

Engineering Program

Specialization	Energy Technology
Course Number	020304262
Course Title	Wind energy technology workshop
Credit Hours	2
Theoretical Hours	0
Practical Hours	6

Brief Course Description:

Investigates the basics of aerodynamic characteristics of wind, dynamic behavior of wind turbine rotors and the generated wind energy.

Course Objectives:

To make the student to feel/understand the wind energy technology

□ Detailed Course Description:

Unit Number	Unit name	Unit Content	Time Needed
1.	Overview of Wind Turbine Components	▪	
2.	Guidelines for Wind Measurements	▪	
3	Wind Data Measurements and Analysis	▪	
4	Wind Turbine Testing & Measurement Techniques	▪	
5	Power Curve Measurements	▪	
6	Wind Turbine Test Station visit	▪	
7	Wind Turbine Research Station visit	▪	
8	Wind Farms visit	▪	

Evaluation Strategies:

		Percentage	Date
1. Exams	Med- Term Exam	20%	
	Reports	30%	
	Final Exam	50%	

Teaching Methodology:

Laboratory

Textbook:

References:

1. Wind power; renewable Energy for home, farm & Business; Paul Gipe, 2004 .
2. Renewable Energy ; Bent Sorensen , 2004
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