

Systems Design Certificate

Engineering Technologies Division

For Program Questions:

Dan Burklo
Dean of Engineering Technologies
(419) 267-1394
dburklo@northweststate.edu

For Admissions Questions:

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



www.northweststate.edu

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The Higher Learning Commission
(312) 263-0456

www.ncahigherlearningcommission.org



Systems Design

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.

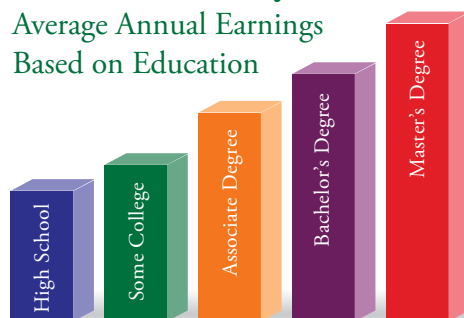
This program will prepare individuals for different technical positions in alternative energy related fields along with a path to transfer into related two-year associate degree programs.

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 design, specify and incorporate these systems into machines and building structures.

Education Pays

Average Annual Earnings
Based on Education



2011-2012

Based on data from the Bureau of Labor Statistics

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 |
|----------|-----------------------------|---------|
| + CAD213 | CAD III | 4 |
| + AET200 | Sustainable Building Design | 3 |
| | | 7 |

Fourth Semester

| | | Credits |
|--------|--|---------|
| MTH109 | College Algebra | 3 |
| + | Alternative Energy Technology Elective | 4 |
| + | Alternative Energy Technology Elective | 4 |
| | | 11 |

Total Program Credit Hours 35



+ 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 Design Certificate

Department of Engineering Technology

PROGRAM NAME & LENGTH

Name of Program: Alternative Energy - Systems Design

Level of Program: Certificate

Program Length: 3 Semesters

RELATED OCCUPATIONS

U.S. Department of Labor's Standard Occupational Classification (SOC) code:

17-3029 Engineering Technicians, All others

Link(s) to the U.S. Department of Labor's O*Net Occupational Profiles:

<http://www.onetonline.org/link/summary/17-3029.00>

COST:

Total Tuition: \$4,760

Fees: \$195

Total Est. Costs for Books and Supplies: \$739

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