

# 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

## Non-discrimination Statement / Equal Educational Opportunities

It is the policy of Eastern Iowa Community College District not to discriminate in its programs, activities, or employment on the basis of race, color, national origin, sex, disability, age, sexual orientation, gender identity, creed, religion, and actual or potential family, parental or marital status, as required by the Iowa Code §§216.6 and 216.9, Titles VI and VII of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d and 2000e), the Equal Pay Act of 1973 (29 U.S.C. § 206, et seq.), Title IX (Educational Amendments, 20 U.S.C. §§ 1681-1688), Section 504 (Rehabilitation Act of 1973, 29 U.S.C. § 794), and Title II of the Americans with Disabilities Act (42 U.S.C. § 12101, et seq.).

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](mailto:djsullivan@eicc.edu) or the Director of the Office for Civil Rights U.S. Department of Education, John C. Kluczynski Federal Building, 230 S. Dearborn Street, 37th Floor, Chicago, IL 60604-7204, Telephone: (312) 730-1560 Facsimile: (312) 730-1576, TDD (800) 877-8339 Email: [OCR.Chicago@ed.gov](mailto:OCR.Chicago@ed.gov).



**THE** *Community's College*



**CLINTON, MUSCATINE  
AND SCOTT COMMUNITY  
COLLEGES**

### Program Faculty

Craig Nelson

563-441-4392

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[www.eicc.edu](http://www.eicc.edu)

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### Our Web Links:

[www.eicc.edu/apply](http://www.eicc.edu/apply)

[www.eicc.edu/visit](http://www.eicc.edu/visit)

[www.eicc.edu/programs](http://www.eicc.edu/programs)

[www.eicc.edu/daretocompare](http://www.eicc.edu/daretocompare)

[www.eicc.edu/financialaid](http://www.eicc.edu/financialaid)

[www.eicc.edu/catalog](http://www.eicc.edu/catalog)

Tuition and fees subject to change by the EICC Board of Trustees.

# RENEWABLE ENERGY SYSTEM SPECIALIST

## Renewable Energy System Specialist, AAS Degree

		Credits
<b>TERM 1</b>		
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

<b>TERM 2</b>		
CSC-110	Introduction to Computers [3.00 credits] <b>OR</b>	3.00
CSC-112	Fundamental Computers for Technicians I/A [2.00 credits] <b>AND</b>	
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

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

<b>TERM 4</b>		
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

<b>TERM 5</b>		
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**

### \*HUMANITIES ELECTIVE

		Credits
(Select one course from the following)		
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

1000 Lincoln Boulevard,  
Clinton, IA 52732  
563-244-7001  
1-800-638-0559

[www.facebook.com/clintoncommunitycollegeia](http://www.facebook.com/clintoncommunitycollegeia)

#### Admissions Officer

**Heather Evans**

[hlevans@eicc.edu](mailto:hlevans@eicc.edu)  
563-244-7007  
FAX 563-244-7107

### Muscatine Community College

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

[www.facebook.com/muscatinecommunitycollege](http://www.facebook.com/muscatinecommunitycollege)

#### Admissions Officer

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### Scott Community College

500 Belmont Road,  
Bettendorf, IA 52722  
563-441-4001  
1-800-895-0811

[www.facebook.com/scottcommunitycollege](http://www.facebook.com/scottcommunitycollege)

#### Admissions Officer

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