solar collectors, 5. Solar water heating systems, 6. Solar space heating and cooling, 7. Industrial process heat, chemistry applications, and solar dryers, 8. Solar desalination systems, 9. Photovoltaic systems, 10. Solar thermal power systems, 11. Designing and modeling solar energy systems, 12. Solar economic analysis.</p>

Prerequisite
Physics