

RENEWABLE ENERGY
 PHOTOVOLTAIC SYSTEM DESIGN AND INSTALLATION
 ASSOCIATE OF APPLIED SCIENCE DEGREE
 Catalog 2008-2009

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.

				Credit Hours	Grade
1st Semester					
_____	COSC	116	Spreadsheets (preferred)* OR		_____
_____	COSC	125	Business Microcomputer Applications*	3	_____
_____	INST	140	Applied Basic DC Circuits	3	_____
_____	PHYS	111	Introduction to Physics	4	_____
_____	MATH	115	Intermediate Algebra and Applications OR	4	_____
_____	MATH	116	Mathematics for High Tech Careers	(3)	_____
_____	_____	_____	Humanities/Social Science Elective*	<u>3</u>	_____
				Total 16-17	
2nd Semester					
_____	CHEM	110	Introductory Chemistry	4	_____
_____	ENGL	118	Technical Composition	3	_____
_____	INST	145	Applied Basic AC Circuits	3	_____
_____	SPCH	110	Public Speaking OR		_____
_____	SPCH	120	Business and Professional Communication	<u>3</u>	_____
				Total 13	
3rd Semester					
_____	ENGL	218	Advanced Technical Composition	3	_____
_____	INST	141	National Electrical Code I	3	_____
_____	INST	175	Renewable Energy Instrumentation	3	_____
_____	RENG	210	Renewable Energy Applications	4	_____
_____	RENG	240	PV Installation and the NEC I	<u>5</u>	_____
				Total 18	
4th Semester					
_____	INST	142	National Electrical Code II	3	_____
_____	INST	215	Renewable Energy AC and DC Machines	3	_____
_____	RENG	220	PV Theory and System Design	4	_____
_____	RENG	241	PV Installation and the NEC II	5	_____
_____	_____	_____	Renewable Energy Elective**	<u>3</u>	_____
				Total 18	

Total credit hours required for this degree is 65-66

* See page 51, Humanities and Social Science Elective, 2008-2009 San Juan College catalog.

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