IN SCENIC FARMINGTON NEW MEXICO

SAN JUAN COLLEGE
Renewable Energy

PROGRAM DESCRIPTION

Currently there is a shortage of qualified workers to support the renewable energy industry, especially in photovoltaics. The renewable energy program at San Juan College gives the student a solid foundation in the science and in design/installation techniques required to work with renewable energy technologies. We offer a concentration in Photovoltaic System Design and Installation either as an Associate of Applied Science (AAS) degree or a One-Year Certificate. The certificate is designed for students who already have a college degree, or who currently work in a related industry. In either case, students gain the knowledge and skills necessary to design and safely install electrical energy systems based on current photovoltaic and power conditioning equipment. The curriculum includes hands-on electrical training both in a computer-based laboratory and outdoors doing projects and installations. Training in, and compliance, with the National Electrical Code is emphasized both in the classroom and during installation practice. Refer to the next page for FAQ's about our program or visit us online at www.sanjuancollege.edu/reng.

1 YR CERTIFICATE PROGRAM

Summer Session • 7 Credits
INST 140 - Applied Basic Electronics - DC Circuits
PHYS 111 - Introduction to Physics

1st Semester • 17 Credits
INST 141 - National Electrical Code I
INST 145 - Applied Basic Electronics - AC Circuits
INST 175 - Renewable Energy Instrumentation and Control
RENG 210 - Renewable Energy Applications
RENG 240 - PV Installation and the NEC I

2nd Semester • 17 Credits
INST 142 - National Electrical Code II
INST 215 - Renewable Energy AC and DC Machines
RENG 220 - Photovoltaic Theory and System Design
RENG 241 - PV Installation and the NEC II
Renewable Energy Elective -
RENG 270 - Sustainable Development **OR**
RENG 299 - Special Topics in Renewable Energy **OR**
BIOL 230 - Environmental Conservation

2 YR ASSOCIATE DEGREE PROGRAM

1st Semester • 16 Credits
Computer Science Elective
COSC 116 - Spreadsheeting (Preferred) **OR**
COSC 125 - Business Microcomputer Applications
INST 140 - Applied Basic Electronics - DC Circuits
PHYS 111 - Introduction to Physics
MATH 116 - Math for High Tech Careers
Humanities/Social Science Elective

2nd Semester • 13 Credits
CHEM 110 - Introductory Chemistry
ENGL 118 - Technical Composition
INST 145 - Applied Basic Electronics - AC Circuits
Speech Elective -
SPCH 111 - Interpersonal Communication **OR**
SPCH 120 - Business and Professional Communication

3rd Semester • 17 Credits
ENGL 218 - Advanced Technical Composition
INST 141 - National Electrical Code I
INST 175 - Renewable Energy Instrumentation and Control
RENG 210 - Renewable Energy Applications
RENG 240 - PV Installation and the NEC I

4th Semester • 17 Credits
INST 142 - National Electrical Code II
INST 215 - Renewable Energy AC and DC Machines
RENG 220 - Photovoltaic Theory and System Design
RENG 241 - PV Installation and the NEC II
Renewable Energy Elective -
RENG 270 - Sustainable Development **OR**
RENG 299 - Special Topics in Renewable Energy **OR**
BIOL 230 - Environmental Conservation

FREQUENTLY ASKED QUESTIONS

Q: ***Do you offer on-line courses in renewable energy?***
A: No. Learning about renewable-energy is best done in a traditional classroom & hands-on setting. This is especially true when it comes to learning how to physically build working circuits and photovoltaic systems, which is done in two of our courses: PV Installation and the NEC I & II.

Q: ***Do you offer any short courses in renewable energy?***
A: At present, we offer only semester long courses that are part of our One-year Certificate and two-year Associate of Applied Science (AAS) degree programs. This allows you to learn in more depth than would be possible in a short course format and allows you to be more successful in the industry.

Q: ***How does the one-year certificate program differ from the two-year associate of applied science degree?***
A: Both share the same core courses and renewable energy content. The One-year Certificate is intended for students that already have a degree or currently work in a related industry. The AAS degree has general education courses added onto the core content of the One-year Certificate. Both are equally valued by the industry.

Q: ***Do you offer courses in wind, micro-hydro, solar thermal or passive solar?***
A: We focus on photovoltaic system design and installation. Once you understand photovoltaic systems it isn't difficult to incorporate wind or micro-hydro. Our Renewable Energy Applications course covers passive solar building design, active solar heating, and briefly introduces wind, micro-hydro, and fuel cell technology..

Q: ***Do you need to have any prior hands-on experience, such as in the building trades or electrical experience?***
A: Prior knowledge or experience in electricity, wiring, or construction isn't required. We teach those skills as part of the PV Installation and the NEC I & II courses.

Q: ***Do you have a job placement service for graduates?***
A: Although the college doesn't have a formal placement service we do assist graduates and alumni of the program in obtaining work. Since our program is highly valued in the industry we are contacted by employers looking for graduates. We pass these job prospects on to both past and present students. Also a few employers visit the campus each year.

Q: ***What kind of work can I expect to do after completing your program?***
A: We prepare you for working successfully in the renewable energy industry. Most graduates go to work as photovoltaic installers, system designers, or in technical sales and support roles. Some have started their own businesses, or have partnered into existing businesses.

Q: ***What does it cost to attend your program? Are there any additional fees?***
A: We have one of the lowest tuition costs of any community college in the country. The tuition is $480 per semester for out-of-state students and $360 per semester for in-state students. There are no fees for the program beyond the tuition other than the cost of books that you need to buy for the courses.

Q: ***When can I start?***
A: If you are attending the One-Year Certificate you can start only in the Summer semester (end of May). If you transfer in the Summer courses of Applied Basic Electronics - DC and Introduction to Physics, then you can start in the Fall semester (middle of August). If you are pursuing the AAS (two-year) degree, you can start at the beginning of any semester, but preferably in the Fall semester.

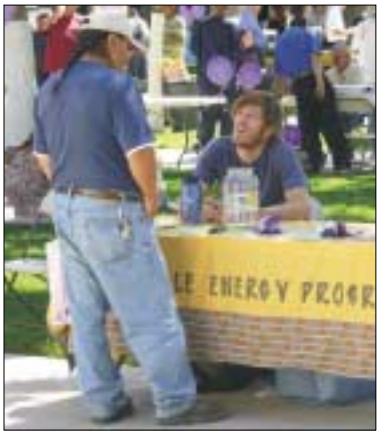
CONTACT INFO

For additional information about the Renewable Energy Program contact:

Tom Munson, PE
Renewable Energy Program Coordinator
505-566-3003
800-241-6327 Ext. 3003
munsont@sanjuancollege.edu

R.E.S.P.E.C.T

R.E.S.P.E.C.T. stands for Renewable Energy & Sustainable Practices Education & Consulting Team. It's a great organization that presents many activities to promote renewable energy and sustainable practices. Examples include an annual Earth Day celebration, free movie and popcorn events featuring timely renewable energy subjects, and education seminars.



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