

Alternative Energy Technology - Wind Turbine Major

Lorain County Community College

New Degree in Alternative Energy Technology - Wind Turbine Major

The first associate's degree credit program in Ohio in the burgeoning field of wind turbine power generation will begin in fall of 2009 at **Lorain County Community College**. The Associate of Science degree in Alternative Energy Technology – Wind Turbine major will train students to become installation and maintenance professionals. These professionals can start their careers earning between \$17-\$20 per hour. This can grow as they advance in the field.

Wind turbine power is expected to be one of the fastest-growing alternative energy sources. The desire to develop alternative energy sources is growing rapidly, here and around the world. It will need qualified people to service the technology that is involved.

The new associate's degree program at Lorain County Community College will cover an overview of alternative energy sources, with specialized training in electronics, electronic controls, mechanical systems and more. The major will focus on residential-sized wind turbines and will include training on commercial-sized turbines.



According to the American Wind Energy Association, wind now provides enough electricity to serve 5.3 million American homes or power a fleet of more than 1 million plug-in hybrid vehicles. This amount of wind capacity can generate as much electricity every year as 28.7 million tons of coal or 90 million barrels of oil. Wind generation currently displaces 34 million tons of carbon dioxide annually, equivalent to taking 5.8 million vehicles off the road. A U.S. Department of Energy study released in May found that wind could provide 20 percent of U.S. electricity by 2030. At that level, wind power would support 500,000 jobs and reduce greenhouse gas emissions by as much as taking 140 million vehicles off the road.



Alternative Energy Technology- Wind Turbine Major

Associate of Applied Science

The Wind Turbine Technology program encompasses a wide range of electrical, mechanical and computer skills required to compete in the emerging Alternate Energy- Wind Turbine Industry. Individuals will be prepared for a range of analysis, installation and maintenance assignments associated with the Wind Turbine industry. Typical job responsibilities will include Design, Testing, R&D, Service, Maintenance and Installation Assignments. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

Alternative Energy Technology - Wind Turbine Technology Career Guide

Fall Semester (First Year)

ALET 111	Introduction to Alternative Energy	3
ELCT 111	Electrical Circuits I	3
ENGL 161	College Composition I	3
MTHM 121	Technical Mathematics I	4
SDEV 101	College 101	1
TECN 111	Technical Problem Solving	4

Spring Semester (First Year)

AETC 121	Programmable Logic Controllers	3
ALET 112	Wind Turbine Mechanical Systems	4
ELCT 112	Electrical Circuits II	4
ENGL 162	College Composition II	3
MTHM 122	Technical Mathematics II	3

Fall Semester (Second Year)

ALET 220	Wind Turbine Technology I	3
ELCT 121	Digital Electronics	4
ELCT 227	NEC & Electrical Systems Design	2/4
PHYC 151	General Physics I	5
Arts and Humanities Elective**		3

Spring Semester (Second Year)

AETC 241	Instrumentation and Control	3
ALET 221	Wind Turbine Technology II	3
CMNW 220	Digital Data Communications	4
ELCT 211	Electrical Power and Devices	4
Social Science Elective***		3

Total Credit Hours: 68/70

About Lorain County Community College

Lorain County Community College, which opened in 1963, is one of Ohio's leading colleges delivering credit programs via live and distance-learning education options.

LCCC is one of Ohio's fastest growing colleges because of the variety of learning opportunities it provides. In fact LCCC's enrollment has grown 70 percent since 1999. Students can choose from more than 80 educational programs. Students can complete the first half — and sometimes more — of a bachelor's degree through LCCC's University Partnership, which brings eight universities to the LCCC campus offering 40 bachelor's and master's degree programs. Students can upgrade, retrain and improve current life skills. Students can learn in the classroom, at home and over the Internet.

In addition to providing a great education for those who enter college with aspirations of a degree, LCCC helps those who have changed their career goals, who want to broaden their horizons, and who want to return to work. LCCC provides learning and training for those who want to move up but find they need new or improved skills for the kind of professional opportunities they seek.

LCCC faculty is recognized locally and nationally for their work as professors and in other areas. They all have advanced degrees and real world experience and understand their primary responsibility at LCCC is to teach classes.

LCCC is fully accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, which is the regional accrediting authority for Ohio colleges and universities. Since opening its doors, LCCC has served more than 300,000 people. More than six million students enroll annually in credit courses at America's community colleges, representing about 46 percent of all students in higher education and about 56 percent of all first-time college entrants.