

ALTERNATIVE AND RENEWABLE ENERGY SYSTEMS,

B. Tech CURRICULUM NO. 865

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<u>First Semester</u>		<u>Term</u>	<u>Grade</u>
PHYS 121	College Physics I (GER2)	3	_____
PHYS 125	*Physics Lab I	1	_____
MATH 121	College Algebra (GER1)	4	_____
ENGL 102	Oral and Written Expression (GER 10)	3	_____
AREA 110	Introduction to Alternative Energy	3	_____
SOET 110	Computer Applications	<u>2</u>	_____
		16	
<u>Second Semester</u>			
PHYS 122	College Physics II	3	_____
PHYS 126	*Physics Lab II	1	_____
MATH 122	Basic Calculus	4	_____
_____	Literature/Humanities (GER 7)	3	_____
MECH 241	Fluid Mechanics	3	_____
ECON 103	Microeconomics (GER 3)	<u>3</u>	_____
		17	
<u>Third Semester</u>			
_____	GER Elective	3	_____
ELEC 261	Electricity	4	_____
ESCI 101	Intro to Environmental Science	3	_____
CHEM 150	College Chemistry I	4	_____
MECH 111	Computer-Aided Drafting	<u>3</u>	_____
		17	
<u>Fourth Semester</u>			
ELEC 141	Industrial Controls	2	_____
_____	GER Elective	3	_____
ELEC 215	Electrical Energy Conversion	4	_____
ENGS 102	Programming for Engineers	2	_____
MATH 141	Statistics	3	_____
MECH 225	Intro to Thermodynamics	3	_____
MECH 226	Thermo/Fluid Lab	<u>1</u>	_____
		18	
<u>Fifth Semester</u>			
_____	ARES Elective	3	_____
_____	GER Elective	3	_____
BSAD 340	Management Communications	3	_____
_____	AREA Elective	3	_____
AREA 320	Exp. & Meas. Lab I	<u>3</u>	_____
		15	
<u>Sixth Semester</u>			
_____	ARES Elective	3	_____
_____	GER Elective	3	_____
ECON 320	Environmental Economics	3	_____
_____	ARES Elective	3	_____
AREA 370	*Exp. & Meas. Lab II	<u>3</u>	_____
		15	
<u>Seventh Semester</u>			
_____	ARES Elective	3	_____
ACHP 401	Building Automation Systems	3	_____
AREA 420	Alt. Energy Design I	3	_____
_____	ARES Elective	3	_____
SOET 361	Project Management	<u>3</u>	_____
		15	
<u>Eighth Semester</u>			
_____	ARES Elective	3	_____
SOET 410	Engineering Technology Seminar	3	_____
CONS 350	Geographic Information Systems	3	_____
AREA 470	Alt. Energy Design II	3	_____
_____	GER Elective	<u>3</u>	_____
		15	

<p>Completion of Computer Competency requirement fulfilled by SOET 110.</p> <p>*Writing Intensive Course</p> <p><u>Graduation Requirements: Total Semester Credit Hours - 128</u></p> <p>STUDENT _____</p> <p>CERTIFIED FOR GRADUATION YES/NO</p> <p>SSN _____</p> <p>CERTIFIED BY _____</p> <p>CLASS OF _____</p> <p>G.P.A. 1____ 2____ 3____ 4____ 5____ 6____</p> <p>7____ 8____</p>

Alternative Energy Courses:

AREA 300*	Fuel Cells
AREA 303*	Wind Turbine
AREA 310*	Bio Fuels
AREA 320	Experimentation & Measurement Lab I
AREA 321*	Solar Energy Utilization
AREA 322*	Passive Solar Buildings
AREA 323*	Photovoltaic Systems
AREA 340*	Geothermal Energy
AREA 370	Experimentation & Measurement Lab II
AREA 400*	Automotive Fuel Cells
AREA 420	Alternative Energy Design I
AREA 470	Alternative Energy Design II

Professional Electives:

TMMA 310*	Energy Management
ACHP 306*	Energy Systems
MECH 323*	Heat Transfer
MECH 351*	Design of Experiments
ACHP 306*	Energy Systems Technology
PHYS 301*	Intro to Photonics

GER Elective Course must come from the following list:

GER 4	American History
GER 5	Western Civilization
GER 6	Other Worlds
GER 8	The Arts
GER 9	Foreign Language