

ENERGY TECHNOLOGY (ENRG)

IvyTech.edu/energy-technology



OVERVIEW

Energy Technology students participate in a wide variety of hands-on learning activities including; designing, installing, and maintaining wind turbines, solar systems, battery systems, solar thermal systems, renewable energy HVAC systems, electrical infrastructure, raceways, generation systems, energy monitoring, home automation, energy audits, etc. Students will learn and apply their training at the Craig Porter Energy Center Laboratory, the most versatile and sophisticated renewable energy training facility in Indiana.

ENERGY TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE

(60 credit hours = 4 semesters)

The Associate of Applied Science degree program prepares students for careers, career changes and career advancement. Students who enroll in the Energy Technology Associates of Applied Science degree program must complete one of the following Technical Certificates prior to earning the AAS:

ENERGY TECHNOLOGY

TECHNICAL CERTIFICATES

Renewable Energy Tech. (34 credit hours = 1-2 semesters)

Industrial Wind Energy Tech. (34 credit hours = 2 semesters)

Electric Line Technology (34 credit hours= 1-22 semesters)

PATHWAY EXAMPLE:

Energy Technology Students generally choose to earn the Renewable Energy TC, the Industrial Wind Energy TC, and the Energy Technology AAS, which includes several certifications. This pathway can be finished in as little as 3 semesters or 15-20 classes.

CERTIFICATIONS:



STARTING SALARIES:

\$40,000-\$60,000

ENERGY AUDITOR: \$40,000 or \$20 dollars an hour. *

SOLAR TECHNICIANS: \$40,000 or \$20 dollars an hour. *

HVAC TECHNICIANS: \$47,080 or \$23 dollars an hour.*

INDUSTRIAL MAINTENANCE: \$50,440 or \$24 dollars an hour. *

WIND TURBINE TECHNICIAN: \$53,880 or \$26 dollars an hour.*

GREEN ELECTRICIAN: \$54,110 or \$26 dollars an hour.*

ELECTRIC LINEMAN: \$64,190 or \$31 dollars an hour.*

PROJECT ENGINEERS/MANAGERS: \$67,280 or \$32 dollars an hour.*

POWER PLANT/SYSTEM OPERATOR: \$84,440 or \$39 dollars an hour.*

ENERGY MANAGEMENT ANALYST: \$82,450 or \$40 dollars an hour.*

*Data provided by the Bureau of Labor Statics

The Energy Technology program provides high skilled training for the following careers: Industrial Wind Turbine Technician, Solar Photovoltaic Technician, Solar Thermal Technician, Industrial Electrician, Green Electrician, Construction Electrician, Electric Lineman, Substation Technician, Project Engineer, Project Manager, Electrical Engineer, Industrial Maintenance Technician, Energy Auditor, Energy Management Analyst, Grid System Operator, Power Plant Operations/Management, Wind Farm Operations/Management, etc. The opportunities are growing and endless.

EARN MORE AND IMPROVE YOUR SKILLS

If you want a good-paying job, you need to invest in your education. With an associate degree from Ivy Tech Community College, you'll earn an average of \$8,000 more each year than you would with just a high school diploma. Over the course of your career, this has a tremendous impact on your earning power—a difference of up to \$400,000. As a result, you'll have the chance to explore opportunities that are well worth the time you'll spend in class. Get started today. Call 888-IVY-LINE or visit ivytech.edu/new-students.

Ready to get started?

APPLY NOW FOR FREE

at IvyTech.edu/applynow

IF YOU'VE GOT QUESTIONS, WE'VE GOT ANSWERS.
FOR MORE INFORMATION:

School of Advanced Manufacturing, Engineering and Applied Sciences
765.269.5229



Ivy Tech Community College-Lafayette

Energy Technology

2018-2019

THE FOLLOWING SUGGESTED SEQUENCE INCLUDES ALL COURSE REQUIREMENTS FOR THIS DEGREE. YOU MUST CONSULT WITH AN ACADEMIC ADVISOR TO DETERMINE WHICH ELECTIVES BEST MEET YOUR CAREER GOALS.

ASSOCIATE OF APPLIED SCIENCE in Energy Technology

General Education Core		Credit Hours
Course #	Title	
COMM 104	Workplace Communication	3
ENGL 111	English Composition	3
MATH 122	Applied Technical Mathematics	1
XXXX XXX	Humanities/Social Behavior Sciences Elective	3
Select 1 of the following courses:		
CHEM 111	Chemistry I	4
SCIN 100	Earth Science	4
PHYS 100	Introductory Physics	4
SCIN 101	Science of Traditional and Alternative Energy	4
Other Institutional Requirements		
^ HVAC 279	Green Awareness Capstone	1
IVYT 113	Student Success in Technology	1
Professional/Technical Core		
INDT 203	Machine Maintenance and Installation	3
XXXX XXX	Energy Technology Statewide Elective	12
TC Specific Technical Courses		
Complete one of the following Technical Certificates:		27
XXXX XXX	Natural Gas Technology Technical Certificate	
XXXX XXX	Power Plant Technology Technical Certificate	
XXXX XXX	Electric Line Technology Technical Certificate	
XXXX XXX	Wind Technology Technical Certificate	
XXXX XXX	Renewable Energy Technology Technical Certificate	

Total Credit Hours: 60

TECHNICAL CERTIFICATE in Industrial Wind Technology

General Education Core		Credit Hours
Course #	Title	
MATH 122	Applied Technical Mathematics	3
Other Institutional Requirements		
IVYT 113	Student Success in Technology	1
Professional/Technical Core		
INDT 113	Basic Electricity	3
SUST 101	Wind Power	3
ENRG 100	Energy Industries Fundamentals	3
XXXX XXX	Statewide Elective	3
SUST 111	Wind Mechanical I	3
INDT 125	Industrial Wiring Principles	3
ENRG 112	Electrical Power Distribution	3
INDT 103	Motor and Motor Controls	3
SUST 211	Wind Technician II	3
Select 1 of the following courses:		
XXXX XXX	Statewide Elective	3
OR		
COMM 104	Workplace Communication	3

Total Credit Hours: 34

TECHNICAL CERTIFICATE in Electric Line Technology

General Education Core		Credit Hours
Course #	Title	
MATH 122	Applied Technical Mathematics	3
Other Institutional Requirements		
IVYT 113	Student Success in Technology	1
Professional/Technical Core		
INDT 113	Basic Electricity	3
ENRG 102	Climbing	3
ENRG 100	Energy Industries Fundamentals	3
INDT 103	Motors and Motor Controls	3
ENRG 107	Transmission and Distribution of Electric Power	3
INDT 104	Fluid Power Basics	3
ENRG 103	Electrical Essentials for Power Line Workers	3
XXXX XXX	Statewide Elective	3
Select 1 of the following courses:		
XXXX XXX	Statewide Elective	3
OR		
COMM 104	Workplace Communication	3

Total Credit Hours: 34

TECHNICAL CERTIFICATE in Renewable Energy Technology

General Education Core		Credit Hours
Course #	Title	
MATH 122	Applied Technical Mathematics	3
Other Institutional Requirements		
IVYT 113	Student Success in Technology	1
Professional/Technical Core		
XXXX XXX	Statewide Elective	3
ENRG 100	Energy Industries Fundamentals	3
ENRG 111	Smart Grid Home Integration	3
Select 1 of the following courses:		
ENRG 107	Transmission and Distribution of Electric Power	3
OR		
ENRG 112	Electrical Power Distribution	3
ENRG 202	Photovoltaic System Installation	3
INDT 113	Basic Electricity	3
INDT 125	Industrial Wiring Principles	3
SUST 101	Wind Power	3
ISUST 102	Intro. to Solar PV, Solar Thermal, and Geothermal Technology	3
Select 1 of the following courses:		
XXXX XXX	Statewide Elective	3
OR		
COMM 104	Workplace Communication	3

Total Credit Hours: 34

FOR MORE INFORMATION:

John Roudebush

Program Chair

Office: 765-269-5472

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Symbol Key
^ Capstone Course

Our online application is FREE.
Why wait? Apply today! IvyTech.edu/applynow

