

UTAH ENGINEERING INITIATIVE

As Utah's economy expands, shortages in the number of highly qualified engineers and computer scientists remain acute. To keep Utah at the top of the list as the "best state for business," we must continue to increase the local supply of highly qualified engineers and computer scientists.

Student interest in technical degree programs has filled the pipeline with capable students. USHE schools statewide need to increase capacity to keep up with student demand.

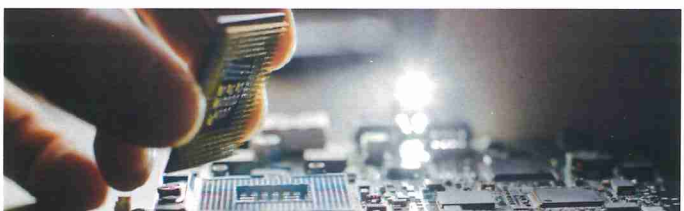
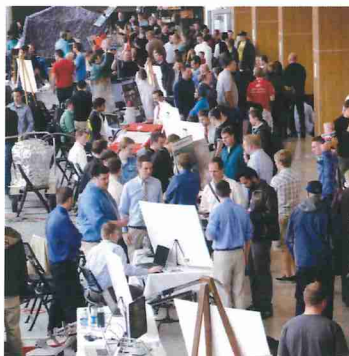
The Engineering Initiative is Utah's proven formula for expanding the technical workforce. In just three years, USHE degree output in engineering and computer science increased by 660 system-wide, a 20% increase which exceeded the 400 promised in the 2019 legislative request. Compared with the baseline year of 2000, engineering and computer science degrees statewide have increased by 240%.

To date, the state has invested \$24M in ongoing funds and \$10.45M in one-time funds in the Engineering Initiative. Every ongoing dollar for faculty salaries has been matched by the institutions, amplifying the impact of the \$24M of ongoing funds that have been invested since 2001. Every school in the USHE system has benefited, and an independent board of business leaders (TIAB) annually monitors performance, and reports directly to the legislature.

With an appropriation in 2022 of \$7M in ongoing funds, we will add capacity to the state's engineering and CS programs to accommodate student demand and increase the size of the technical workforce. With these additional funds, we commit to adding 600 more engineering and computer science graduates per year to the statewide system.

With an appropriation of \$7M, we will add capacity by:

- Recruiting more faculty in high demand disciplines.
- Building capacity by creating more class sections and developing online alternatives.
- Boosting retention through academic advising and career counseling.
- Strengthening outreach to all high school students, including women and underrepresented minorities.



ENGINEERING INITIATIVE: 2022 FUNDING REQUEST

- Employment in Utah's tech-related industries has risen to 153,000, representing 8,197 companies (*CompTIA 2021 Report*). This growth relies on a steady supply of engineering and computer science graduates.
- Targeted investments through the Engineering Initiative have resulted in more than double the output of engineering degrees and triple the output of computer science degrees.
- Since 2019, USHE degree output in engineering and computer science increased by 660 system-wide, a 20% increase which exceeded the 400 promised in the 2019 legislative request.
- Despite this increase, thousands of jobs remain unfilled. The tech industry's direct contribution to the Utah economy is an estimated \$20 billion, or 11.5% of the gross domestic product. Workforce development remains a major concern.
- The Higher Ed pipeline is full of students who want to pursue degrees in engineering and computer science. We need to increase capacity to educate these capable students. Eight out of ten of the highest starting salaries for bachelor's degree graduates are in engineering and computer science, with salaries ranging from \$73,000 to \$87,000 (*Forbes*).

With \$7M in new ongoing funds, we can add another 600 engineers and computer scientists each year to the skilled workforce.



THE ENGINEERING INITIATIVE IS A PRIORITY REQUEST FOR THESE UTAH COMPANIES

Abstrax Inc

Adobe

Autoliv

Avantor

BAE Systems

Berkadia

BHB Engineers

Boeing

Bright Path Laboratories

BUKU

Cao Group

Causality Link

Chevron

Control4

CoreBrace

CRS Engineers

Degreed

Delicious AI

Divvy

Dominion Energy

Enzy

FatPipe

Fincity, a Mastercard Company

Galaxy

Gremlin

HealthEquity

Horrocks Engineers

Job Industrial Services Inc.

Kimley Horn

L3Harris

Layton Construction

Lightning Protection Systems

Lucid

Merit Medical Inc

Microsoft

Northrop Grumman Corporation

Nvidia

Okland Construction

PowerSchool

Progressive Lending

Psomas

Qualtrics

Ralph L. Wadsworth Construction

Rocky Mountain Power

Silicon Slopes

Stryker Neurovascular

SyberJet

Texas Instruments

Thermo King

TraskBritt

Tula Health Inc

Union Wireless

US Synthetic

Wright Engineers

Zions Bancorporation