

Renewable energy sources are the cutting edge of America's quest for a diversified and secure energy future. Environmentally friendly and regenerating, renewable energy sources have always been the right choice, but with rising fuel costs, renewable energy sources are no longer a choice but a requirement. Careers in renewable energy will be increasing dramatically nationally as well as locally. There is an increasing demand for skilled workers in the local area for solar installers, home energy auditors and many other areas.

For information:

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Degrees: Associate of Applied Science

Renewable Energy Technology

Solar Thermal Specialty

Solar Photovoltaic Specialty

Solar Photovoltaic Business Owner Specialty

Solar Thermal Business Owner Specialty

Certificates:

Grid Tie Entry Level

Advanced Photovoltaic Installation

Solar Photovoltaic Designer

Solar Thermal Entry Level

Solar Thermal Installer

Solar Thermal Designer

Post EIC Degree Solar Photovoltaic

Post HVA Degree Solar Thermal

Energy Auditing

Energy Efficiency Weatherization

AAS Degree

Renewable Energy Technology

To earn this degree select a Solar Thermal or Solar Photovoltaic Specialty. Degree seeking students will complete the general education and core requirements listed below.

The AAS degree in Renewable Energy may also be customized to meet the needs of the entrepreneur operating a solar business. A renewable energy advisor will work with you to identify courses within the area which complement your career goals.

Information: Larry Snyder 303 914 6306,

larry.snyder@rrcc.edu, www.rrcc.edu/renewable

AAS Solar Thermal Specialty

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
ENY 102 Building Energy Audit Tech	3
OSH 127 10 hour OSHA	1

HVA 105 Basic Electricity	4
CAR 123 Framing	1
CAR 125 Roofing Materials	1
ENY 120 Solar Thermal Install	4
ENY 175 SpTp: Thermal Install II Controls	4
ENY 105 Applied Information Technology for Energy	4
PLU 101 Piping Skills	4
ENY 132 NABCEP Entry Level Prep Class	1
ENY 231 Solar Contracting	4
ENY 240 Estimating for Energy	4

Internship or elective:

8

Seek advisor approval for elective courses in CON, BUS, ACT, CIS, ENY, MAR, MAN, COM, HVA, EIC, PLU

General Education Courses:

ENG 131 Technical Writing	3
MAT 107 Career Math	3
PHY 107 Physics	4
PHI 218 Philosophy of the Environment	3

Choose three credits from the following areas:

ART, FRE, GER, HUM, LIT, MUS, PHI, SPA, AST, BIO, CHE, GEY, PHY, ANT, ECO, GEO, HIS, POS, PSY, SOC, & CIS 118

Total Credits 62

AAS Solar Photovoltaic Specialty

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
ENY 102 Building Energy Audit Tech	3
OSH 127 10 hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
CAR 123 Roof Framing	1
CAR 125 Roofing Materials and Methods	1
ENY 130 Photovoltaic Grid Tie	2
EIC 110 Electrical Installations I	4
EIC 130 National Electrical Code I	4
ENY 105 Applied Information Technology for Energy	4
ENY 131 Advanced Solar PV	2
ENY 132 NABCEP Entry Level Prep Class	1
ENY 230 PV Maintenance and Troubleshoot	2
ENY 231 Solar Contracting	4
ENY 240 Estimating for Energy	4

Internship or elective:

4

Seek advisor approval for elective courses in CON, BUS, ACT, CIS, ENY, MAR, MAN, COM, HVA, EIC, PLU

General Education Courses:

ENG 131 Technical Writing	3
MAT 107 Career Math	3
PHY 107 Energy, Science and Technology	4
PHI 218 Philosophy of the Environment	3

Choose three credits from the following areas:

ART, FRE, GER, HUM, LIT, MUS, PHI, SPA, AST, BIO, CHE, GEY, PHY, ANT, ECO, GEO, HIS, POS, PSY, SOC, & CIS 118

Total Credits 60

AAS Solar Photovoltaic Business Owner Specialty

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
ENY 102 Building Energy Audit Tech	3
OSH 127 10 hour OSHA	1
HVA 105 Basic Electricity	4
ENY 130 Solar Photovoltaics Grid-tie	2
ENY 105 Applied Information Technology for Energy	4
ENY 231 Solar Contracting	4
ENY 240 Estimating for Energy	4
Advisor approved electives	16
Internship or elective	4

General Education Courses:

ENG 131 Technical Writing	3
MAT 107 Career Math	3
PHY 107 Physics	4
PHI 218 Philosophy of the Environment	3

Choose three credits from the following areas:

ART, FRE, GER, HUM, LIT, MUS, PHI, SPA, AST, BIO, CHE, GEY, PHY, ANT, ECO, GEO, HIS, POS, PSY, SOC, & CIS 118

Total Credits 61

*Elective list for owner, a mix of advisor approved classes within CON, BUS, MAR, ACT, MAN, COM, CIS, PSY

AAS Solar Thermal Business Owner Specialty

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
ENY 102 Building Energy Audit Tech	3
OSH 127 10 hour Construction Industry Standards	1
HVA 105 Basic Electricity	4
ENY 105 Applied Information Technology for Energy	4
ENY 120 Thermal Install	4
CON 105 Construction Tech	4
ENY 231 Solar Contracting	4
ENY 240 Estimating for Energy	4

Advisor approved electives 15

Internship or elective: 4

Elective list for owner, a mix of advisor approved classes within CON, BUS, ACT, MAR, MAN, COM, CIS, PSY

General Education Courses:

ENG 131 Technical Writing	3
MAT 107 Career Math	3
PHY 107 Physics	4
PHI 118 Philosophy of the Environment	3

Choose three credits from the following areas:

ART, FRE, GER, HUM, LIT, MUS, PHI, SPA, AST, BIO, CHE, GEY, PHY, ANT, ECO, GEO, HIS, POS, PSY, SOC, & CIS 118

Total Credits 62

Certificate

Grid Tie Entry Level

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
EIC 110 Electrical Installations I	4
CAR 123 Roof Framing	1
CAR 125 Roofing Materials and Methods	1
ENY 130 Solar Photovoltaics Grid-tie	2
EIC 130 National Electrical Code I	4
Total Credits	20

Certificate

Advanced Photovoltaic Installation

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
EIC 110 Electrical Installations I	4
CAR 123 Roof Framing	1
CAR 125 Roofing Materials and Methods	1
ENY 130 Solar Photovoltaics Grid-tie	2
EIC 130 National Electrical Code I	4
ENY 131 Advanced Solar PV	2
ENY 132 NABCEP Entry Level Prep Class	1
ENY 230 PV Maintenance and Troubleshoot	2
ENY 231 Solar Contracting	4
Total credits	29

Certificate

Solar Photovoltaic Designer

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
ENY 102 Building Energy Audit Tech	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
ENY 130 Solar Photovoltaics Grid-tie	2
ENY 105 Applied Information Technology for Energy	4
ENY 131 Advanced Solar PV	2
ENY 231 Solar Contracting	4
ENY 240 Estimating for Energy	4
ENG 131 Technical Writing	3
Total Credits	30

Certificate

Solar Thermal Entry Level

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
CAR 123 Roof Framing	1
CAR 125 Roofing Materials and Methods	1
ENY 120 Solar Thermal System Install I	4
PLU 101 Piping skills	4
Total credits	18

Certificate

Solar Thermal Installer

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
CAR 123 Roof Framing	1
CAR 125 Roofing Materials and Methods	1
ENY 120 Solar Thermal System Install I	4
ENY 175 SP TP: Thermal Install II Controls	4
PLU 101 Piping skills	4
ENY 231 Solar Contracting	4
Total Credits	26

Certificate

Solar Thermal Designer

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
ENY 102 Building Energy Audit Tech	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
ENY 120 Solar Thermal System Install I	4
ENY 105 Applied Information Technology for Energy	4
ENY 231 Solar Contracting	4
ENY 240 Estimating for Energy	4
ENG 131 Technical Writing	3
Total Credits	30

Certificate

Post EIC Degree Solar Photovoltaic

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
CAR 123 Roof Framing	1
CAR 125 Roofing Materials and Methods	1
ENY 130 Solar Photovoltaics Grid-tie	2
ENY 131 Advanced Solar PV	2
ENY 230 PV Maintenance and Troubleshoot	2
ENY 280 Internship or Advisor Approved Electives	4
Total Credits	20

Certificate

Post HVA Degree Solar Thermal

Required Courses	Credits
ENY 101 Intro to Energy Technologies	3
OSH 127 10 Hour Construction Industry Standards	1
HVA 105 Electricity for HVAC/R	4
CAR 123 Roof Framing	1
CAR 125 Roofing Materials and Methods	1
ENY 120 Solar Thermal System Install I	4
ENY 175 SP TP: Thermal Install II Controls	4
ENY 280 Internship or Advisor Approved Electives	4
Total Credits	22

Certificate

Energy Auditing

ENY 101 Intro to Energy Technologies	3
OSH 127 10 Hour Construction Industry Standards	1
ENY 102 Building Energy Audit Tech	3
ENY 275 SP TP: Energy Auditing Field Course	3
ENY 176 SP TP: Commercial Building Energy Audit	4
ENY 280 Internship	3
Advisor Approved Electives:	6
Seek advisor approval for elective courses in SOC, PSY, PHI, AEC. Students completing ENY 102 and ENY 275 will have the option to sit for the BPI Building Analyst exam. Please note exam costs are in addition to course tuition and fees.	
Total Credits	23

Certificate

Energy Efficiency Weatherization

ENY 102 Building Energy Audit Tech	3
OSH 127 10 Hour Construction Industry Standards	1
ENY 153 Renewable Energy Construction	4
ENY 175 Insulation and Air Sealing	1
CAR 130 Windows and Exterior Doors	1
CAR 135 Thermal/Moisture Methods/Mat	1
CAR 102 Hand and Power Tools	1
CAR 175 EPA Certified Lead Renovator	0.5
HEW 113 First Aid and CPR for Adults	0.5
Total Credits	13