

RENEWABLE ENERGY
Associate of Applied Science Degree
Photovoltaic System Design and Installation

The Photovoltaic System Design and Installation degree is a concentration of San Juan College's Renewable Energy program. Students will gain the knowledge and skills necessary to design and safely install electrical energy systems based on current photovoltaic and power conditioning equipment. Utilities and remote power users already recognize this fast-growing sector of the electrical power industry as a viable and established energy alternative. Employment opportunities exist in small renewable energy businesses, energy companies, equipment supply companies, oil and gas field service companies, utilities, and in international agencies assisting the development of Third World countries.

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.

1st Semester

PHYS	111	Introduction to Physics	4 credits
MATH	116	Mathematics for High Tech Careers	3 credits
COSC	125	Business Microcomputer Applications	3 credits
INST	140	Applied Basic Electronics - DC Circuits	3 credits
		Humanities/Social Science Elective	<u>3 credits</u>
Total			16 credits

2nd Semester

INST	145	Applied Basic Electronics - AC Circuits	3 credits
CHEM	110	Introductory Chemistry	4 credits
SPCH	111	Interpersonal Communication	3 credits
ENGL	118	Technical Composition	<u>3 credits</u>
Total			13 credits

3rd Semester

ENGL	218	Advanced Technical Composition	3 credits
INST	141	National Electrical Code I	3 credits
RENG	210	Renewable Energy Applications	4 credits
RENG	240	PV Installation and the NEC 1	3 credits
RENG	170	Instrumentation and Control	<u>3 credits</u>
Total			16 credits

4th 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 2	3 credits
		Renewable Energy Elective *	<u>3 credits</u>
Total			<u>16 credits</u>

Total Credits 61 credits

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