Lake Land College

Renewable Energy

(AAS.RNRG) Associate in Applied Science Degree

Manufacturing

You might also like:

Workforce Ready

- Advanced Automation & Control Technology – page 21
- CNC Operator – page 41
- CNC Programmer – page 42
- Computer-Aided Design – page 48
- Computer-Aided Drafting – page 49
- Computer Integrated Manufacturing Technology – page 45
- Electronic Control Technology – page 64
- Electronic Systems Specialist – page 66
- Industrial Maintenance – page 79
- Instrumentation & Control Technology – page 80
- Mechanical-Electrical Technology – page 100
- Programmable Logic Controllers – page 118
- Renewable Energy – page 121
- Renewable Energy Management – page 123
- Sustainable Energy – page 125
- Welding Technology – page 129

This program prepares students for entry level positions into the field of renewable energy technicians and technical maintenance. Emphasis is placed on "green" technologies including electricity, physics, chemistry, wind, photovoltaics, solar thermal, bioenergy, energy efficiency, and smart grid technology. There is a critical skill shortage of trained workers knowledgeable with issues relating specifically to renewable energy and who can troubleshoot renewable energy systems.

Program requirements may change over time. Specific degree/graduation requirements are determined by the students' degree audit.

FIRST YEAR

First Semester		Hours
☐ EET 040	Basic Electronics	2.5
☐ EET 050	Electric Circuits I *	2.5
☐ HED 178	Responding to Emergencies	2
☐ TEC 050	Technical Math I	2
☐ TEC 052	Technical Math II *	2
☐ TEC 057	Introduction to Renewable Energy	3
☐ WND 040	Introduction to Wind Technology	3
	SEMESTER TOTALS	**17**

Second Semester		
☐ PHY 110	Concepts of Physics	4
☐ TEC 054	Technical Math III *	2
☐ TEC 056	Technical Math IV *	2
☐ ENG 120	Composition I *	3
☐ TEC 058	Alternative Energy	3
☐ EET 068	Photovoltaic Systems *	3
	SEMESTER TOTALS	**17**

SECOND YEAR

First Semester		
☐ SPE 111	Introduction to Speech Communications	3
☐ CHM 111	Concepts of Chemistry	4
☐ TEC 064	Bioenergy	3
☐ TEC 067	Smart Grid Introduction	3
☐ TEC 066	Resource Sustainability	3
	SEMESTER TOTALS	**16**

Second Semester		
☐ ECO 231	Principles of Economics I	3
☐ TEC 063	Electric Power Distribution	3
☐	Technical Electives	9
	SEMESTER TOTALS	**15**

SUGGESTED ELECTIVES

☐ EET 065	Home Technology Integration	3
☐ EET 070	Photovoltaic Technician	2
☐ WND 041	Wind Technology Maintenance I *	3
☐ WND 042	Tower Rescue and Competent Climber *	0.5
☐ TEC 059	Weatherization Technician/Installer	3
☐ TEC 061	Solar Energy	3
☐ TEC 062	Solar Thermal Applications	2
☐ TEC 064	Bioenergy	3
☐ TEC 065	Energy Efficiency	3
☐ TEC 067	Smart Grid Introduction	3
☐ TEC 068	Special Topics in Renewable Energy	0.5 – 5
☐ TEC 069	Site Assessment for Renewable Energy	2
☐ CAD 063	Wind Energy Design	3
☐ CAD 056	CAD I	2
☐ EET 069	Residential Wiring I *	3
☐ EET 072	Industrial Control I *	2
☐ IND 044	Fluid Power	3
☐ IND 062	Rigging and Hoisting	1
☐ MET 043	Motors and Generators *	2.5
☐ MTT 050	Introduction to Machining Procedures	3
☐ TEC 040	Blueprint Reading for Industry	2.5
☐ IND 042	Pipefitting Procedures	1
☐ WEL 056	Metal Cutting and Fabrication *	2
☐ EET 086	Programmable Logic Controllers I *	2
	TOTAL PROGRAM HOURS	**65**

* There are prerequisites, course requisites or minimum placement test scores for this course

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Phone: 217-234-5073