Institute of Northern Engineering

The Institute of Northern Engineering is the research enterprise of the College of Engineering and Mines. INE faculty and students conduct basic and applied research supporting careful and sustainable development and solutions for locations around the globe, focusing on the world’s cold regions. INE is home to many of the world’s leading researchers in cold climate science and engineering. INE research and support span the engineering and environmental disciplines, offering studies and expertise in energy production, modeling and testing of mechanical systems, environmental engineering, Arctic infrastructure, mining and petroleum development, hydrology and environmental sciences. INE also participates in many cross-institute endeavors.

The Institute includes the Arctic Infrastructure Development Center (https://autc.uaf.edu/), Mineral Industry Research Laboratory (https://ine.uaf.edu/mirl/), Petroleum Development Laboratory (https://www.uaf.edu/cem/programs/petroleum-engineering/research.php) and Water and Environmental Research Center (https://ine.uaf.edu/werc/). WERC serves as the home of the Alaska Stable Isotope Facility and the Materials Analysis Center. External grant and research support for INE programs has been more than $20 million annually since 2011. INE’s close ties with the College of Engineering and Mines allow research results to reach the classroom quickly and offer diverse interdisciplinary research opportunities, challenging students to tackle wide-ranging engineering and environmental topics. Students gain knowledge and experience through hands-on engagement in laboratories and in the field, setting them apart in the science and engineering job market.

To get started with your northern engineering research or studies, visit the INE website (https://www.uaf.edu/ine/) or call 907-474-5457.