

RENEWABLE ENERGY SYSTEM SPECIALIST

Program Description

This program is designed to meet the AAS requirement for individuals who wish to enter the job market with the skills to install, maintain, and troubleshoot photovoltaic systems, wind turbines, solar thermal systems, methane energy production systems, and biofuel manufacturing equipment. People in this position need a strong electro-mechanical background and therefore will receive such training. Renewable Energy System Technicians need to be able to analyze a site, install equipment, and have working knowledge of electrical systems, pumps, and motors related to renewable energies.

A Renewable Energy Systems Technician employed in the renewable energy field might:

- Assess sites for photovoltaic, solar thermal, and wind energy installations and analyze the feasibility of using such systems at certain locations.
- Work with customers to plan and design renewable energy systems.
- Install systems in a wide variety of settings.
- Work with concrete construction contractors for installing wind turbines and freestanding photovoltaic systems.
- Work with inverters and batteries, as well as grid-inter tie systems.
- Install pumps, storage tanks, and plumbing for solar thermal systems and for biofuels equipment.
- Troubleshoot photovoltaic, solar thermal, and wind energy systems and be able to repair problematic systems.
- Install, maintain, and troubleshoot ethanol and biodiesel manufacturing equipment, and methane energy production systems.

Award Options

Renewable Energy System Specialist Associates of Applied Science Degree

Related Occupational Titles

Electrician, Renewable Energy Technician, Solar Systems Installer, Ethanol Manufacturing Maintenance Technician, Biodiesel Manufacturing Maintenance Technician, Windsmith

Job Outlook

Renewable energies are a rapidly growing field locally, regionally, nationally, and internationally. Considering the training that students will receive in this program, students will have a variety of potential employment options following graduation. With North American Board Certified Energy Practitioner (NABCEP) certification, students would be more marketable. Starting salary is approximately \$25,000 to \$35,000 annually.

For details, please visit this link <http://www.bls.gov/oco/>



THE *Community's College*



**SCOTT COMMUNITY
COLLEGE**

Program Faculty

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RENEWABLE ENERGY SYSTEM SPECIALIST

Renewable Energy System Specialist AAS Degree

		Credits
TERM 1		
ELE:101	Industrial Safety	1.00
ELE:216	DC Circuit Analysis	3.00
ELE:217	AC Circuit Analysis	3.00
IND:134	Print Reading	2.00
MAT:705	Industrial Math and Measurement I	2.00
MAT:706	Industrial Math and Measurement II	2.00
		13.00

TERM 2		
CSC:110	Introduction to Computers [3.00 credits] OR	3.00 - 4.00
CSC:112	Fundamental Computers for Technicians I/A [2.00 credits] AND	
CSC:113	Fundamental Computers for Technicians I/B [2.00 credits]	
ELE:225	Electrical Motor Control & Power Distribution	3.00
ELE:309	Digital Circuits	3.00
ELT:312	Solid State Devices & Systems	3.00
PHY:185	Conceptual Physics Fundamentals I	2.00
		14.00 - 15.00

TERM 3 – SUMMER		
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ENG:105	Composition I OR	3.00
ENG:107	Composition I: Technical Writing	
PHY:186	Conceptual Physics Fundamentals II	2.00
		8.00

TERM 4		
EGT:117	Fluid Power Fundamentals	2.00
ELT:123	Programmable Logic Controllers	3.00
IND:136	Process Control I	3.00
SER:100	Introduction to Renewable Energy Application	2.00
SER:102	History of Power Generation	3.00
SER:103	Renewable Energy Site Assessment	3.00
		16.00

TERM 5		
SER:104	Residential Renewable Energy Power Systems	3.00
SER:105	Residential RE Mounting & Tower Systems	3.00
SER:108	Inverters, Chargers and Storage Devices	3.00
SER:109	Monitoring and Maintenance	3.00
SER:306	Sustainable Energy Capstone	3.00
		15.00

Renewable Energy System Specialist AAS Total 66.00 – 67.00

*HUMANITIES ELECTIVE

(Select one course from the following)		Credits
ECN:120	Principles of Macroeconomics	3.00
ECN:130	Principles of Microeconomics	3.00
HUM:105	Working in America	3.00
HUM:110	Changes and Choices	3.00
POL:111	American National Government	3.00
PSY:110	Introduction to Psychology	3.00
SOC:110	Introduction to Sociology	3.00

Clinton Community College

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Muscatine Community College

152 Colorado Street,
Muscatine, IA 52761
563-288-6001
1-800-351-4669

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Admissions Officer

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Scott Community College

500 Belmont Road,
Bettendorf, IA 52722
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1-800-895-0811

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If you have questions or complaints related to compliance with this policy, please contact Debora J. Sullivan, Equal Employment Opportunity Officer/Equity Coordinator, Eastern Iowa Community College District, 101 West Third Street, Davenport, Iowa 52801, 563-336-3487, djsullivan@eicc.edu or the Director of the Office for Civil Rights, U.S. Department of Education, Citigroup Center, 500 West Madison Street, Suite 1475, Chicago, Illinois 60661-7204, phone number 312-730-1560, fax 312-730-1576, OCR. Chicago@ed.gov.