

DIPLOMA IN WIND ENERGY TECHNOLOGY (DWET)

(Please see the *Undergraduate Program Offerings by Campus* chart in the catalog or on the Herzing Website at www.herzing.edu/career-programs/downloads for a list of Herzing campuses offering this program.)

PROGRAM DESCRIPTION

This program will develop a strong foundation in the knowledge and skills needed by the graduates to qualify them for entry into an exciting, dynamic career as a wind energy technician. The program covers industrial safety, applied wind energy physics, energy production from wind, and wind energy maintenance. The program also covers DC and AC electricity, motors and generators, fluid power, programmable logic controllers, and basic mechanics.

PROGRAM OUTCOMES

Upon completion of this program, the student should be able to:

1. Describe the operation, application, and proper use of test equipment used in electrical technology.
2. Demonstrate the ability to use principles of electrical technology to test, analyze, and troubleshoot electrical and electronic circuits.
3. Explain the physics of wind energy production and how a wind turbine creates electrical energy from wind.
4. Explain the various types of physical loads and structural stress on wind energy structures.
5. Categorize and describe potential safety hazards working on wind turbines and in the wind energy business.
6. Describe the operation, application, and proper use of safety equipment used in electrical technology and wind energy production.
7. Describe the principles and operation of fluid power devices used in wind energy production.
8. Describe the components and operation of programmable logic controllers used in wind energy production.
9. Explain the importance of and procedures for maintenance and inspection of wind turbine components, both internal and external.

SPECIAL ADMISSION REQUIREMENTS

Please refer to the "Additional Admission Acknowledgements for Wind Energy Technology" policy in the Admissions Information section of this catalog for Wind Energy Technology program admission requirements.

POTENTIAL OCCUPATIONAL TITLES

Potential occupational titles for this program include, but are not limited to, wind turbine technician.

PROGRAM CONTENT

A minimum of 38.00 semester credit hours is required for graduation.

REQUIRED COURSES

36.00 semester credit hours are required.

Course Number	Course Name	Prerequisites/Corequisites	Semester Credit Hours
AE 100	Introduction to Alternative Energy	None	3.00
AE 120	Introduction to Wind Energy	None	3.00
AE 200	Wind Turbine Fundamentals	AE 120	3.00
AE 220	Wind Turbine Maintenance	AE 200	3.00
AE 395	Wind Energy Lab/Boot Camp	AE 220	3.00
EE 111	Electricity and Test Equipment	None	3.00
EE 121	DC Fundamentals	EE 111	3.00
EE 131	AC Fundamentals	EE 121	3.00
IN 130	Hydraulic and Pneumatic Systems	None	3.00

Course Number	Course Name	Prerequisites/Corequisites	Semester Credit Hours
IN 200	Industrial Electricity	EE 131	3.00
IN 211	Programmable Logic Controllers	EE 111	3.00
MA 115	Applied Mathematics for the Trades	None	3.00

PERSONAL AND PROFESSIONAL DEVELOPMENT COURSES

2.00 semester credit hours are required.

Course Number	Course Name	Prerequisite	Semester Credit Hours
PD 121	Professional Development I	None	1.00
PD 202	Professional Development II	None	1.00