RENEWABLE ENERGY
The Renewable Energy program is offered through Matanuska-Susitna College.

▲ OCCIDENTAL ENDORSEMENT
Certificate, Renewable Energy

In the Renewable Energy Occupational Endorsement Certificate Program, students learn the fundamental concepts and skills necessary to pursue employment or gain further training as renewable energy technicians. Students are introduced to the physical principles of various renewable energies including solar, wind, hydro, and geothermal power sources. Terminology, energy conservation, and safety are emphasized throughout the program. Coursework incorporates the appropriate skills and knowledge necessary for students to become effective employees in the energy, utility, and maintenance industries. Career pathways may include operating large- and small-scale renewable power production facilities; designing, installing, and maintaining renewable energy systems; or assisting homeowners and businesses with energy efficiency. A required practicum provides applied experience in a workplace setting.

STUDENT OUTCOMES
Upon completion of the occupational endorsement certificate, students will demonstrate:
• Knowledge of renewable energy resources and technologies
• Basic technical skills for diesel engine repair
• Introductory understanding of basic physics and power management as applied to renewable energy
• Familiarity with OSHA General Industry standards and safety
• Entry-level skills for renewable energy project development and management

ADMISSION REQUIREMENTS
See Admission to Occupational Endorsement Certificate in Chapter 6 of this catalog.

ACADEMIC PROGRESS
In order to receive the Renewable Energy Occupational Endorsement Certificate, students must achieve a grade of C or better in all courses required for the occupational endorsement certificate.

GRADUATION REQUIREMENTS
1. Complete the following required courses (23 credits):
   RE A100 Introduction to Renewable Energy (3)
   RE A101 Industrial Safety for Renewable Energy (2)
   RE A102 Applied Physics for Renewable Energy (3)
   RE A106 Introduction to Diesel Engines (3)
   RE A200 Power Generation Systems (3)
   RE A201 Power System Management (3)
   RE A203 Renewable Energy Project Development (3)
   RE A295 Renewable Energy Practicum (3)

2. A total of 23 credits are required for this Occupational Endorsement Certificate.

FACULTY
Dan Mielke, Assistant Professor
(907)745-9715
dmielke@matsu.alaska.edu