

RENEWABLE ENERGY
 Photovoltaic System Design and Installation
 One-year Certificate Program
 Catalog 2009-2010

The Photovoltaic System Design and Installation certificate is appropriate for students who already have a college degree, or who currently work in a related industry.

NOTE: A student must earn a grade of "C" or higher in all courses in order to obtain a certificate.

NOTE: The courses below require prior mathematical and computer software experience. MATH 115 and COSC 116 are listed as prerequisites. Transfer credits are acceptable for substitution.

Pre-requisite courses:				Credit Hours	Grade
___	COSC	116	Spreadsheets	3	___
___	MATH	115	Intermediate Algebra and Applications	<u>4</u>	___
				Total	7
Summer Session					
___	INST	140	Applied Basic DC Circuits	3	___
___	PHYS	111	Introduction to Physics	<u>4</u>	___
				Total	7
1st Semester					
___	INST	144	National Electrical Code	3	___
___	INST	145	Applied Basic AC Circuits	3	___
___	INST	175	Renewable Energy Instrumentation	3	___
___	RENG	242	Photovoltaic Installation and the NEC I	3	___
___	RENG	242L	Photovoltaic Installation and the NEC I Lab	2	___
___	RENG	250	Passive Solar Design and Analysis	<u>3</u>	___
				Total	17
2nd Semester					
___	INST	215	Renewable Energy AC and DC Machines	3	___
___	RENG	220	Photovoltaic Theory and System Design	4	___
___	RENG	243	Photovoltaic Installation and the NEC II	3	___
___	RENG	243L	Photovoltaic Installation and the NEC II Lab	2	___
___	RENG	260	Solar Thermal Design and Application	3	___
___	___	___	Renewable Energy Elective *	<u>3-4</u>	___
				Total	18-19

Total credit hours required for this certificate is 42-43

* Choose from: RENG 270 – Sustainable Development (3), RENG 299 – Special Topics (1-4), **OR** BIOL 230 – Environmental Conservation (4).