

Wind Energy Technician

Associate of Applied Science Degree
Sioux City Campus

Program Overview and Opportunities:

The number of wind turbines in Iowa and in the United States continues to increase, as does the need for skilled workers who are able to install, maintain, service, and operate them. The Wind Energy Technician program encompasses the skill sets needed as a technician and/or operator, depending on the career path students choose. A number of certificate and diploma options will be available, allowing students to customize their interests and training accordingly.

Wind is the fastest growing energy source in the United States. In 2007, wind energy production increased by 21 percent, and a recent report by the U.S. Department of Energy suggests that it could contribute 20 percent of the nation's electricity by 2030. Although BLS does not collect data specifically on wind energy employment, the American Solar Energy Society estimates that in 2006 there were 16,000 jobs in wind turbine construction and maintenance.



Wind Energy Technician AAS Degree Curriculum

Course #	Title	Credits
WTT 103	Introduction to Wind Energy	3
CSC 110	Introduction to Computers	3
MAT 102	Intermediate Algebra	4
WTT 138	Wind Turbine Technician Safety Standards and Procedures	2.5
WTT 137	Wind Turbine Maintenance Fundamentals	1.5
ELE 112	Basic Electrical Theory	3
COM 723	Workplace Communications	3
EGT 142	Fluid Power I	2
ELE 192	Principles of Motors/Transformers	3
WTT 214	Basic Networking & Computer Technology	3
WTT 144	Wind Turbine System Control	3
ELT 154	Industrial Electronics	3
WTT 201	Wind Turbine Site Construction and Location	1
WTT 932	Wind Turbine Internship	4
PSY 102	Human and Work Relations	3
ELT 118	Programmable Logic Controllers	2
EGT 150	Electrical Control of Fluid Power	3
WTT 146	Wind Turbine Load Analysis	5
ELE 222	Supervisory Control & Data Acquisition	3
WTT 147	Gauging and Measurement	2
EMS 110	EMS First Responder	2
BPT 114	Instrumentation I	2
MFG 520	Predictive Maintenance	2
WTT 145	Advanced Wind Turbine System Control	3
Program Total		66

Wind Site Assessment Specialist Certificate Curriculum

Course #	Title	Credits
WTT 204	Wind Turbine Siting	4
WTT 225	Data Acquisition and Assessment	4
PHS 166	Meteorology, Weather, & Climate	4
Certificate Total		12

Wind Turbine Maintenance Specialist Diploma Curriculum

Course #	Title	Credits
WTT 103	Introduction to Wind Energy	3
CSC 110	Introduction to Computers	3
MAT 102	Intermediate Algebra	4
WTT 138	Standards & Procedures Wind Turbine Maintenance	2.5
WTT 137	Wind Turbine Maintenance Fundamentals	1.5
ELE 112	Basic Electrical Theory	3
COM 723	Workplace Communications	3
EGT 142	Fluid Power I	2
ELE 192	Principles of Motors/Transformers	3
WTT 214	Basic Networking & Computer Technology	3
ELT 154	Industrial Electronics	3
WTT 144	Wind Turbine System Control	3
MFG 520	Predictive Maintenance	2
WTT 201	Wind Turbine Site Construction and Location	1
WTT 932	Wind Turbine Internship	4
Diploma Total		41

Program Advisors

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Sections of shading indicate groups of courses that could be taken during the same semester if a full-time student is academically ready for all courses.

See course descriptions in the back of the catalog for more detailed information about course prerequisites and co-requisites.

Please see an advisor to ensure correct course sequence.