

# Solar energy training at the UAF Bristol Bay Campus

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University of Alaska Fairbanks Bristol Bay Campus



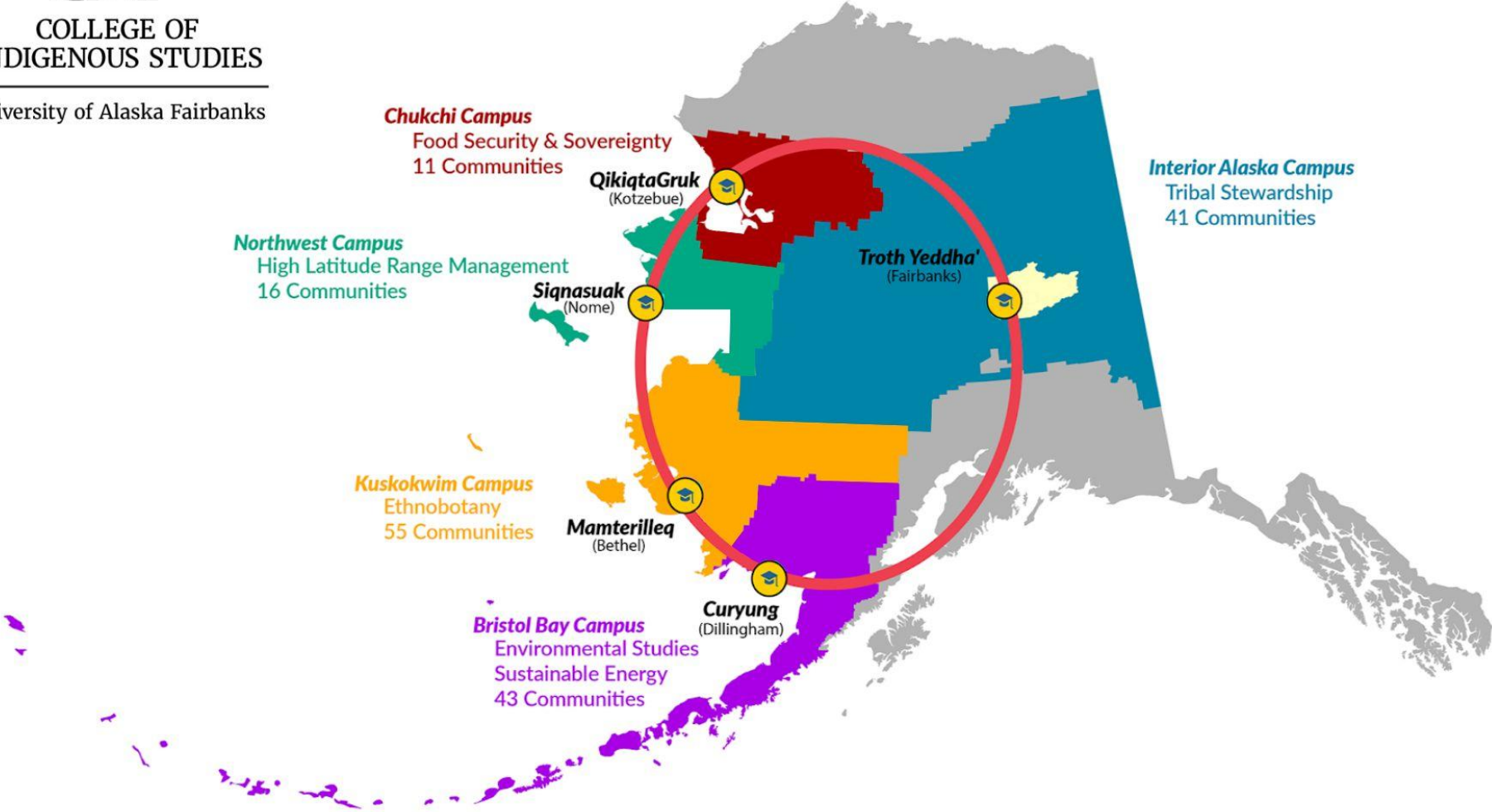
# UA Locations Across Alaska



COLLEGE OF  
INDIGENOUS STUDIES

University of Alaska Fairbanks

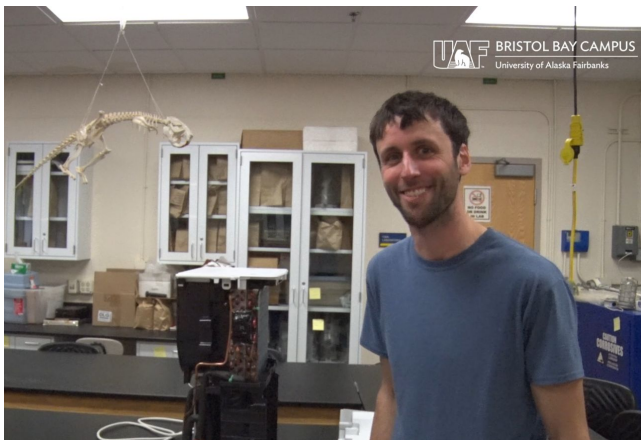
## Drumbeats Alaska



# What is the Bristol Bay Campus

- We affect social and economic change of the communities we serve by enriching the quality of life for our students through learning.
- Some of the programs offered at BBC are:
  - Sustainable Energy
  - Traditional crafts
  - Alaska Adult Education
  - Marine Advisory Program
  - Nursing Program

# We have an occupational endorsement (OE) in Sustainable Energy



- Core Classes:
  - Intro to Sustainable Energy
  - Math Class
- Elective Class Options:
  - Energy & Society
  - Energy Efficiency Building Design & Simulation
  - Home Energy Basics
  - Utility Lecture Series
  - Solar Installation Training
  - Introduction to Small Wind Systems
  - Introduction to Biomass Energy Systems
  - Solar Energy Basics
  - Introduction to Environmental Science
  - Basics of Heat Pumps



# Graduates of the OIE have gone on to work for the Alaska Energy Authority, Tribal Organizations and more.



Aihs Palmer and Khae Pasao celebrate completing their occupational endorsement.

Khae used the program to advance her career at the Alaska Energy Authority

Aihs is now a part of the Buildings Up energy efficiency team in Fairbanks.



# We now offer vocational solar trainings.





# We offer a one week “Photovoltaics 101” course.

- Perform power and energy calculations
- Identify types of PV systems
- Test and operate PV systems
- Identify common PV mounting options
- Describe and select critical PV system components (inverters, charge controllers, over-current protection, etc.)



# The course is broadly recognized by the solar industry.

- We leased the curriculum from Solar Energy International.
- Students receive a certificate of completion.



## PV101 Introduction

SEI curriculum and educational materials are the intellectual property of SEI and may be used only as expressly permitted by SEI.  
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We also offer a two day off grid solar class and are planning advanced lab classes.





# Our instructors are Alaskans with work experience and teacher training.



Kolt Garvey. Licensed electrical administrator, owner Sunstone Electric.



Amanda Garvey. Mechanical engineer, owner Sunstone Electric.



Jacob Ivanoff. Former solar installation foreman, Unalakleet environmental coordinator.



If you're looking to add workforce development to a solar project, give us a call!



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# The course combines hands on training with classroom study.





# Solar energy is becoming common in Alaska.

- Solar costs have fallen.
- Solar is the most cost effective source of electricity in some cases.
- In 2024, Alaska secured over \$100 million in funding for solar projects.



Kotzebue solar array. Photo by Amanda Byrd. [Link](#)

# We're planning advanced lab classes.

- Hands-on construction of ~2 kilowatt arrays
  - Roof mounted and ground mounted
- Commissioning, operations and trouble shooting practices

