

RENEWABLE ENERGY

One-Year Certificate in Photovoltaic System Design and Installation

The Photovoltaic System Design and Installation certificate is a concentration of San Juan College's Renewable Energy Program. It is appropriate for students who already have a college degree, or who currently work in a related industry. Students will gain the knowledge and skills necessary to design and safely install electrical energy systems based on current photovoltaic and power conditioning equipment.

NOTE: A student must earn a grade of "C" or higher in all RENG, INST, and PHYS courses in order to receive a degree or certificate.

NOTE: The courses below require prior mathematical and computer software experience. MATH 116 and COSC 125 are listed as prerequisites. Instructor permission and/or transfer credits are acceptable for substitution.

Summer Session

INST	140	Applied Basic - DC Circuits	3 credits
PHYS	111	Introduction to Physics	<u>4 credits</u>
Total			7 credits

1st Semester

INST	145	Applied Basic - AC Circuits	3 credits
INST	141	National Electrical Code I	3 credits
RENG	210	Renewable Energy Applications	4 credits
RENG	170	Instrumentation and Control	3 credits
RENG	240	PV Installation and the NEC I	<u>3 credits</u>
Total			16 credits

2nd Semester

INST	142	National Electrical Code II	3 credits
RENG	171	AC and DC Machines	3 credits
RENG	220	Photovoltaic Theory and System Design	4 credits
RENG	241	PV Installation and the NEC II	3 credits
		Renewable Energy Elective *	<u>3 credits</u>
Total			<u>16 credits</u>
Total Credits			39 credits

* Choose from: RENG 270, RENG 299, BIOL 230

Prerequisite requirements

MATH	116	Mathematics for High Tech Careers	3 credits
COSC	125	Business Microcomputer Applications	3 credits