

# Systems Design—Alternative Energy Technology

## Engineering Technology

### Alternative Energy



Due to rising fuel costs and the depletion of our earth's natural resources, there is an increasing interest in alternative energy technologies. Regional and national legislation is requiring a shift to alternative and renewable energy sources. The manufacturing core is shifting toward solar, biomass, wind and other alternative energy technologies. As industry shifts, a large workforce will need developed and/or retrained for new jobs; new jobs in the area of alternative energy technology.

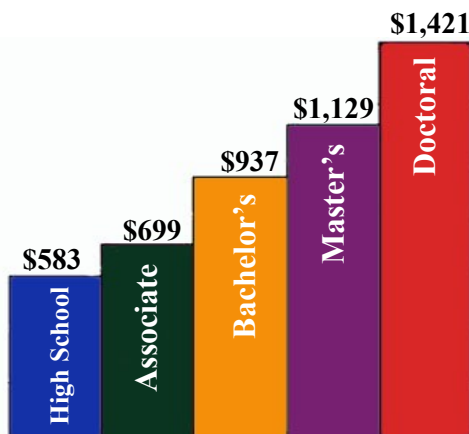
This program will prepare individuals for different technical careers in alternative energy related fields. This may include the design of systems incorporating various alternative energies or the design and specification of components related to the AET systems. This program will also be a path to transfer into similar or related four-year engineering technology programs.

### Career Options

Currently there is a large amount of research in alternative energy technology. With the innovation of this technology, there will be a need for individuals who can design, specify and incorporate these systems into machines and building structures.

### Education Pays

Average Weekly Earnings Based on Educational Attainment



Based on data from the Bureau of Labor Statistics



## Program Sequence

2011-2013

### First Semester

ENG111	Composition I	3
MTH109	College Algebra	3
MET100	Intro to Engineering Technologies	2
+ MET110	Print Reading and Sketching	3
+ IND120	Industrial Electricity I	3
+ AET100	Intro to Alternative Energy	<u>3</u>
		17

### Second Semester

ENG112	Composition II	3
MTH112	Trigonometry	3
PHY251	Physics Mechanics and Heat	4
+ AET110	Energy Audit	3
	Communications Elective	<u>3</u>
		16

### Third Semester

+ MET235	Statics	3
+ MET234	Strength of Materials	3
+ AET200	Sustainable Building Design	3
+ CAD213	CAD III	4
+	Alternative Energy Tech Elective	<u>4</u>
		17

### Fourth Semester

+	Alternative Energy Tech Elective	4
+ AET290	Alternative Energy Capstone	4
	Humanities Elective	3
	Social/Behavioral Science Elective	3
	Science Elective	<u>4</u>
		18

+ Students must attain a minimum grade of "C" in all courses with a '+' to progress in the program and to graduate

\*\* Course curriculum is subject to change. Please consult with an Academic Advisor for up-to-date information

## Contact Information

### For Program Information, Contact:

Dan Burklo, Dean  
Engineering Technologies  
(419) 267-1273  
dburklo@northweststate.edu

### For Admissions Information, Contact:

Admissions Office  
(419) 267-1320

# Northwest State Community College

## Dave VonDeylen, Class of 1981

Future Northwest State Students:

I, like many others, attended Northwest State because tuition was affordable and the campus was close to home. While attending Northwest State, my instructors were extremely helpful. They guided me to enroll in courses that appealed to my interests and talents, and really went the extra mile to ensure my success in their programs.

My advisors also were able to help me gain employment through a Co-op program that gave me a chance to get hands-on training outside of the classroom and begin networking with other professionals in the area. Now, many years later, I know the experience I gained and the local contacts I made helped me build my own company, Alex Products, Inc.

Alex Products began in a small, one room shop and, in 22 years, has grown into a large plant with four locations in the five-county area. Not only are we well known for our quality of service, we are also recognized for offering the highest level of career preparation for our employees. As a matter of fact, out of our 1,000 employees, more than 20% have received some level of training from Northwest State Community College.

Whether you decide to major in Engineering, Business, Nursing or any other degree at Northwest State Community College, you are building a foundation to a successful future. Not only will the education you earn at Northwest State prepare you for the workforce, it will give you the confidence to fill a professional role right out of college. The confidence that employers, like me, look for in their employees.

Best of luck in your education as well as your career.

Dave VonDeylen

## Numbers to Call

**Admissions:** (419) 267-1320

**Financial Aid:** (419) 267-1333

**Main Campus:** (419) 267-5511

**Or Visit Our Web Site at**

[www.northweststate.edu](http://www.northweststate.edu)



The Plastic Engineering Technology program at Northwest State Community College is an incredible program to be involved in. There are great opportunities for jobs in the plastic engineering field after graduation. It is a key component in trying to get your foot in the door at a plastics company.

Another option that the Plastic Engineering Degree offers is transferring to a four year school. I had the opportunity to transfer to Ferris State University to earn a bachelor's degree in plastic engineering. The

knowledge I gained at Northwest State made it a very easy transition. If you are interested in a position in plastics, or want to continue your education, Northwest State is a great choice.

- Brian Brown, Class of 2006



I graduated from Northwest State with an engineering technology degree and the confidence that I was well-prepared to enter the job field. It was that confidence that helped me earn a position at Campbell Soup working as a technology trouble shooter.

Today, I am making more money than I ever could have without a college degree. Northwest State Community College transformed my life.

- Mike Kappen, Class of 2003



## Northwest State Service Area



It Makes  
You Think!

Accredited by the Higher Learning Commission (312) 263-0456 [www.ncahigherlearningcommission.org](http://www.ncahigherlearningcommission.org)

Northwest State Community College • 22600 State Route 34 • Archbold, Ohio 43502 • (419) 267-5511