STATEWIDE ENERGY EDUCATION & WORKFORCE INITIATIVE

UtahState University

ADVANCING UTAH'S ENERGY ECONOMY THROUGH ENGINEERING EDUCATION

Utah has an abundance of minerals and energy resources. But a future with enhanced economic opportunities for all Utahns requires a workforce with advanced engineering training and an entrepreneurial spirit to drive innovation.

- Utah is rich in energy resources. Now is the time to create a dedicated energy knowledge hub that serves a more robust energy economy.
- The bulk of energy and mineral extraction happens in Central and Eastern Utah where residents have limited access to engineering education—but where USU has facilities to educate our workforce.
- A knowledge and research deficit in Utah's energy sector limits economic opportunity for residents and constrains advances in production.

USU PROPOSES A COMPREHENSIVE ENERGY ENGINEERING PROGRAM

We envision Utah's first statewide, rural-focused energy engineering program to serve as the **Energy Knowledge Hub** for all of Utah. The program will enhance our energy economy and help develop a next-generation workforce better equipped to leverage the state's energy portfolio, including:

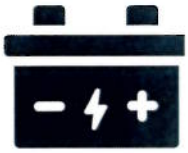
Conventional Hydrocarbons

Coal and natural gas comprise a key portion of the state's energy economy. New research and innovations are needed to convert legacy technologies into more sustainable solutions.

Modular Nuclear Reactors

Advanced Small Modular Reactors offer a promising solution to safe and reliable, carbon-free energy. Our proximity to the San Rafael Energy Research Center enables new collaborations on energy research.

Critical Minerals



Minerals such as lithium, copper, cobalt, and nickel are used to manufacture batteries for electric vehicles and everyday electronics. Utah is uniquely positioned to benefit from mineral extraction.

UTAH'S FIRST COMPREHENSIVE, RURAL ENERGY ENGINEERING PROGRAM

Providing education opportunities for more Utahns while enhancing our energy economy.

The Energy Engineering Program at USU will provide:

Education & Training

- Prepare tomorrow's energy engineers who bring expertise and new insight to energy policy and economics.
- Provide a suite of education options, including certificate, associate, bachelor's, and graduate degree programs to build a workforce for all levels of energy development.
- Graduate engineers with broad training and expertise to guide Utah's energy future while improving quality of life in rural communities.

Engineering Innovations

- Develop Utah-specific solutions for Utah's energy needs with a focus on stewardship and the energy-water nexus.
- Pioneer innovative technologies and market-relevant insight to inform decision-makers and better predict energy supply and demand issues.
- Leverage the expertise and resources of the Bingham Research Center in Vernal and the San Rafael Energy Research Center in Emery County.

Economic Opportunity

- Stimulate our energy economy and create a culture of innovation akin to Utah's burgeoning *Silicon Slopes.*
- Serve Utah's rural workforce with advanced technical knowledge and opportunities for entrepreneurship and wealth building.
- Help Utah leaders navigate forthcoming transformations in the energy and mining sectors to better predict economic risk and opportunities.

WHY AN ENERGY ENGINEERING PROGRAM AT USU?

- USU has a strong engineering tradition and award-winning faculty with industry-relevant experience and world-class research facilities.
- With campuses in Price, Vernal, and Blanding, USU is uniquely positioned to administer the state's first comprehensive energy workforce initiative.
- With our proximity to Idaho National Lab, USU ranks in the top six nationwide for nuclear engineering research funding from the Department of Energy.

BROAD INDUSTRY SUPPORT

ROCKY MOUNTAIN POWER. | Utah Mining Association | Utah Petroleum Association | SAVAGE

APPROPRIATION REQUEST:

$2.1 Million Ongoing

Ongoing funding to support up to nine full-time engineering faculty with academic advising and support staff

- *Five faculty in Blanding, Price, and Vernal*
- *Four faculty at the USU Logan campus*

+

$450,000 One-Time

Upgrade existing USU facilities and purchase new equipment for energy research

- *Renovate classrooms and labs in Price, Vernal, Blanding, and Logan*

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