

RENEWABLE ENERGY
Photovoltaic System Design and Installation
One-year Certificate Program
Catalog 2010-2011

SCHOOL OF ENERGY • 800 South Hutton • Farmington, NM 87401 • 505.327.5705

The Photovoltaic System Design and Installation certificate is appropriate for students who are looking for a degree and for those wanting to pursue further education. San Juan College's Renewable Energy program offers a one-year certificate, which 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.
- 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.
- **Renewable Energy is a selective program.**

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).