# *Systems Service Certificate*

# Engineering Technologies Division

## Systems Service

*Certificate in Alternative Energy Technology*

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 positions in alternative energy related fields along with a path to transfer into related two-year associate degree programs.

## Career Outlook

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 install, service, maintain and repair these systems in machines and building structures.


**For Program Questions:**

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*Dean of Engineering Technologies*
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**For Admissions Questions:**

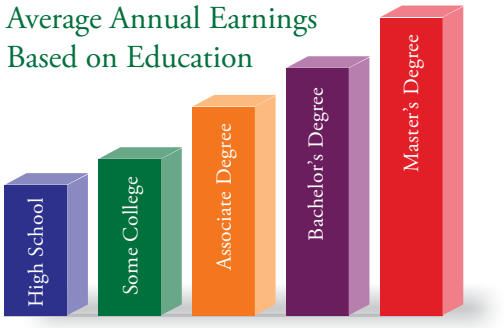
NSCC Admissions Office
(419) 267-1320
admissions@northweststate.edu


Northwest State Community College

www.northweststate.edu

## Education Pays

Average Annual Earnings Based on Education




Based on data from the Bureau of Labor Statistics

***NSCC is accredited by:***
*The Higher Learning Commission*
*(312) 263-0456*
*www.ncahigherlearningcommission.org*

# Program Sequence

| *First Semester* | | *Credits* |
|---|---|---|
| ENG111 | Composition I | 3 |
| MET100 | Introduction to Engineering Technologies | 2 |
| + AET100 | Introduction to Alternative Energy | 3 |
| | | 8 |

| *Second Semester* | | *Credits* |
|---|---|---|
| + MET110 | Print Reading and Sketching | 3 |
| + IND120 | Industrial Electricity I | 3 |
| + AET110 | Energy Audit | 3 |
| | | 9 |

| *Third Semester* | | *Credits* |
|---|---|---|
| IND203 | Applied Geometry and Trigonometry | 3 |
| + IND121 | Industrial Electricity II | 3 |
| + INT120 | HVAC-R I | 3 |
| | | 9 |

| *Fourth Semester* | | *Credits* |
|---|---|---|
| PHY101 | Principles of Physical Science | 3 |
| IND131 | Industrial Pipefitting | 3 |
| + | Alternative Energy Technology Elective | 4 |
| | | 10 |

***Total Program Credit Hours*** ***36***

+ 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.*

# Alternative Energy - Systems Service Certificate

## Department of Engineering Technology

## PROGRAM NAME & LENGTH

**Name of Program:** Alternative Energy - Systems Service
**Level of Program:** Certificate
**Program Length:** 3 Semesters

## RELATED OCCUPATIONS

**U.S. Department of Labor's Standard Occupational Classification (SOC) code:**
49-9081 Wind Turbine Service Technicians

**Link(s) to the U.S. Department of Labor's O*Net Occupational Profiles:**
http://www.onetonline.org/link/summary/49-9099.02

## COST:

**Total Tuition:** $4,896
**Fees:** $255
**Total Est. Costs for Books and Supplies:** $632

## DEBT AT PROGRAM COMPLETION

Number of students completing the program between July 1, 2010 and June 30, 2011
**Number of 2010-2011 Graduates:** No 2010-2011 Graduates

For all Students completing program, the median cumulative debt for:
**Federal Student Debt:** No 2010-2011 Graduates

## PROGRAM COMPLETION IN NORMAL TIME

**Normal Time in Months to Complete Program:** 12 Months