

# SUSTAINABLE ENERGY

College of Rural and Community Development  
907-842-5109 or 800-478-5109  
[www.uaf.edu/rural/](http://www.uaf.edu/rural/)

## Occupational Endorsement

Minimum Requirements for Occupational Endorsement: 12 credits

Providing education and training in energy efficiency and renewable energy, the sustainable energy occupational endorsement addresses many of the energy issues that influence Alaska communities and provides the basic academic preparation for entry-level sustainable energy careers. It also serves as a steppingstone into science- and engineering-related certificate, associate or bachelor's programs.

The program is structured as 6 credits of foundation knowledge and a minimum of 6 credit electives that allow students (in consultation with their advisor) to specialize in specific areas of sustainable energy. Some examples of how the electives can be formed into specific areas of study follow. Applicants must be 16 years old to be admitted.

- **Energy Science**  
ENVI F101—Introduction to Environmental Science (3)  
PHYS F102X—Energy and Society (4)
- **Photovoltaic**  
CTT F100—Construction Technology Core (3)  
CTT F160—Photovoltaic Systems — Part I (5)  
CTT F161—Photovoltaic Systems — Part II (5)
- **Biomass**  
CTT F100—Construction Technology Core (3)  
ENVI F120—Home Energy Basics (1)  
CTT F250—Current Topics in Construction Trades: Biomass (2)
- **Wind**  
CTT F100—Construction Technology Core (3)  
ENVI F120—Home Energy Basics (1)  
CTT F250—Current Topics in Construction Trades: Turbine (2)
- **Energy-Efficient Construction**  
CTT F100—Construction Technology Core  
CT S201—Cold Climate Construction (3)\*\*
- Other areas of study related to sustainable energy

## Occupational Endorsement Program

1. Complete the following admissions requirement: Be at least 16 years old by the first day of the semester in which you are admitted.
  2. Complete the general university requirements (page 90).
  3. Complete the occupational endorsement requirements (page 90).
  4. Complete the following:\*  
DEV M F105—Intermediate Algebra (3)  
or CTT F106—Construction Mathematics (3)  
or TTCH F131—Mathematics for the Trades (3) .....3  
ENVI F220—Introduction to Sustainable Energy .....3
  5. Complete at least 6 credits from the following electives:\*  
CT S201—Cold Climate Construction ..... 3\*\*  
CTT F100—Construction Technology Core .....3  
CTT F160—Photovoltaic Systems — Part I .....5  
CTT F161—Photovoltaic Systems — Part II .....5  
CTT F250—Current Topics in Construction Trades ..... 1-3  
ENVI F101—Introduction to Environmental Science .....3  
ENVI F120—Home Energy Basics .....1  
ENVI F121—Building Ventilation and Energy .....1  
ENVI F122—Energy Efficient Building Design and Simulation .....1  
PHYS F102X—Energy and Society .....4  
or other, advisor-approved electives
  6. Minimum credits required .....12
- \* Students must earn a C- or better in each course.  
\*\* CT S201 is offered by the University of Alaska Southeast.