



At the University of Idaho, we have led decades of competitive research in next-generation nuclear technologies, advanced manufacturing, cyber-physical systems and supply chain management.

Our longstanding programs have deep connections to worldwide industry leaders. With direct access to nuclear and cybersecurity simulation laboratories and expansive online programs, we have tremendous ability to generate the advanced energy professionals needed to strengthen not only the Idaho but U.S. economy.

The University of Idaho College of Engineering is part of a consortium of Idaho leaders in advanced nuclear energy innovation that has been recognized by the U.S. Department of Commerce's Economic Development Administration (EDA) for its ability to strengthen workforce development and the region's capacity to manufacture, commercialize and deploy technology.

U of I is part of the Idaho Advanced Energy Consortium leading the development of the Intermountain West Nuclear Energy Corridor (INEC). The EDA's designation is part of a new economic development initiative, the <u>Tech Hubs program</u>, to bring funding to regions across the nation identified for their high potential to become epicenters for globally competitive innovation.

Initial funding of \$500,000 and official EDA designation opens opportunity for up to \$70 million in additional federal funding to the state to carry out the nuclear energy tech hub's mission. The Phase Two submission process is well underway, and if funded, will substantially expand the role of clean nuclear energy in the state and the nation.

U of I's nuclear engineering program in Idaho Falls began in 1954 and was developed in partnership with the Idaho National Laboratory (INL), the advanced nuclear energy leader responsible for the world's first usable electricity generated by nuclear power and innovation in small modular reactor (SMR) technology. Idaho is host to the first micro and SMR demonstration and deployment. SMRs are known for their lower cost and improved safety and security. The reactors use energy from a controlled nuclear chain reaction to create steam, which powers a turbine to produce electricity.

U of I and INL research initiatives funded by federal and state agencies include advanced nuclear energy reactors, advanced manufacturing across food-energy-water systems, cyberinfrastructure and cybersecurity, as well as biotechnology development for renewable materials production and critical materials extraction and recovery.

Our strong history, regionally and nationally recognized faculty, and incredible state technological resources and access put the University of Idaho and our college at an incredible advantage to lead clean, safe nuclear energy innovations in Idaho and beyond.

I look forward to sharing continued achievements in this area, as we shape our nation's clean energy future.





Suzie Long, Ph.D., P.E., C.P.E.M., F. ASEM, F.IISE Dean, College of Engineering

NSA Cyber Defense Designation Renewed



The U of I Center for Secure an Dependable Systems (CSDS) recently renewed its designation as a National Center of Academic Excellence in Cyber Defense, a designation it has held since 1999!

As one of the National Security Agency's first seven centers, CSDS's

designation ensures students receive academic instruction to produce the qualified workforce the nation needs.

For over 20 years, CSDS has maintained its standing in the National Science Foundation's Scholarship for Service (SFS) program, offering cybersecurity training scholarships preparing students to work at the highest levels of government.

Faculty have secured more than \$20 million in total funding for participants and graduated over 110 students in the program. U of I was one of the first five institutions to be part of the SFS program, and one of three to remain continually funded.

Learn More about CSDS

U of I Coeur d'Alene to Develop Weeding Robot for Tree Seedling Nursery



University of Idaho Coeur d'Alene researchers have been granted a \$139,000 award from the U.S. Department of Agriculture to develop a robotic weeding system at the U.S. Forest Service's tree seedling nursery in Coeur d'Alene in what is known as Project Evergreen.

Project Evergreen researchers aim to develop and establish an automated robotic weed detection and eradication system for tree nurseries. The U of I Coeur d'Alene research team will build, test and validate a robotic vision detection system and an actuated weeding system at the Coeur d'Alene nursery. The system will also collect real-time data during use to allow researchers and foresters to monitor the progress and effectiveness of the weeding system.

Read More About this Robot

Watch Our Research on KTVB

Our college has been recently featured on several Idaho Today segments, KTVB's daily talk show serving southern Idaho.

Making Affordable Housing a Reality



Watch the Video

Sustainable Methods for Extracting Rare Earth Elements



Watch the Video

Creating Waves in Ecohydraulic Research



Watch the Video

Helping Bolivian Families



Engineering is very human. It's seeing the world in a different way and wanting to find solutions to make it a better place.

University of Idaho College of Engineering students recently experienced this first-hand, traveling to the remote community of Challcha in the Andes Mountains, six hours from the Bolivian capital city of Sucre.

Representing the U of I's Humanitarian Engineering Corps (HEC), five students helped Bolivian families improve sanitation in their community as part of an overseas humanitarian effort funded by Idaho donors.

Watch the Video

Helping NASA Track the Weather



A team of <u>University of Idaho engineering students</u> is helping NASA gather complex datasets scientists have been trying to capture for decades, data that can improve global weather forecast models and our understanding of the atmosphere.

U of I is a lead university in the <u>Nationwide Eclipse Ballooning Project</u> (<u>NEBP</u>), and has been training four university teams in the Pacific Northwest all year long to successfully track and gather data on gravity waves using weather balloons.

Learn More About the Research

Students and Faculty Recognized for Alumni Awards for Excellence



Congrats to our Vandal engineers who earned Alumni Awards for Excellence this past fall semester!

Seniors are nominated by faculty and staff for their outstanding academic success, demonstrated career and professional preparation, campus and community leadership and involvement, and leadership in the classroom, laboratory, campus and community.

Learn More About Awardees on Linkedin

Upcoming Events

- Feb. 6 <u>Industry Networking Night</u> employers, students, faculty and staff invited
- April 25 and 26 <u>Engineering Design EXPO VIP</u> mentorshipfocused program. Selected applicants are invited to an all-expensespaid visit on our Moscow campus during our nationally recognized Engineering Design EXPO.
- April 26 <u>Engineering Design EXPO</u>

College of Engineering Social Media





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