



USU Board of Trustees Regular Meeting

Wednesday, April 29, 2026, at 10:00 AM - 12:15 PM MDT

Meeting Details:

In person at University Inn, Logan, Utah or virtually:

<https://usu.zoom.us/j/81383617774?pwd=XlGwf7Qi4rCOC5J8nwGdgn8bqqpoXq.1&from=addon>

Agenda

- | | |
|---|-----------------|
| 1. Welcome and Call to Order | 10:00 AM |
| Presenter: Chair Tessa White | |
| 2. Resolution of Appreciation for Brandon Sorensen | 10:05 AM |
| Presenter: Chair Tessa White | |
| 3. Oath of Office - Max Alder | 10:15 AM |
| Presenter: Notary Sam Zehe | |
| 4. President's Report & Legislative Audit Update | 10:25 AM |
| Presenters: President Brad Mortensen, VP Jessica Oyler | |
| 5. Reports | |
| 5.1. USUSA Report | 10:45 AM |
| Presenter: Former USUSA President Brandon Sorensen | |
| 5.2. Trustee Committee Reports | 11:00 AM |
| 5.2.1. Executive | |
| Presenter: Chair Tessa White | |
| 5.2.2. ARC | |
| Presenter: Trustee Ryan Dent | |
| 5.2.3. TRAAC | |
| Presenter: Vice Chair Gina Gagon | |
| 5.2.4. Strategic Partnerships and Fundraising | |
| Presenter: Trustee Jacey Skinner | |
| 5.2.5. Student Success | |
| Presenter: Trustee Kacie Malouf | |
| 5.3. Student Success - Completion and Enrollment | 11:25 AM |
| Presenter: VP Kris Winter | |
| 6. Consent Agenda | 11:40 AM |
| 6.1. Approve: Meeting Minutes | |
| 6.1.1. 3.20.26 USU Board of Trustees Regular Meeting Minutes | |
| 6.1.2. 4.10.26 USU Board of Trustees P&T Meeting Minutes | |

6.2. Recommend: Re-appointment to Space Dynamic Laboratory Board of Directors: Ms. Elizabeth M. Young

6.3. RETIRE: Policy 5205: Network Monitoring & Vulnerability Scanning

6.4. Academic Approvals

6.4.1. Name Changes and Restructures

6.4.1.1. CEHS-NURS-Nursing Associate of Applied Science Restructure

6.4.1.2. CEHS-SPERC-Special Education: Complex Support Needs Emphasis Elementary Education Composite Bachelor of Arts, Bachelor of Science Name Change

6.4.1.3. CEHS-SPERC-Special Education: Mild/Moderate & Complex Support Needs Dual Emphasis Bachelor of Arts, Bachelor of Science Name Change

6.4.1.4. CEHS-SPERC-Special Education: Complex Support Needs Emphasis Bachelor of Arts, Bachelor of Science Name Change

6.4.1.5. CEHS-SPERC-Special Education Online Practical Teacher Training (OPTT): Complex Support Needs Emphasis Bachelor of Arts, Bachelor of Science Name Change

6.4.1.6. CEHS-SPERC-Special Education: Complex Support Needs & Birth to 5 Dual Emphasis Bachelor of Arts, Bachelor of Science Name Change

6.4.1.7. QANR-ADVS-Animal, Dairy and Veterinary Sciences Master of Science Restructure

6.4.1.8. QANR-ADVS-Animal, Dairy and Veterinary Sciences PhD Restructure

6.4.1.9. QANR-TDTE-Automation Technology Technical Certificate Name Change and Restructure

6.4.1.10. QANR-TDTE-Electrical Apprenticeship Technical Certificate Name Change and Restructure

6.4.1.11. QANR-TDTE-Carpentry Fundamentals Technical Certificate Name Change and Restructure

6.4.1.12. QANR-TDTE-Construction Technology Technical Certificate Name Change and Restructure QANR-TDTE-Cosmetology Technical Certificate Name Change and Restructure

6.4.1.13. QANR-TDTE-Cosmetology Technical Certificate Name Change and Restructure

6.4.1.14. QANR-TDTE-Drafting and Design Technical Certificate Name Change and Restructure

6.4.1.15. QANR-TDTE-Medical Assistant Technical Certificate Restructure

6.4.1.16. QANR-TDTE-Nail Technician Technical Certificate Name Change and Restructure

6.4.1.17. QANR-TDTE-Phlebotomy Technical Certificate Name Change and Restructure

6.4.2. Transfers

6.4.2.1. QANR-WILD-Master of Natural Resources-MNR Transfer

6.4.3. Discontinuations

6.4.3.1. CEHS-KHS-Health Education Teaching Certificate Discontinue

6.4.4. Certificates

6.4.4.1. CAS-COMM-Conflict Transformation Post-Bachelor's Certificate

6.4.4.2. CAS-THEA-Musical Theatre Certificate

6.4.4.3. CEHS-ITLS-Qualitative Advanced Research Methods (Q-ARM) Post-Bachelor's Certificate

6.4.4.4. COE-Engineering Foundations Certificate

6.4.4.5. QANR-LAEP-Thematic Design Certificate

6.4.5. Full Programs

6.4.5.1. COE-BE-Biomanufacturing Master of Science

6.4.5.2. COE-BE-Chemical Engineering Bachelor of Science

6.4.5.3. COE-Energy Engineering Bachelor of Science

6.4.5.4. QANR-ENVS-Master of Geographic Information Science and Technology

7. CLOSED SESSION

11:45 AM

8. Information Agenda

8.1. Report of Investments-December 2025

8.2. Upcoming: June 4-6, 2026: (Price, UT) Board of Trustees Meeting, Training and Passport to Eastern

9. Adjourn

12:15 PM



UtahStateUniversity

PRESIDENT'S REPORT

APRIL 29, 2026



Academic Enterprise

ACADEMIC AFFAIRS

Honors Program – In March, two USU students were awarded the prestigious Goldwater Scholarship for in an application process administered by the University Honors Program. Ashley Starr (Logan) is an honors student studying wildlife ecology and management, and Michael Davies (Vernal), the first USU statewide student to win this scholarship, is majoring in environmental science and sustainability. Michael applied to join University Honors after the scholarship announcement. The Goldwater Foundation reports that 1,485 students from 482 institutions were nominated for the scholarship this year. From that pool, the foundation named just 454 Goldwater Scholars. USU is very proud of these outstanding undergraduate researchers and grateful to their faculty mentors.



STUDENT SUCCESS

EdSights – The Division of Student Success is launching [EdSights](#), an AI tool that engages students, gathers real-time feedback, and provides insights to improve success and retention. Staff across the division have collaborated to build its knowledge base, alerts, and messaging. The tool will help identify systemic barriers while supporting individual student needs. It will launch with Logan undergraduates, with plans to expand statewide and to graduate students if successful.

Peer Assisted Study Sessions – At the start of Spring 2026, Supplemental Instruction was renamed Peer Assisted Study Sessions (PASS) to better reflect its collaborative and student-centered approach. In 2025–26, PASS supported 65 courses and employed CRLA-certified leaders. It plans to support five CIVC courses in Fall 2026.

Student Aid – USU has successfully re-certified to administer Title IV aid through 2032. The university has awarded 15,094 scholarships to Fall 2026 admits. FAFSA completion is up 2.21% year-over-year, reflecting continued progress in financial aid outreach and completion.

Incoming Student Registration – Over 2,200 new incoming students registered for classes April 8–9. In response to feedback about the process, Student Success implemented a cross-divisional team—including members from advising, orientation, and the registrar's office—to staff a registration hotline. There were over 25,000 student touch points via text, phone, and email within those two days.

Career Design Awards – The Career Design Center honored five recipients at the 2026 Career Design Awards ceremony, recognizing exceptional contributions across student employment, internship, and faculty categories. Honorees included Student Employee of the Year Joshua Hunsaker, Intern of the Year Emma Karren, Supervisor of the Year Susan Rasmussen, Intern Supervisor of the Year Jenna Szczech, and Career Design Champion Steven Mansfield.

Advancement & USU Foundation

USU Elevated Through Philanthropy & Engagement

AGGIE IMPACT STORIES

- [Elizabeth Leishman: Empowered to Teach, Inspired to Make a Difference](#)
- [From Scholarship to Stewardship: Helen Simmons and Shauna LaBeau's Circle of Giving](#)
- [Built to Endure: The Walther Professorship and the Power of Faculty Excellence](#)

138TH FOUNDERS DAY & OLD MAIN SOCIETY CELEBRATION

Old Main Society Members by the Numbers –

- 156 new Old Main Society inductees
- 108 members advanced giving levels
- 24 new Heritage-Level inductees (planned gifts)

Watch the Awardee Videos –

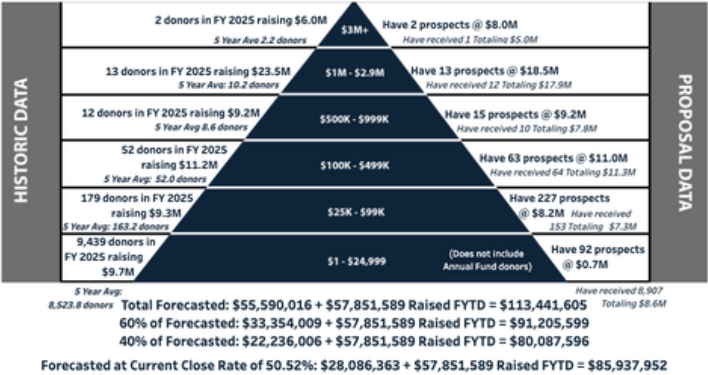
- [Spirit of Old Main Award: Kent Alder and Donna Alder](#)
- [Emeriti Old Main Award: Ned M. Weinshenker](#)
- [Distinguished Service Award: Jill W. Anderson](#)
- [Distinguished Alumni Award: Paul A. S. Wiebel](#)

Event Media –

- [Event Press Release](#)
- [Event Photos](#)

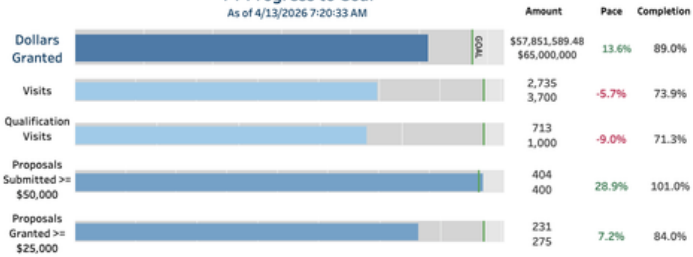


\$65M GOAL JUSTIFICATION FY26



FY Progress to Goal

As of 4/13/2026 7:20:33 AM



Aggie Athletics

GENERAL ATHLETICS

2025–26 Highlights – During the 2025–26 academic year, the Aggies captured a share or outright regular-season championship in volleyball, men's basketball, gymnastics (share), and men's tennis. They also earned tournament titles in soccer, volleyball, men's basketball, and gymnastics, totaling eight conference or tournament championships and leading the Mountain West in USU's final season in the league.

Robins Awards – Men's basketball junior Mason Falslev and volleyball sophomore Kaylie Kofe were named the Male and Female Athlete of the Year, respectively, at the annual Robins Awards, recognizing the best of USU.

New Hire – Utah State hired its third deputy athletics director in February. Emily Fulton, who also holds the title of chief strategy officer, joins the Aggies after more than five years at the Virginia Military Institute.



Programs

Football – The National Football Foundation & College Hall of Fame inducted 11 Utah State players into the 2026 NFF Hampshire Honor Society. The list consists of former Aggies Trey Andersen, Noah Avinger, Bryson Barnes, Brady Boyd, Jacob Conover, Jake Eichorn, Naki Fahina, EJ Fisk, Broc Lane, Jared Pele and Josh Sterzer.

USU and the University of Utah have agreed to a home-and-home series. The Utes will visit Maverik Stadium on August 28, 2031, and the Aggies will travel to Rice-Eccles Stadium in Salt Lake City on September 1, 2033. A previously scheduled game in Salt Lake City has been moved to September 14, 2030.

Men's Basketball – The Utah State's men's basketball team secured a victory in the Mountain West Championship game on March 14, advancing to the NCAA Tournament for the 26th time in school history and the 14th time in the past 27 years. The Aggies earned an 86-76 victory against eighth-seeded Villanova in the first round of the West Region, reaching the round of 32 for the second time in three years. Overall, this was USU's sixth appearance in the second round of the NCAA Tournament.

On March 30, USU hired Ben Jacobson, as its 23rd men's basketball head coach. Jacobson previously coached at the University of Northern Iowa, where he guided the Panthers to five NCAA Tournament appearances, including reaching the Sweet 16 in 2010. Under Jacobson, UNI has won a total of nine conference or tournament championships.



Gymnastics – USU gymnastics competed in its 29th NCAA Regional in Baton Rouge, Louisiana and qualified for the second round for the first time since 2022. The team won both the Mountain West regular-season and postseason championships, contributing to a total of nine conference titles in program history. The team also set a school record for most consecutive scores of 196.000 or higher, besting that mark seven times this year. USU's 16 regular-season wins this year tied for the fourth most in program history and the most since 1986.

Track & Field – On April 9–11, USU track and field participated in the Bryan Clay Multis in Azusa, California; the Weber State Spring Classic in Ogden, Utah; and the Utah Spring Classic in Salt Lake City, Utah. Across these three events, the team claimed seven titles, 18 podium finishes, and two performances that rank in the top 10 in school history.

Three team members earned second-team All-America honors at the 2026 NCAA Division I Indoor Track and Field Championships: senior Logan Hammer (pole vault), sophomore Ayodele Ojo Jr. (60 meters), and junior Landon Bott (800 meters).

Softball – Utah State softball defeated San Diego State 5-4 in a thriller April 4 at SDSU Softball Stadium, clinching the series with two wins in the three-game weekend. The victory marked USU's first road-series win over the Aztecs in program history. Overall, it was the team's fourth series victory against SDSU and its first since 2019.

Men's Tennis – The USU men's tennis team clinched a share of the Mountain West regular season title, remaining a perfect 6-0 in conference play. This is USU's fifth regular-season conference title in program history; the Aggies also took home regular season crowns in 2016, 2017, 2018 and 2024, winning the MW Tournament in 2017 and 2018.



Women's Tennis – Utah State women's tennis secured a 4-3 road win against San Jose State on April 4 at the Spartan Tennis Complex. This was the team's first three-match winning streak since 2022 and its first such run in conference play since 2019.

USU Extension

Improving the Lives of Individuals, Families & Communities in Utah



Friend of Extension Award – Joe and Paula Sargetakis received the 2026 Friend of Extension Award, which recognizes individuals for outstanding support and personal involvement in Extension efforts. Founders of Frog Bench Farms in the Salt Lake region, Joe and Paula are agricultural entrepreneurs and community philanthropists whose partnership with USU Extension has strengthened agricultural research and education.

Ignite by 4-H – In March, 66 faculty, staff, volunteers, and teen leaders traveled to Washington, D.C. to represent Utah at Ignite by 4-H. Demonstrating the effectiveness of the Beyond Ready framework, youth from Utah 4-H presented a total of 15 workshops to peers, covering topics ranging from mental health to STEM outreach. Through these presentations, they developed communication, teamwork, leadership, and critical-thinking skills. In addition, three Utah 4-H agriscience ambassadors and one advisor were invited to attend the Great American Agriculture Celebration on the south lawn of the White House.



Granite Youth Court – Fox 13 recently reported that USU Extension in Salt Lake County is partnering with the Granite School District to manage a new youth court. USU Extension Program Coordinator Angie Peters oversees the court's operations and works with student panelists to hold weekly hearings. The youth court is working to enhance protective factors for students by strengthening connections with their families and communities, developing important life skills, and building resilience.

Spring Planting Tips – Taun Beddes, USU Extension associate professor of horticulture, recently shared spring planting tips on KUTV. He discussed the unseasonably warm weather as well as dipping temperatures, and how that affects what and when to plant. He shared information about vegetables, flowers, fertilization, lawns, water restrictions, and being mindful of water-wise landscaping.



Utah Women & Leadership Project – As Utah's population and economy grow, workforce shortages in the skilled trades are concerning. Despite strong wages and advancement opportunities, women remain underrepresented in these careers. Expanding access for women is both a practical solution to labor gaps and a strategic priority for the state's economy. The USU [Utah Women & Leadership Project](#) recently published a research report titled "[Utah Women and Skilled Trades](#)." The report examines job demand, trends in women's participation, and ways to increase opportunities for Utah women in these careers.

Finance & Administrative Services

Investing in Our Success

FACILITIES

Construction Updates – Construction has concluded on the new Monument Valley Academic Building, and the ribbon-cutting ceremony was held on April 22. The College of Veterinary Medicine Building and the Administrative Services Building are on track for completion in summer 2026 and winter 2027, respectively.



College of Veterinary Medicine Building



Administrative Services Building

PARKING & TRANSPORTATION

Ride by Demand – Aggie Shuttle is driving toward a more sustainable future with the addition of a fully electric nine-passenger transit van. Beginning in Fall 2026, the van will play a key role in Aggie Shuttle's new Ride by Demand program focused on connecting Innovation Campus and the Utah Water Research Laboratory with the main Logan campus. Riders will be able to request transportation by calling a designated hotline, with informational flyers posted at key locations. By shifting to an on-demand model for these routes, Aggie Shuttle aims to reduce unnecessary daily mileage while improving efficiency and responsiveness. This new vehicle was made possible through the generous support of the USU Sustainability Council.

Government & External Affairs

2026 UTAH LEGISLATIVE SESSION

Legislative Funding – On top of a nearly \$350M base budget, USU received several one-time and ongoing funding allocations from the Utah Legislature. These will go to many areas of need that will strengthen USU's mission and ability to support students, university stakeholders, and the state and local communities. They include:

- \$1.8M of funding for performance in access to higher education, timely completion, and percentage of high-yield degrees earned
- Approval of nearly \$29M in dedicated funds for a re-scoped renovation and expansion of the historic Animal Science Building and \$165,000 in ongoing funding for building operations
- \$750,000 in one-time and \$750,000 in ongoing funding for the Center for Civic Excellence
- \$150,000 in one-time and \$150,000 in ongoing funding for the Analytics Solutions Center to create a public dashboard visualizing the risk of federal fund reductions
- \$1.5M in one-time and \$500,000 in ongoing funds to establish an odometry lab and proof of concept for communications-based train control on a light rail vehicle line with the goals of (1) determining the best signaling system for current and future transit operations in the Salt Lake Valley and (2) promoting a center of excellence for such systems at USU
- \$50,900 in ongoing funding for operation and maintenance of USU's new hazardous waste facility
- \$1.9M in one-time and \$650,000 in reallocated ongoing funds for the new Forest Restoration Institute to expand its role and work with the state's Watershed Restoration Initiative to fund watershed and forest restoration projects
- \$200,000 in ongoing funds for the Rural Business & Agricultural E-Commerce Accelerator
- \$85,000 in ongoing funds for the Utah Marriage Commission, operated by USU Extension
- \$695,300 in ongoing funds for the Utah FFA Association, operated by the Quinney College of Agriculture and Natural Resources' applied sciences, technology and education department
- \$250,000 in one-time funds for a study on impacts of geothermal energy development
- \$300,000 in one-time funds for the Bear River Agricultural Education & Resource Center
- \$200,000 in one-time funds to address the rise in extreme behavioral issues in Utah elementary schools via the Extreme Behaviors Intervention Trial Program in the department of social work
- \$200,000 in one-time funds to study the teacher academy model in the USU Center for the School of the Future (focusing on enhancements to K-12 teacher preparation, effects on educator retention within the first five years of employment, effects on K-12 student achievement, and increased teacher skills and capacity due to participation in the academy)

In addition to these USU-specific allocations, the Utah Board of Higher Education also received several allocations that help USU, including:

- \$50M in one-time funding to create a pilot state-level grant program for higher education research funding
- \$15M in one-time funding to secure, develop, and support a dedicated artificial intelligence research data center, which shall serve as a shared research resource available to public institutions of higher education and researchers throughout the state
- \$3M in one-time funding for an energy, artificial intelligence, and deep tech workforce accelerator
- \$4.5M in one-time funding to pilot evidence-based policy grants for education and workforce programs

Prior to the conclusion of the legislative session, the Utah Legislative Executive Appropriations Committee also issued final approval to release the remaining 70% of funding for USU's Strategic Reinvestment Plan.



Government & External Affairs (Continued)

INSTITUTE OF GOVERNMENT & POLITICS

Project Inspire – As part of the America 250 celebration, the Institute of Government and Politics partnered with Logan City to launch [Project Inspire](#). This initiative, directed toward students attending USU, Logan High School, and Mount Logan Middle School, will award nine \$500 grants to support creative projects that foster community engagement and address local needs. The IOGP is working to encourage USU students to submit their ideas, and members of IOGP's student advisory board are participating as well.



IOGP & Poli-Sci Book Club Series – The annual book club series, a collaborative effort between IOGP and the College of Arts and Sciences, provides a forum for thoughtful dialogue throughout the year, deepening students' understandings of foundational governance structures and contemporary public service. This year's series, led by Dr. Damon Cann and Dr. Jennifer Seelig, included discussion of *Nothing Like It in the World* by Stephen E. Ambrose and *The Constitutional Convention: A Narrative History from the Notes of James Madison* by Edward J. Larson and Michael P. Winship. For the latter, USU welcomed Sandi Goodlander, who facilitated a conversation on key constitutional questions and shared insights from her experience serving as chair of the Cache County Council."



America 250 Lecture Series – Dr. Damon Cann, professor in the School of Social Sciences, kicked off the America 250 Lecture Series with an examination of the complex compromises that shaped the founding of the United States. This series came about through a partnership between IOGP, the College of Arts and Sciences, and the Logan Library. Lectures will take place on the third Saturday of each month through December. For more information and for details on upcoming lectures, visit the [Logan Library's website](#).

University Marketing & Communications

MEDIA PRESENCE

Utah State Today – Since March 1, Utah State Today has published 92 stories, resulting in nearly 92,000 story views. Of those, about 8,500 came directly from the Utah State Today newsletter.

Social Media – The president's social media accounts have achieved 2.8% follower growth over the last quarter and have amassed nearly 530,000 channel views.

CAMPUS COLLABORATION

Music Licensing Agreement – UMAC and Aggie Athletics came together to sign a joint music licensing agreement with an outside vendor, saving the university approximately \$15,000.

Video Productions – In collaboration with advancement, UMAC created four feature videos highlighting this year's Founders Day and Old Main Society award recipients: Paul Wiebel, Kent and Donna Alder, Jill Anderson, and Ned Wenshenker. These videos, along with information on the awardees, can be found on the [Founders Day 2026 webpage](#). UMAC also teamed up with commencement organizers to create videos for honorary degree recipients Joyce and Stan Albrecht and Ara Serjoie as well as commencement speaker Bobby Wagner. On top of this, they created 18 new student orientation videos to be used as a recruitment yield tool to enroll prospective students for their first semester.

INSTITUTIONAL ADVERTISING & MARKETING

March Madness Digital Blitz – During the Mountain West Conference men's basketball tournament and March Madness (March 11–22), USU launched a "digital blitz" campaign. Using strategic geofencing, the blitz targeted stadiums, opposing teams' campuses, and key travel routes, meeting fans and rivals all along their way to Las Vegas. The multi-channel push included paid social media, YouTube, Google Display, CTV, and digital billboards spanning Utah, Las Vegas, and San Diego as well as current and potential opponent markets. In all, the campaign delivered nearly 500,000 impressions and views.

BRAND & LICENSING

Jersey Drop Campaign – UMAC executed a high-impact [jersey drop](#) to build brand excitement through limited-edition releases. In response to unprecedented demand, the university secured a new licensee and placed product in key local stores within 30 days, capitalizing on peak market interest. This strategy was bolstered by targeted Google Ads, which generated 1,079 clicks at an average cost per click of \$0.11.

March Madness Activation & Digital Consolidation – The Brand Activation Team served as the driving force behind a comprehensive "hot market" strategy for the Mountain West Conference men's basketball tournament and NCAA Championship, facilitating merchandise orders between the Mountain West Conference and key local retailers while centralizing all fan gear into a dedicated [March Madness web portal](#). This initiative was amplified by a targeted Google Ad campaign which generated 1,047 clicks and fueled record retail sell-through.



Image credit: Yahoo Sports

Strategic Summit – Utah State initiated and led a three-day strategic planning session with the Collegiate Licensing Company (CLC). This session provided CLC with a definitive roadmap to identify untapped retail opportunities and systematically enhance the Aggie brand footprint statewide.

Financial Performance – USU has achieved \$1.5M in sales for the current fiscal year (through Q3). This represents a 26% increase in royalty revenue compared to the same period during the previous fiscal year.

Research Enterprise

Research Week 2026 – Research Week, held April 6–10, highlighted the wide range of research, creative work, and innovation happening across Utah State University. The main event, the Student Research Symposium (SRS), brought together nearly 650 students who shared 448 projects through faculty- and peer-reviewed posters and oral presentations.

A defining feature of the symposium continues to be its mix of experience levels, with first-year undergraduates presenting alongside doctoral students. This approach supports early engagement in research and reflects USU's strong, inclusive research culture. Participation continues to grow, representing more disciplines each year.

Student projects covered a broad set of topics, from literary studies and the arts to practical research in emergency services, water resources, electric vehicles, health sciences, and the potential impacts of Utah hosting the 2034 Winter Olympic Games. One highlight was *Child's Play*, a book arts exhibit that showcased the role of creative scholarship alongside traditional research.

Research Week also included events such as the Statewide Campuses Research Symposium, Faculty Research Summit, workshops, and Aggie Talks, helping connect research efforts across campuses and with the wider community.

Overall, Research Week helped build momentum, strengthen connections, and shine a light on the people driving USU's research. Outstanding student work is recognized on the [SRS website](#).



Faculty Recognition – Josh Ryan and Elizabeth Vargis were appointed Faculty Fellows for Student Research for the 2026–27 academic year. Learn more at: [Utah State Today](#).



Research
UtahStateUniversity

Statewide Campuses

Actively Exploring New Avenues to Enhance Services & Contribute to the University's Mission

ENROLLMENT

Total: 6,971 (Unofficial Day 15 Spring Report)

- **Concurrent:** 1,904
- **Undergraduate:** 6,007
- **Graduate:** 964

CAMPUS & COMMUNITY HIGHLIGHTS

- USU Blanding hosted 90 juniors from San Juan High School at their **ACT Bootcamp**
- On April 6, USU Brigham hosted the **20th anniversary celebration** for their Little Brigham Aggies childcare center
- Intrepid Potash created a **new endowed scholarship** for students attending USU Moab
- USU Tremonton hosted an **Artemis II watch party** with 175 attendees; [KSL](#) and [KUTV](#) included the watch party in their coverage of the launch
- Nearly 20 students enrolled in the criminal justice section of **USU Tooele's 2026 Summer Program**—an increase of more than 25% over last year
- USU Uintah Basin hosted 70 alumni and community members for an **agriculture-focused engagement event** featuring Aggie Creamery cheese tastings and local Vernal vineyard products
- On March 17, the **Uintah Basin Speaker Series** collaborated with America250 Utah to highlight the Domínguez-Escalante expedition, bringing history to life for community attendees; the lecture will be featured on PBS Utah

FACULTY, RESEARCH & ACADEMIC PROGRAMS

Student Research Symposium – On April 9, USU Statewide Campuses held its annual Student Research Symposium. The event featured an online session followed by poster sessions at each campus. 10 students from campuses across the state—including Vernal, Salt Lake, Blanding, and Eastern—presented lightning talks about their research spanning the humanities, social sciences, and natural sciences. Dr. Josh Lively, curator of paleontology at the USU Prehistoric Museum, delivered keynote remarks. The top three presenters received a \$200 prize.

STUDENT SUCCESS & ENGAGEMENT

Statewide Graduation – 1,602 Statewide students graduated this spring, earning a total of 1,743 degrees (1,350 graduate and 393 undergraduate). Of those students, 492 were first generation. A new [graduation video](#) was produced highlighting student success.

Student Support – Through the Salt Lake Community College half-off waiver and USU Salt Lake's Helping Hand Scholarship, 13 students received approximately \$10,000 in financial support during the spring semester. Additionally, Statewide Next Step Nights were a success, with 140 attendees at USU Salt Lake, over 40 attendees at USU Tooele, and over 100 attendees at USU Brigham City.

Statewide Retention – Following the Statewide Retention Summit, Andrea Hunt and Jacob Van den Akker facilitated a second summit with Division of Student Success leadership to identify system-level retention opportunities. Five shared priorities emerged—human-centered support, student transitions, communication, data, and system alignment—highlighting the need for a more coordinated, proactive approach to student success.

Alumni Engagement – Whitney Boudrero and LaNae Walker conducted statewide listening sessions to assess alumni engagement efforts, identify growth opportunities, and determine support needs. Insights informed a strategic plan to strengthen engagement across campuses, now in active implementation.



USU Board of Trustees Executive Committee Meeting Summary

Date: April 21, 2026 | **Time:** 9:00 AM - 9:53 AM

Items on Consent Report:

1. Space Dynamics Lab Board Appointment

- Reappointment of Elizabeth Young approved for a third 3-year term (exceeding typical two-term limit)
- Terms are 3 years, renewable; SDL President Jed Hancock strongly supports her continued service

2. Policy 5205 Retirement

- Network monitoring and vulnerability scanning policy retired (subsumed into comprehensive cybersecurity Policy 5200, which was passed by the Board on November 7, 2025)

Audit, Risk, and Compliance Committee Meeting

USU Board of Trustees

Wednesday, April 29, 2026

Meeting: The Audit, Risk, and Compliance Committee met on April 3, 2026. Committee members Ryan Dent, Tessa White, and Luke Johnson were in attendance. They were joined by USU staff Burke Nazer, Janalyn Brown, Jarrod Larsen, Janna Hawkins, Nicole LaRoque, Josh Brown and Jessica Oyler.

Review: The committee reviewed and approved meeting minutes from the February 20, 2026 meeting.

Discussion:

Chief Audit Executive Transition

The committee was informed the new Chief Audit Executive has been hired, with a start date of May 4, 2026. Transitional activities are underway to support continuity as responsibilities shift to the incoming CAE.

Divisional and Enterprise Risk Management

The committee received an in-depth presentation on the history, challenges, and future direction of divisional and enterprise risk assessments at the university. The discussion emphasized the transition from historically informal risk assessments toward a more structured and centralized enterprise risk management framework. The Origami Risk platform will be used to integrate audit, ERM, compliance, and risk assessment activities, with the goal of improving data consistency, executive engagement, and governance-level reporting. The committee discussed the importance of consolidating risk-related initiatives across campus and using forward-looking data and metrics to support proactive governance and decision-making.

Committee members discussed and recommended aligning divisional risks with the university's nine enterprise risk categories and looking at options for a self-assessment framework in certain circumstances. The need for clearer risk ownership, improved timeliness of updates, and actionable reporting was emphasized by the committee. Plans were outlined to centralize risk governance, develop administrative guidelines, and establish regular reporting to the ARC Committee, including annual reviews and follow-up discussions on major risk areas.

Utah Board of Higher Education Annual Audit Report

An update was provided on the Utah Board of Higher Education annual audit report that was presented to the USHE Board's Audit Committee (AC) on March 18, 2026 by Trustee Dent and IAS leaders Nicole Laroque and Janna Hawkins. The report was positively received by the AC.. The report discussed results of the year's audits, enhancements made to university policies resulting from audit results, related consulting projects, including work focused on mitigating financial aid fraud through enhanced data monitoring and identifying risks associated with computer archiving practices, which informed the 2026 audit plan. The potential for broader system-wide use of the Origami Risk platform was also noted.

Legislative Audit Recommendations

The committee received updates on progress related to legislative audit recommendations. A structured tracking process has been implemented, including a comprehensive spreadsheet and a customizable dashboard that reflects the status of all open recommendations. Several recommendations are close to being remediated due to actions taken before the audit report was released, and good progress is being made on all audit recommendations.

The committee discussed preparation for a required six-month status report to the legislative auditor, anticipated later this summer, as well as longer-term timelines associated with budget process revisions, training requirements, and a compensation study aligned with the implementation of a new human resources system. The committee requested a summarized, dashboard-style report using visual indicators to improve visibility for trustees and the full board.

Ethics, Compliance, and Privacy

The committee received a report on ethics, compliance, and privacy activities. Updates included preparations for annual ethics and conflicts of interest disclosure training, results from recent disclosures, and ongoing work to formalize standard operating procedures for ethics and compliance workgroups. Efforts are underway to update the university's compliance matrix and ensure alignment with current regulatory requirements. The importance of timely escalation and transparency in compliance matters was emphasized.

Research and Academic Approval Committee Meeting

USU Board of Trustees

Wednesday, April 29, 2026

Meeting: The Research and Academic Approval Committee met on March 27, 2026. Committee members Gina Gagon, Kacie Malouf, Jacey Skinner, Brett Hugie were in attendance. They were joined by USU committee support staff Paul Barr, Lisa Berreau, and Haley Klaassen.

Discussion:

Academic Approvals: Vice Provost Paul Barr presented expedited tenure and rank review for Dr. David Fukuda. His tenure request received positive support from internal review committees, the department, college leadership, the provost, and the president. The committee recommended that Dr. Fukuda be hired at the rank of professor with tenure, with the recommendation placed on the consent agenda of the upcoming Promotion and Tenure board meeting.

Vice Provost Paul Barr presented academic approval proposals. Name changes and restructures were discussed, many of which were driven by state licensing changes, alignment with workforce and market expectations, and updates designed to improve student engagement and retention.

The committee also reviewed a proposal to discontinue the Health Education Teaching Certificate due to low enrollment, insufficient faculty capacity, and broader financial considerations tied to university budget initiatives.

Several new degree programs and certificates were presented and discussed in detail, with emphasis on workforce demand, industry partnerships, and funding sustainability.

The committee agreed to recommend all program proposals to the full board for approval.

Research: Vice President Lisa Berreau led a discussion focused on research priorities and federal engagement. Committee members discussed the importance of strengthening Utah State University's federal relations strategy to better position the institution for emerging opportunities and evolving federal funding landscapes. Trustee expertise within the committee was identified as a key asset, and potential role adjustments were discussed to enhance focus in this area. Future conversations will involve coordination with university leadership and consideration of external consulting support.



Strategic Partnerships and Fundraising Committee Report

USU Board of Trustees

Wednesday, April 29, 2026

Meeting: The Strategic Partnerships and Fundraising Committee met on April 3, 2026. Committee members Jacey Skinner, Tessa White, and Clark Whitworth were in attendance. They were joined by USU committee support staff: Devin Wiser, Matt White, and MaKenzie Stock.

Discussion:

The discussion addressed legislative engagement, external partnerships, and trustee involvement in advancement. The recent legislative session was reported as very successful, yielding significant additional funding and strong goodwill with state leaders. Trustees emphasized sustaining this momentum through coordinated outreach, including a formal Board letter, continued invitations to commencement and major events, and selective personal engagement with legislators and members of the congressional delegation. Commencement was identified as a key opportunity to highlight the university's statewide impact, particularly during an election year.

Trustees also noted the importance of timely post-graduation follow-up with county and legislative leaders through a statewide impact report and targeted outreach.

Strategic industry partnerships and research engagement were discussed, with consensus on the need for a more focused, coordinated approach. The Board supported prioritizing a limited number of key industries and developing a repeatable partnership model aligned with institutional priorities, with clear ownership and accountability within the President's Office.

Fundraising discussions emphasized leveraging trustees as relationship-builders through flexible, targeted engagement. Trustees stressed that all proposed strategies, structures, and charters should be clearly defined, aligned with university priorities, and formally reviewed and ratified by the Board to ensure accountability and continuity.



Student Success Committee Report

USU Board of Trustees

Wednesday April 29, 2026

Meeting: The Student Success Committee met on April 3, 2026. Committee members David Huntsman, Kacie Malouf, Dave Petersen, and Tessa White were in attendance. They were joined by USU committee support staff: Kris Winter, Shelby Frauen-Riddle, and MaKenzie Stock.

Discussion:

The meeting opened with a question to Vice President of Student Success Kris Winter about what is working well in supporting students. She noted the strong, visible commitment and passion faculty and staff have for student success.

The discussion covered enrollment trends, student success strategy, and key governance matters related to institutional performance.

Enrollment updates highlighted recent declines, attributed to reduced Utah College Advising Corps (UCAC) capacity and the age change for women serving religious missions. Enrollment deposits increased following the 2024 confirmation policy, with flexibility for financial hardship and exceptions for southeast campuses. Comparisons suggest Utah State's deferment policies, including no deferment fee, may influence student decisions.

The Division of Student Success outlined its expanded, institution-wide focus under new leadership, emphasizing improved retention and graduation rates. Strategies include targeted recruitment and support for mission-deferred students, increased use of data analytics, and peer benchmarking.

Additional discussion included coordinated missionary support efforts, particularly for female students, and a transfer pathways initiative to streamline admissions, align credits, and strengthen statewide partnerships.

An update on admissions fraud confirmed recent incidents were contained through cross-department coordination and strengthened IT safeguards, with further improvements to screening planned.

Retention data highlighted ongoing challenges with first-year persistence, reinforcing a shift toward a more retention-focused, data-informed approach.



USU Board of Trustees Regular Meeting (VIRTUAL)

Friday, March 20, 2026, at 8:00 AM - 11:20 AM MDT via Zoom:

<https://usu.zoom.us/j/89125383092?pwd=C2GXBj4qWmdOzEXsmIqOWagDCalTXr.1>

Attendance

Trustees:

Tessa White, Chair

Gina Gagon, Vice Chair

Ryan Dent

Brett Hugie

David Huntsman

Luke Johnson

Kacie Malouf

Dave Petersen

Jacey Skinner

Brandon Sorensen

Clark Whitworth

University Representatives:

Jeff Aird

Paul Barr

Lisa Berreau

Josh Brown

Janalyn Brown

Steve Campbell

Dave Cowley

Amanda DeRito

Pam Dupin-Bryant

Crystal Giordano

Todd Griffith

Haley Klaassen

Nicole Laroque

Brad Mortensen

Burke Nazer

Kristian Olsen

Jessica Oyler

Whitney Pugh

Justen Smith

Larry Smith

Tracy Sorensen

MaKenzie Stock

Nicole Vouvalis

Cam Walker

Courtney White

Matt White

Kris Winter

Other:

TJ Bliss, USHE

Jacob Wright, USHE

Agenda

1. Welcome and Call to Order

8:01 AM

Presenter: Chair Tessa White

The Chair welcomed those in attendance. It was reported that a meeting had recently been held with state auditors and that the institution had been well prepared, resulting in a positive review. Appreciation was expressed to all who contributed to the preparation and support of that process.

2. Closed Session

8:02 AM

Motion for Closed Session:

Vice Chair Gina Gagon moved that in accordance with Section 52-4-205 of the Utah Code, the Utah State University Board of Trustees enter into a closed executive session for the purpose of discussing the character, professional competence, or physical or mental health of an individual and the possible sale of real property. Motion seconded by Trustee Ryan Dent. Roll call vote

was initiated by Chair Tessa White and taken by Secretary Janalyn Brown. Voting was unanimous in the affirmative and the meeting moved to a closed session which commenced at 8:02am.

Attendance

Trustees:

Tessa White, Chair	David Huntsman	Jacey Skinner
Gina Gagon, Vice Chair	Luke Johnson	Brandon Sorensen
Ryan Dent	Kacie Malouf	Clark Whitworth
Brett Hugie	Dave Petersen	

University Representatives Present:

Janalyn Brown	Dave Cowley	Jessica Oyler
Brad Mortensen	Burke Nazer	

Motion to adjourn Closed Session:

Motion to adjourn the closed session was made by Trustee David Huntsman and seconded by Trustee Luke Johnson. Voting was unanimous and the closed session concluded at 9:09am.

3. Strategic Plan Preview

9:09 AM

Presenters: President Brad Mortensen, VP Jessica Oyler

See presentation for further details. President Mortensen introduced Burke Nazer, Justen Smith, and Pam Dupin-Bryant as new and interim members of the President's Cabinet. An overview was then provided on the current phase of the strategic planning process, including the four guiding pillars that will direct ongoing work.

It was reported that prior institutional work will be reviewed and integrated into the process. The Board was informed that a more comprehensive update, including identified strategies and associated measures, will be provided in the coming months. Board members emphasized the importance of continued communication and opportunities for feedback. Administration noted that planning groups are structured to remain effective while still welcoming broader participation where appropriate. Smaller groups are advancing targeted initiatives to support actionable progress. Appreciation was expressed for ongoing efforts, and the Board was advised that regular updates will continue.

4. President's Report, Legislative and Audit Updates

9:21 AM

Presenters: President Brad Mortensen, VP Jessica Oyler

See President's Report for further details. The Board received an update on the institution's management of the legislative audit, including the creation of a system to track progress on all recommendations and related tasks. It was noted that regular follow-up will occur with the appropriate oversight committee, required updates will be submitted to external auditors at

the designated interval, and several actions have already been implemented. The tracking system will be updated continually to maintain accountability.

Questions were addressed regarding external auditors' response, and it was reported that initial feedback has been positive, with further review to occur upon submission of the institution's progress report. Board members emphasized the importance of consistent visibility into audit-related work, and it was confirmed that audit progress will be reported at each meeting.

Additional discussion addressed enrollment trends influenced by broader external factors, and it was noted that the institution is preparing appropriate measures in response. The Board expressed appreciation for the continued momentum of institutional initiatives and reaffirmed the importance of sustaining a proactive approach to audit compliance and organizational improvement.

5. Approve: 2026-2027 Tuition Rate and Fee Adjustments

9:30 AM

Presenters: Trustee Brandon Sorensen, President Brad Mortensen, VP Dave Cowley, VP Cam Walker

5.1. Comprehensive Review of General Student Fees

Presenters: Trustee Brandon Sorensen, VP Dave Cowley

5.2. Modification of Student Fees

Presenters: Trustee Brandon Sorensen, VP Dave Cowley

See presentation for further details. The Board received an overview of tuition and fee proposals, including anticipated systemwide recommendations and planned adjustments to maintain affordability. It was reported that tuition remains a comparatively small portion of overall funding due to strong state support, and that several tuition categories will be held flat while others undergo further review. Differential tuition will be frozen for the year, and certain student fees will be consolidated into tuition to align with policy requirements.

The tuition and fee proposal presented includes a 3.36% tuition increase at Utah State University, excluding differential tuition and the College of Veterinary Medicine, as well as the transition of \$88.73 from student fees to tuition. These changes create different impacts depending on student type. The increase does not apply to students at statewide campuses, except those in Price, Moab, and Blanding, who have completed 65 or fewer credits. Proposed student fee changes include small increases on the Logan campus, a one time Athletics fee, and moving several fees into tuition, resulting in a 9.77% overall decrease in student fees. Additional transitions of fees into tuition are proposed for USU Eastern, statewide and Blanding campuses, and for Technical Education programs.

Administration addressed questions regarding state funding processes, budget submissions, and compensation adjustments, noting that guidance on salary increases varies annually. Clarification was provided on the ongoing nature of promotion-related funding and the state's evaluation of base budgets.

The Board received a summary of the required five-year fee review, during which some existing fees were identified as inconsistent with updated policy expectations and will therefore be reclassified. Discussion followed regarding proposed fee adjustments, including those related to student activities and athletics. Administration described the institutional model for student access to athletic events and its connection to campus engagement, retention, and overall student experience. The Board discussed the importance of clear communication about this model and its distinction from practices at other institutions.

Further discussion highlighted priorities for student well-being, including mental health and nutrition services, and the potential use of fee revenues to expand student opportunities and experiences. Comparative information was provided regarding tuition and fee levels across the state, with the Board noting the importance of situating proposals within the broader higher education landscape.

The Board emphasized the importance of transparency, alignment with policy, and maintaining a student-focused approach in tuition and fee decisions.

Motion:

Trustee Brandon Sorensen moved that the Utah State University Board of Trustees approve the proposed 2026–2027 tuition rates and fee adjustments as presented. Trustee Luke Jonson seconded the motion. Voting was unanimous in the affirmative. Motion passed.

6. Reports

6.1. Trustee Committee Reports

10:18 AM

6.1.1. Executive

Presenter: Chair Tessa White

See report.

6.1.2. Audit, Risk, and Compliance

Presenter: Trustee Ryan Dent

See report.

6.1.3. Research and Academic Approval

Presenter: Vice Chair Gina Gagon

See report.

6.2. Faculty Senate

10:29 AM

Presenter: Todd Griffith

See report.

6.3. USU Foundation Board

10:39 AM

Presenter: Vice Chair Gina Gagon

The Board received an update on fundraising, noting that fundraising is one of the Board's defined responsibilities and that efforts are underway to strengthen alignment with the USU Foundation Board to leverage shared resources. It was reported that the June 2026 USU Board of Trustees meeting will be coordinated with a USU Foundation Board meeting to support this collaboration and provide training.

Administration noted that current staffing levels support fundraising at the institution's present scale and that increased fundraising goals would require additional advancement capacity or expanded advancement strategies.

7. Consent Agenda

10:44 AM

7.1. 2026-2027 Board of Trustees Regular Meeting Schedule

7.2. 1.16.26 USU Board of Trustees Regular Meeting Minutes

7.3. Academic Approvals

7.3.1. Approve: New Administrative Unit

7.3.1.1. COE-BE-Department of Biological and Chemical Engineering

7.3.2. Approve: Name Changes and Restructures

7.3.2.1. CAS-COMM-Public Relations, Social Media, and Journalism Bachelor of Arts, Bachelor of Science Name Change

7.3.2.2. CEHS-KHS-Health Science Bachelor of Science Name Change

7.3.2.3. CEHS-TEAL-Early Childhood Elementary Education Bachelor of Arts, Bachelor of Science Name Change

7.3.2.4. HSB-MSLE-MBA- Entrepreneurship Specialization Master of Business Administration Name Change

7.3.2.5. QANR-ADVS-Animal-Assisted Interventions Certificate Name Change

7.3.2.6. QANR-ADVS-Animal-Assisted Interventions Post-Bachelor's Certificate Name Change

7.3.2.7. QANR-ADVS-Equine Science Minor Name Change

7.3.2.8. QANR-APEC-Department of Agricultural and Resource Economics Name Change

7.3.2.9. QANR-APEC-Ranch Management Economics Bachelor of Science Name Change

- 7.3.2.10. CEHS-SHS-Speech-Language Pathology Assistant Certificate Restructure**
- 7.3.2.11. QANR-AVTE-Master of Aviation Science Restructure**
- 7.3.2.12. QANR-WATS-Climate Adaptation Science Specialization Program Change**
- 7.3.3. Approve: Transfers**
 - 7.3.3.1. QANR-ADVS-Master of Public Health-Veterinary Public Health Specialization Transfer**
 - 7.3.3.2. QANR-ENVS-Geographic Information Science (GIS) Post-Bachelors Certificate Transfer**
- 7.3.4. Approve: Discontinuations and Suspensions**
 - 7.3.4.1. CEHS-HDFS-Family Finance Emphasis Bachelor of Arts, Bachelor of Science Discontinuation**
 - 7.3.4.2. CEHS-HDFS-Family Finance Minor Discontinuation**
 - 7.3.4.3. CEHS-HDFS-Marriage and Family Therapy Specialization Master of Science Discontinuation**
 - 7.3.4.4. CEHS-KHS-Coaching Certificate Discontinuation**
 - 7.3.4.5. CEHS-KHS-Community and Public Health Emphasis Bachelor of Science Discontinuation**
 - 7.3.4.6. CEHS-KHS-Health Education Teaching Minor Discontinuation**
 - 7.3.4.7. CEHS-KHS-Physical Education Teaching Emphasis Bachelor of Science Discontinuation**
 - 7.3.4.8. CEHS-KHS-Physical Education Teaching Minor Discontinuation**
 - 7.3.4.9. CEHS-TEAL-Education Paraprofessional Certificate Discontinuation**
 - 7.3.4.10. QANR-ADVS-Animal Biotechnology Minor Discontinuation**
 - 7.3.4.11. QANR-ADVS-Biotechnology Bachelor of Science Discontinuation**
 - 7.3.4.12. QANR-ADVS-Biotechnology Certificate Discontinuation**
 - 7.3.4.13. QANR-ADVS-Toxicology-Animal, Dairy and Veterinary Sciences Master of Science Discontinuation**
 - 7.3.4.14. QANR-ADVS-Toxicology-Animal, Dairy and Veterinary Sciences Doctorate Discontinuation**
 - 7.3.4.15. QANR-NDFS-Dietetic Internship Post-Bachelor's Certificate Discontinuation**
 - 7.3.4.16. CEHS-HDFS-Child Development Emphasis Bachelor of Arts, Bachelor of Science Suspension**
 - 7.3.4.17. CEHS-HDFS-Family and Community Emphasis Bachelor of Arts, Bachelor of Science Suspension**
 - 7.3.4.18. CEHS-HDFS-Human Development Emphasis Bachelor of Arts, Bachelor of Science Suspension**
- 7.3.5. Approve: New Emphases and Minors**
 - 7.3.5.1. CAS-THEA-Theatre Arts Costume Design Bachelor of Fine Arts Emphasis**
 - 7.3.5.2. CAS-THEA-Theatre Arts Lighting Design Bachelor of Fine Arts Emphasis**

- 7.3.5.3. CAS-THEA-Theatre Arts Scenic Design Bachelor of Fine Arts Emphasis
- 7.3.5.4. CAS-THEA-Theatre Arts Technical Production Bachelor of Fine Arts Emphasis
- 7.3.5.5. QANR-PSC-Climate Science Climate System Emphasis Bachelor of Science Emphasis
- 7.3.5.6. CAS-THEA-Elementary Theatre Endorsement Minor
- 7.3.5.7. CAS-THEA-Secondary Theatre Endorsement Minor
- 7.3.6. Approve: New Programs
 - 7.3.6.1. QANR-AVTE-Aviation Technology Unmanned Aircraft Systems Associate of Science
 - 7.3.6.2. QANR-LAEP-Environmental Design Associate of Science
 - 7.3.6.3. QANR-TDTE-Product Creation Associate of Science
 - 7.3.6.4. QANR-TDTE-Robotics, Automation, and Control Systems Bachelor of Science
- 7.3.7. Approve: New Certificates
 - 7.3.7.1. QANR-NDFS-Nutrition and Healthy Living Certificate
 - 7.3.7.2. QANR-PSC-Organic Agriculture Certificate
 - 7.3.7.3. QANR-PSC-Residential Landscape Design Certificate
 - 7.3.7.4. QANR-WATS-Marine Biology Certificate
 - 7.3.7.5. QANR-WILD-Human-Wildlife Interactions Certificate
 - 7.3.7.6. QANR-WILD-Human-Wildlife Interactions Post-Bachelor's Certificate
 - 7.3.7.7. QANR-WILD-Plant Identification and Applied Botany Certificate
 - 7.3.7.8. QANR-WILD-Wildland Fire Science Certificate
- 7.4. Approve: Policies
 - 7.4.1. Policy 2204: Student Aid Fraud Prevention
 - 7.4.2. Policy 4205: Residency for Tuition Purposes

Motion:

Trustee David Huntsman moved that the Utah State University Board of Trustees approve the Consent Agenda as presented. Vice Chair Gina Gagon seconded the motion. Voting was unanimous in the affirmative. Motion passed.

8. Action Agenda

8.1. Approve: Policy 4001: Faculty Senate and Its Committees

10:46 AM

Presenter: Executive Vice Provost Paul Barr, President Brad Mortensen

The Board received an update on revisions to the policy, which were described as aligning the policy with current legal requirements and reinforcing shared governance principles. It was noted that the policy clarifies the advisory role of faculty and promotes transparency and

collaboration across the institution. The revised structure is intended to support more consistent and cooperative governance practices.

Motion:

Trustee Jacey Skinner moved that the Utah State University Board of Trustees approve Policy 4001 regarding the Faculty Senate and its committees as presented. Trustee Ryan Dent seconded the motion. Voting was unanimous in the affirmative. Motion passed.

8.2. Approve New Center: Utah Earthquake Engineering Center

10:48 AM

Presenter: Executive Vice Provost Paul Barr

This issue is critically important to Utah State University because the state has formally tasked USU with creating a center that will help Utah prepare for a major seismic event. Approximately 80% of Utah residents live within fifteen miles of the Wasatch Fault line, which runs from Brigham City to Nephi, and the Salt Lake segment alone is expected to generate an estimated \$33 billion in economic loss during a major earthquake. Given these significant risks, the Board received an update on the projected impact of such an event. To support this statewide responsibility, the University has received legislative funding as well as a generous donation from alumnus James D. Ballif to establish a center dedicated to education, training, and research in seismic preparedness. The ongoing operation and maintenance of the facility will be supported by the College of Engineering.

Motion:

Trustee Clark Whitworth moved that the Utah State University Board of Trustees approve the establishment of the Utah Earthquake Engineering Center. Trustee Brett Hugie seconded the motion. Voting was unanimous in the affirmative. Motion passed.

8.3. Accept: External Audit Reports

10:53 AM

Presenter: VP Dave Cowley

It was reported that the Audit, Risk and Compliance Committee received ten external audit reports and conducted a review of each one.

Motion:

Trustee Dave Petersen moved that the Utah State University Board of Trustees accept the external audit reports as presented. Vice Chair Gina Gagon seconded the motion. Voting was unanimous in the affirmative. Motion passed.

8.4. Approve: Lease with Purchase Option in Price, UT

10:54 AM

Presenter: VP Dave Cowley

The Board received an overview of a proposed public-private partnership (P3) to develop new student housing. The proposal involves a privately owned parcel where a developer would construct a 96-bed facility. The University would enter into a two-year lease, after which it would have the option to purchase the property at a predetermined amount established in the contract.

Administration reported that early projections indicate the building could become financially self-supporting within a short period. A potential donor has expressed interest in contributing to the project, though donor funding has not been included in current financial modeling and would be incorporated later if secured.

Approval was requested to engage professional services needed to obtain final cost estimates, which will require initial expenditures. Administration noted that the project will return to the Board for further review once complete financial details are available.

Motion:

Trustee Luke Johnson moved that the Utah State University Board of Trustees approve the lease with a purchase option for the property located in Price, Utah, as presented. Vice Chair Gina Gagon seconded the motion. Voting was unanimous in the affirmative. Motion passed.

9. Information Agenda

9.1. Upcoming Board of Trustees Meetings

9.1.1. Friday, April 10, 2026, 8:00am-10:00am VIRTUAL Meeting (Promotion & Tenure)

**9.1.2. Wednesday, April 29, 2026, 8:00am-12:30pm Regular Meeting
(Commencement)**

**9.1.3. Friday, June 5, 2026, 1:00pm-3:30pm Regular Meeting (USU Eastern Campus,
Price, UT)**

9.2. Interim Policies

**9.2.1. Interim Policy 2102: Title IX Sexual Misconduct in an Employment or Education
Program or Activity**

9.2.2. Interim Policy 2103: Non-Title IX Sexual Misconduct

9.2.3. Interim Policy 2101: Discrimination based on Protected Characteristics

9.3. Differential Tuition and HB264 Restructuring

9.4. November 2025 Report of Investments

10. Adjourn

11:04 AM

Motion:

Trustee Dave Petersen moved to adjourn the meeting. Trustee David Huntsman seconded the motion. Voting was unanimous in the affirmative. Meeting adjourned.

Tessa White, Chair

Janalyn Brown, Secretary

Date Approved

DRAFT



USU Board of Trustees Virtual Meeting

Friday, April 10, 2026, at 8:00 – 8:30 AM

Attendance

Trustees:

Tessa White, Chair
Brett Hugie
David Huntsman
Luke Johnson

Gina Gagon, Vice Chair
Kacie Malouf
Jacey Skinner
Brandon Sorensen

Ryan Dent
Clark Whitworth
Dave Petersen (absent)

University representatives:

Brad Mortensen, President
Paul Barr
Scott Bernhardt
Janalyn Brown
Stephen Campbell
Dave Cowley

Pam Dupin-Bryant
Haly Klaassen
Burke Nazer
Jessica Oyler
Bill Plate
Justen Smith

Larry Smith
MaKenzie Stock
Cam Walker
Courtney White
Devin Wiser

Agenda

- 1. Welcome and Call to Order** **8:00 AM**
Chair White called the meeting to order and welcomed those in attendance.

- 2. Promotion and Tenure Process** **8:01 AM**
Presenter: President Brad Mortensen, Provost and EVP Larry Smith

President Mortensen provided an overview of [USU's promotion and tenure process](#). The six-year process includes rigorous evaluations, with candidates submitting dossiers reviewed by external peers and university groups. This year, 83 candidates were recommended for promotion and tenure across various levels.

- 3. Action Agenda** **8:08 AM**
 - 3.1 Approve: Promotion and Tenure**
Presenter: President Brad Mortensen, Provost and EVP Larry Smith

The President and Provost recommended 83 candidates for promotion and tenure. All individuals had completed the evaluations outlined in the promotion and tenure process.

Provost Smith prepared notification letters for approved candidates, pending final approval, to be delivered at the end of the meeting.

Motion: Vice Chair Gagon moved that the Utah State University Board of Trustees approve the promotion and tenure recommendations as presented, effective July 1, 2026, as recommended by the President. Trustee David Huntsman seconded the motion. Voting was unanimous in the affirmative. Motion passed.

4. Consent Agenda

8:10 AM

4.1 Expedited Tenure and Rank Review

4.1.1 David Fukuda - Department Head of Kinesiology and Health Science

Motion: Trustee Luke Johnson moved that the Utah State University Board of Trustees approve the Consent Agenda as presented. Trustee Clark Whitworth seconded the motion. Voting was unanimous in the affirmative. Motion passed.

5. Adjourn

8:12 AM

Motion: Trustee Ryan Dent moved to adjourn the meeting. Trustee Clark Whitworth seconded the motion. Voting was unanimous in the affirmative. Meeting adjourned at 8:12 am.

Tessa White, Chair

Janalyn Brown, Secretary

Date Approved

MEMORANDUM

To: Utah State University Board of Trustees

From: Bruce Carlson, Chair, Space Dynamics Laboratory Board of Directors

Date: 3/12/2026

Re: Re-appointment of Director Elizabeth M. Young

Utah State University Space Dynamics Laboratory Board of Directors submits to the Utah State University President and Board of Trustees recommendations to appoint individuals to the Utah State University Space Dynamics Laboratory Board of Directors. These recommendations are consistent with Article IV of the Amended and Restated Articles of Incorporation and Article III of the Amended Bylaws of the USU Space Dynamics Laboratory.

The appointment of a Utah State University Space Dynamics Laboratory board member by the Utah State University President and Board of Trustees is in accordance with [Utah System of Higher Education Policy R271, Section 3.3.2](#).

The Utah State University Space Dynamics Laboratory Board recommends the re-appointment of Ms. Elizabeth M. Young as Director to the Board for an additional three (3) year term. Ms. Young's service as a director has been very beneficial to the Laboratory and the Laboratory recommends her continued service will remain valuable.

This recommendation was made by a resolution of the majority of the Utah State University Space Dynamics Laboratory Board of Directors after appropriate review and discussion.

Elizabeth M. Young

In 2011, Young retired at the rank of Rear Admiral from the US Navy, where she served with distinction for twenty years at the National Reconnaissance Office. The NRO is one of the seventeen US Intelligence agencies and the organization responsible for designing, building, launching, and maintaining America's intelligence-gathering satellites. She led the NRO's Systems Engineering Directorate and was credited with helping the NRO through a historic six satellite launches in less than a year. Young also served as the Program Executive Officer for Navy Space Systems.

A graduate of the US Naval Academy, Young was commissioned in 1984, earning an undergraduate degree in chemistry. Her initial tour was at the Naval Space Surveillance Systems Command. Subsequent assignments included the Naval Postgraduate School, where she earned a graduate degree in physics; the Naval Research Laboratory; the Naval Space Command Detachment at the Defense Support System Ground Station; the Aerospace Data Facility; and the Naval Tactical Unmanned Air Vehicle Program at the Naval Air Systems Command. In 1999 she reported to the NRO, where she served as the Deputy Chief Systems Engineer of the Future Imagery Architecture Program in the Imagery Intelligence Directorate. In 2001 she was reassigned as the Deputy Program Manager and Chief Systems Engineer of the Advanced Concepts Staff in the Imagery Intelligence Directorate. In 2005 she was appointed Program Manager, Low Earth Orbit System Program Office in the Signal Intelligence Directorate.

Young is the recipient of numerous awards and decorations, including the Defense Superior Service Medal, the Legion of Merit, two Defense Meritorious Service Medal, and the Meritorious Service Medal. She is also the recipient of two NRO Gold Medals for Distinguished Service, the National Geospatial-Intelligence Agency Medallion, and the Defense Intelligence Agency Director's Award.



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

EXECUTIVE MEMORANDUM

TO: Utah State University Board of Trustees
FROM: David T. Cowley, Vice President for Finance & Administrative Services; Eric Hawley, Chief Information Officer
CC: Brad L. Mortensen, President
DATE: April 29, 2026
RE: Approval to Retire Policy 5205: Network Monitoring & Vulnerability

BACKGROUND: In November 2025, the Board of Trustees adopted Policy 5200: Information Security and Appropriate Use. This new policy includes updated terms and definitions, as well as relevant content from Policy 5205: Network Monitoring & Vulnerability. Therefore, Policy 5205 is redundant, outdated, and no longer needed.

IMPLEMENTATION: The Chief Information Officer (CIO) conducted a risk assessment based on the absence of this policy and determined the risk level to be very low. The CIO coordinated efforts with the Chief Information Security Officer (CISO). Together, they determined UBHE rule requirements are met by the new Policy 5200. The CIO and CISO solicited feedback from campus IT managers and the cybersecurity groups. Communication was also sent to the Policy Update listserv.

ACTION: The retirement of Policy 5205: Network Monitoring & Vulnerability followed the processes outlined in Policy 1001: University Policy System. The University Leadership Council approved the retirement of the policy during the April 8, 2026, meeting. The President and Vice President for Finance & Administrative Services recommend that the Board of Trustees approve the retirement of Policy 5205: Network Monitoring & Vulnerability.

ATTACHMENTS: Policy Retirement Form
Notice sent to campus community
Policy 5205 (current version – to be retired)
Policy 5200 (to be replaced by current version)





This form is used to suggest the retirement of an existing policy and to provide information to the Policy Office in order to assess:

- the need for retiring the policy
- the impact on risks associated with retirement and
- the impact on resources required to retire the policy

INSTRUCTIONS: The Policy Office can be contacted at any point in the process to provide assistance and direction in developing the required information. For more information about the retirement of policies see 1001-PR6, Retirement of Policies.

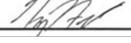
PART 1: Needs Assessment

POLICY INFORMATION			
Policy Number & Title:	5205: Network Monitoring & Vulnera	Category:	Facilities, Operatio
Covered Individuals:		Subsection:	Info Tech
Submitted by:	Eric Hawley	Date:	3/10/2025
Responsible Executive:	 box SIGN 19WXY5ZY-1XLKQXRJ	Date:	Mar 16, 2026
Policy Custodian:	 box SIGN 426LK774-1XLKQXRJ	Date:	Mar 12, 2026
Provide a summary of the reasons that support the retirement of this policy. Why is it no longer needed? Is there a law or regulation that necessitates retiring the policy? Is this policy being consolidated with a different policy? Include other related policies impacted by the retirement of this policy. The current content in Policy 5205 is now covered in the new Policy 5200: Information Security and Appropriate Use. Policy 5205 was adopted in 2008. Definitions and updated terms are now included in Policy 5200.			

In the absence of the policy or amendment, what is the...	Risk Level:
Likelihood that unwanted behavior will occur?	☒ Low ☐ Medium ☐ High
Severity of negative financial consequences?	☒ Low ☐ Medium ☐ High
Severity of reputational consequences?	☒ Low ☐ Medium ☐ High
Severity of health and safety consequences?	☒ Low ☐ Medium ☐ High
Severity of operational consequences?	☒ Low ☐ Medium ☐ High
Severity of compliance consequences?	☒ Low ☐ Medium ☐ High
If you answer medium or high to the risk questions above, please provide additional detail to support your answer:	

Who will be impacted by the retirement of this policy?
no one, as the purpose and detail are already wrapped into 5200
What additional policies or procedures will need to be updated as a result of retiring this policy?
already done (5200)
What financial resources will be impacted by retiring this policy?
none
Who will be included in the policy retirement team?
Allen Hill

Submit to the University Policy Office for preliminary review

POLICY OFFICE USE ONLY:	
☒ No longer needed for UBHE policies	☒ Impact on existing policies or procedures
☐ New federal, state laws, rules, or regulations require the retirement of existing policy.	☒ Impact on other relevant areas of operation
OFFICE OF GENERAL COUNSEL USE ONLY:	
Signature:	 box SIGN 1R9OZRW6-1XLK0XRJ

Do not continue until the Policy Office contacts you.

PART 2: Retirement Plan

What stakeholder groups were included in reviewing and commenting on the policy? Attach comment summaries from stakeholder discussions.
See 5200 review and approval process
Describe best practices in this area. List aspirational peer policies that were reviewed.
See 5200 review and approval process
Attach a communications plan that will be developed to notify campus and stakeholders. Include any external constituents that will need to be notified of this change.
not needed, as requirements won't change
In the absence of this policy, what new policy or procedure will be implemented?
aready done 5200
What mechanisms or assessments will be implemented to monitor any unintended consequences of retiring this policy? Or what measures will be put in place?
not needed, as requirements won't change

DRAFT APPROVAL			
Responsible Executive:	Eric Hawley	Date:	11/Mar/26

PART 3: Submit to the University Policy Officer who submits the retirement proposal for approval. The Responsible Executive presents the proposal at applicable meetings and records feedback and/or decisions.

APPROVAL PROCESS		
Body	Date Consulted	Decision or Comments
USU Leadership Council		
President		
Board of Trustees		
Utah Board of Higher Education		N/A

POLICY OFFICE USE ONLY:			
Approved	☐ Yes ☐ No ☐ With revisions		
Removed from Policy Library		Notice Published on Policy Office Home Page	
Email sent to Policy Update Subscribers			

Proposed Retirement of USU Policy 5205 – Network Monitoring & Vulnerability Scanning

Hi everyone,

As part of USU's policy review and retirement process, we are providing notice to stakeholders and offering an opportunity for feedback before this proposal moves to final approval. Please see the details below and don't hesitate to reach out with any thoughts.

USU Policy 5205 (Network Monitoring & Vulnerability Scanning) is being proposed for retirement.

Policy 5205 has been in place since 2008. During the recent rebuild of Policy 5200 (Information Security and Appropriate Use), the substance of 5205 was fully incorporated into 5200 — both the spirit and the letter. Retiring 5205 simply eliminates the redundancy and keeps our policy library clean.

NETWORK MONITORING AND VULNERABILITY SCANNING ARE NOT GOING AWAY

USU has adopted the [NIST Cybersecurity Framework \(CSF\)](#), and we are obligated under USHE Regulation R345 to meet the CIS Controls. Both frameworks explicitly require continuous vulnerability scanning and network monitoring as foundational elements of a sound information security program. These practices are required, by regulation and by framework, independent of any single policy document, and they continue under Policy 5200.

WHAT THIS MEANS FOR YOU

Operationally, nothing changes. The USU InfoSec Team continues conducting vulnerability scanning across USU systems.

NEXT STEPS

The retirement proposal is currently in the signature routing phase. It is targeted for final approval at the April ULC and Board of Trustees meeting. In the meantime, this is your opportunity to weigh in. If you have questions, thoughts, or concerns, I'd love to hear from you — DM me on Slack or shoot me an email at allen.hill@usu.edu. You can also find more information at <https://infosec.usu.edu>



UtahStateUniversity

POLICY MANUAL

OPERATING POLICIES AND PROCEDURES

Number 5205

Subject: Network Monitoring & Vulnerability Scanning

Effective Date: September 24, 2008

5205.1 PURPOSE

Computers that are connected to the Utah State University Network are at risk of compromise resulting in unauthorized access to computing resources (processor power and storage space) and to confidential data (personal and financial) stored on or transmitted through the computer as part of university operations. This Policy defines a means by which vulnerable and/or compromised computers might be identified and isolated from the network pending correction of the problem.

5205.2 POLICY

The University's Information Technology (IT) Security Team is authorized and directed to monitor network traffic patterns and to probe ports of connected computers for the purpose of identifying vulnerable and compromised computers on the USU network. All computer and communication devices connected to the Utah State University network are subject to this monitoring, whether or not they are owned or operated by Utah State University. Arrangements with the Security Team for exceptions can be made if probes or other vulnerability testing interfere with research applications and other security assurances can be obtained.

IT is directed to develop procedures for announcement or notification of network-connected devices with vulnerabilities or compromises. Vulnerabilities and other policy violations will be resolved by communication to the user of record, with denial of network access reserved as a last resort. Compromises and other security breaches will be resolved immediately by termination of network access to protect the resources. That termination will be followed by communication with affected users or system administrators to identify and resolve the issue.

IT will implement procedures for subsequent handling of incidents to achieve a good resolution, maintaining or restoring the user's network access while protecting the institutions resources, consistent with the [Information Security \(5200\)](#) and the [Appropriate Use of Computing, Networking, and Information Resources \(5201\)](#).

The Security Team will monitor patterns and attributes of network traffic but not the information content except as needed to identify known attack vectors. Privacy of individual communication will be respected by the Security Team, consistent with the [Data Privacy \(3016\)](#).

Network performance and/or availability may be affected by the network scanning. The IT Security Team is the authorized entity to perform enterprise-wide network scanning of all USU computer systems. System administrators may scan systems and subnets in their area of responsibility. Those scans must be coordinated with the IT Security Team to avoid confusion with unauthorized intrusion attempts.

5205.3 DEFINITIONS

Vulnerability - lack of a security barrier to unauthorized access or use.

Compromise - a vulnerability that has been found and exploited by an unauthorized user.

Network Traffic Patterns - information about the source, destination, protocol, port and bandwidth of network packets.

Network Scanning - systematic attempts to communicate with a class of network addresses via a particular port or protocol to see which computers respond. A first step to identify and exploit vulnerabilities.

University Policy 5200: Information Security and Appropriate Use

Category: Facilities, Operations and IT

Subcategory: Information Technology

Covered Individuals: Employees, Students, and Guest Users of IT Resources

Responsible Executive: Chief Information Officer, Executive Vice President & Chief Operating Officer

Policy Custodian: Information Technology, Chief Information Security Officer

Last Revised: 2025/11/07

Previous USU Policy Number: 550: Appropriate Use and 551: Information Security¹

5200.1 PURPOSE AND SCOPE

The purpose of this Information Security Policy is to establish a comprehensive framework for protecting the confidentiality, integrity, and availability of Institutional Information and Information Technology Resources at Utah State University (USU), safeguarding them from unauthorized access, use, disclosure, disruption, modification, or destruction. This policy enables the university to comply with regulations and maintain a secure environment for administration, academics, and research.

This policy applies to all faculty, staff, students, third parties, vendors, and any other individuals or entities with access to USU's Information Technology Resources and Institutional Information, also known as User(s).

5200.2 POLICY

2.1 Information Security Standards

All users must use the University's Information Technology Resources responsibly and in accordance with applicable laws, regulations, and policies. The use of these resources must align with assigned roles and be in accordance with the capacity and purpose of the resource.

USU maintains security policies, standards, procedures, and best practices to protect Institutional Information and University Systems. These resources are available at <https://infosec.usu.edu> and are regularly updated to address evolving security threats, compliance requirements, and industry best practices. Users should refer to this repository for required procedures and guidance on implementing security controls, understanding legal obligations, and managing risks effectively.

USU is committed to compliance with all applicable local, state, federal, and international regulations, including but not limited to [FERPA](#), [HIPAA](#), [GDPR](#), [GLBA](#), [the Utah Governmental Data Privacy Act \(GDPA\)](#), [the Utah Protection of Personal Information Act](#), and the Government Records Access and Management Act (GRAMA), as well as internal university policies and procedures governing information security and privacy. Adherence to these requirements is critical to protecting university data, ensuring research integrity, and maintaining operational security. Additional compliance resources are available on the [Information Security website](#).

2.2. Appropriate Use and Terms of Use

¹ Applicable content from Policy 5201 was combined with Policy 5200, creating one new policy. Policy 5201 is retired.

Users are required to adhere to the following Appropriate Use standards whenever they access or interact with the University's Information Technology Resources and Institutional Information:

- a. **Access Controls & Authentication:** Access to restricted resources is granted through authentication credentials and controls provided as a privilege tied to a user's role. The university reserves the right to revoke credentials to safeguard resources.
- b. **User Responsibility & Security Awareness:** Users are responsible for maintaining the integrity, security, and confidentiality of university resources and data. They must follow instructions from resource administrators and take proactive measures to prevent unauthorized access, such as recognizing phishing attempts, malware risks, and social engineering threats.
- c. **Prohibited Activities:** Circumventing security controls, accessing unauthorized systems or data, sharing credentials, or granting unauthorized access to others is strictly prohibited. Users must only access resources and data within the scope of their roles and responsibilities, ensuring compliance with all related policies and procedures.

By accessing the University's Information Technology Resources and Institutional Information, users agree to adhere to these [Terms of Use](#), which define acceptable behavior, security practices, and user responsibilities. These Terms of Use are subject to updates to reflect changes in legal, regulatory, and cybersecurity requirements. Additionally, users must comply with all applicable federal, state, and local laws, including those governing intellectual property, communications, privacy, and the appropriate use of government resources.

2.3 Device and Endpoint Management and Security

All university-owned devices must meet or exceed the security procedures and standards outlined at <https://computers.usu.edu>. This includes requirements for device configuration, software updates, and endpoint security controls to protect against unauthorized access, malware, and other threats. Access controls must be implemented on all devices to ensure only authorized individuals can access university-owned or -managed data and resources. Employees are responsible for collaborating with their assigned IT staff to ensure their devices meet these security standards.

The use of personal devices to access university data or conduct university business must be limited to ensure the security, privacy, and integrity of institutional information. Employees are encouraged to utilize university-provided devices and services whenever possible. If personal devices must be used, they must comply with the university procedure, as documented on the [Device Management Website](#).

2.4 Data Classification and System Criticality Classification

USU data must be inventoried and classified according to a system that assesses the potential impact of unauthorized access, use, or alteration. This classification framework helps manage risks associated with various types of Institutional Information and supports critical functions such as compliance, information management, vendor oversight, and incident response. Each classification level considers potential impacts on individuals and the university, as well as legal, regulatory, and contractual obligations. While all individuals handling Institutional Information should be aware of its classification and associated safeguards, trustees and stewards must ensure that their teams implement and adhere to appropriate security measures. For more details, refer to the [USU Data Classification and System Criticality Classification](#).

2.5 Security Incident Management

A security incident is any unauthorized access, acquisition, disclosure, loss of access, or destruction of Institutional Information. The significance of a breach is determined by its potential to cause substantial harm or disruption to university resources, stakeholders, affected individuals, or services. This assessment considers various risk factors, including the type and volume of data involved, the number of individuals affected, and the nature of the incident. All users must report Information Security Incidents according to the procedures and timelines outlined at <https://infosec.usu.edu>. Timely reporting helps

mitigate damage, ensures compliance with regulatory requirements, and assists in the swift recovery and investigation of security incidents.

2.6 Vendor Management

Vendors or third-party contractors may access the University's Information Technology Resources or Institutional Information only if an appropriate agreement is established, ensuring compliance with applicable information security and privacy regulations and standards, based on the type of Institutional Information involved. Please consult the [University Vendor Management Plan](#) before initiating a contractual process to understand and address the applicable compliance controls.

2.7 Information Privacy

USU is committed to protecting the privacy of Personal Data in compliance with applicable laws, regulations, and standards. Users must handle Personal Data in accordance with the information outlined in the University Privacy Policy and the [USU Privacy Website](#). This includes safeguarding personal information and promoting its confidential, lawful, transparent, and responsible use of Personal Data.

2.8 Artificial Intelligence (AI) Use and Compliance

USU recognizes the growing significance of Artificial Intelligence (AI) in education, research, and operations. The use of AI tools must align with university policies, security guidelines, and ethical standards.

- a. **Data Security & Privacy:** Users are responsible for ensuring that sensitive, restricted, or confidential data (including FERPA, HIPAA, Personal Data, and proprietary university information) is not uploaded or processed in AI tools unless the university has an established privacy agreement with the provider. Uploading such data to third-party AI tools without a university-approved privacy agreement may result in security breaches, compliance violations, and legal or institutional liability. Users must understand these restrictions and exercise caution when using AI tools.
- b. **Integrity and Accountability:** AI-generated content must be reviewed for accuracy, bias, and compliance with copyright regulations before use in coursework, research, or administrative communications.
- c. **Responsible Use:** AI should supplement human decision-making but must not replace critical thinking, academic rigor, or professional judgment.
- d. **Institutional Guidance:** Faculty, staff, and students should refer to [USU's AI Guidance](#) for official procedures, best practices, and available AI tools.

2.9 Enforcement and Sanctions

Failure to comply with USU's Information Security policies, including but not limited to unauthorized access, data misuse, or failure to report security incidents, may result in disciplinary action. Potential sanctions include loss of access to university IT resources, termination of employment or academic privileges, and, where applicable, legal action. Violations will be investigated in accordance with university procedures, and actions will be determined based on the severity of the infraction.

Disciplinary actions will be enforced in alignment with the following policies:

- [USU Policy 3001](#): Setting Expectations and Managing Performance
- [USU Policy 4006](#): Academic Due Process—Sanctions and Hearing Procedures for Faculty
- [Article VI of the Student Code](#): Governing Procedures for Students

5200.3 RESPONSIBILITIES

The successful implementation and adherence to USU's information security policies require the involvement of various stakeholders across the institution. The following roles outline the responsibilities of specific parties to ensure compliance and protect university assets.

3.1 President's Cabinet, Deans, and Department Heads

The President's Cabinet, Deans, and Department Heads are accountable for fostering a culture of compliance, providing the necessary resources to support information security initiatives, and ensuring that their departments and divisions comply with relevant security policies, procedures, and standards. Additionally, they must promote security awareness and support the enforcement of university-wide security measures.

3.2 Chief Information Security Officer (CISO)

The CISO is responsible for developing, maintaining, and overseeing USU's overarching information security program. The CISO ensures that security standards, procedures, and best practices are documented, updated, and made accessible to support compliance with laws, policies, and evolving security needs. This role includes overseeing the implementation of enterprise security controls and leading responses to security incidents. Additionally, responsibilities include coordinating the assessment of emerging threats and vulnerabilities to drive continuous improvement in security practices and procedures across the university. Collaboration with university departments is a key aspect of this role, ensuring the delivery of effective training and awareness programs related to information security.

3.3 Information Technology and IT Staff

The Information Technology department, along with all campus IT staff, holds primary responsibility for implementing and enforcing technical security controls on university systems. IT staff includes members of the USU Information Technology Department as well as any other USU employees tasked with these responsibilities. Collectively, they are accountable for ensuring robust access control, comprehensive device management, proactive engagement, and timely incident response. This includes the consistent application of security patches, configurations, reporting, and updates in accordance with established university procedures to protect the university's information assets and infrastructure.

Additionally, IT staff manage IT resources, systems, and services that store, process, or transmit Institutional Information. They ensure system security through proper configuration, maintenance, and adherence to best practices, policies, and procedures. By providing technical expertise and supporting the systems under their care, IT staff play a critical role in preserving data integrity, enforcing security standards, and protecting university-owned assets.

3.4 Data Management Roles

3.4.1 Data Trustees are responsible for appointing Data Stewards to manage specific data sets or operational responsibilities, ensuring that data governance is effectively delegated and maintained. They establish and approve governance practices designed to protect and preserve Institutional Information while ensuring alignment with organizational goals and regulatory requirements. Additionally, Data Trustees guide the development of data strategies, ensuring compliance with policies and mitigating risks associated with data management. They also make high-level decisions regarding system procurement, creation, and lifecycle governance to support the organization's overall mission.

3.4.2 Data Stewards Data Stewards are responsible for collaborating with Data Trustees to ensure that operational practices align with data governance strategies, institutional goals, and organizational policies. They inventory, classify, and categorize Institutional Information to maintain an accurate understanding of the data landscape. Additionally, they manage user access permissions based on roles and responsibilities, ensuring compliance with relevant policies, regulations, and contracts. Data

Stewards implement and enforce policies, procedures, and best practices to promote secure and effective data management. They also oversee and approve the lifecycle of Institutional Data, including its collection, transfer, integration, and use, with a focus on maintaining integrity when data is shared across units or with third parties.

3.5 Researchers and Research Administrators

Researchers must comply with university policies, state and federal regulations, and contract and award terms to protect research data, including by working under the proper cybersecurity controls, adhering to export control laws and securing controlled technologies. They are responsible for classifying and safeguarding research data in accordance with university procedures to protect sensitive research, intellectual property, and federally funded projects. Research Administrators assist researchers in fulfilling compliance requirements, working with the Office of Research to secure research data and report any information security incidents. For further guidance on research data security, and export controls, researchers can consult [USU's Office of Research](#).

3.6 Faculty, Staff, and Students

All faculty, staff, and students are responsible for adhering to the information security procedures outlined in <https://infosec.usu.edu>. This includes following the security protocols for device usage, data protection, and reporting any security incidents. Users are required to comply with data classification procedures and ensure that any confidential or sensitive data they handle is protected in accordance with university standards. Each user is expected to complete any required information security awareness training and to follow best practices for securing their accounts, passwords, and devices.

3.7 Contractors and Vendors

Contractors and vendors with access to university systems or data must comply with the university's information security policies and contractual obligations regarding data protection. Contractors must follow the security protocols outlined in their agreements, including limited use, confidentiality, access controls, data handling procedures, incident reporting, and disposal or return of data. When engaging or planning to procure University Systems through third-party vendors, all units and departments must follow the [USU Vendor Management Process](#).

3.8 Users (General Responsibility)

Users include university employees, faculty, students, agents, contractors, consultants, temporary staff, volunteers, visiting scholars, guests, and affiliated personnel through third-party contractors who are granted access to University Systems, Institutional Information, or resources to fulfill their academic, professional, or contractual responsibilities, or for any other authorized purpose.

Users are responsible for protecting Personal Data and Institutional Information on any devices they use and for ensuring that personal and sensitive information is handled securely. They must safeguard their user-controlled equipment, accounts, and credentials to prevent misuse or compromise.

Users are required to report any information security incidents promptly and follow the procedures outlined at <https://infosec.usu.edu>. Furthermore, users must adhere to the university's acceptable use policies as outlined in the [Terms of Use](#), as well as any service and access policies established by their units, departments, or USU. Finally, they must comply with all applicable laws, regulations, and university policies governing the use of institutional systems and data.

5200.4 REFERENCES

This policy and its associated procedures are designed to comply with and implement the requirements of the Utah State of Higher Education Policy R345, Information Technology Resource Security, and the Protection of Personal Information Act, Utah Code 13-44-101 et seq. The framework established by this policy is based on current best practices, including the CIS Controls, the NIST Cybersecurity

Framework, and other relevant standards and guidelines. These are intended to secure university information systems, protect personal data, and ensure compliance with applicable legal and regulatory standards.

- [Utah System of Higher Education Policy R345, Information Technology Resource Security.](#)
- [Protection of Personal Information Act, Utah Code 13-44-101 et seq.](#)
- [Center for Internet Security – Critical Security Controls \(CIS Controls\)](#)
- [NIST Cybersecurity Framework](#)

5200.5 RELATED USU POLICIES

- [Information Technology Policies \(5200-5208\)](#)
- [Policy 1010: Contract Signature Authority and Delegation](#)
- [Policy 2202: Privacy and Security of Protected Health Information under HIPAA](#)
- [Policy 4102: Research](#)
- [Policy 4103: Protection of Human Participants in Research](#)
- [Policy 4106: Intellectual Property](#)
- [Policy 4107: Research Data](#)
- [Policy 4109: Export Controls](#)

5200.6 DEFINITIONS

- **Artificial Intelligence (AI).** A machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments.
- **Capacity of Resource.** Some Resources have a limit that can be exceeded by certain uses, either causing the Resource to underperform or exceed service or license capacity.
- **CIS Controls.** A set of best practices developed by the Center for Internet Security to safeguard systems and data from cyber threats.
- **Chief Information Security Officer (CISO).** A role responsible for developing, maintaining, and overseeing the organization's information security program. The CISO ensures that security standards, procedures, and best practices are documented, updated, and made accessible to support compliance with laws, policies, and evolving security needs.
- **Compromise.** Loss of exclusive, authorized control of an IT Resource to an unauthorized person or unauthorized software, resulting in the exploitation, control, and/or use of the IT Resource beyond USU's purpose or intent for that IT Resource.
- **Credentials.** UserID/PIN, username/passcode or other secrets or keys used to gain access to a restricted Resource.
- **Data Asset Inventory.** A comprehensive list of data assets owned or managed by an organization, used for classification and protection purposes.
- **Data Stewards.** Management-level officials (e.g., Controller, Registrar, Directors, Managers, Principal Investigators) who have operational responsibility for specific data or services that may contain sensitive information. They coordinate with Data Trustees, classify data, authorize access, and enforce applicable policies and practices.
- **Data Trustees.** USU Administrative Officers (President, Provost, Vice Presidents, Deans, etc.) with oversight of data in their divisions. Responsibilities include appointing stewards, implementing protective practices, approving data transfers and usage, and designing workflows to reduce risk.
- **Device.** Any electronic equipment, such as laptops, desktops, smartphones, or tablets, used to access, store, or process organizational data.
- **Endpoint Security.** Measures implemented to protect devices such as laptops, desktops, and mobile devices connected to an organization's network from threats like unauthorized access and malware.
- **Export Control Regulations.** U.S. laws that restrict the export of certain sensitive technologies, information, and software, particularly those related to defense and national security.
- **Incident Management Plan.** The process of reporting any event that compromises the security

of information systems, including data breaches and unauthorized access.

- **Institutional Data.** Refer to Institutional Information.
- **Institutional Information.** Information collected, created, maintained, shared with, or generally managed by Utah State University (USU) in support of academic, research, administrative, or operational functions. This includes data in all formats and media and encompasses both personal and non-personal data.
- **Information Technology (IT).** Refers to the systems, services, personnel, and resources involved in managing the university's computing, networking, and digital infrastructure.
- **Information Technology Resources.** Any service, data, or device provided by or on behalf of the University, including networks, infrastructure, devices, applications, and storage.
- **NIST Cybersecurity Framework.** A set of standards, guidelines, and practices developed by the National Institute of Standards and Technology to help organizations manage and reduce cybersecurity risks.
- **Personal Data.** Also known as Personally Identifiable Information (PII), this includes any information that can be used to identify an individual. This includes both Direct Identifiers (e.g., name, ID number) and Indirect Identifiers (e.g., ZIP code, gender, age) that can reveal an individual's identity when combined.
- **Privilege.** While access is generally granted to everyone in a relevant role, the University retains the right to revoke that access to protect the Resource from misuse or overuse.
- **Research Administrators.** University staff who manage compliance requirements related to sponsored research and regulatory areas. They coordinate with institutional offices and the CISO to secure research data and report incidents.
- **Resource.** Refer to Information Technology Resources.
- **Resource Owners.** Individuals directed to establish and communicate procedures and access controls specific to the Resource they manage, aligning with policy objectives.
- **Resource Users.** Individuals who use a Resource and are responsible for complying with policies and procedures associated with that Resource.
- **Restricted Resources.** Resources available only to individuals in particular roles, unlike public resources such as the USU homepage.
- **Role.** A category of user who is given access to a particular restricted Resource; may range from general (e.g., student) to specific (e.g., advisor).
- **System Administrators or Support.** IT professionals responsible for managing systems and services that store, process, or transmit sensitive data. They ensure technical security, system preservation, and compliance with best practices and policies.
- **Terms of Use.** A document outlining acceptable behavior, responsibilities, and practices that users must agree to in order to access and use organizational resources.
- **Third-party.** Any external entity that interacts with the institution but is not directly part of it, including vendors, collaborators, and government agencies.
- **University Systems.** Any software, hardware, network, or cloud-based system used to gather, process, transmit, or store data in support of university operations.
- **User.** Any individual or organization granted access to University Systems, including students, faculty, staff, contractors, volunteers, and affiliated personnel. Users are expected to comply with policies, report incidents, and follow university security guidelines.
- **Vendor Management Plan.** A structured approach to managing third-party vendors and service providers to ensure they meet operational, security, and compliance requirements. It includes evaluation, contracting, monitoring, and risk management processes.

Additional definitions of key terms related to USU's Information Security Program may be found in the Glossary section on the [USU Information Security Program website](#).

Information below is not included as part of the contents of the official policy. It is provided only as a convenience for readers/users and may be changed at any time by persons authorized by the president.

RESOURCES

Procedures

- [Information Security Program: https://infosec.usu.edu](https://infosec.usu.edu)
- [Device/Endpoint Management: https://computers.usu.edu](https://computers.usu.edu)
- [Data Asset Inventory: https://datacensus.usu.edu](https://datacensus.usu.edu)
- [Research Data: https://research.usu.edu/compliance/](https://research.usu.edu/compliance/)
- [Artificial Intelligence: https://ai.usu.edu](https://ai.usu.edu)
- [Data Management and Storage](#)
- [Equipment Management Procedures and Forms](#)

Guidance

- [Center for Internet Security CIS Critical Security Controls \(USHE 2022 selected core cybersecurity framework\):](#)
- [NIST Cybersecurity Framework](#)
- [Guidance For Implementing National Security Presidential Memorandum 33 \(Nspm-33\) On National Security Strategy for United States Government-Supported Research and Development](#)
- Cybersecurity Maturity Model Certification (CMMC) Program
 - <https://www.federalregister.gov/documents/2024/10/15/2024-22905/cybersecurity-maturity-model-certification-cmmc-program>
 - <https://www.defense.gov/News/Releases/Release/Article/3932947/cybersecurity-maturity-model-certification-program-final-rule-published/>
- Executive Order 14028, Improving the Nation's Cybersecurity:
 - <https://www.federalregister.gov/documents/2021/05/17/2021-10460/improving-the-nations-cybersecurity>
 - <https://www.nist.gov/itl/executive-order-improving-nations-cybersecurity>

Related Forms and Tools

- [Equipment Management Forms](#)

Contacts

- USU IT Services: <https://it.usu.edu>
 - Chief Information Officer, [Eric Hawley](#)
 - Chief Information Security Officer, [Allen Hill](#)
 - Service Desk, (435) 797-HELP
- [Office of Legal Affairs](#)
- [Office of Research](#)
- [Internal Audit Services](#)
- List of Data Trustees, Data Stewards, and Support Technicians (under development)

POLICY HISTORY

Original issue date: 2022/03/23

Last revision date: 2025/11/07

Next scheduled review date: 2026/05/01

Previous revision dates: 2022/03/23; 2025/06/20



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Restructure: Nursing Associate of Applied Science
Department of Nursing
Emma Eccles Jones College of Education and Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Nursing, in the Emma Eccles Jones College of Education and Human Services, proposes restructuring the Nursing Associate of Applied Science.

This proposal restructures the Associate of Applied Science in Nursing program from a former two-step structure, in which students earned a Practical Nursing certificate followed by an Associate of Applied Science, into a cohesive, integrated four-semester curriculum that prepares competent, practice-ready registered nurses.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-NURS-Nursing-AAS-Restructure



USU_BANNER - New R401 Abbreviated Program Proposal - Nursing - AAS - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Education & Human Services

Department(s)

Nursing

Letters of Support (if needed)

-

Current Title (if applicable)*

Nursing - AAS

Proposed Title

Nursing - AAS

CIP Code

CIP Code (6-digits)*

513801

Minimum Number of Credits (if applicable)

63

Maximum Number of Credits (if applicable)

67

Type of Degree: (BA, BS, etc.)*

AAS

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

No new program - changes to existing academic program only

Existing Academic Program Changes:

Program Restructure (with or without Consolidation)

Administrative Unit Changes:

N/A

Other: (explain change)

The Associate of Applied Science in Nursing (AAS) program marks the transition from the former 1+1 model—previously offering a Practical Nursing (PN) certificate followed by an Associate of Applied Science—to a cohesive, integrated four-semester curriculum that prepares competent, practice-ready registered nurses. The total program length is four semesters, with an optional PN step-out pathway after completion of the first two semesters at the Price, Moab, and Blanding campuses. Students who meet required maternal–newborn and mental health competencies may sit for the NCLEX-PN examination, enabling them to begin working as practical nurses while completing the final two semesters of AAS.

Total program length at the Uintah Basin and Tooele campuses will continue to be two semesters, offering AAS completion after students have completed a PN certificate at a USHE technical college.

There are minimal curriculum changes required for the proposed program(s).

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval
No

Educator Licensing Approval
No

SECTION I: THE REQUEST

R401 Purpose

The Associate of Applied Science in Nursing (AAS) program marks the transition from the former 1+1 model—previously offering a Practical Nursing (PN) certificate followed by an Associate of Applied Science—to a cohesive, integrated four-semester curriculum that prepares competent, practice-ready registered nurses. There are minimal changes to the current curriculum with this proposed program change. This proposal supports the continuation of the Associate of Applied Science (AAS) nursing program concurrent with the implementation of the new Associate of Science in Nursing (ASN) pathway. Maintaining the AAS option ensures continued access to a work-ready nursing pathway that is intentionally designed for rapid entry into practice and immediate employment within local healthcare systems.

USU's regional campuses serve geographically dispersed communities with distinct educational objectives, economic constraints, and healthcare workforce needs. Offering both the AAS pathway—focused on direct workforce entry—and the ASN pathway—structured to support academic mobility and progression to a bachelor's degree—aligns with USHE priorities related to access, affordability, and workforce.

Specifically, this dual-pathway model will:

- Expand access for place-bound and nontraditional students,
- Align nursing education pathways with regional employer and healthcare system needs, and
- Support recruitment and long-term retention of nurses in rural and underserved communities.

Utah workforce and policy data emphasize the importance of flexible entry points into nursing education, such as the AAS, coupled with clearly articulated academic progression models that support seamless transition to higher credentials (ASN to RN-to-BSN). This approach is particularly critical in rural regions where healthcare workforce shortages persist and geographic travel barriers limit student mobility

The continuation of the AAS program alongside the ADN pathway reflects best practices in nursing education, supports the Accreditation Commission for Education in Nursing standards related to mission alignment and community need, and advances USU's commitment to meeting regional workforce demands while preserving academic mobility for students.

The total program length is four semesters, with an optional PN step-out pathway after completion of the first two semesters at the Price, Moab, and Blanding campuses. Students who meet required maternal–newborn and mental health competencies may sit for the NCLEX-PN examination, enabling them to begin working as practical nurses while completing the final two semesters of AAS. Total program length at the Uintah Basin and Tooele campuses will remain two-semesters, offering AAS

completion after students have completed a PN certificate at a USHE technical college.

Graduates are well-positioned for seamless academic progression through Utah State University's fully online RN–BSN completion program. This integrated design, combined with flexible entry and exit options and strong academic–practice partnerships, creates an accessible and student-centered pathway that supports Utah's ongoing demand for well-prepared registered nurses.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

Development of the proposed dual pathway approach for the Associate of Science in Nursing (ASN) and Associate of Applied Science (AAS) programs has been guided by sustained engagement with external stakeholders, industry partners, and system-level collaborators to ensure alignment with workforce demand, state policy, and student pathways. Beginning in Fall 2021, Utah State University (USU) nursing leadership engaged in structured conversations with program advisory committee members from each regional program, nursing administrators from Tooele Technical College and Uintah Basin Technical College, local healthcare employers, USU student advisors, and peer institutions across the Utah System of Higher Education (USHE). Stakeholder input reflected the perspectives of healthcare partners in Price, Blanding, the Uintah Basin, Tooele, and Moab.

This engagement was initiated as part of a statewide effort led by the USHE Assistant Commissioner for Academic Affairs in response to 2020 legislation, including Senate Bill 111, which integrated technical colleges with degree-granting institutions under USHE. Concurrent statutory direction (Utah Code 53B-16-105) requires the Board of Higher Education to reduce barriers for students through common course numbering, aligned curricula, and clearly defined transfer pathways. Nursing was identified as a priority discipline for this alignment due to workforce demand and the need for seamless academic mobility.

Through these statewide and regional discussions, stakeholders evaluated existing program structures and future workforce needs. While local partners expressed strong satisfaction with outcomes from the existing Practical Nursing (PN) and Associate of Applied Science (AAS) programs, they also emphasized the importance of preserving rapid entry-to-practice options, particularly for rural and place-bound students. At the same time, employers and system partners noted increasing expectations for academic progression and baccalaureate preparation over the course of a nurse's career.

In response, the proposed program design balances workforce readiness with academic mobility. The ASN program provides a unified, transfer-aligned pathway to registered nurse licensure while remaining fully compatible with USU's RN-to-BSN completion program. At rural sites, the continued availability of an AAS option ensures that students with immediate employment and financial needs retain access to a career-entry pathway. The ASN option supports students seeking efficient progression to a bachelor's degree with minimal credit loss.

This dual-pathway approach reflects stakeholder consensus and aligns with Utah policy guidance emphasizing appropriate use of applied and transfer degrees based on student intent and labor-market outcomes. It broadens access for rural students, aligns educational pathways with employer needs, and strengthens nurse recruitment and retention across underserved regions. Ongoing collaboration with industry partners, technical colleges, and USHE institutions will continue to inform implementation and continuous improvement of the program.

Labor Market Demand (if applicable)

The National League for Nursing (NLN) annual survey provides program-level detail showing that programs continue to turn away qualified applicants across program types (PN, ASN, BSN, MSN, doctoral), with varying percentages by program type. (NLN Annual Survey, 2023).

Utah-specific audits and workforce reviews document a persistent capacity problem. A Utah System of Higher Education performance audit noted that historically 35% of qualified applicants to public bachelor's nursing programs were turned away in the 2007–2014 period. The audit flagged limited capacity as an ongoing constraint on producing more nurses in the state.

Earlier state consortium reporting estimated over 1,000 qualified applicants are turned away from Utah nursing programs annually because of limited class size and capacity constraints (Utah Nursing Consortium / legislative background material). This figure has been cited repeatedly in state workforce discussions as the minimum annual number of qualified applicants not admitted.

Over the past four years, the average student enrollment in the regional AAS nursing programs has been 65-70. Since 2020, enrollment numbers at each regional site have fluctuated and have not reached full capacity due to a limited pool of qualified applicants. Although several potential contributing factors have been examined, a consistent observation has been the increasing availability of programs offering accelerated pathways to RN and BSN degrees. In comparison, the existing 1+1 program model appears fragmented. It is anticipated that implementing a unified program structure leading seamlessly toward a BSN degree will increase student interest, strengthen program appeal, and subsequently improve the number of qualified applicants, allowing the program to once again reach full capacity.

Consistency with Institutional Mission & Institutional Impact

The mission of Utah State University is to be a premier, student-centered institution that serves the people of Utah through learning, discovery, and engagement. The continuation of the AAS nursing pathway alongside the implementation of the ASN program directly advances this mission by expanding access to nursing education for rural and place-bound students, supporting timely entry into the nursing workforce, and providing clear academic pathways for progression to the bachelor's degree. Together, these pathways reflect USU's commitment to accessibility, workforce responsiveness, and student success across diverse communities.

Describe and List any Anticipated Expenses and Revenue

The regional campuses will utilize the same faculty and staff in place at each campus, teaching the same curriculum they had in the past with minimal revisions. With little anticipation of sudden growth in enrollment, the implementation of this program is designed to be cost-neutral. A written plan for expenses related to growth has been in place for the regional campuses and will remain unchanged.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

The previous 1+1 program model consisted of a Practical Nursing (PN) certificate program followed by an Associate of Applied Science in Nursing (AAS) degree program. These curricula were developed concurrently and organized in a simple-to-complex progression, allowing students to advance from the PN program (two semesters) into the AAS program (two semesters).

The proposed dual pathway approach for Associate of Science in Nursing (ASN) and Associate of Applied Science (AAS) will retain this strong curricular foundation and will be delivered as a single, integrated four-semester program. Core concepts and clinical exemplars will continue to progress in complexity across the four semesters, with only minor adjustments to support integration and continuity. The existing concept-based curriculum was developed using nationally recognized standards, including the National League for Nursing (NLN) competencies for practical and associate-degree nurses, the National Council of State Boards of Nursing (NCSBN) NCLEX-PN and NCLEX-RN Test Plan frameworks, and the Quality and Safety Education for Nurses (QSEN) competencies related to knowledge, skills, and professional attitudes.

Achievement of program outcomes will be measured through direct and indirect methods such as national standardized assessment tools, clinical evaluations, and a student exit survey. These are completed by each cohort in the 4th semester and are assessed and evaluated at the department spring retreat. Faculty discuss discrepancies and/or gaps found during evaluation and strategize methods for curriculum development or improvement.

The nursing faculty use evaluation findings for decision-making for program improvement. Faculty review data results at annual faculty retreat and in an ongoing manner at faculty and other committee meetings. Documentation of analysis of assessment data is included in an action minutes' format to ensure that discussion, resulting actions, responsibility, mechanism of evaluating strategies, and specific ACEN standard and criteria to which the action is related, are clearly identified. The action minutes' format is used at annual faculty retreat, faculty meetings,

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

[USU - AAS Degree Map \(Price, Moab, BI\)V5.docx](#), [USU PN to AAS Degree Map \(UB & Tooele\)V4.docx](#)

Student Learning Outcomes Assessment Plan

[USU Program Student Learning Outcomes AAS program-v2.docx](#)

Budget Worksheet

[USU AAS program - Budget Worksheet.docx](#)

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Locations Offered

Blanding, Moab, Price, Tooele, Uintah Basin

Course Delivery Method

In-Person, Hybrid



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change: Special Education: Severe Emphasis/Elementary Education Composite Bachelor of Arts, Bachelor of Science
Department of Special Education and Rehabilitation Counseling
Emma Eccles Jones College of Education and Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Special Education and Rehabilitation Counseling, in the Emma Eccles Jones College of Education and Human Services, proposes changing the name of the Special Education: Severe Emphasis/Elementary Education Composite Bachelor of Arts, Bachelor of Science to the Special Education: Complex Support Needs Emphasis/Elementary Education Composite Bachelor of Arts, Bachelor of Science.

This proposal changes the name of the emphasis to align the program with the new special education licenses in Utah.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-SPERC-Severe Emphasis Elementary Ed Composite-BA BS-Name Change



USU_BANNER - New R401 Abbreviated Program Proposal - SPECIAL EDUCATION: COMPLEX SUPPORT NEEDS EMPHASIS/ELEMENTARY EDUCATION COMPOSITE - BA, BS - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Education & Human Services

Department(s)

Special Education & Rehab Counseling

Letters of Support (if needed)

-

Current Title (if applicable)*

SPECIAL EDUCATION: SEVERE EMPHASIS/ELEMENTARY EDUCATION COMPOSITE - BA, BS

Proposed Title

SPECIAL EDUCATION: COMPLEX SUPPORT NEEDS EMPHASIS/ELEMENTARY EDUCATION
COMPOSITE - BA, BS

CIP Code

CIP Code (6-digits)*

13.1001

Minimum Number of Credits (if applicable)

126

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

BA, BS

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

No new program - changes to existing academic program only

Existing Academic Program Changes:

Name Change of Existing Program

Administrative Unit Changes:

N/A

Other: (explain change)

-

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

No

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

This request is to change the name of the program from Severe to Complex Support Needs.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

The Utah State Board of Education (USBE) has changed the names for special education licenses in the state of Utah. Utah State University (USU) would like to change the names of the special education programs that are offered to align with the new names for the special education licenses.

Severe is now Complex Support Needs.

Labor Market Demand (if applicable)

-

Consistency with Institutional Mission & Institutional Impact

This name change is in alignment with the Institutional Mission & Impact.

Describe and List any Anticipated Expenses and Revenue

Typical expenses and revenue will not be impacted by this name change. Promotional materials will need to be updated to reflect name change. These materials are regularly updated and part of the existing department and college expenses.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

There is no change to the curriculum. This is a change in name only. Course titles will need to be updated to reflect current names.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

-

Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Utah State University, 2026 / February

Locations Offered

ALL

Course Delivery Method

In-Person, Online, Connect, Hybrid, Virtual, Arranged



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change: Special Education: Mild/Moderate & Severe Dual Emphasis - Bachelor of Arts, Bachelor of Science
Department of Special Education and Rehabilitation Counseling
Emma Eccles Jones College of Education and Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Special Education and Rehabilitation Counseling, in the Emma Eccles Jones College of Education and Human Services, proposes changing the name of the Special Education: Mild/Moderate & Severe Dual Emphasis Bachelor of Arts, Bachelor of Science to the Special Education: Mild/Moderate & Complex Support Needs Dual Emphasis Bachelor of Arts, Bachelor of Science.

This proposal changes the name of the emphasis to align the program with the new special education licenses in Utah.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-SPERC-Mild-Moderate & Severe Support Needs Dual Emphasis-BA,BS-Name Change



USU_BANNER - New R401 Abbreviated Program Proposal - SPECIAL EDUCATION: MILD/MODERATE & COMPLEX SUPPORT NEEDS DUAL EMPHASIS - BA, BS - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Education & Human Services

Department(s)

Special Education & Rehab Counseling

Letters of Support (if needed)

-

Current Title (if applicable)*

SPECIAL EDUCATION: MILD/MODERATE & SEVERE DUAL EMPHASIS - BA, BS

Proposed Title

SPECIAL EDUCATION: MILD/MODERATE & COMPLEX SUPPORT NEEDS DUAL EMPHASIS - BA, BS

CIP Code

CIP Code (6-digits)*

13.1001

Minimum Number of Credits (if applicable)

120

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

BA, BS

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

N/A

Existing Academic Program Changes:

Name Change of Existing Program

Administrative Unit Changes:

N/A

Other: (explain change)

-

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

No

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

This request is to change the name of the program from Severe to Complex Support Needs.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

The Utah State Board of Education (USBE) has changed the names for special education licenses in the state of Utah. Utah State University (USU) would like to change the names of the special education programs that are offered to align with the new names for the special education licenses.

Severe is now Complex Support Needs.

Labor Market Demand (if applicable)

-

Consistency with Institutional Mission & Institutional Impact

This name change is in alignment with the Institutional Mission & Impact.

Describe and List any Anticipated Expenses and Revenue

Typical expenses and revenue will not be impacted by this name change. Promotional materials will need to be updated to reflect name change. These materials are regularly updated and part of the existing department and college expenses.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

There is no change to the curriculum. This is a change in name only. Course titles will need to be updated to reflect current names.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

-

Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Utah State University, 2026 / February

Locations Offered

ALL

Course Delivery Method

In-Person, Online, Arranged, Virtual, Hybrid, Connect



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change: Special Education: Severe Emphasis - Bachelor of Arts, Bachelor of Science
Department of Special Education and Rehabilitation Counseling
Emma Eccles Jones College of Education and Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Special Education and Rehabilitation Counseling, in the Emma Eccles Jones College of Education and Human Services, proposes changing the name of the Special Education: Severe Emphasis Bachelor of Arts, Bachelor of Science to the Special Education: Complex Support Needs Emphasis Bachelor of Arts, Bachelor of Science.

This proposal changes the name of the emphasis to align the program with the new special education licenses in Utah.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-SPERC-Special Ed Severe Emphasis, BA,BS-Name Change



USU_BANNER - New R401 Abbreviated Program Proposal - SPECIAL EDUCATION: COMPLEX SUPPORT NEEDS EMPHASIS - BA, BS - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Education & Human Services

Department(s)

Special Education & Rehab Counseling

Letters of Support (if needed)

-

Current Title (if applicable)*

SPECIAL EDUCATION: SEVERE EMPHASIS - BA, BS

Proposed Title

SPECIAL EDUCATION: COMPLEX SUPPORT NEEDS EMPHASIS - BA, BS

CIP Code

CIP Code (6-digits)*

13.1001

Minimum Number of Credits (if applicable)

120

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

BA, BS

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

-

Existing Academic Program Changes:

Name Change of Existing Program

Administrative Unit Changes:

-

Other: (explain change)

-

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

No

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

This request is to change the name of the program from Severe to Complex Support Needs.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

The Utah State Board of Education (USBE) has changed the names for special education licenses in the state of Utah. Utah State University (USU) would like to change the names of the special education programs that are offered to align with the new names for the special education licenses.

Severe is now Complex Support Needs.

Labor Market Demand (if applicable)

-

Consistency with Institutional Mission & Institutional Impact

This name change is in alignment with the Institutional Mission & Impact.

Describe and List any Anticipated Expenses and Revenue

Typical expenses and revenue will not be impacted by this name change. Promotional materials will need to be updated to reflect name change. These materials are regularly updated and part of the existing department and college expenses.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

There is no change to the curriculum. This is a change in name only. Course titles will need to be updated to reflect current names.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

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Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Locations Offered

ALL

Course Delivery Method

In-Person, Online, Connect, Hybrid, Virtual, Arranged



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change: Special Education Online Practical Teacher Training (OPTT): Severe Emphasis - Bachelor of Arts, Bachelor of Science
Department of Special Education and Rehabilitation Counseling
Emma Eccles Jones College of Education and Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Special Education and Rehabilitation Counseling, in the Emma Eccles Jones College of Education and Human Services, proposes changing the name of the Special Education Online Practical Teacher Training (OPTT): Severe Emphasis Bachelor of Arts, Bachelor of Science to the Special Education Online Practical Teacher Training (OPTT): Complex Support Needs Emphasis Bachelor of Arts, Bachelor of Science.

This proposal changes the name of the emphasis to align the program with the new special education licenses in Utah.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-SPERC-Special Ed Online Practical Teacher Training-BA,BS-Name Change



USU_BANNER - New R401 Abbreviated Program Proposal - SPECIAL EDUCATION ONLINE PRACTICAL TEACHER TRAINING (OPTT): COMPLEX SUPPORT NEEDS EMPHASIS - BA, BS - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Education & Human Services

Department(s)

Special Education & Rehab Counseling

Letters of Support (if needed)

-

Current Title (if applicable)*

SPECIAL EDUCATION ONLINE PRACTICAL TEACHER TRAINING (OPTT): SEVERE EMPHASIS - BA, BS

Proposed Title

SPECIAL EDUCATION ONLINE PRACTICAL TEACHER TRAINING (OPTT): COMPLEX SUPPORT
NEEDS EMPHASIS - BA, BS

CIP Code

CIP Code (6-digits)*

13.1001

Minimum Number of Credits (if applicable)

120

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

BA, BS

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

-

Existing Academic Program Changes:

Name Change of Existing Program

Administrative Unit Changes:

-

Other: (explain change)

-

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

No

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

This request is to change the name of the program from Severe to Complex Support Needs.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

The Utah State Board of Education (USBE) has changed the names for special education licenses in the state of Utah. Utah State University (USU) would like to change the names of the special education programs that are offered to align with the new names for the special education licenses.

Severe is now Complex Support Needs.

Labor Market Demand (if applicable)

-

Consistency with Institutional Mission & Institutional Impact

This name change is in alignment with the Institutional Mission & Impact.

Describe and List any Anticipated Expenses and Revenue

Typical expenses and revenue will not be impacted by this name change. Promotional materials will need to be updated to reflect name change. These materials are regularly updated and part of the existing department and college expenses.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

There is no change to the curriculum. This is a change in name only. Course titles will need to be updated to reflect current names.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

-

Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Utah State University, 2026 / February

Locations Offered

ALL

Course Delivery Method

In-Person, Online, Connect, Hybrid, Virtual, Arranged



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change: Special Education: Severe & Birth to 5 Dual Emphasis - Bachelor of Arts, Bachelor of Science
Department of Special Education and Rehabilitation Counseling
Emma Eccles Jones College of Education and Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Special Education and Rehabilitation Counseling, in the Emma Eccles Jones College of Education and Human Services, proposes changing the name of the Special Education: Severe & Birth to 5 Dual Emphasis Bachelor of Arts, Bachelor of Science to the Special Education: Complex Support Needs & Birth to 5 Dual Emphasis Bachelor of Arts, Bachelor of Science.

This proposal changes the name of the emphasis to align the program with the new special education licenses in Utah.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-SPERC-Special Ed Severe & Birth to 5 Dual Emphasis-BA, BS-Name Change



USU_BANNER - New R401 Abbreviated Program Proposal - SPECIAL EDUCATION: COMPLEX SUPPORT NEEDS & BIRTH TO 5 DUAL EMPHASIS - BA, BS - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Education & Human Services

Department(s)

Special Education & Rehab Counseling

Letters of Support (if needed)

-

Current Title (if applicable)*

SPECIAL EDUCATION: SEVERE & BIRTH TO 5 DUAL EMPHASIS - BA, BS

Proposed Title

SPECIAL EDUCATION: COMPLEX SUPPORT NEEDS & BIRTH TO 5 DUAL EMPHASIS - BA, BS

CIP Code

CIP Code (6-digits)*

13.1001

Minimum Number of Credits (if applicable)

124

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

BA, BS

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

-

Existing Academic Program Changes:

Name Change of Existing Program

Administrative Unit Changes:

-

Other: (explain change)

-

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

No

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

This request is to change the name of the program from Severe to Complex Support Needs.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

The Utah State Board of Education (USBE) has changed the names for special education licenses in the state of Utah. Utah State University (USU) would like to change the names of the special education programs that are offered to align with the new names for the special education licenses.

Labor Market Demand (if applicable)

-

Consistency with Institutional Mission & Institutional Impact

This name change is in alignment with the Institutional Mission & Impact.

Describe and List any Anticipated Expenses and Revenue

Typical expenses and revenue will not be impacted by this name change. Promotional materials will need to be updated to reflect name change. These materials are regularly updated and part of the existing department and college expenses.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

There is no change to the curriculum. This is a change in name only. Course titles will need to be updated to reflect current names.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

-

Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Utah State University, 2026 / February

Locations Offered

ALL

Course Delivery Method

In-Person, Online, Connect, Hybrid, Virtual, Arranged



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Restructure: Animal, Dairy and Veterinary Sciences Master of Science
Department of Animal, Dairy and Veterinary Sciences
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Animal, Dairy and Veterinary Sciences, in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Animal, Dairy and Veterinary Sciences Master of Science.

These changes leverage departmental research strengths, address growing demand for graduate education in animal virology and biotechnology, and strengthen graduate professional preparation by ensuring teaching experience is part of the curriculum.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-ADVS-Animal, Dairy and Veterinary Sciences-MS-Restructure



R401 Abbreviated Program Proposal

USU_BANNER - New R401 Abbreviated Program Proposal - Animal, Dairy And Veterinary Sciences - MS - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Agriculture & Natural Resources

Department(s)

Animal, Dairy & Veterinary Sciences

Letters of Support (if needed)

-

Current Title (if applicable)*

Animal, Dairy and Veterinary Sciences - MS

Proposed Title

Animal, Dairy and Veterinary Sciences - MS

CIP Code

CIP Code (6-digits)*

26.0707

Minimum Number of Credits (if applicable)

30

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

Master of Science

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

-

Existing Academic Program Changes:

-

Administrative Unit Changes:

-

Other: (explain change)

- Add Virology as a graduate program specialization
- Change "Animal Molecular Genetics" specialization to "Animal Biotechnology and Molecular Genetics"
- Require 1 semester of ADVS 6950

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

Yes

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

The purpose of this abbreviated R401 is to add Virology as a Plan A specialization, change the name of the “Animal Molecular Genetic” specialization to “Animal Biotechnology and Molecular Genetics,” and add the requirement of one semester of a new course titled Teaching Experiences in Animal, Dairy and Veterinary Sciences (ADVS 6950).

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

The Department of Animal, Dairy and Veterinary Sciences proposes three coordinated changes to the MS in Animal, Dairy and Veterinary Sciences: (1) add **Virology** as a Plan A specialization; (2) rename the **Animal Molecular Genetics** specialization to **Animal Biotechnology and Molecular Genetics** to reflect expanded coursework and industry relevance; and (3) require completion of **ADVS 6950, Teaching Experiences in Animal, Dairy and Veterinary Sciences**, for both Plan A and Plan B candidates to formalize training in undergraduate teaching and outreach. These changes leverage departmental research strengths, address growing demand for graduate education in animal virology and biotechnology, and strengthen graduate professional preparation by ensuring teaching experience is part of the curriculum.

Labor Market Demand (if applicable)

-

Consistency with Institutional Mission & Institutional Impact

The above programmatic changes strengthen the department’s program offerings and thereby strengthen the institutional impact by adjusting offerings to better meet the educational needs of our graduating students. They expand opportunities for graduate training and enhances students’ capacity to contribute to the agricultural, veterinary, and public-health domains the institution serves.

Describe and List any Anticipated Expenses and Revenue

No new facilities, modifications or equipment is needed and no other programs are impacted by these minor changes.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

Specializations

All MS specializations are offered as Plan A programs. Animal Management may be taken as a Plan A or Plan B program.

- Animal Health and Disease
- Animal Management

- Animal Biotechnology and Molecular Genetics
- Animal Nutrition
- Reproduction and Development
- Virology

Plan A

- The Plan A option requires the preparation and defense of a thesis and is best suited for students desiring research experience.
- A minimum of 30 credits applied toward a program of study approved by the student's supervisory committee, including:
 - 15 credits minimum of graduate-level coursework (this does not include thesis credits)
 - Under exceptional circumstances, a student may petition for a waiver of the minimum 15-credit requirement of graduate-level coursework
 - 6-15 credits of ADVS6970
 - 3 credits of ADVS6950
 - 1 credit of ADVS6800
- ADVS6900 credits shall not exceed 3 credits unless approved by the supervisory committee.
- All graduate students are expected to have a statistics course included in their program of study.

Plan B

- The Plan B option requires the preparation and defense of a paper and is best suited for animal science professionals not pursuing a research career path.
- A minimum of 30 credits applied toward a program of study approved by the student's supervisory committee, including:
 - 15 credits minimum of graduate-level coursework (this does not include thesis credits)
 - 3 credits of ADVS6950
 - 2-3 credits of ADVS6970
 - 1 credit of ADVS6800

- ADVS6900 credits shall not exceed 3 credits unless approved by the supervisory committee.
- All graduate students are expected to have a statistics course included in their program of study.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

[Graduate SLOs.docx](#)

Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Locations Offered

Main Campus, Online, Virtual, Arranged

Course Delivery Method

In-Person, Online, Arranged, Virtual



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
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Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Restructure: Animal, Dairy and Veterinary Sciences PhD
Department of Animal, Dairy and Veterinary Sciences
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Animal, Dairy and Veterinary Sciences, in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Animal, Dairy and Veterinary Sciences PhD.

This restructure will streamline time to degree, reduce redundant coursework for students with prior graduate training, update credit requirements, specializations in biotechnology and virology, eliminate outdated tracks, and add structured teaching experience.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-ADVS-Animal, Dairy and Veterinary Sciences-PhD-Restructure



USU_BANNER - New R401 Abbreviated Program Proposal - Animal, Dairy And Veterinary Sciences - PhD - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Agriculture & Natural Resources

Department(s)

Animal, Dairy & Veterinary Sciences

Letters of Support (if needed)

-

Current Title (if applicable)*

Animal, Dairy and Veterinary Sciences - PhD

Proposed Title

Animal, Dairy and Veterinary Sciences - PhD

CIP Code

CIP Code (6-digits)*

26.0707

Minimum Number of Credits (if applicable)

35

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

PhD

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

-

Existing Academic Program Changes:

Program Restructure (with or without Consolidation)

Administrative Unit Changes:

-

Other: (explain change)

- Reduce total credits required for PhD students who have a master's from 42 to 35 and for PhD students who just have a bachelor's from 70 to 60
- Add Virology as a graduate program specialization
- Change "Animal Molecular Genetics" specialization to "Animal Biotechnology and Molecular Genetics"
- Remove Animal Management specialization
- Require 2 semesters of ADVS 6950

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

Yes

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

The purpose of this abbreviated R401 is to reduce the total credits required for PhD students with a master's degree to 35 and for PhD students with a bachelor's degree to 60, add Virology as a specialization, change the "Animal Molecular Genetic" specialization to "Animal Biotechnology and Molecular Genetics," remove the Animal Management specialization, and add the requirement of two semesters of new course ADVS 6950 Teaching Experiences in Animal, Dairy and Veterinary Sciences.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

The ADVS department proposes to restructure the PhD program to (1) reduce total credit requirements from 42 to **35 credits** for students entering with a master's or Doctor of Veterinary Medicine (DVM) degree and from 70 to **60 credits** for students entering with a bachelor's degree; (2) add **Virology** as a specialization; (3) rename the "Animal Molecular Genetics" specialization to **Animal Biotechnology and Molecular Genetics**; (4) remove the **Animal Management** specialization; and (5) require two semesters (6 credits) of the new course **ADVS 6950: Teaching Experiences in Animal, Dairy and Veterinary Sciences**.

Rationale:

These changes streamline time-to-degree and align program content with current disciplinary emphases in molecular biology, biotechnology, and viral disease research. Reducing redundant coursework for students with prior graduate training increases program competitiveness and enrollment feasibility. Adding Virology and renaming the molecular specialization reflect growing institutional strengths and external demand in infectious disease, molecular therapeutics, and biotechnology. Requiring structured teaching experience prepares graduates for academic careers and meets departmental expectations for professional development.

Labor Market Demand (if applicable)

Consistency with Institutional Mission & Institutional Impact

The above programmatic changes strengthen the department's program offerings and thereby strengthen the institutional impact by adjusting offerings to better meet the educational needs of our graduating students. They expand opportunities for graduate training and enhances students' capacity to contribute to the agricultural, veterinary, and public-health domains the institution serves.

Describe and List any Anticipated Expenses and Revenue

No new facilities, modifications or equipment is needed and no other programs are impacted by these minor changes.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

Specializations

- Animal Health and Disease
- Animal Biotechnology and Molecular Genetics
- Animal Nutrition
- Reproduction and Development
- Virology

PhD with a Master's or DVM Degree

- A minimum of 35 credits applied toward a program of study approved by the student's supervisory committee, including:
 - 15 credits minimum of graduate-level coursework (this does not include dissertation credits)
 - Under exceptional circumstances, a student may petition for a waiver of the minimum 15-credit requirement of graduate-level coursework.
 - 12 credits minimum of ADVS7970
 - 6 credits of ADVS6950
 - 2 credits of ADVS6800
- All graduate students are expected to have a statistics course included in their program of study.

PhD with a Bachelor's Degree

- 60 credits applied toward a program of study approved by the student's supervisory committee, including:
 - A minimum of 30 credits minimum of graduate-level coursework (this does not include dissertation credits)
 - Under exceptional circumstances, a student may petition for a waiver of the minimum 30-credit requirement of graduate-level coursework
 - 18 credits minimum of ADVS7970

- 6 credits of ADVS6950
- 3 credits of ADVS6800
- All graduate students are expected to have a statistics course included in their program of study.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

[Graduate SLOs.docx](#)

Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Locations Offered

Main Campus, Online, Virtual, Arranged

Course Delivery Method

In-Person, Arranged, Online, Virtual



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change and Restructure: Automated Manufacturing Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Automated Manufacturing Technical Certificate and changing the name to the Automation Technology Technical Certificate.

This proposal will restructure the program to align with USHE requirements.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Automation Technology Tech Certificate-Name Change-Restructure



USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Automated Manufacturing - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Automated Manufacturing - Technical Certificate

Proposed Name Change to Existing Certificate

Automation Technology - Technical Certificate

CIP Code

47.0303

Funding

Funding is established from the Automated Manufacturing program, no additional funding is needed.

DELIVERY METHODS AND LOCATIONS OFFERED

Utah State University, 2026 / March

Delivery Methods

Hybrid, In-Person

Locations Offered

Price

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment

[Student Outcomes Plan.pdf](#), [Automation Technology R401.docx](#)



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Restructure: Apprentice Electrician Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Apprentice Electrician Technical Certificate and changing its name to Electrical Apprenticeship Technical Certificate.

This restructure will align the program with state requirements by standardizing the program at 24 total credits.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE- Electrical Apprenticeship Tech Certificate-Name Change-Restructure



R401 Technical Certificate: New, Modified, or Discontinued Certificate

USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Apprentice Electrician - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Apprentice Electrician - Technical Certificate

Proposed Name Change to Existing Certificate

Electrical Apprenticeship - Technical Certificate

CIP Code

46.0302

Funding

This is a restructure of the Apprentice Electrician certificate with established funding. No additional funding source is needed.

DELIVERY METHODS AND LOCATIONS OFFERED

Delivery Methods

Hybrid, In-Person

Locations Offered

Moab, Price, Blanding

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment

[Apprentice Electrician R401 .docx](#), [Electrical Apprentice Student Outcomes Plan.pdf](#)



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change and Restructure: Construction Fundamentals Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Construction Fundamentals Technical Certificate and changing its name to the Carpentry Fundamentals Technical Certificate.

This program is being restructured to align with USHE credit requirements.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Construction Fundamentals Tech Certificate-Name change-Restructure



USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Construction Fundamentals - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Construction Fundamentals - Technical Certificate

Proposed Name Change to Existing Certificate

Carpentry Fundamentals - Technical Certificate

CIP Code

46.0201

Funding

Funding is established from Construction Fundamentals, no additional funding is needed for the restructure.

DELIVERY METHODS AND LOCATIONS OFFERED

Utah State University, 2026 / March

Delivery Methods

In-Person

Locations Offered

Blanding

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment
[Student Outcomes Plan.pdf](#), [Carpentry Fundamentals R401.docx](#)



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change and Restructure: Construction Technology and Management Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Construction Technology and Management Technical Certificate and changing its name to the Construction Technology Technical Certificate.

This proposal will restructure the program to align with USHE requirements.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Construction Technology Tech Certificate-Name change-Restructure



USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Construction Technology And Management - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Construction Technology and Management - Technical Certificate

Proposed Name Change to Existing Certificate

Construction Technology - Technical Certificate

CIP Code

46.0415

Funding

There is established funding from Construction Technology and Management, no funding is needed for the restructure.

DELIVERY METHODS AND LOCATIONS OFFERED

Utah State University, 2026 / March

Delivery Methods

In-Person

Locations Offered

Blanding

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment
[Student Outcomes Plan.pdf](#), [Construction Technology R401.docx](#)



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Restructure: Cosmetology Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Cosmetology Technical Certificate.

This restructure will align the program with state requirements.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Cosmetology Tech Certificate-Restructure



USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Cosmetology - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Cosmetology - Technical Certificate

Proposed Name Change to Existing Certificate

-

CIP Code

12.0401

Funding

Funding is established, no additional funds are needed for the restructure

DELIVERY METHODS AND LOCATIONS OFFERED

Utah State University, 2026 / March

Delivery Methods

In-Person

Locations Offered

Price

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment
[Student Outcomes Plan.pdf](#), [Cosmo TC R401 .docx](#)



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change and Restructure: Engineering, Drafting and Design Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Engineering, Drafting and Design Technical Certificate and changing its name to Drafting and Design Technical Certificate.

This proposal will restructure the program to align with USHE requirements.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Drafting and Design Tech Certificate-Name Change-Restructure



USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Engineering, Drafting, And Design - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Engineering, Drafting, and Design - Technical Certificate

Proposed Name Change to Existing Certificate

Drafting and Design - Technical Certificate

CIP Code

15.1302

Funding

Funding is established, no additional funds are needed for the restructure

DELIVERY METHODS AND LOCATIONS OFFERED

Utah State University, 2026 / March

Delivery Methods

In-Person, Hybrid

Locations Offered

Moab, Price, Blanding

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment
[Student Outcomes Plan.pdf](#), [Drafting and Design R401.docx](#)



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Restructure: Medical Assistant Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Medical Assistant Technical Certificate.

This restructure is to update the existing Technical Certificate to ensure students are prepared for entry-level employment and national certification through aligned clinical, administrative, and externship training.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Medical Assistant Tech Cert-Restructure



Utah System of Higher Education

Request for Approval of a New Certificate Program

SECTION I: PROGRAM INFORMATION

Institution: Utah State University

Department: Technology, Design, and Technical Education

Proposed Certificate Name: Medical Assistant

Award Type: Technical Certificate

CIP Code: (Provide a 6-digit CIP Code. Omit the period.): 51.0801

Nature of Certificate

Select the manner students will enroll:

- ☐ Certificate is embedded in a degree program(s) only; OR
- ☐ Certificate is a “stand-alone” program only; OR
- ☒ Certificate may be earned both embedded in a degree program(s) or as a stand-alone program.
- ☐ Certificate is an industry recognized credential. Name of credential:

Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☒ Entire program can be completed in person
- ☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
- ☐ Entire program can be completed Online
- ☐ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program: 28

Maximum Credit Hours to Complete Program: 28

Expected First Semester Students May Enroll in Program: Fall

Expected First-Year Students May Enroll in Program: 2026

Chief Academic/Instructional Officer Signature:

After Peer Review Council input and the Institution's Board of Trustees approval, please return a copy of this proposal with the Board of Trustees approval date.

Institutional Board of Trustees' Approval Date:

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description and Objectives

Present a brief program description including student learning outcomes. (1-2 paragraphs.)

This is a restructure of the current Medical Assisting Technical Certificate at USU.

Medical assistants are versatile allied health professionals who perform a variety of clinical and administrative tasks and play a vital role in healthcare teams. This program prepares students for entry-level positions, providing a foundation to advance into higher-level roles while gaining experience alongside physicians and healthcare providers. Students develop knowledge, practical skills, and professional behaviors through training in administrative and clinical back-office procedures. Upon completing all required courses, students participate in a medical office externship. Graduates are eligible to sit for a national certification exam.

Students will learn to provide competent patient care as medical assistants in ambulatory healthcare settings while developing essential clinical skills such as obtaining vital signs, performing phlebotomy, understanding basic pharmacology, conducting EKGs, and assisting providers during specialty examinations. They will practice accurate medical documentation, patient education, and effective communication, applying critical thinking in both simulated and clinical environments. Throughout the program, students will gain an understanding of the general, clinical, and administrative responsibilities of medical assisting and demonstrate the competencies needed to successfully prepare for a national medical assistant certification examination.

Consistency with Institution Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals. (1-2 paragraphs.)

Utah State University, as both a land-grant institution and the regional community and technical college, is committed to expanding educational access and supporting Utah's evolving healthcare workforce. To address the growing demand for skilled medical assistants across the state, USU is developing a Medical Assisting program that provides flexible, career-focused training and clear pathways for students to advance in healthcare careers. Through hands-on learning and close collaboration with local clinics and healthcare providers, this program prepares students for medical assisting roles while strengthening Utah's healthcare system.

Aligned with USU's mission of innovation, community partnership, and inclusivity, the Medical Assisting program delivers practical, accessible training that meets the needs of employers. By partnering with healthcare organizations, the program creates opportunities for students from diverse backgrounds and helps clinics build a skilled, professional workforce. This approach fosters a learning environment focused on growth, opportunity, and career advancement in healthcare.

SECTION III: NEEDS ASSESSMENT

Labor Market Demand

Briefly describe how earning this certificate will benefit students. If certificate may be taken stand-alone, is there market demand for the certificate in the institution's service region and in the state? If embedded in a degree, does the certificate enhance the degree's marketability? (1-2 paragraphs.)

Utah is experiencing growing demand for skilled healthcare professionals as clinics, hospitals, and medical offices expand to meet the needs of an increasing patient population. This growth is creating strong opportunities for medical assistants trained in both clinical procedures and administrative tasks across outpatient, inpatient, and specialty care settings. Employment for medical assistants in Utah is projected to rise steadily over the coming decade, reflecting the essential role they play in efficient, high-quality patient care. As Utah's population grows and needs increase, medical assistant careers project to grow by 24.1% from 2025 to 2035. The median salary is \$42,994.

Earning a credential in Medical Assisting enhances a student's employability by demonstrating practical skills, patient-care knowledge, and readiness for real-world healthcare environments. This preparation equips students with expertise in clinical procedures, office management, safety protocols, and patient communication. These competencies provide a foundation for higher-level healthcare education and open pathways to advanced roles in nursing, healthcare administration, or specialized clinical practice, supporting long-term career growth and advancement.

Professional Licensure

Will graduates of this program require certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

N/A, but will be eligible to test for the NHA certification exam.

Transfer Check

If applicable, provide information on USHE degree-granting or technical college program credit that may prepare students for the program or count for certain credits. Use comments field to describe unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments
Bridgerland	Certificate	Certificate	https://btech.edu/medical-assistant/	
Davis	Certificate	Certificate of Program Completion	https://www.davistech.edu/programs/medical-assistant/	
Dixie	Certificate	Accredited Dixie Technical College Certificate	https://dixietech.edu/programs/healthcare-sciences/medical-assisting/	
Mountainland	Certificate	MTECH Program Certificate in Medical Assistant	https://mtec.edu/programs/medical-assistant/	
Ogden-Weber	Certificate	Certificate	https://www.otech.edu/medical-assistant/	

Salt Lake	Certificate	Technical Certificate	https://www.slcc.edu/sltech/areas/health_care/clinical-medical-assisting.aspx	
Snow	Certificate	Medical Assistant Certificate	https://snow.edu/academics/tech-ed/medical-assistant.html	
Southwest	Certificate	Certificate	https://stech.edu/programs/health/medical-assistant/	
Tooele	Certificate	Certificate	https://tooeletech.edu/medical-assistant/	
Uintah Basin	Certificate	Certificate	https://ubtech.edu/avada_portfolio/medical-assistant/	

(add more rows to table if needed)

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program.

Course Prefix & Number	Course Title	New Course? Y/N	Credit Hours
TEMA 1010	Introduction to Medical Assisting	Y	2
TEMA 1020	Medical Office I	Y	2
TEMA 1030	Medical Office II	Y	2
TEMA 1040	Anatomy and Physiology	Y	4
TEMA 1050	Pharmacology	Y	3
TEMA 1060	Clinical Procedures	Y	2
TEMA 1900	Medical Assistant Externship I	Y	2
TEMA 1910	Medical Assistant Externship II	Y	2
TEMA 1080	Medical Terminology	Y	2
TEMA 1095	Emergency First Response	Y	3
TEMA 1450	Preparation for Workforce Entry	Y	1
TEMA 1700	Phlebotomy I	Y	2
TEMA 1710	Phlebotomy II	Y	1

(add more rows to table if needed)

Expense Narrative

Describe expenses associated specifically with the proposed program. If there are no unique expenses, type "N/A."

Departmental Index					
Budget	Expended	Commitments	Available Balance		
\$ 37,270.31	\$ 690.99	\$ -	\$ 36,579.32		
				Total Budgeted:	\$ 37,270.31
Salaries, Benefits, & Wages					
Job Description		Salary Base	Benefits	Total Budgeted FY25	
Lecturer		\$ 54,060.00	\$ 25,137.90	\$ 79,197.90	
Lecturer		\$ 61,050.00	\$ 28,388.25	\$ 89,438.25	
				Total Budgeted:	\$ 168,636.15
Summary					
				Combined Total:	\$ 205,906.46



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Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Restructure: Nail Technician Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Nail Technician Technical Certificate.

This program is being restructured to align with USHE credit requirements.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Nail Technician Tech Certificate-Restructure



USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Nail Technician - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Nail Technician - Technical Certificate

Proposed Name Change to Existing Certificate

-

CIP Code

12.0410

Funding

Funding is established, no additional is needed for restructure.

DELIVERY METHODS AND LOCATIONS OFFERED

Utah State University, 2026 / March

Delivery Methods

In-Person

Locations Offered

Price

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment
[Student Outcomes Plan.pdf](#), [Nail Tech R401.docx](#)



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Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Name Change and Restructure: Phlebotomy Technician Technical Certificate
Department of Technology, Design and Technical Education
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Technology, Design and Technical Education in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes restructuring the Phlebotomy Technician Technical Certificate and to change the name to Phlebotomy Technical Certificate.

This proposal will restructure the program to align with USHE requirements.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-TDTE-Phlebotomy Tech Certificate-Name Change-Restructure



USU_BANNER - New R401 Technical Certificate: New, Modified, Or Discontinued Certificate - Phlebotomy Technician - Technical Certificate - R401 Technical Certificate: New, Modified, Or Discontinued Certificate

SECTION 1: Required for a New, Modified, or Discontinued Technical Education Certificate

Institution

Utah State University

College

College of Agriculture & Natural Resources

Department(s)

Technology, Design & Technical Ed

Action Requested

Restructure or Name Change of Existing Technical Certificate

Technical Education Certificate Name

Phlebotomy Technician - Technical Certificate

Proposed Name Change to Existing Certificate

Phlebotomy - Technical Certificate

CIP Code

51.1009

Funding

Funding is established, no additional is needed for name change.

DELIVERY METHODS AND LOCATIONS OFFERED

Utah State University, 2026 / March

Delivery Methods

In-Person

Locations Offered

Price, Moab, Blanding

UPLOAD COMPLETED TEMPLATE

Attach Completed Forms: R401 Certificate and Student Learning Outcomes Assessment
[Student Outcomes Plan.pdf](#), [Phlebotomy R401.docx](#)



*Tessa White, Chair | Gina Gagon, Vice Chair
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Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Transfer: Master of Natural Resources (MNR)
Department of Wildland Resources
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Wildland Resources in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes transferring the Master of Natural Resources (MNR) to the Department of Wildland Resources.

This transfer will move the program from college-level administration to department-level administration.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-WILD-Master of Natural Resources-MNR-Transfer



USU_BANNER - New R401 Abbreviated Program Proposal - Master Of Natural Resources - MNR - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Agriculture & Natural Resources

Department(s)

Wildland Resources

Letters of Support (if needed)

[MNR_Support_2025.pdf](#)

Current Title (if applicable)*

Master of Natural Resources - MNR

Proposed Title

Master of Natural Resources - MNR

CIP Code

CIP Code (6-digits)*

3.0208

Minimum Number of Credits (if applicable)

30

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

Masters of Natural Resources (MNR)

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

N/A

Existing Academic Program Changes:

N/A

Administrative Unit Changes:

Administrative Unit (Transfer)

Other: (explain change)

-

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

Yes

Educator Licensing Approval

No

SECTION I: THE REQUEST

R401 Purpose

Transfer the existing Masters of Natural Resources from administration at the college level (the S.J. and Jessie E. Quinney College of Agriculture and Natural Resources) to administration by two departments: the Department of Wildland Resources and the Department of Environment and Society.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

Utah State University (USU) proposes to transfer the fully-online Masters of Natural Resources Program (MNR) from administration at the college level to administration across two departments: Wildland Resources & Environment and Society. This transfer is a proposed result of the recent merger of the S.J. and Jessie E. Quinney College of Natural Resources (QCNR) and the College and Agriculture and Applied Sciences, as with the much larger merged college (S.J. and Jessie E. Quinney College of Agriculture and Natural Resources, QANR), it now makes strong administrative sense to move the graduate program into the appropriate departments. The receiving units, the Department of Wildland Resources and the Department of Environment and Society, currently administer other natural resources focused academic programs. This decision was reached following discussion among the current director of the Masters of Natural Resources program, and department heads whose faculty teach within the program. The current interim dean for QANR also has indicated support for this action. The benefits of this action accrue to all parties, with appropriate academic unit oversight of this academic program.

Labor Market Demand (if applicable)

n/a

Consistency with Institutional Mission & Institutional Impact

The preferred administration of academic programs is by academic departments.

Describe and List any Anticipated Expenses and Revenue

No changes to expenses or revenues should result from this change.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

No changes are being proposed for the curriculum.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map

-

Student Learning Outcomes Assessment Plan

-

Budget Worksheet

-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Locations Offered

ALL

Course Delivery Method

Online



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Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Discontinue: Health Education Teaching Certificate
Department of Kinesiology and Health Science
Emma Eccles Jones College of Education & Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Kinesiology and Health Science, in the Emma Eccles Jones College of Education and Human Services, proposes discontinuing the Health Education Teaching Certificate.

This proposal discontinues the Health Education Teaching Certificate as it can no longer be supported by the Health Education and Promotion faculty.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-KHS-Health Education Teaching Certificate-Discontinue



USU_BANNER - New R401 Abbreviated Program Proposal - Health Education Teaching - Certificate - R401 Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

Hints

Yes

Resources

Budget Worksheet

High-Yield CIP Codes or Classification of Instructional Programs

Student Learning Outcomes Assessment Plan

USHE Labor Market Analysis Guide

USHE R401 Policy

Writing Guidelines/Suggestions

COLLEGE AND DEPARTMENT INFORMATION

College

College of Education & Human Services

Department(s)

Kinesiology and Health Science

Letters of Support (if needed)

-

Current Title (if applicable)*

Health Education Teaching - Certificate

Proposed Title

Health Education Teaching - Certificate

CIP Code

CIP Code (6-digits)*

51.2207

Minimum Number of Credits (if applicable)

-

Maximum Number of Credits (if applicable)

-

Type of Degree: (BA, BS, etc.)*

Academic Certificate

TYPE OF CHANGE BEING REQUESTED (select one)

New Academic Program:

-

Existing Academic Program Changes:

Program Discontinuation (permanent program removal)

Administrative Unit Changes:

-

Other: (explain change)

-

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval

No

Educator Licensing Approval

Yes

SECTION I: THE REQUEST

R401 Purpose

With the recent reductions in faculty teaching resources, this minor can no longer be supported by existing Health Education and Promotion (HEP) faculty. It is therefore proposed that this certificate be discontinued.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale

With the recent reductions in faculty teaching resources, this minor can no longer be supported by existing Health Education and Promotion (HEP) faculty. It is therefore proposed that this certificate be discontinued.

Labor Market Demand (if applicable)
-**Consistency with Institutional Mission & Institutional Impact**

Consistent with university priorities and reductions in force, it is proposed that the Health Education Teaching Academic Certificate be discontinued.

Describe and List any Anticipated Expenses and Revenue

No new facilities or equipment are required for this program discontinuation. The reduction in courses and faculty responsibilities will allow resources to be reallocated to the other programs within the department, minimizing any budgetary impact. No new funds are needed, and the discontinuation is expected to result in cost savings. These savings will support institutional budget priorities without negatively affecting other units.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

The Health Education Teaching Academic Certificate at USU offers 21 credit hours of state-approved coursework designed to prepare students to teach health education in K-12 classrooms. The curriculum includes essential health topics and teaching skills, with no variable credit courses. Due to recent reduction in faculty resources within the department, this minor can no longer be supported and is proposed for discontinuation.

If this is a new credential does the curriculum require more than 25% newly developed courses?

No

Degree Map
-**Student Learning Outcomes Assessment Plan**
-**Budget Worksheet**
-

SECTION IV: LOCATIONS OFFERED AND DELIVERY METHODS

Locations Offered

Main Campus

Course Delivery Method

In-Person



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Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Post-Bachelor's Certificate: Conflict Transformation
Heravi Peace Institute
College of Arts & Science

In accordance with [Utah Board of Higher Education Policy R401](#), the Heravi Peace Institute, in the College of Arts & Sciences, proposes offering a Conflict Transformation Post-Bachelor's Certificate.

This Post-Bachelor's Certificate focuses on the theory and practice of constructive conflict engagement, with coursework in conflict coaching, transformative mediation, and advanced interpersonal conflict skills.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CAS-COMM-Conflict Transformation PBC





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 25, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Post Baccalaureate Certificate in Conflict Transformation to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Post Baccalaureate Certificate in Conflict Transformation

The Heravi Peace Institute proposes the establishment of a nine-credit Post-Baccalaureate Certificate in Conflict Transformation. Upon successful completion of the required coursework, students will also fulfill all criteria for the Utah Dispute Resolution Certificate.

CIP Code Classification

Proposers have selected CIP code 30.2801 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal underwent peer review by members of the academic community within the Utah System of Higher Education (USHE).

Feedback was received from staff in the Commissioner's Office, Weber State University, and Southern Utah University.

Reviewers at Weber State University and Southern Utah University inquired whether the certificate is designed to stack into existing graduate degree programs. Southern Utah University faculty additionally recommended considering an increase in total certificate credits, appointing a designated administrator to oversee the program, and providing the Board of Trustees with a more robust analysis of labor-market demand for certificate completers.

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,

A handwritten signature in black ink, appearing to read "TJ Bliss", with a long horizontal flourish extending to the right.

TJ Bliss, Ph.D.

Associate Commissioner of Academic Affairs and Chief Academic Officer

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Academic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Paul Barr, Vice Provost
Janalyn Brown, Board Secretary

Attachment:

Peer Review Report

Utah State University | Post Baccalaureate Certificate in Conflict Transformation

Peer Review Council Written Comments

February 2025

Steve Hood, Commissioner's Office

The Heravi Peace Institute proposes the creation of a nine-credit Post-Baccalaureate Certificate in Conflict Transformation. Students who complete the courses in the certificate program will also complete all requirements for the Utah Dispute Resolution Certificate.

The proposers have selected CIP Code 30.2801 to classify this program. Under Board Policy R402, Utah State University is authorized to offer academic programs using this classification.

Weber State University

The proposal was shared with Michael Ault, Director of Weber's Masters in Professional Communication program:

Overall, I think that this certificate is worthwhile and valuable for students.

- 1) The curriculum seems to meet the standards of the industry for a certificate in conflict management. The program appears to follow the UDR requirements for certification.
- 2) It appears that the resources already exist to run this certificate. No new courses need to be created.
- 3) I would like to know if this certificate is stackable with an existing graduate program, so that students who earn this certificate could continue on to earn a master's degree if they choose.
- 4) I'm not sure that the name communicates what this certificate does. I recognize that USU already has a certificate in Conflict Management & Facilitation, so there is a need to choose a different title, but I don't see the word "transformation" as a standard in this space. I recognize that there are programs with this name (e.g., Emory University, Eastern Mennonite University), but it's not common and could therefore be confusing. It's not clear what they will be transforming conflict into.

Thank you for the opportunity to provide feedback.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal for the Post-Baccalaureate Certificate in Conflict Transformation with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The 9-credit curriculum focuses on critical applied skills such as transformative mediation, conflict coaching, and conversational space-making, aligning well with the mission of the Heravi Peace Institute. The inclusion of state mediation certification via Utah Dispute Resolution (UDR) adds significant professional value to the credential. However, compared to national benchmarks, a 9-credit graduate certificate is notably lean. Established programs at peer institutions-such as George Mason University (15 credits), UMass Boston (12 credits), and the University of Alabama (15 credits)-typically require more extensive coursework to ensure graduate-level depth in theory and practice. Faculty should consider if three courses provide sufficient academic rigor for a post-baccalaureate designation or if an additional elective or capstone component is needed to match these national standards.

Resource Adequacy and Future Needs

The proposal indicates that no new expenses are anticipated, as it utilizes existing faculty and courses within the Heravi Peace Institute. While this "flat" funding model is efficient, it mirrors a concern we noted in other interdisciplinary proposals: the potential for administrative oversight to be overlooked. Successful certificate programs typically require a designated Program Coordinator to manage graduate admissions, track student progress, and facilitate the transition for professionals seeking state certification. Relying on existing faculty to absorb these coordination duties without specified workload adjustments risks reducing the individualized support essential for a specialized peacebuilding program.

Structural and Programmatic Concerns

There are structural concerns regarding the long-term transferability and "stackability" of the program. Specifically, the "Transfer Check" table in the proposal is currently blank, leaving it unclear how these credits would articulate to other USHE institutions or even within USU's own graduate degrees. Additionally, one of the three required courses (CMST 5600) is a 5000-level course. While often permissible, the program should clarify how the "graduate-level" expectations and workload for this course are differentiated to justify its inclusion in a post-baccalaureate certificate.

Other Considerations

The program's alignment with the "Disagree Better" initiative is a significant strength and provides a clear social and political rationale for the credential. However, the proposal would benefit from more localized labor market data. While it lists broad fields such as "human resources" and "social work" as potential career paths, providing specific Utah-based employment statistics or letters of support from regional partners (such as municipal governments or non-profits) would more clearly demonstrate the professional demand for these specific conflict transformation skills in our state.

In summary, we appreciate Utah State University's commitment to fostering constructive conflict engagement. The proposal could address four key areas:

- evaluating the 9-credit requirement against national 12-15 credit standards to ensure graduate-level depth;
- identifying a designated administrative lead to handle program coordination and professional certification tracking;

- clarifying the path for these credits to stack into larger graduate degree programs; and
- strengthening the market justification with localized workforce data and specific industry letters of support.

Overall, SUU supports the proposal and we wish you the very best as you seek final approval for this new certificate program.

Camille Thomas
Assistant Provost
Southern Utah University

END OF COMMENTS

Utah System of Higher Education

Request for Approval of a New Certificate Program

SECTION I: PROGRAM INFORMATION

Institution: Utah State University

Department: Heravi Peace Institute, College of Arts & Sciences

Proposed Certificate Name: Conflict Transformation

Award Type: Post-Baccalaureate Certificate

CIP Code: (Provide a 6-digit CIP Code. Omit the period.): 30.2801

Nature of Certificate

Select the manner students will enroll:

- ☐ Certificate is embedded in a degree program(s) only; OR
- ☒ Certificate is a “stand-alone” program only; OR
- ☐ Certificate may be earned both embedded in a degree program(s) or as a stand-alone program.
- ☒ Certificate is an industry recognized credential. Name of credential: state mediation certification; Utah Dispute Resolution

Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☐ Entire program can be completed in person
- ☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
- ☐ Entire program can be completed Online
- ☒ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program: 9

Maximum Credit Hours to Complete Program: 9

Expected First Semester Students May Enroll in Program: Fall 2026

Expected First-Year Students May Enroll in Program: Fall 2026

Chief Academic/Instructional Officer Signature: Laurens H. Smith

After Peer Review Council input and the Institution’s Board of Trustees approval, please return a copy of this proposal with the Board of Trustees approval date.

Institutional Board of Trustees’ Approval Date:

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description and Objectives

Present a brief program description including student learning outcomes. (1-2 paragraphs.)

The Graduate Certificate in Conflict Transformation equips students with the theory and practice of constructive conflict engagement through coursework in conflict coaching, transformative mediation, and advanced interpersonal conflict skills. Designed for professionals across disciplines, the program prepares graduates to foster understanding, empowerment, and sustainable change in personal, organizational, and community settings.

Consistency with Institution Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals. (1-2 paragraphs.)

The proposed Graduate Certificate in Conflict Transformation aligns closely with Utah State University's Board-approved mission to cultivate academic excellence, research, and community engagement that improve the human condition locally and globally. By equipping students with advanced skills in conflict coaching, transformative mediation, and interpersonal communication, the program supports USU's role as a land-grant university committed to fostering leadership, collaboration, and problem-solving in diverse and complex environments.

Housed within the Heravi Peace Institute, the certificate advances the Institute's mission to promote peacebuilding, dialogue, and understanding across cultural, religious, and ideological divides. It builds on the Institute's interdisciplinary foundation by preparing graduates to lead transformative processes in their communities, institutions, and professions—directly supporting USU's goal of creating engaged citizens and resilient communities through education that bridges theory and practice.

SECTION III: NEEDS ASSESSMENT

Labor Market Demand

Briefly describe how earning this certificate will benefit students. If certificate may be taken stand-alone, is there market demand for the certificate in the institution's service region and in the state? If embedded in a degree, does the certificate enhance the degree's marketability? (1-2 paragraphs.)

Earning the Graduate Certificate in Conflict Transformation equips students with practical, marketable skills—conflict coaching, transformative mediation, and advanced interpersonal conflict engagement—that can be applied across a wide range of professional settings. Graduates will be prepared to address disputes, foster collaboration, and build trust in human resources, social work, therapy, education, community leadership, and environmental collaboration fields. These skills are increasingly sought after by organizations that value constructive dialogue, inclusive decision-making, and sustainable conflict resolution practices.

The certificate can also stand alone as a professional credential for those seeking to advance or transition into roles requiring strong conflict engagement abilities. In Utah and the broader Mountain West, there is demonstrable market demand for these competencies in courts, schools, government, and nonprofit sectors, as well as within private and community mediation programs. Human resources professionals use these tools to navigate employee relations and organizational change; social workers and therapists apply them to help clients manage interpersonal and family conflicts; educators use them to foster restorative practices in classrooms; and environmental professionals rely on them to mediate complex stakeholder negotiations. Together, these trends indicate strong and growing demand for trained conflict transformation practitioners across USU's service region and the state.

Professional Licensure

Will graduates of this program require certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

State mediation certification as recognized by Utah Dispute Resolution, a public non-profit organization in Utah. UDR follows the standards outlined in the Utah Mediation Best Practice Guide as approved by the Utah Judicial Council in 2025. USU already offers a mediation certification through the Heravi Peace Institute's collaboration with UDR and Disagree Better. Currently, USU undergraduates enrolled in PI 3110 and professionals taking USU's transformative mediation certification course can earn this certificate. The proposed Conflict Transformation graduate certificate will extend the HPI's program to graduate students who successfully complete the graduate certificate.

Transfer Check

If applicable, provide information on USHE degree-granting or technical college program credit that may prepare students for the program or count for certain credits. Use comments field to describe unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments

(add more rows to table if needed)

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program.

Course Prefix & Number	Course Title	New Course? Y/N	Credit Hours
CMST 5600	Advanced Communication and Conflict	N	3
PI 6000	Mediation Workshop	N	3
PI 6600	Conversational Space Making	N	3

(add more rows to table if needed)

Expense Narrative

Describe expenses associated specifically with the proposed program. If there are no unique expenses, type "N/A."

N/A



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Certificate: Musical Theatre
Department of Theatre Arts
College of Arts & Science

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Theatre Arts, in the College of Arts & Sciences, proposes offering a Musical Theatre Certificate.

This certificate offers advanced training in the core performance elements of musical theatre, including acting, singing, dancing, and musical staging, while also preparing future educators with the technical skills needed to teach and produce musical theatre.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CAS-THEA-Musical Theatre-Certificate





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 2, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Certificate in Musical Theatre to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Certificate in Musical Theatre

The Department of Theatre Arts proposes a 14-credit certificate designed to provide students with advanced training in musical performance within the existing Theatre Education BFA program.

CIP Code Classification

Proposers have selected CIP code 50.0509 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal underwent peer review by members of the academic community within the Utah System of Higher Education (USHE).

Feedback was received from staff in the Commissioner's Office, Weber State University, Southern Utah University, and the University of Utah. Southern Utah University noted that the certificate addresses a clear need for teaching professionals but emphasized that it should not be marketed as a professional musical theatre credential. The University of Utah expressed concern that a fourteen-credit program may be insufficient for educators seeking comprehensive musical theatre preparation and suggested the inclusion of additional coursework, such as dance. Weber State University expressed full support for the proposal.

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,

A handwritten signature in black ink, appearing to read "TJ Bliss", with a long, sweeping horizontal line extending from the end of the signature.

TJ Bliss, Ph.D.

Associate Commissioner of Academic Affairs and Chief Academic Officer

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Economic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Janalyn Brown, Board Secretary

Attachment: Peer Review Report

Utah State University | Certificate in Musical Theatre

Peer Review Council Written Comments

January 2025

Steve Hood, Commissioner's Office

The Department of Theatre Arts proposes a 14-credit certificate that will prepare students advanced training in musical performance within the existing BFA in Theatre Education program.

Proposers have selected CIP Code 50.0509 to classify this program. Under Board Policy R402, Utah State University is authorized to offer academic programs in this academic area.

Gail Niklason, Weber State University

This proposal was shared with Jessica Greenberg, chair of Weber State's School of Performing Arts, and faculty in Theatre.

Does the proposed curriculum meet the standards of the degree area as assessed by your relevant faculty- specify specific concerns based on your accepted curriculum or national standards, and/or accreditation standards?

- This proposal for this Musical Theatre certificate within their BFA for Theatre Education seems appropriate. The courses address dance for musical theatre, voice training, music fundamentals, and musical theatre history. I would want to confirm that some acting courses are present elsewhere in this BFA degree.

Do the resources exist to adequately offer a quality program of study and are future resource needs adequately specified? Provide examples of how the resources available in your program look so as to give context on where and why you feel deficiencies exist.

- The materials provided do not give information on the resources available for this certificate. If this certificate is embedded in the existing BFA, I imagine that these are courses that are already being offered for Musical Theatre students, and so this would not require additional resources.
- I can see the benefit for the Theatre Education students to have this certificate to clearly communicate this skill set to future employers. I agree with their assessment that Musical Theatre skills for educators K-12 are in demand in the region and in the state.

Are there any structural or programmatic concerns with the degree? Will students be able to transfer without difficulty (3000 and 4000 level curriculum in the first 2 years, etc.), etc., etc.- Be specific in your examples

- I do not see any concerns based on the material provided.

Are there any other concerns not addressed above?

- No. Thank you for the opportunity to provide feedback!

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal with my colleagues here at SUU. Here is the feedback they provided.

Curriculum Standards and Faculty Assessment

The curriculum effectively addresses the "triple threat" requirements of acting, singing, and dancing within an educational context, incorporating foundational coursework in music fundamentals, aural skills, and private voice instruction alongside performance-oriented courses in musical theatre workshop and history. However, reviewers note that a 14-credit certificate cannot replicate the sustained studio training of a BFA program. While appropriate as a specialized credential for educators, USU must clearly market this as an enhancement for teaching professionals rather than professional performance certification to avoid suggesting competency in a discipline that typically requires years of intensive study.

Resource Adequacy

The proposal demonstrates efficient resource use by leveraging existing faculty and courses within the Theatre Arts and Music departments, with no unique expenses required. Because enrollment is limited to students already pursuing the BFA in Theatre Education, the certificate primarily fills existing seats in under-enrolled sections rather than creating new instructional demands.

Structural and Programmatic Considerations

A potential concern is graduation delay, as adding 14 credits to an already rigorous 120-hour program with certification requirements could extend time to completion if credits don't satisfy existing major or elective requirements. However, a significant structural safeguard is the embedded-only design, which prevents the certificate from being offered as a stand-alone credential and mitigates concerns about credential creep.

Equity, Access, and System-Wide Alignment

USU positions this certificate as serving an internal need for future high school drama educators, where musicals drive revenue and engagement-distinguishing it from SUU's professionally oriented BFA. To avoid recruitment confusion, USU must explicitly communicate that this credential does not provide comprehensive professional preparation equivalent to USHE BFA degrees in Musical Theatre. The proposal aligns with USHE's differentiated institutional roles and uses existing infrastructure efficiently, though any future expansion beyond 14 credits should require a new R401 review with explicit system approval.

The proposal is well-designed for its intended purpose but requires attention in three areas:

- clear marketing language that positions this as an educator enhancement rather than professional performance training;
- verification that certificate credits align with existing degree requirements to prevent graduation delays; and
- mitigating concerns of "credential creep" and duplicating SUU's Musical Theatre program, USU should reaffirm its commitment to the embedded-only model and its current 14-credit cap.

The embedded-only structure and efficient use of existing resources are notable strengths that address many potential concerns. Overall, SUU supports the proposal, and we wish you the very best as you seek final approval for this new degree program.

Camille Thomas

Assistant Provost

Southern Utah University

University of Utah Provost's Office

As proposed, the certificate curriculum is weighted heavily toward music, theory and sight-singing skills, with six of the fourteen required credits dedicated to musicianship and voice. In contrast, only two credits are allocated to a single dance class, and three credits are applied toward a single musical theatre performance course.

Nationally, a musical theatre dance course is typically structured as a "styles" and "repertoire" class, offering students a survey of musical theatre dance styles and major choreographers. While technical elements may certainly be addressed, such courses are not designed to function as technique classes focused on developing foundational, healthy dance practices. In addition to the Musical Theatre Dance course, I would strongly prefer to see a ballet or jazz technique class included in the certificate, potentially in place of aural skills or a second semester of voice study.

Additionally, musical theatre history coursework already appears to be an option within the Theatre Education BFA degree. Given that interested theatre education students can fulfill this requirement as part of their primary program, I would recommend removing it from the certificate and instead adding an additional acting technique course, which would provide substantial benefit to future educators.

I fully agree that Theatre Education students need expanded opportunities to study the musical theatre form, particularly given the prevalence of musical theatre productions in school programs. This is a clear and pressing need. However, I do question whether a fourteen-credit certificate is sufficient to meet that need, considering the limited opportunities Theatre Education students currently have to pursue performance-based technique coursework within their primary degree. The constraints of a fourteen-credit certificate make it difficult to provide meaningful, comprehensive training. A twenty-credit minor, available to all theatre students, may offer a more effective structure for developing essential musical theatre skills. Such a minor would likely be extremely popular, particularly given the absence of a musical theatre-specific degree at USU.

Erin Speer - Head, Musical Theatre Program

END OF COMMENTS

Utah System of Higher Education

Request for Approval of a New Certificate Program

SECTION I: PROGRAM INFORMATION

Institution: Utah State University

Utah State University

Department: Department of Theatre Arts

Proposed Certificate Name: Musical Theatre Certificate

Award Type: Select the awarded credential

CIP Code: (Provide a 6-digit CIP Code. Omit the period.): 500509

Nature of Certificate

Select the manner students will enroll:

- ☒ Certificate is embedded in a degree program(s) only; OR
- ☐ Certificate is a “stand-alone” program only; OR
- ☐ Certificate may be earned both embedded in a degree program(s) or as a stand-alone program.
- ☐ Certificate is an industry recognized credential. Name of credential:

Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☒ Entire program can be completed in person
- ☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
- ☐ Entire program can be completed Online
- ☐ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program: 14

Maximum Credit Hours to Complete Program: 14

Expected First Semester Students May Enroll in Program: Fall 2026

Expected First-Year Students May Enroll in Program: Fall 2026

Chief Academic/Instructional Officer Signature:

After Peer Review Council input and the Institution's Board of Trustees approval, please return a copy of this proposal with the Board of Trustees approval date.

Institutional Board of Trustees' Approval Date:

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description and Objectives

Present a brief program description including student learning outcomes. (1-2 paragraphs.)

The Musical Theatre Certificate for BFA Theatre Education students is a specialized credential designed to offer advanced training in performance elements essential to musical theatre. This program provides focused coursework in acting, singing, dancing, and musical staging, equipping future educators with the technical expertise and confidence to direct, produce, and teach musical theatre productions in educational settings. By integrating performance training with pedagogical principles, the certificate prepares students to meet the diverse demands of arts education and contribute creatively to school and community theatre programs.

Student Learning Objectives:

- Demonstrate proficiency in skills of singing, acting, and dance specific to musical theatre.
- Apply musical staging techniques to enhance storytelling and audience engagement.
- Analyze and interpret musical theatre history, styles, and genres.
- Develop confidence and professionalism in performance.

Consistency with Institution Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals. (1-2 paragraphs.)

The proposed Musical Theatre Certificate at Utah State University aligns closely with the institution's mission to provide comprehensive, accessible, and high-quality education that fosters creativity, artistic expression, and professional development. By offering concentrated training in acting, singing, and dance, the program supports Utah State's goals of preparing students for successful careers in the arts while emphasizing the importance of experiential learning and performance. Furthermore, the certificate's design encourages collaboration with departmental productions and interdisciplinary engagement, promoting the university's commitment to experiential, stage-based learning and community involvement. This program advances Utah State's role in cultivating well-rounded artists prepared to contribute meaningfully to the cultural and artistic landscape.

Additionally, the certificate complements the university's broader goals of fostering innovation, community building, and lifelong learning. By providing an alternative pathway for students to develop essential performance skills concurrently with their primary majors, it broadens access to rigorous arts education and supports the university's mission to expand educational opportunities. Overall, this program reflects Utah State's commitment to nurturing artistic talent and preparing students to excel in dynamic, professional environments while enriching the cultural fabric of the university and the wider community.

SECTION III: NEEDS ASSESSMENT

Labor Market Demand

Briefly describe how earning this certificate will benefit students. If certificate may be taken stand-alone, is there market demand for the certificate in the institution's service region and in the state? If embedded in a degree, does the certificate enhance the degree's marketability? (1-2 paragraphs.)

Adding a Musical Theatre Certificate available to the BFA Theatre Education program would give future school theatre teachers a competitive edge by broadening their skill set in one of the most popular and widely produced forms of theatre in K–12 schools. Musical theatre is a cornerstone of school and community theatre seasons, and possessing specialized training in areas such as vocal performance, dance, and musical staging would better equip graduates to direct, choreograph, and produce these productions with confidence. This additional expertise not only strengthens their teaching credentials but also enhances their marketability when applying for teaching positions.

Beyond classroom applications, the certificate significantly enriches students’ artistic development, which is a core component of the BFA Theatre Education program. Given the sustained demand for musical theatre productions across the region and statewide, this credential is likely to increase employment opportunities for graduates and meet the evolving needs of arts education in schools and community theatres.

Professional Licensure

Will graduates of this program require certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

N/A

Transfer Check

If applicable, provide information on USHE degree-granting or technical college program credit that may prepare students for the program or count for certain credits. Use comments field to describe unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments

(add more rows to table if needed)

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program.

Course Prefix & Number	Course Title	New Course? Y/N	Credit Hours
THEA 3230	Musical Theatre Dance I	N	2
MUSC 1630	Private Voice Instruction (1 credit hour, taken twice)	N	2
MUSC 1105	Music Fundamentals	N	3
MUSC 1130	Aural Skills I	N	1
THEA 3440	Music Theatre Workshop I	N	3
THEA 4720/4730	Musical Theatre History I OR Musical Theatre History II	N	3

(add more rows to table if needed)

Expense Narrative

Describe expenses associated specifically with the proposed program. If there are no unique expenses, type “N/A.”

N/A



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Post-Bachelor's Certificate: Qualitative Advanced Research Methods Certificate (Q-ARM)
Department of Instructional Technology and Learning Sciences
Emma Eccles Jones College of Education and Human Services

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Instructional Technology and Learning Sciences, in the Emma Eccles Jones College of Education and Human Services, proposes offering a Qualitative Advanced Research Methods (Q-ARM) Post-Bachelor's Certificate.

This Post-Bachelor's Certificate prepares students to conceptualize, conduct, and report on qualitative research studies.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

CEHS-ITLS-Qualitative Advanced Research Methods (Q-ARM) PBC





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 25, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Post Baccalaureate Certificate in Qualitative Advanced Research Methods to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Post Baccalaureate Certificate in Qualitative Advanced Research Methods

The College of Education and Human Services, in collaboration with multiple academic disciplines, proposes the establishment of a Post-Baccalaureate Certificate in Qualitative Advanced Research Methods. The certificate is designed to equip students with the knowledge and skills necessary to design, conduct, and disseminate high-quality qualitative research across academic and professional fields.

CIP Code Classification

Proposers have selected CIP code 13.0601 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal underwent peer review by members of the academic community within the Utah System of Higher Education (USHE).

Feedback was received from staff in the Commissioner's Office, Weber State University, Utah Valley University, and Southern Utah University.

All institutions expressed support for the proposal. Faculty at Utah Valley University noted concerns regarding accessibility for students outside the field of education, given that two core courses are graduate-level education offerings. Faculty at Southern Utah University recommended considering the addition of a capstone course, appointing a certificate coordinator to oversee the program, and further clarifying the certificate's stackable pathways for prospective students.

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,

A handwritten signature in black ink, appearing to read 'TJ Bliss', with a long horizontal flourish extending to the right.

TJ Bliss, Ph.D.

Associate Commissioner of Academic Affairs and Chief Academic Officer

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Academic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Paul Barr, Vice Provost
Janalyn Brown, Board Secretary

Attachment:

Peer Review Report

Utah State University
Post Baccalaureate Certificate in Qualitative Advanced Research Methods
Peer Review Council Written Comments
February 2025

Gail Niklason, Weber State University

This proposal was shared with Wei Qiu, Director of Weber's Graduate Studies in Education program:

1. Does the proposed curriculum meet the standards of the degree area as assessed by your relevant faculty- specify specific concerns based on your accepted curriculum or national standards, and/or accreditation standards?

The certificate is designed in a comprehensive manner with a clear goal to develop advanced qualitative research method skills for students. It provides broad and foundational research courses, in addition to courses that describe slightly different parts of the qualitative research process (e.g., ethnography, mixed methods). The courses seem to share the same goal of incremental growth and they leverage expertise from different departments (e.g., ITLS, TEAL) in the College of Education and Human Services at USU, which I believe is a strength. As an alumna, I can personally testify to the quality of the established courses, but I am particularly pleased that USU identified gaps in the offered content (e.g. autoethnography and discourse analysis) and is planning to develop those courses as well.

2. Do the resources exist to adequately offer a quality program of study and are future resource needs adequately specified? Provide examples of how the resources available in your program look so as to give context on where and why you feel deficiencies exist.

Yes. The current resources should be adequate to support this 15-credit program.

3. Are there any structural or programmatic concerns with the degree? Will students be able to transfer without difficulty (3000 and 4000 level curriculum in the first 2 years, etc.), etc., etc.- Be specific in your examples

No concerns.

4. Are there any other concerns not addressed above?

No concerns.

Thank you for the opportunity to provide feedback.

Debbie Ferguson, Utah Valley University

Response from Adam Ogurlu, Elementary Education, UVU
Curriculum

- 1- The curriculum demonstrates strong alignment with established qualitative research training standards in social sciences
- 2- The required courses (EDUC 6570 then EDUC 6770) look an appropriate methodological progression
- 3- The elective courses like ethnography, discourse analysis, autoethnography, design-based research are common qualitative research methods
- 4- Since it is an advanced qualitative research program, maybe using AERA qualitative standards (attached), graduates should demonstrate more advanced competencies for instance justification the theory not just "using theory". Using critical evaluation, justification, or synthesis would be more appropriate
- 5- I'm assuming that they would teach ethics of the research, but I think more explicit objective or course on ethical considerations and IRB procedures would be helpful

Resources

- 1- Having various departments and courses from different departments helps the sustainability of the program.
- 2- Using different modalities is a strength of the program
- 3- Since it is a multi-department program, I do not see how the coordination would exist
- 4- The other concern is how advising would be since it requires courses from different departments

Concerns

- 1- Since required courses (EDUC 6570 then EDUC 6770) are from Education, I'm not sure how accessible it is for non-education students.
- 2- Advising is not addressed here since it is a multi-department program

Strengths

- 1- The progression of the curriculum aligns with the standards of qualitative research
- 2- There is good chunk of elective courses

Other

- 1- I do not see any program completion project or any capstone requirements

Steve Hood, Commissioner's Office

The College of Education and Human Services, in cooperation with multiple disciplines, proposes the creation of a Post-Baccalaureate Certificate in Qualitative Advanced Research. The purpose of the certificate is to prepare students to design, conduct, and report qualitative research in academic and professional studies.

The proposers have selected CIP Code 13.0601 to classify this program. Board Policy R402 authorizes Utah State University to offer academic programs in this field of study.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal for the Post-Baccalaureate Certificate in Qualitative Advanced Research Methods (Q-ARM) with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The 15-credit curriculum aligns well with national benchmarks for graduate-level research training, matching the rigor of the University of Alabama and exceeding credit requirements at peer institutions like Purdue. The coursework effectively encompasses the "Full Research Cycle," moving students systematically from epistemology and theoretical frameworks to data collection and sophisticated analysis. However, "Gold Standard" research certificates at institutions such as the University of North Carolina typically require a formal culminating experience or capstone presentation to verify mastery. Incorporating a requirement for students to present their qualitative findings at a university symposium or a relevant conference would bring the program into closer alignment with these high national standards for research excellence.

Resource Adequacy and Future Needs

The proposal indicates "N/A" for unique expenses by utilizing existing courses and faculty; however, this may underestimate the administrative "hidden costs" inherent in interdisciplinary certificates. High-quality R1 programs typically designate a Certificate Coordinator with a specific percentage of Full-Time Equivalent (FTE) workload dedicated to admissions, progress tracking, and specialized advising. Relying on internal reallocation without a named point of contact risks "diffusion of responsibility." Providing a clear administrative lead is essential to ensure that students from diverse departments—such as Psychology, Kinesiology, or Teacher Education—receive consistent advising as they navigate the various departmental silos involved in the certificate.

Structural and Programmatic Concerns

The program is structurally sound for graduate-level work, utilizing appropriate 6000 and 7000-level coursework. However, the proposal does not yet fully address USHE's emphasis on system-wide transferability, as the transfer equivalent table is currently blank. To satisfy R401 requirements, the proposal should proactively identify equivalent qualitative courses at other USHE institutions, such as the University of Utah, to ensure graduate students moving within the state do not face credit loss. Furthermore, while the program is intended to be stackable, the proposal would be strengthened by explicitly mapping how these 15 credits apply toward USU's specific doctoral degrees to guarantee a seamless pathway for internal students.

Other Considerations

Strengthening the proposal with localized labor market data from the Utah Department of Workforce Services would provide a more compelling justification for the program. While the academic need is clear, specific evidence of demand for qualitative expertise within Utah's healthcare sector (e.g., Intermountain Health) or the "Silicon Slopes" tech corridor (e.g., User Experience/UX research) would bolster the "need" argument. Additionally, given that the electives are spread across eight different departments, the school should provide a guaranteed two-year course rotation schedule to ensure that students can realistically complete the 15-credit requirement in a timely manner.

In summary, we appreciate Utah State University's innovative and interdisciplinary approach to providing advanced research training. The proposal could address four key areas:

- incorporating a culminating capstone or public presentation requirement to meet national research excellence benchmarks;
- formally designating a Certificate Coordinator to manage the administrative and advising needs of an interdisciplinary student body;
- clarifying the internal "stackable" pathways into USU doctoral programs; and
- strengthening the proposal with localized Utah workforce data and a reliable elective rotation schedule to ensure program completion.

Overall, SUU supports the proposal and we wish you the very best as you seek final approval for this new certificate program.

Camille Thomas
Assistant Provost
Southern Utah University

END OF COMMENTS

Utah System of Higher Education

Request for Approval of a New Certificate Program

SECTION I: PROGRAM INFORMATION

Institution: Utah State University

Department: EDUC Courses; Human Development and Family Studies; Instructional Technology and Learning Sciences; Kinesiology and Health Science; Psychology; School of Teacher Education and Leadership; Speech and Hearing Sciences; Special Education and Rehabilitation

Proposed Certificate Name: Qualitative Advanced Research Methods Certificate (Q-ARM)

Award Type: Post-Baccalaureate Certificate

CIP Code: (Provide a 6-digit CIP Code. Omit the period.): 130601

Nature of Certificate

Select the manner students will enroll:

- ☐ Certificate is embedded in a degree program(s) only; OR
- ☒ Certificate is a “stand-alone” program only; OR
- ☒ Certificate may be earned both embedded in a degree program(s) or as a stand-alone program.
- ☐ Certificate is an industry recognized credential. Name of credential:

Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☐ Entire program can be completed in person
- ☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
- ☐ Entire program can be completed Online
- ☒ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program: 15

Maximum Credit Hours to Complete Program: 15

Expected First Semester Students May Enroll in Program: Fall

Expected First-Year Students May Enroll in Program: 2026

Chief Academic/Instructional Officer Signature:

After Peer Review Council input and the Institution's Board of Trustees approval, please return a copy of this proposal with the Board of Trustees approval date.

Institutional Board of Trustees' Approval Date:

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description and Objectives

Present a brief program description including student learning outcomes. (1-2 paragraphs.)

The Emma Eccles Jones College of Education and Human Services (CEHS) at Utah State University along with partnering CEHS departments offers a graduate certificate in Qualitative Advanced Research Methods (Q-ARM). The certificate prepares students to conceptualize, conduct, and report on qualitative (including qualitative, design-based, community engaged and/or evaluation) research studies. Students will not only learn about but utilize these skills throughout their coursework and be prepared to employ them in academic as well as business and industry settings. The certificate is also available as a post-baccalaureate credential for learners seeking to enhance their readiness for a PhD program.

In the context of conducting qualitative research (broadly defined as qualitative, design-based, community engaged and/or evaluation), learners will be able to:

1. Select an appropriate theoretical framework and use it to inform key facets of a research project.
2. Write appropriate and clear research questions.
3. Conceptualize, justify, and design qualitative studies to answer clear research questions.
4. Select and use data collection techniques.
5. Conduct and describe qualitative analyses on collected data.
6. Write qualitative findings based on analyses.
7. Write complete qualitative proposals and/or papers of conducted research.

Consistency with Institution Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals. (1-2 paragraphs.)

This graduate level training provides both a bridge between Utah State University's commitment to undergraduate training and graduate education as well as an expansion of graduate education. It helps maintain the R1 status of Utah State University by supporting pathways and/or graduate student training in the core theme of learning. For both graduate students and faculty it supports discovery through the development and often application of research. Finally, since qualitative research involves a focus on community it embodies the core theme of engagement as well as the land-grant mission of Utah State University.

SECTION III: NEEDS ASSESSMENT

Labor Market Demand

Briefly describe how earning this certificate will benefit students. If certificate may be taken stand-alone, is there market demand for the certificate in the institution's service region and in the state? If embedded in a degree, does the certificate enhance the degree's marketability? (1-2 paragraphs.)

Academic positions as well as non-academic sectors are seeking highly qualified candidates who can ethically connect, partner with and collect data with and about communities. Many R1 institutions (Indiana University, George Mason, University of North Carolina) offer qualitative research certificate programs. While there are opportunities for select qualitative research classes at regional institutions there are none that offer a certificate like the one proposed here and already offered at other US Universities. We anticipate 10-15 students completing this certificate with good potential to grow through non-degree seeking students—which will help to increase enrollments in related courses.

Professional Licensure

Will graduates of this program require certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

N/A

Transfer Check

If applicable, provide information on USHE degree-granting or technical college program credit that may prepare students for the program or count for certain credits. Use comments field to describe unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments

(add more rows to table if needed)

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program.

Course Prefix & Number	Course Title	New Course? Y/N	Credit Hours
Required Courses			
EDUC 6570	Introduction to Educational and Psychological Research (<i>required</i>)	N	3
EDUC 6770	Qualitative Research Methods (<i>required</i>); (pre-q EDUC 6570)	N	3
Elective Courses			
EDUC 6010	Introduction to Program Evaluation (<i>elective</i>)	N	3
EDUC 6800	Mixed Methods (<i>elective</i>);(pre-req EDUC 6770; 6600)	N	3
ITLS 7340	Building Community Partnerships in Research Contexts (<i>elective</i>)	N	3
ITLS 7350	Ethnography (<i>elective</i>)	N	3
ITLS 7360	Design Based Research (<i>elective</i>)	N	3
TEAL 7547	Thinking with Theory in Qualitative Research (<i>elective</i>);(pre-req EDUC 6770)	N	3
TEAL 7549	Content/Discourse Analysis (<i>elective</i>); <i>pending approval</i>	Y	3
TEAL 6675/7675	Autoethnography as a Research Methodology (<i>elective</i>); <i>pending approval</i>	Y	3
TEAL 7546	Qualitative Data Analysis (<i>elective</i>);(pre-req EDUC 6770)	N	3

(add more rows to table if needed)

Note classes are offered in a mix of delivery formats and the certificate can be completed from the Logan campus or any of USU's statewide campus locations.

Expense Narrative

Describe expenses associated specifically with the proposed program. If there are no unique expenses, type "N/A."

N/A while there are two pending classes associated with the certificate their introduction was planned before this Q-ARM certificate was proposed.



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Certificate: Engineering Foundations
College of Engineering

In accordance with [Utah Board of Higher Education Policy R401](#), the College of Engineering proposes offering an Engineering Foundations Certificate.

The purpose of this certificate is to provide students with a strong understanding of core engineering principles and develop analytical reasoning, problem-solving, and design skills.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

COE-Engineering Foundations-Certificate





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 2, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Certificate in Engineering Foundations to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Certificate in Engineering Foundations

The College of Engineering has designed a Certificate in Engineering Foundations for students preparing to pursue an undergraduate engineering degree at Utah State University. This 25-credit program brings together the prerequisite courses required by all engineering majors and provides students with an early introduction to the wide range of engineering disciplines available at the University.

CIP Code Classification

Proposers have selected CIP code 14.4801 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal underwent peer review by members of the academic community within the Utah System of Higher Education (USHE).

Feedback was received from staff in the Commissioner's Office, Weber State University, and Southern Utah University. Weber State noted that the newly developed courses for this certificate may not articulate seamlessly with engineering courses at other institutions, potentially creating challenges for students seeking to transfer to Utah State University's engineering programs. Southern Utah University also raised concerns about transferability, emphasizing that the required curriculum could pose obstacles for students transitioning to Utah State. They further observed that a 25-credit requirement is uncommon

for a certificate, representing nearly a full year of coursework. Despite these concerns, both Weber State University and Southern Utah University expressed overall support for the proposal.

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,

A handwritten signature in black ink, appearing to read "TJ Bliss", with a long, sweeping horizontal line extending from the end of the name.

TJ Bliss, Ph.D.

Associate Commissioner of Academic Affairs and Chief Academic Officer

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Economic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Janalyn Brown, Board Secretary

Attachment: Peer Review Report

Utah State University | Certificate in Engineering Foundations

Peer Review Council Written Comments

January 2025

Steve Hood, Commissioner's Office

The College of Engineering has designed a certificate that contains courses that every undergraduate engineering student at Utah State University will need to enroll in, prior to selecting the engineering major of their choice. This is a 25-credit program that bundles required foundational courses and introduces students to the variety of engineering majors available to them at the University.

Proposers have selected CIP Code 14.4801 to classify this program. Board Policy R402 authorizes Utah State University to offer academic programs in this classification area.

Gail Niklason, Weber State University

The proposal was shared with Tariq Arif, faculty in Weber's Mechanical Engineering program:

I appreciate the chance to review USU's proposed Engineering Foundations Certificate. This year-long curriculum has 25 credits and lets students explore various engineering areas without losing academic progress. The idea of a combined freshman engineering curriculum, which includes calculus, chemistry, physics, engineering exploration, and programming, is thoughtful, and would likely contribute to student success/retention.

Two areas for your consideration:

- It is not clear how the two new proposed courses, Engr 1010 and Engr 1400 compare with similar courses at other schools. Without this clarity students may have trouble transferring their credits to other institutions. This uncertainty may undermine one of the certificate's main goals, which is to provide a smooth/transferable first-year engineering experience.
- The proposal lists a wide range of ABET engineering student outcomes for the certificate. However, most of the coursework consists of general science courses, that while providing a critical foundation, may not directly address the outcomes listed. It seems that trying to evaluate the entire set of ABET engineering outcomes at this stage could distract from the purpose of a foundational certificate.

Overall, the Engineering Foundations Certificate can improve student success by offering a clear first-year pathway and encouraging ongoing interest/retention in engineering. I support this proposal and welcome any conversation on curriculum alignment, transfer articulation, and other efforts to ensure the certificate's success.

Thank you for the opportunity to provide feedback.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The program learning outcomes are explicitly aligned with ABET-accredited engineering program criteria, focusing on solving complex problems and applying engineering design. The curriculum correctly identifies standard high-level math and science prerequisites including Calculus I and II, Chemistry I, and Physics I, while the inclusion of Programming I and Engineering Exploration provides necessary computer science and design-thinking foundations for a freshman-year engineering core. However, at 25 credits, this is a very heavy certificate. While it accurately reflects the foundational year of an engineering degree, faculty should ensure students are thoroughly advised on the intense workload, which requires high mathematical and physical science proficiency from the outset.

Resource Adequacy and Future Needs

The proposal indicates no unique expenses, implying the program will leverage existing faculty and lab spaces. However, the curriculum includes two new courses—Engineering Exploration and Programming I—and launching technical courses, especially a programming lab, typically requires dedicated teaching assistants or adjunct support. Additionally, new certificates often attract non-majors seeking career pivots, and advising students who may lack traditional prerequisites could require more resources than initially anticipated.

Structural and Programmatic Concerns

The certificate is specifically designed to prepare students for sophomore-level engineering courses across the state, which is a major structural strength supporting student mobility within USHE. The stand-alone credential option provides a valuable stop-out point for students who may need to enter the workforce before completing a full BS degree. However, the Transfer Check table in the proposal is currently blank—USU should formalize which courses from regional technical colleges or other USHE institutions will count toward this certificate before the program launches to ensure seamless transferability.

Equity, Access, and System-Wide Alignment

The certificate supports USU's land-grant mission to expand access to high-quality foundational education across the state. While almost all USHE institutions offer the first year of an engineering degree, this proposal differentiates itself by providing a specific credential recognizing student achievement earlier in their academic career. By targeting students in other disciplines such as law, business, or policy, the certificate fulfills system-wide goals of creating technically literate professionals who understand systems thinking and design processes. The program is currently listed as entirely in person; to further enhance equity and access for working professionals or those at regional campuses, USU might consider developing hybrid or online pathways for non-lab portions of the curriculum.

The proposal presents a well-designed certificate aligned with ABET standards that supports student mobility and recognizes early academic achievement. Four areas warrant attention:

- ensuring robust advising to help students manage the intensive 25-credit workload;
- clarifying resource needs for the two new courses, particularly teaching assistant support for the programming lab;
- completing the blank Transfer Check table to formalize course articulation agreements before launch; and
- considering hybrid or online delivery options for non-lab coursework to enhance access for working professionals and students at regional campuses.

The certificate's role in creating technically literate professionals across disciplines represents a valuable contribution to USHE's workforce development goals. Overall, SUU supports the proposal and we wish you the very best as you seek final approval for this new degree program.

Camille Thomas
Assistant Provost
Southern Utah University

END OF COMMENTS

Utah System of Higher Education

Request for Approval of a New Certificate Program

SECTION I: PROGRAM INFORMATION

Institution: Select an Institution

Department: **College of Engineering**

Proposed Certificate Name: Engineering Foundations

Award Type: Select the awarded credential

CIP Code: (Provide a 6-digit CIP Code. Omit the period.): 14.4801

Nature of Certificate

Select the manner students will enroll:

- ☐ Certificate is embedded in a degree program(s) only; OR
- ☐ Certificate is a “stand-alone” program only; OR
- ☒ Certificate may be earned both embedded in a degree program(s) or as a stand-alone program.
- ☐ Certificate is an industry recognized credential. Name of credential:

Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☒ Entire program can be completed in person
- ☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
- ☐ Entire program can be completed Online
- ☐ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program: 25

Maximum Credit Hours to Complete Program: 25

Expected First Semester Students May Enroll in Program: Fall

Expected First-Year Students May Enroll in Program: 2026

Chief Academic/Instructional Officer Signature:

After Peer Review Council input and the Institution’s Board of Trustees approval, please return a copy of this proposal with the Board of Trustees approval date.

Institutional Board of Trustees’ Approval Date:

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description and Objectives

Present a brief program description including student learning outcomes. (1-2 paragraphs.)

Program Description

The Engineering Foundations Certificate offers students—both aspiring engineers and those in other disciplines—an opportunity to develop a strong understanding of core engineering principles. Through a coherent sequence of first-year courses, students gain the knowledge and skills needed to succeed in sophomore-level engineering coursework or to enhance their perspective in other professional fields. The certificate provides a solid grounding in analytical reasoning, problem-solving, and design, making it valuable for students pursuing a wide range of academic and career paths.

Student Learning Outcomes

Aligned with ABET-accredited engineering programs, students completing the certificate will demonstrate:

1. The ability to identify, formulate, and solve complex engineering problems using principles of engineering, science, and mathematics.
2. The ability to apply engineering design to produce solutions that meet specified needs while considering health, safety, welfare, and broader societal and environmental factors.
3. Effective communication skills for a variety of audiences.
4. Ethical and professional responsibility in engineering contexts, with awareness of global, economic, environmental, and societal impacts.
5. The ability to collaborate effectively on teams that provide leadership, establish goals, plan tasks, and achieve objectives.
6. The ability to design and conduct experiments, analyze data, and apply engineering judgment to draw conclusions.
7. The capacity to acquire and apply new knowledge as needed, using appropriate learning strategies.

Consistency with Institution Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals. (1-2 paragraphs.)

The Engineering Foundations Certificate directly supports Utah State University's mission as the state's land-grant and R1 research institution by expanding access to high-quality, foundational engineering education. As a land-grant university, USU is committed to fostering statewide educational opportunity, economic development, and the practical application of knowledge. This certificate embodies those principles by providing a clear and transferable pathway for students to begin or advance their studies in engineering—whether they continue at USU or transfer to other institutions across Utah.

As an R1 research university, USU also seeks to cultivate innovation, technical expertise, and interdisciplinary problem-solving. The Engineering Foundations Certificate strengthens this mission by equipping students with the analytical and design skills that underpin modern research, innovation, and workforce development in engineering and

SECTION III: NEEDS ASSESSMENT

Labor Market Demand

Briefly describe how earning this certificate will benefit students. If certificate may be taken stand-alone, is there market demand for the certificate in the institution's service region and in the state? If embedded in a degree, does the certificate enhance the degree's marketability? (1-2 paragraphs.)

Earning the Engineering Foundations Certificate demonstrates that a student has successfully completed the rigorous first-year core courses common to all engineering disciplines. This credential signals to employers and transfer institutions that the student has mastered fundamental engineering concepts, mathematical reasoning, and problem-solving skills that are essential for success in advanced technical fields. The certificate prepares students to seamlessly enter sophomore-level courses in engineering programs not only at Utah State University but also across the state.

Given the growing demand for professionals with technical literacy and analytical expertise, this certificate holds value beyond traditional engineering pathways. Employers in business, technology, law, policy, and management increasingly seek individuals who understand the engineering design process and systems thinking. Whether pursued as a stand-alone credential or embedded within a degree, the Engineering Foundations Certificate enhances a student's marketability by demonstrating persistence, technical competence, and readiness for the next stage of academic or professional advancement.

Professional Licensure

Will graduates of this program require certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

N/A

Transfer Check

If applicable, provide information on USHE degree-granting or technical college program credit that may prepare students for the program or count for certain credits. Use comments field to describe unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments

(add more rows to table if needed)

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program.

Course Prefix & Number	Course Title	New Course? Y/N	Credit Hours
ENGR 1010	ENGR 1010: Engineering Exploration - Mission to Mars	Yes	3
MATH 1210	Calculus I	No	4
MATH 1220	Calculus II	No	4
CHEM 1210	Chemistry I	No	4
CHEM 1215	Chemistry 1 Lab	No	1
PHYS 2210	Physics I	No	4
PHYS 2215	Physics I Lab	No	1
ENGR 1400	Programming I	Yes	4

(add more rows to table if needed)

Expense Narrative

Describe expenses associated specifically with the proposed program. If there are no unique expenses, type "N/A."

N/A



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Certificate: Thematic Design
Department of Landscape, Architecture and Environmental Planning
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Landscape, Architecture and Environmental Planning, in the S.J. & Jessie E Quinney College of Agriculture and Natural Resources proposes offering a Thematic Design Certificate.

This certificate is designed to prepare students to design immersive environments by integrating spatial, environmental, and narrative design principles.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-LAEP-Thematic Design-Certificate





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 2, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Certificate in Thematic Design to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Certificate in Thematic Design

The Department of Landscape Architecture and Environmental Planning has developed a nine-credit certificate designed to equip students with the skills needed to create thematic outdoor environments. The program prepares students to design landscape plans for public spaces, including theme parks, zoos, botanical gardens, and other interpretive environments.

CIP Code Classification

Proposers have selected CIP code 04.0601 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal underwent peer review by members of the academic community within the Utah System of Higher Education (USHE).

Feedback was received from staff in the Commissioner's Office and from Southern Utah University.

Faculty reviewers at Southern Utah University strongly supported the proposal, awarding it high marks and endorsing the creation of the certificate.

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,

A handwritten signature in black ink, appearing to read "TJ Bliss", with a long, sweeping horizontal line extending from the end of the signature.

TJ Bliss, Ph.D.

Associate Commissioner of Academic Affairs and Chief Academic Officer

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Economic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Janalyn Brown, Board Secretary

Attachment: Peer Review Report

Utah State University | Certificate in Thematic Design

Peer Review Council Written Comments

January 2025

Steve Hood, Commissioner's Office

The Department of Landscape Architecture and Environmental Planning has created this nine-credit program to help students design outdoor public spaces such as theme parks, zoos, and botanical gardens and other interpretive spaces.

Proposers have selected CIP Code 04.0601 to classify this program. Board Policy R402 authorizes Utah State University to offer academic programs in this area.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The curriculum focuses on highly specialized immersive environments such as theme parks, zoos, and botanical gardens, where storytelling and spatial experience converge. By requiring Advanced 3D Modeling and VR and Thematic Design Studio, the program ensures students are proficient in digital visualization tools currently demanded by the entertainment and interpretive design industries. The learning outcomes are well-defined, requiring students to synthesize artistic, ecological, and narrative elements to enhance visitor engagement. The department is leveraging existing unique faculty expertise developed through Zoo Design charrettes held over the past several years, suggesting a high level of instructional readiness.

Resource Adequacy and Future Needs

The program is exceptionally lean, requiring only one new course in Zoo Design. The instructional cost of approximately \$6,000 plus benefits will be covered by the department's discretionary growth and operating funding, with the course initially handled as an overload assignment or at an adjunct rate representing only one-eighth of a faculty FTE. Unlike proposals requesting significant new faculty lines and higher pay scales, this represents a low-risk, high-efficiency model utilizing internal reallocations and existing expertise.

Structural and Programmatic Concerns

A critical structural detail is that this certificate is embedded in a degree program only-it is not a stand-alone credential. This ensures that only students already pursuing a foundational design degree such as Landscape Architecture can earn it, maintaining the high standard of prerequisite design knowledge required for the field. At only 9 credits, it functions as a focused micro-credential appropriate for a specialized undergraduate certificate meant to enhance a primary major rather than replace it. By tying

the certificate to existing LAEP design degrees, the program avoids structural issues regarding student preparation for advanced 3D and VR modeling.

Delivery Method and System Alignment

This program serves a very specific niche that does not duplicate other USHE programs, focusing on interpretive venues rather than general architecture or landscape design. The entirely in-person delivery is pedagogically appropriate given the studio nature of the curriculum and focus on spatial experience. The proposal aligns with USHE goals by providing a distinctive specialization that enhances the marketability of a traditional degree without requiring significant new state investment.

The proposal presents an exemplary model of efficient program development—a focused, low-cost credential that leverages existing faculty expertise and infrastructure while filling a distinctive niche within USHE. No significant concerns are identified.

The embedded-only structure appropriately ensures students possess foundational design knowledge, and the in-person studio delivery is pedagogically sound for this specialized field. The minimal resource requirements and strategic use of internal funding demonstrate how institutions can create valuable specialized credentials without significant state investment. This program serves as a model for how micro-credentials can enhance traditional degrees while maintaining academic rigor and system-wide efficiency. Overall, SUU supports the proposal and we wish you the very best as you seek final approval for this new degree program.

Camille Thomas
Assistant Provost
Southern Utah University

END OF COMMENTS

Utah System of Higher Education

Request for Approval of a New Certificate Program

SECTION I: PROGRAM INFORMATION

Institution: Utah State University
Department: LAEP
Proposed Certificate Name: Thematic Design
Award Type: Academic Undergraduate Certificate
CIP Code: (Provide a 6-digit CIP Code. Omit the period.): 040601

Nature of Certificate

Select the manner students will enroll:

- ☒ Certificate is embedded in a degree program(s) only; OR
☐ Certificate is a “stand-alone” program only; OR
☐ Certificate may be earned both embedded in a degree program(s) or as a stand-alone program.
☐ Certificate is an industry recognized credential. Name of credential:

Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☒ Entire program can be completed in person
☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
☐ Entire program can be completed Online
☒ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program: 9
Maximum Credit Hours to Complete Program: 9

Expected First Semester Students May Enroll in Program: Fall
Expected First-Year Students May Enroll in Program: 2026

Chief Academic/Instructional Officer Signature:

After Peer Review Council input and the Institution’s Board of Trustees approval, please return a copy of this proposal with the Board of Trustees approval date.

Institutional Board of Trustees’ Approval Date:

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description and Objectives

Present a brief program description including student learning outcomes. (1-2 paragraphs.)

Utah State University (USU), Quinney College of Agriculture and Natural Resources (QANR), Department of Landscape Architecture and Environmental Planning (LAEP) proposes to offer an institutional certificate of proficiency in Thematic Design. Coupled with one of LAEP's design degrees, the certificate of proficiency in Thematic Design introduces students to the principles and practices of designing immersive environments where storytelling, spatial experience, and environmental design converge. Focusing on the design of theme parks, zoos, botanical gardens, and other interpretive venues, the program explores how narrative, form, and materiality shape user experience. Students develop skills in conceptual thinking, spatial composition, and visual communication that prepare them for specialization within their careers or advanced study in thematic design and related design fields.

Upon completion of the Certificate of Proficiency in Thematic Design, students will be able to:

1. Apply principles of spatial and experiential design to create cohesive, story-driven environments.
2. Integrate artistic, ecological, and interpretive elements to enhance visitor engagement in outdoor settings.
3. Utilize manual and digital tools to visualize and communicate thematic concepts effectively.
4. Demonstrate creative problem-solving and collaboration across disciplines involved in thematic design projects.
5. Evaluate how narrative, setting, and design choices influence the quality and meaning of user experiences in themed environments.

Consistency with Institution Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals. (1-2 paragraphs.)

The proposed certificate of proficiency in Thematic Design supports Utah State University's mission as a premier student-centered land-grant and space-grant institution dedicated to learning, discovery, and engagement. The program broadens access to design education by introducing the principles and practices of experiential and thematic environmental design. Serving both as a specialization credential and as a pathway to advanced study, the certificate prepares diverse learners with creative, technical, and collaborative skills applicable to careers in theme park, zoo, exhibit, and interpretive design.

Aligned with the University's theme of discovery, the Thematic Design certificate cultivates creative and evidence-based inquiry as students explore how narrative, ecology, and spatial design intersect to shape user experiences in themed environments. Through iterative design processes, environmental analysis, and visual storytelling, students learn to create immersive, meaningful spaces that integrate aesthetic, ecological, and cultural dimensions. These experiences strengthen the habits of creativity, observation, and synthesis that are central to USU's broader research and scholarly mission.

SECTION III: NEEDS ASSESSMENT

Labor Market Demand

Briefly describe how earning this certificate will benefit students. If certificate may be taken stand-alone, is there market demand for the certificate in the institution's service region and in the state? If embedded in a degree, does the certificate enhance the degree's marketability? (1-2 paragraphs.)

This is not a stand-alone certificate required for a specific career path. However, earning the certificate of proficiency in Thematic Design provides students with a distinctive specialization that enhances their competitiveness in the marketplace. By combining creative storytelling with environmental design principles, the certificate prepares graduates for roles in the growing industries of theme park, zoo, exhibit, and interpretive design—fields that value the ability to craft immersive, memorable experiences. The credential signals to employers that students possess both artistic vision and the practical design skills necessary to contribute immediately to professional projects.

The core learning objectives of thematic design—where students learn to design environments that evoke emotion, communicate meaning, and encourage engagement through the thoughtful arrangement of form, material, and sequence are applicable beyond thematic landscapes. Whether applied to entertainment venues, public parks, or cultural landscapes, these skills enable designers to shape spaces that are functional, inclusive, and experientially rich.

Professional Licensure

Will graduates of this program require certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

N/A

Transfer Check

If applicable, provide information on USHE degree-granting or technical college program credit that may prepare students for the program or count for certain credits. Use comments field to describe unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments

(add more rows to table if needed)

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program.

Course Prefix & Number	Course Title	New Course? Y/N	Credit Hours
LAEP 2400	Advanced 3D Modeling	No	3
LAEP 2900	VR and Thematic Design Studio	No	3
LAEP 5070	Zoo Design	Yes	3

(add more rows to table if needed)

Expense Narrative

Describe expenses associated specifically with the proposed program. If there are no unique expenses, type "N/A."

The Landscape Architecture and Environmental Planning department will offer one new course in the foundation of the Thematic Design certificate, Zoo Design. This course is built on existing unique faculty expertise and Zoo Design charrettes offered the past few years. This new three credit course is an addition to LAEP's offered courses and represents an increase of 1/8th of a faculty FTE for instruction (3 credits of a 24 credit instructional load). This increased cost will be supported by LAEP's discretionary growth and operating funding, primarily as overload instructional costs at an adjunct instructional rate initially (approximately \$6,000 + benefits rate).



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Full Program: Biomanufacturing Master of Science
Department of Biological Engineering
College of Engineering

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Biological Engineering, in the College of Engineering, proposes offering a Biomanufacturing Master of Science.

This degree provides students with the skills and knowledge necessary in bioprocessing and biomanufacturing to meet industry expectations.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

COE-BE-Biomanufacturing MS-Full Program





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 2, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Master of Science in Biomanufacturing to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Master of Science in Biomanufacturing

The Department of Biological Engineering proposes a 30- to 32-credit Master of Science in Biomanufacturing, developed in consultation with industry specialists. The program is being developed in a fast-growing academic area and aligns with Utah State University's mission and role.

CIP Code Classification

Proposers have selected CIP code 26.1201 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal underwent peer review by members of the academic community within the Utah System of Higher Education (USHE).

Comments were received from the Commissioner's Office, Weber State University, and Southern Utah University.

The Commissioner's Office noted significant gaps in the proposal, including the absence of a clearly stated purpose for the degree, a defined recruitment strategy, and criteria for undergraduate preparation, including the undergraduate majors required for entry into the program.

Reviewers also raised concerns about the proposed curriculum: 12 new courses are listed, yet only 1 currently exists, and only 2 new faculty members—both with master’s degrees—are planned to support the program. The Office questioned whether master’s-trained faculty can adequately support the quality expected of a graduate program.

Weber State University similarly found that missing details made the curriculum design difficult to understand. Southern Utah University expressed concern about staffing the program with master’s-level faculty, emphasizing the importance of terminally-degreed faculty for graduate-level academic rigor.

Reviewers also found the budget incomplete. Although two faculty positions are required, no corresponding budget information was provided. Enrollment projections also appeared inconsistent: despite estimating only one enrolled student per year for the first five years, the proposal projects four program completers in year one and twelve in year five. These discrepancies suggest the submitted proposal may have been incomplete or a draft version.

Labor Analysis from the USHE Chief Economist

As required for all proposed master’s degrees, a specialized labor market analysis was conducted by the USHE Chief Economist. Based on her analysis of data from the U.S. Department of Labor’s Bureau of Labor and Statistics and additional private-sector employment sources, her review indicates that associated occupations align with a four- to five-star rating, reflecting strong long-term employment demand and favorable career prospects.

Commissioner’s Office Recommendation

The Commissioner’s Office recommends that the proposers update their proposal before submitting it to the Utah State Board of Trustees. It need not be returned to our office, but it should be professionally prepared prior to trustee consideration. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,



Geoffrey Landward
Commissioner of Higher Education

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Economic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Janalyn Brown, Board Secretary

Attachment: Peer Review Report

Utah State University | Master of Science in Biomanufacturing

Peer Review Council Written Comments

January 2025

Steve Hood, Commissioner's Office

The Department of Biological Engineering proposes a 30-36 credit Master's of Science in Biomanufacturing degree. The program was designed with input from industry specialists.

Proposers have selected CIP Code 26.1201 to classify this program. Under Board Policy R402, Utah State University is authorized to offer academic programs in this area.

We believe this program is something that would benefit Utah, but we are concerned at the lack of detail in this degree proposal. There is no purpose listed for this degree program to exist—it is up to readers to determine what the intention is. There is no explanation of a recruitment plan or what undergraduate majors qualify a student for entry into this graduate program. Twelve new courses are proposed for this program (there is only one course listed in the curriculum that currently exists) and there are only two faculty members to be hired to teach in the program, and they are listed as masters-degreed hires. We worry about the quality of graduate programs when masters-level teachers are training students in a graduate degree program.

The budget for this proposed program is incomplete. Two faculty need to be hired, but there is no budget submitted for the hires. In addition, the projected number of students enrolled is estimated to be one, for each of the first five years in the program. There must be a mistake, given that the proposers expect completers to number four in the first year and twelve by year five.

Master's degrees require special labor analysis to be completed by the Chief Economist at the Utah System of Higher Education. When she has completed her study, she will send her analysis to our office and we will share her findings with the proposers and the Board of Trustees at Utah State University. Academic affairs staff in the Commissioner's Office note that she does a full analysis of market conditions and compares her findings to information contained in the faculty proposal. The lack of information in the proposal may delay the completion of her study.

We wonder if the submitted proposal was a draft and not the completed copy of the proposal. If this is the case, please send us the completed copy and we will put it on the schedule for the February peer review.

Gail Niklason, Weber State University

The proposal was shared with faculty in Weber's Manufacturing Engineering and Bioengineering programs:

1. *Does the proposed curriculum meet the standards of the degree area as assessed by your relevant faculty- specify specific concerns based on your accepted curriculum or national standards, and/or accreditation standards?*

- The proposal could be stronger with the inclusion of a required course in project management or manufacturing statistics. While the heavy focus on bioprocesses/cell culture meets a segment of the market, additional breadth could better meet the needs of medical device manufacturers or pharmaceutical manufacturing companies.

2. *Do the resources exist to adequately offer a quality program of study and are future resource needs adequately specified? Provide examples of how the resources available in your program look so as to give context on where and why you feel deficiencies exist.*

- Is it possible that Bioprocessing could be a more appropriate title for the program: Manufacturing doesn't seem to be captured in the described program of study.

3. *Are there any structural or programmatic concerns with the degree? Will students be able to transfer without difficulty (3000 and 4000 level curriculum in the first 2 years, etc.), etc., etc.- Be specific in your examples.*

- We are not familiar with any MS degree that allows entry without a BS (referencing the text 'either an associate of science with 5+ years of experience in a biotech field'.) Another faculty expressed concern about student readiness without clear levelling courses for those coming in with an AS or even a mechanical or electrical engineering BS.

4. *Are there any other concerns not addressed above?*

- The emphasis areas in pharma and medical devices do not appear to be supported by relevant course work.

Thank you for the opportunity to provide feedback!

Harrison Kleiner, Utah State University

Response from USU Dept of Biological Engineering to Weber State:

The proposal was shared with faculty in Weber's Manufacturing Engineering and Bioengineering programs:

1. *Does the proposed curriculum meet the standards of the degree area as assessed by your relevant faculty- specify specific concerns based on your accepted curriculum or national standards, and/or accreditation standards?*
2. *The proposal could be stronger with the inclusion of a required course in project management or manufacturing statistics. While the heavy focus on bioprocesses/cell culture meets a segment of the market, additional breadth could better meet the needs of medical device manufacturers or pharmaceutical manufacturing companies.*

Responses: Our grant proposal to create this new online MS of Biomanufacturing was submitted to Talent Ready Utah's Life Science Workforce Initiative in August 2024. The proposed online MS program aligns well two Grant Objectives (statement from the grant RFP):

- *“Create and expand Life science programs... to enhance educational opportunities and meet the demands of the life sciences industry. This objective aims to provide comprehensive and diverse programs for students to acquire the necessary skills and knowledge for high-demand life science occupations.”*

The students need for this Biomanufacturing is high, based on the gap analysis between manufacturing job opportunities in life sciences industry and the challenges of current education programs in USHE institutions (see Section III Needs Assessment). Prior to our grant application, we surveyed 20+ life sciences companies in Utah to identify the necessary technical skills that would be needed for those students who graduated from Biology/Bioscience/Biotech programs in order to apply for biomanufacturing related jobs in industry. Thus, we carefully designed our curriculum to meet the needs of industry.

- *“Ensure students are well-prepared for in-demand occupations within the life sciences industry. This objective focuses on equipping students with the practical skills, industry-specific knowledge, and hands-on experience needed to succeed and excel in Life Science careers.”*

Involving our strong team of industry partners with our education program is another key feature of our proposed program. For example, the general course courses and the specialization courses include guest lectures from the subject matter experts (SMEs) (e.g., production managers or manufacturing managers, or regulation/compliance officers), followed by the facility tours which will enhance the learning experience for the students. Also, the Internship course (with well-defined objectives) will give the students another opportunity to build rewarding experience from real-world environment in biomanufacturing related field. For example, most students from traditional Biology/Bioscience/Biotechnology programs may not have any knowledge about the Standards of Operation Procedures (SOPs) in unit operation in monoclonal antibody production. By taking our Upstream or Downstream Processing course, they will build the concept on this topic first and then learn to create practical SOPs in antibody production by taking another Technical Writing course.

It is a very good suggestion to add project management or manufacturing statistics. In the revision, we did include project management and manufacturing statistics in the Course of Biotech Entrepreneurship (see appendix A, Table 6). When we prepared the USHE grant proposal, we surveyed or interviewed 20+ life sciences industries in Utah and 16 of these companies' executives provided letters of support or collaboration, showing strong enthusiasm for this new online MS program. Based on the feedback, we designed the curriculum that includes a breadth of courses recognized by the industry. The curriculum therefore includes three core courses (Upstream Processing, Downstream Processing, and Mammalian Cell Culture), an Entrepreneurship course, and two industry highly recommended courses (Regulation/cGMP/Quality Management System, and Technical Writing). The curriculum also includes four optional specialization courses covering each of four industrial fields with a strong presence in Utah (Biologicals Manufacturing, Agriculture Bioproduct Manufacturing, Nutraceutical & Pharmaceutical Manufacturing, and Medical Device & Diagnostic Manufacturing). Each specialization course will have at

least 3-5 corresponding industry partners to contribute one or more collaborative initiatives, including guest lectures, manufacturing facility tours, and/or internships. Almost every industry partner will deliver guest lectures provided by subject matter experts (SMEs), for example, their manufacturing managers or production managers. See Table 3 for the list of 16 life sciences companies and the itemized practical technical skills and knowledge that the companies' guest lectures can cover.

2. *Do the resources exist to adequately offer a quality program of study and are future resource needs adequately specified? Provide examples of how the resources available in your program look so as to give context on where and why you feel deficiencies exist.*
3. *Is it possible that Bioprocessing could be a more appropriate title for the program: Manufacturing doesn't seem to be captured in the described program of study.*

Responses: In the revision, we provided more details on the Program Rationale, Labor Market Demand, and Student Demand. We addressed why we need to create a Biomanufacturing online MS program – including high paying jobs in manufacturing and the significant challenges within the current biology-related education programs in USHE system. In the section of Institutional Readiness, we highlighted the current resources allowing us to create this new online MS program, such as our NSF ExLENT funded Biomanufacturing Certificate Program and strong historical collaborations with leading biotech/biomanufacturing industries (e.g., Cytiva, Thermo Fisher Scientific). These two companies have more than two decades of collaboration with USU Biological Engineering Department.

We believe the proposed academia-industry partnership model (through those collaborative initiatives) for this online MS program will not only increase the student enrollment number (employees can take this MS program with flexible schedule) but also increase the employability of the students after graduation (through the internship program). We also list the potential employers that can benefit from this online MS program (see Tables 3 & 4).

In addition, we are actively looking for collaboration opportunities with manufacturing organizations, such as Utah Manufacturers Associations (UMA) and Utah Manufacturing Extension Partnership Center (MEP), to expand visibility of this program to more companies.

This online MS program offers courses that are recommended by relevant life sciences industry. As identified, we will maintain good relationships with our 16 industry partners through different optional collaboratives (Table 3). We are also confident that the list of industry partners will increase. For example, after our R401 form was submitted in fall 2025, we started developing communications with three potential industry partners in Utah: (1) Ya-Ya Foods, (2) Denali Therapeutics, and (3) a start-up Anziva Pharmaceuticals, with confirmation to offer guest lectures or internships to students in the online MS program. An FDA attorney who worked in the FDA office in Washington D.C. and recently returned to work as an FDA regulatory affairs attorney in a law firm in Salt Lake City confirmed to deliver guest lectures on FDA regulations to our class in spring 2026.

We understand that two core courses (Upstream Processing and Downstream Processing) cover the knowledge and skills in the field of Bioprocessing, which typically deal with the living cells (e.g., microbes

and mammalian cells) to produce enzymes, metabolites, recombinant proteins, or small molecules. The reason we don't select "Bioprocessing" as this online degree title is because we don't want to limit the program to training students or employees in "living cells"-derived bioproducts only, while ignoring the other areas that involve biological manufacturing systems. For example, nutraceuticals/pharmaceuticals manufacturing, medical device/IVD product manufacturing, may not involve "living cells" processing directly, but they may include the processing of bioactive molecules (e.g., probiotics) or bacterial nucleic acid molecules (e.g., as the raw materials for consumable diagnostic kits).

For clarification of the definition of *Biomanufacturing* presented in this new online MS program, we describe a broad range of *Biomanufacturing* in Section III (Needs Assessment), which is not limited to only Biologicals Manufacturing (working with living cells).

3. Are there any structural or programmatic concerns with the degree? Will students be able to transfer without difficulty (3000 and 4000 level curriculum in the first 2 years, etc.), etc., etc.- Be specific in your examples.
4. We are not familiar with any MS degree that allows entry without a BS (referencing the text 'either an associate of science with 5+ years of experience in a biotech field'.) Another faculty expressed concern about student readiness without clear levelling courses for those coming in with an AS or even a mechanical or electrical engineering BS.

Responses: When we surveyed the life sciences industry in Utah, we do see the student demands from two different education programs to fit industry biomanufacturing jobs: one end is how to train non-engineering biology/bioscience/biotechnology students with sufficient courses to build "manufacturing" related knowledge and skills; the other end is how to train engineering students, e.g., mechanical engineering or electrical engineering, with "biological" related courses to make them more capable to apply for or work in the biomanufacturing jobs sector of the bioeconomy. In the revision, we balance both needs and show that, we added prerequisite courses (2 of 4 biology/biochemistry courses) that need to be taken for engineering students applying for this MS program. See Section IV (Program Details).

Whether or not A.S. students (from Biology/Biotech background) with 5+ years in biotech field would be qualified to apply admission to this online M.S. program, we are still investigating the feasibility by working with our university Online Education office. For our current enrolled four students in spring 2026 semester (tentatively assigned to Master's of Engineering), all earned B.S. degrees.

4. Are there any other concerns not addressed above?
5. The emphasis areas in pharma and medical devices do not appear to be supported by relevant course work.

Responses: As explained above, Medical Device/IVD Diagnostic Substance Manufacturing is listed as one of four Specialization courses. In the revision, Table 3 lists 5 industry partners that are willing to provide guest lectures, facility tours, and/or internships for this program.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The curriculum was developed based on surveys of over 20 manufacturing-related life science companies in Utah, focusing on essential technical skills including Upstream/Downstream Processing, Mammalian Cell Culture, and Quality Management Systems under cGMP standards. Unlike many research-intensive master's programs, this degree is designed to provide immediate workforce skills for the bioprocessing and biomanufacturing industries. The mandatory on-site practical lab and internship totaling 9 credits ensures students gain hands-on experience despite primarily online delivery. One consideration: the two new full-time faculty hires will hold Master's degrees rather than Doctorates. While appropriate for an applied professional degree, faculty should monitor alignment with long-term graduate school standards if the program seeks specialized engineering or life science accreditation.

Resource Adequacy and Future Needs

The program is primarily funded through the Utah Life Science Workforce Initiative, which covers initial personnel costs, and no new staff are required initially as the program leverages existing department infrastructure for advising and administration. Unlike proposals requesting significantly higher starting salaries or enhanced adjunct pay, this program relies on external grant funding for new faculty. However, the long-term sustainability of these positions and potential pay discrepancies between grant-funded lines and regular faculty should be considered as the program transitions toward reliance on tuition revenue.

Structural and Programmatic Concerns

A notable structural strength is the admission pathway for students with an Associate of Science and five or more years of experience in a biotech-related field, providing a valuable professional development bridge for non-traditional students and the existing workforce. The program maintains standard graduate-level rigor with a 3.0 GPA requirement and at least 15 credits at the 6000 level or above. A unique element is the agreement between USU, UVU, and Utech to share lab space for the required practicum, maximizing system-wide efficiency and reducing redundant facility investments.

Delivery Method and System Alignment

The online delivery model directly serves working professionals who may have difficulty attending in-person classes. The proposal correctly identifies that while other USHE institutions have biotechnology programs, those primarily focus on creating technicians at the associate or undergraduate level—this MS degree fills a distinct gap by focusing on advanced processes and manufacturing leadership. By partnering with UVU and Utech for physical lab components, USU avoids competing program concerns. This hybrid approach of online theory with localized, shared-facility practicums is an excellent model for serving a statewide audience without unnecessary duplication of expensive lab resources.

The proposal presents a well-designed, industry-driven program that addresses a clear workforce gap in Utah's growing life sciences sector. The collaborative lab-sharing agreement with UVU and Utech represents an exemplary model for system-wide efficiency, and the online delivery with localized practicums effectively serves working professionals statewide. Two areas warrant monitoring:

1. developing a sustainability plan for faculty positions as external grant funding transitions to tuition revenue, and
2. ensuring that Master's-level faculty credentials remain appropriate as the program matures and potentially seeks specialized accreditation.

The innovative admission pathway for experienced professionals and the curriculum's direct alignment with industry needs are notable strengths that position this program for success. Overall, SUU supports the proposal and we wish you the very best as you seek final approval for this new degree program.

Camille Thomas
Assistant Provost
Southern Utah University

END OF COMMENTS

**Utah System of Higher Education
New Academic Program Proposal
Cover/Signature Page - Full Template**

Institution Submitting Request: Utah State University

Proposed Program Title: Master of Science of Biomanufacturing

Are There New Emphases: Yes ☒ No ☐

Names of New Emphases (Separated by Commas): Biomanufacturing

Sponsoring School, College, or Division: College of Engineering

Sponsoring Academic Department(s) or Unit(s): Biological Engineering Department

Classification of Instructional Program Code¹ : 6 - Digit CIP: 26.1201

Min/Max Credit Hours Required of Full Program: 30 Min Cr Hr / 36 Max Cr Hr

Proposed Beginning Term²: Fall 2026

Institutional Board of Trustees' Approval Date:

Program Type (mark all that apply with an x):

☐ (AAS)	Associate of Applied Science Degree
☐ (AA)	Associate of Arts Degree
☐ (AS)	Associate of Science Degree
☐	Specialized Associate Degree (specify award type ³ :)
☐	Other (specify award type ³ :)
☐ (BA)	Bachelor of Arts Degree
☐ (BS)	Bachelor of Science Degree
☐ (BAS)	Bachelor of Applied Science Degree
☐	Specialized Bachelor Degree (specify award type ³ :)
☐	Other (specify award type ³ :)
☐ (MA)	Master of Arts Degree
☒ (MS)	Master of Science Degree
☐	Specialized Bachelor Degree (specify award type ³ :)
☐	Other (specify award type ³ :)
☐	Doctoral Degree (specify award type ³ :)
☐	K-12 School Personnel Program
☐	Out of Service Area Delivery Program ☐ Attached MOU
☐	Out of Mission Program
☐	NEW Professional School

¹ For CIP code classifications, please see <http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55>.

² "Proposed Beginning Term" refers to first term after Regent approval that students may declare this program.

³ Please indicate award such as APE, BFA, MBA, MEd, EdD, JD

Changes to Existing Programs or Administrative Units Required (mark all that apply with an x, if any):

☐	Program Restructure with or without Consolidation
☐	Emphases transfer from another program or academic unit
☐	Name Change of Existing Program or Academic Unit
☐	Program transfer to a different academic unit
☐	Suspension or discontinuation of a unit or program
☐	Reinstatement of a previously suspended/discontinued program or administrative unit
☒	Other

Chief Academic Officer (or Designee) Signature:

I, the Chief Academic Officer or Designee, certify that all required institutional approvals have been obtained prior to submitting this request to the Office of the Commissioner.

Date:

☐

I understand that checking this box constitutes my legal signature.

**Utah System of Higher Education
Program Description - Full Template**

Section I: The Request

Utah State University's Biological Engineering department requests approval to offer the following degree(s):

Master of Science of Biomanufacturing

To be effective on: August 25, 2026

This program was approved by the institutional Board of Trustees on:

Section II: Program Proposal

Program Description

Online Master's program to provide participants with the skills and knowledge to function immediately within the workforce of the bioprocessing and biomanufacturing industries.

Consistency with Institutional Mission

It is consistent with USU's regent approved mission.

Section III: Needs Assessment

Program Rationale

Demand from industry for skills provided by the program are on the rise. To remain competitive with national standards we need to offer a technical degree. This objective focuses on equipping students with practical skills, industry-specific knowledge, and hands-on experience needed to succeed and excel in Life Science Careers.

Labor Market Demand

Upon recommendation of our Industry Advisory Board, the department of Biological Engineering needs to offer an additional Master's degree option with practical experience. We surveyed over 20 manufacturing-related life science companies in Utah and gathered initial feedback on the essential manufacturing-related knowledge and technical skills that formed the basis for the curriculum, to meet industry needs. The program will prepare the next generation workforce for Utah's life science industry.

Student Demand

We have the Utah State Higher Education requesting the addition of an MS degree. Given the number of bioscience-related degrees awarded every year, (2022-2023 only 1,043 B.S. degrees awarded) acquiring advance technical skills through an industry-oriented education program will significantly improve the employment opportunities for these bioscience-related major students in Utah. While open to anyone, this degree is geared toward those already in the workforce.

Similar Programs

There are no other similar programs available in Utah. Biotechnology programs are focused on creating technicians. This program focuses on industry need for individuals with knowledge of processes and manufacturing experience for bioproducts.

Collaboration with and Impact on Other USHE Institutions

As the university starting this program, we are doing so in collaboration with USHE and the other eight degree-granting higher education institutions in Utah – Univ. of Utah, Utah Valley Univ., Weber State Univ., Southern Utah Univ., Utah Tech Univ., Snow College, and Salt Lake Community College.

External Review and Accreditation

External review is overseen by the USU Biological Engineering Industry Advisory Board: Samuel Briggs, Boyd Bringham, Matt Clegg, Christopher Fox, Justin Hyer, Nephi Jones, Libbie Linton, David Perry, Tyler Richards, Sunil Sukumaran, Cameron Copeland, Michael Henrie. The department is accredited by the NWCCU.

Section IV: Program Details

Graduation Standards and Number of Credits

- A minimum of 30 credits of technical and scientific coursework is required.
- Approval of academic forms required for master's students by the School of Graduate Studies
- Graduate students are required to maintain at least a 3.0 GPA for degree-program courses. Grades of C- or lower will not be accepted for a graduate degree.
- The Program of Study (POS) for a master's degree must include at least 15-semester credits at the level of 6000 or above.
- A master's degree must be completed within six years of entering the program. Additional time may be requested by the student's committee and submitted to the Vice Provost for Graduate Students for review.
- Coursework over eight years old at the time of degree completion may not be used for a graduate degree until it is revalidated.

Admission Requirements

- Either an Associate of Science with 5+ years experience in a biotech related field, or Bachelor's degree in a STEM discipline from an accredited U.S. college or university, or a similarly recognized international university is required for admission.
- 3.0 or higher GPA.
- Three letters of recommendation.

Curriculum and Degree Map

See Appendix A for curriculum and degree map.

Section V: Institution, Faculty, and Staff Support

Institutional Readiness

This is a restructure without consolidation of current degree offerings. New courses will be developed for the online delivery platform, specifically for this degree program. USU, UVU, and Utech have all agreed to provide lab space for the practicum.

Faculty

New teaching faculty are required to implement program. They will be funded by USHE through the Utah Life Science Workforce Initiative program.

Staff

No new staff is needed at this time. As program grows, we intend to hire an additional staff member.

Student Advisement

Students will be advised by faculty advisor.

Library and Information Resources

No additional resources needed.

Projected Enrollment and Finance

Grant funding is provided by USHE through the Utah Life Science Workforce Initiative program. Additional continuous funding will come through USU tuition.

Projected enrollment: see appendix D.

Section VI: Program Evaluation

Program Assessment

Assessment will be satisfactory completion of courses with a required minimum GPA of 3.0, including 3 credits of on-site practical lab work (at USU, UVU, or Utech) and 6 credits of practical internship.

Student Standards of Performance

They will have skills as required by industry and are marketable in the field: technical writing, communication skills, management of projects, industry processes, critical thinking. Standards are advised by USHE, the department Industry Advisory Board, and met through academic performance.

Appendix A: Program Curriculum

For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the narrative box at the end of this appendix.

Course Number	NEW Course	Course Title	Credit Hours
General Education Courses (list specific courses recommended for this program on Degree Map)			
General Education Credit Hour Sub-Total			30
Required Courses			
BENG XXXX	X	Upstream Processing in Biological Engineering.	3
BENG 6600		Downstream Processing In Biological Engineering	3
BENG XXXX	X	Mammalian Cell Culture	3
BENG XXXX	X	Industrial Biotechnology and Biopharmaceuticals Entrepreneur)	3
BENG XXXX	X	Regulation, cGMP & Quality Management Systems	3
BENG XXXX	X	Technical Writing in Life Sciences	3
Required Course Credit Hour Sub-Total			18
Elective Courses			
BENG XXXX	X	Practice in Lab	3
BENG XXXX	X	Internship	6
Elective Credit Hour Sub-Total			9
Core Curriculum Credit Hour Sub-Total			27

Add An Emphasis:

Can students complete this degree without emphases? ☐ Yes ☒ No

Course Number	NEW Course	Course Title	Credit Hours
Name of Emphasis:		Biological Manufacturing (choose 1)	
BENG XXXX	X	Microbial Fermentation	3
BENG XXXX	X	Monoclonal Antibody & Vaccine Production	3
Name of Emphasis:		Agriculture Bioproducts Manufacturing	
BENG XXXX	X	Agro-bioproduct, Biorefining, Biomanufacturing	3
Name of Emphasis:		Nutraceutical & Pharmaceutical Manufacturing	
BENG XXXX	X	Nutraceutical & Pharmaceutical Product Manufacturing	3
Name of Emphasis:		Medical Device & Diagnostic Manufacturing	
BENG XXXX	X	Medical Device & In-Vitro Diagnostic Substance Manufacturing	3
Emphasis Credit Hour Sub-Total			3
Total Number of Credits to Complete Program			30

Program Curriculum Narrative

Courses as indicated and any additional relevant offerings at USU.

Table 6. The curriculum for proposed 2-year online M.S. program

	Semester 1 (Fall)	Semester 2 (Spring)	Semester 3 (Fall)	Semester 4 (Spring)
General courses (online) – 18 cr	Upstream Processing (3cr)	Downstream Processing (3 cr)	Mammalian Cell Culture (3 cr)	Industrial Biotechnology and Biopharmaceuticals Entrepreneurship (3 cr)
	Regulation, cGMP & Quality Management Systems (3cr)			
	Technical Writing in Life Science Industry (3 cr)			
Specialization courses (online) - 3 cr	<i>Biologicals Manufacturing</i>		<i>Agriculture Bioproducts Manufacturing</i>	
	Microbial Fermentation (3 cr)	or Monoclonal antibody & Vaccine Production (3 cr)	Agro-bioproduct, biorefining, biomanufacturing (3 cr)	
	<i>Nutraceutical & Pharmaceutical Manufacturing</i>		<i>Medical Device & Diagnostic Manufacturing</i>	
	Nutraceutical & Pharmaceutical products Manufacturing (3 cr)		Medical device & In Vitro Diagnostic Substance Manufacturing (3 cr)	
Practice in Lab (available at 3 sites: USU, UVU, UTU) – Practice in Lab (3cr)				
Internship - Internship (3 cr for Fall, 3 cr for Spring across 2-yr) (6 cr)				

Appendix C: Current and New Faculty / Staff Information

Part I. Department Faculty / Staff

Identify # of department faculty / staff (headcount) for the year preceding implementation of proposed program.

	# Tenured	# Tenure -Track	# Non -Tenure Track	
Faculty: Full Time with Doctorate	6	5		
Faculty: Part Time with Doctorate				
Faculty: Full Time with Masters				
Faculty: Part Time with Masters				
Faculty: Full Time with Baccalaureate				
Faculty: Part Time with Baccalaureate				
Teaching / Graduate Assistants				
Staff: Full Time	2			
Staff: Part Time				

Part II. Proposed Program Faculty Profiles

List current faculty within the institution -- with academic qualifications -- to be used in support of the proposed program(s).

	First Name	Last Name	Tenure (T) / Tenure Track (TT) / Other	Degree	Institution where Credential was Earned	Est. % of time faculty member will dedicate to proposed program.	If "Other," describe
Full Time Faculty							
	Anhong	Zhou	T	PhD	Hunan University, China		
	Ronald	Sims	T	PhD	North Carolina State University		
							Add Another Full Time
Part Time Faculty							
							Add Another Part Time

Part III: New Faculty / Staff Projections for Proposed Program

Indicate the number of faculty / staff to be hired in the first three years of the program, if applicable. Include additional cost for these faculty / staff members in Appendix D.

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.
Faculty: Full Time with Doctorate					
Faculty: Part Time with Doctorate					
Faculty: Full Time with Masters					
Faculty: Part Time with Masters			2	MS in Biological Engineering or BioChemistry	95%
Faculty: Full Time with Baccalaureate					
Faculty: Part Time with Baccalaureate					
Teaching / Graduate Assistants					
Staff: Full Time					
Staff: Part Time					

Appendix D: Projected Program Participation and Finance

Part I.

Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty & staff as described in Appendix C.

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
Student Data						
# of Majors in Department	1	1	1	1	1	1
# of Majors in Proposed Program(s)		1	1	1	1	1
# of Graduates from Department	13	18	21	24	27	30
# Graduates in New Program(s)		4	6	8	10	12
Department Financial Data						
<i>Project additional expenses associated with offering new program(s). Account for New Faculty as stated in Appendix C, "Faculty Projections."</i>	Department Budget					
	Year Preceding Implementation (Base Budget)	Year 1	Year 2	Year 3		
		Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)		
EXPENSES – nature of additional costs required for proposed program(s)						
<i>List salary benefits for additional faculty/staff each year the positions will be filled. For example, if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the year expended.</i>						
Personnel (Faculty & Staff Salary & Benefits)						
Operating Expenses (equipment, travel, resources)						
Other:						
TOTAL PROGRAM EXPENSES		\$0	\$0	\$0		
TOTAL EXPENSES	\$0	\$0	\$0	\$0		
FUNDING – source of funding to cover additional costs generated by proposed program(s)						
<i>Describe internal reallocation using Narrative 1 on the following page. Describe new sources of funding using Narrative 2.</i>						
Internal Reallocation						
Appropriation						
Special Legislative Appropriation						
Grants and Contracts						
Special Fees						
Tuition						
Differential Tuition (requires Regents approval)						
PROPOSED PROGRAM FUNDING		\$0	\$0	\$0		
TOTAL DEPARTMENT FUNDING	\$0	\$0	\$0	\$0		
Difference						
Funding - Expense	\$0	\$0	\$0	\$0		

Part II: Expense explanation

Expense Narrative

Money will be needed to hire 2 new faculty as online-only teachers, dedicated to this program.

Part III: Describe funding sources

Revenue Narrative 1

Funding has been secured through the USHE Workforce Development program.

Revenue Narrative 2

(Remove instructions in italics when filling out this section.) Describe new funding sources and plans to acquire the funds.



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Full Program: Chemical Engineering Bachelor of Science
Department of Biological Engineering
College of Engineering

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Biological Engineering, in the College of Engineering, proposes offering a Chemical Engineering Bachelor of Science.

This program focuses on biotechnology, clean energy, food production, advanced materials, and environmental sectors, emphasizing sustainability, upcycling, AI-driven process modeling, and industry-specific skill development.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

COE-BE-Chemical Engineering BS-Full Program





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 2, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Bachelor of Science in Chemical Engineering to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Bachelor of Science in Chemical Engineering

The Department of Biological and Chemical Engineering proposes the creation of a Bachelor of Science in Chemical Engineering. The program will feature three areas of emphasis—upcycling, sustainability, and AI-driven chemical process modeling. While the University of Utah and Brigham Young University currently offer chemical engineering degrees, the proposers have clearly distinguished this program from those existing options.

The Department has begun forming an Industrial Advisory Board and has collaborated with industry partners to design sponsored capstone projects. The new degree will require the development of 20 new courses and the hiring of six additional faculty members, along with some reassignment of current faculty, to ensure adequate support for the major.

The labor market analysis is strong, and proposers have effectively used Utah Department of Workforce Services data to demonstrate statewide demand for chemical engineers across a broad range of occupations.

Funding for the program, including the six new faculty positions, will primarily come from reallocations enabled by HB 265. The overall cost for faculty hires and program support is estimated at \$2.7 million. Enrollment is anticipated to grow steadily, with 25 students in the first year and 100 majors by year five.

The proposed curriculum assumes that students enter prepared to take MATH 1210 (Calculus I) in their first year. Students who do not meet the prerequisites before matriculation may experience a longer time to degree completion.

CIP Code Classification

Proposers have selected CIP code 15.0701 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal was submitted for peer review by academic colleagues across the Utah System of Higher Education (USHE). Feedback was received from the Commissioner's Office, Weber State University, Southern Utah University, and the University of Utah. Both Southern Utah University and Weber State University expressed support for the proposed program. Faculty at the University of Utah shared the following concerns:

- **Accreditation Readiness:** Reviewers questioned whether the program, as proposed, could meet ABET accreditation standards due to perceived gaps in key curricular and laboratory components.
- **Laboratory Capacity:** Concerns were raised regarding the overall amount of laboratory experience available to students within the program structure.
- **Sustainable Funding:** Reviewers expressed doubt that the program has sufficient long-term financial resources to support faculty, infrastructure, and ongoing program needs.
- **Transfer Pathways:** The University of Utah indicated uncertainty about whether clear and workable pathways could be established for students transferring into Utah State University's program.
- **Labor Market Demand:** The reviewers questioned whether statewide demand for chemical engineers is strong enough to justify an additional chemical engineering program in Utah.

Faculty proposers at Utah State University provided a detailed and thoughtful response to each concern raised by University of Utah reviewers (see attached peer review report). They note that the program was developed with substantial input from industry advisors and maintain confidence that the proposed degree is both academically robust and aligned with workforce needs.

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,



Geoffrey Landward
Commissioner of Higher Education

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Economic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Janalyn Brown, Board Secretary

Attachment: Peer Review Report

Utah State University | Bachelor of Science in Chemical Engineering

Peer Review Council Written Comments

January 2025

Steve Hood, Commissioner's Office

The Department of Biological and Chemical Engineering propose a Bachelor of Science in Chemical Engineering degree. This program will have three areas of emphasis, including upcycling, sustainability, and AI-driven chemical process modeling. The University of Utah and Brigham Young University have chemical engineering programs, and the proposers have given a review of the differences between their proposed program and the programs at those other universities.

The proposers have selected CIP Code 15.0701 to classify this program. Utah Board of Higher Education Policy R402 authorizes Utah State University to use this classification number because it is an academic area of concentration.

The Department has begun organizing an Industrial Advisory Board and they have worked with industries to design sponsored capstone projects. Twenty new courses will be required to be developed for this degree program. In turn, this will require the hiring of six additional faculty members and some reassignments for existing faculty in order to support this major.

The labor analysis for this degree is good, and proposers have made good use of Utah Department of Workforce Services data to tease out labor market need for chemical engineers in a wide range of occupations.

Funding for this program, including the six faculty hires, is mostly coming from reallocation as a result of HB 265. The faculty hires and support for the program will cost the university around \$2.7 million. Proposers believe the major will grow steadily, with 25 students in the first year to 100 majors by year five.

The proposed curriculum assumes students will be ready to take MATH 1210 (calculus) in their first year of study. For some students, this will mean they will need to take prerequisites to MATH 1210 which will result in a slower pace to degree completion.

Thank you for this proposal.

Gail Niklason, Weber State University

This proposal was shared with both the Dean and Associate Dean of the College of Engineering, Applied Science, and Technology who responded with:

WSU does not have a comparable program, but we are supportive of USU's proposal.

Thank you for the opportunity to provide feedback.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The curriculum is robust and interdisciplinary, blending core foundations from Mechanical, Electrical, Biological, Civil, and Chemical Engineering while covering standard technical requirements including Calculus, Linear Algebra, Chemistry, and Physics. The program distinguishes itself by focusing on the unique energy landscape of the Intermountain West, including renewable technologies, nuclear energy, carbon-based sources, and critical minerals. The emphasis on balancing energy production with emissions reduction and environmental sustainability prepares graduates for diverse sectors such as utilities, renewable development, and national laboratories.

Resource Adequacy and Future Needs

The program benefits from significant state investment, with the Utah State Legislature funding nine new faculty positions—five to be hired in the first year and four in the second. Faculty will be strategically placed at USU Eastern in Price and the Uintah Basin campus in Vernal, ensuring instructional expertise is physically present in energy-rich regions. The funding model combines legislative appropriations (\$1.22 million), tuition (\$1 million), and differential tuition to support the specialized educational mission. This substantial legislative appropriation suggests a well-resourced launch that may set a high bar for faculty recruitment in the energy sector compared to institutions relying solely on internal reallocations.

Structural and Programmatic Concerns

A unique structural strength is the dual-degree pathway allowing existing engineering majors in Mechanical, Electrical, and other fields to earn a concurrent degree in Energy Engineering, enabling rapid development of trained energy engineers statewide. The program adheres to the 120-credit standard while maintaining a high GPA requirement of 2.80 for graduation. Following USU's general policy, students accepted as freshmen are also accepted into the program, providing low barriers to entry for aspiring engineers.

Equity, Access, and System Alignment

The program strongly aligns with USU's land-grant mission by focusing on regional resource management and expanding access to high-demand technical degrees outside the Wasatch Front. By offering the degree in Vernal and Price rather than solely in Logan, USU directly addresses the needs of place-bound students in rural Utah who are already working in or near energy sectors. The proposal identifies collaboration opportunities with the University of Utah on nuclear initiatives and Bridgerland Technical College on automation and controls, positioning the program as a central hub for energy workforce development rather than a duplicative silo.

The proposal presents an exceptionally well-resourced and strategically positioned program that addresses critical state workforce needs while fulfilling USU's land-grant mission. The significant legislative investment, regional campus delivery model, and collaborative approach with other institutions represent notable strengths. The dual-degree pathway offers an innovative mechanism for rapidly increasing the state's energy engineering workforce.

No significant concerns are identified; however, USU should ensure sustainable funding mechanisms are in place beyond the initial legislative appropriation to maintain the nine faculty positions and specialized facilities long-term. The program's focus on the Intermountain West's unique energy landscape and its placement in energy-rich regions positions it as a model for workforce-aligned engineering education. Overall, SUU supports the proposal and we wish you the very best as you seek final approval for this new degree program.

Camille Thomas
Assistant Provost
Southern Utah University

Provost's Office, University of Utah (cao@utah.edu)

Faculty members expressed significant concerns that the proposed curriculum does not fully meet national norms or forthcoming ABET accreditation standards. In particular, the absence of a dedicated Process Control course represents a major deviation from standard Chemical Engineering curricula nationwide and from explicit ABET criteria. Additionally, the curriculum appears to place disproportionate reliance on a three-course capstone sequence to satisfy requirements related to design, analysis, control, and safety, which may limit both depth and breadth of student exposure. Faculty also noted insufficient laboratory experience, with only one Unit Operations laboratory course and limited explicit treatment of process safety and hazards. Structural choices—such as a single 3-credit thermodynamics course, omission of Physics II, and potential redundancy in transport-related courses—further raise concerns about alignment with national standards and peer programs.

Faculty members raised serious doubts that the currently specified resources are sufficient to support a high-quality Chemical Engineering program. The proposal's plan to hire six new faculty with a total allocation of \$826,500 was viewed as unrealistic, unless substantial other resources were available to address faculty startup packages (assuming mostly tenure-line hires). Similarly, the proposed laboratory funding—\$70,000 in startup costs with \$30,000 ongoing—falls well below what faculty with extensive experience in teaching laboratories consider necessary to establish and maintain state-of-the-art facilities. Without clearly articulated matching funds or long-term institutional commitments, faculty believe that the program risks being under-resourced from inception, potentially compromising educational quality and accreditation prospects.

Faculty identified several structural concerns, particularly regarding student transfer and articulation. Introductory and foundational courses in the proposed curriculum may not align well with those at other Utah institutions, potentially creating barriers for students who wish to transfer. Missing or non-

equivalent programming and modeling coursework, combined with differing general education alignments, could result in students needing substantial additional coursework to remain on track. More broadly, the curriculum lacks the vertically integrated, hands-on, project-based learning experiences that characterize many established programs, raising concerns about student preparedness and competitiveness.

Faculty expressed concern about the overall justification and strategic rationale for creating a new Chemical Engineering program in Utah. Market demand data do not clearly demonstrate unmet need, and existing programs report available capacity. Additionally, faculty objected strongly to inaccuracies in how peer programs were characterized in the proposal, noting that these misrepresentations undermine confidence in the analysis. Finally, several reviewers questioned whether establishing this program represents an effective or responsible use of public funds, given the scale of investment required and the absence of compelling evidence that current statewide capacity is insufficient.

Eric Edding

Chair, Chemical Engineer Department

Harrison Kleiner, Utah State University

Eric Edding, chair of USU Chemical Engineering dept, offers this response to UU Comments on the New Chemical Engineering Program at Utah State University:

Faculty members expressed significant concerns that the proposed curriculum does not fully meet national norms or forthcoming ABET accreditation standards. In particular, the absence of a dedicated Process Control course represents a major deviation from standard Chemical Engineering curricula nationwide and from explicit ABET criteria. Additionally, the curriculum appears to place disproportionate reliance on a three-course capstone sequence to satisfy requirements related to design, analysis, control, and safety, which may limit both depth and breadth of student exposure. Faculty also noted insufficient laboratory experience, with only one Unit Operations laboratory course and limited explicit treatment of process safety and hazards. Structural choices—such as a single 3-credit thermodynamics course, omission of Physics II, and potential redundancy in transport-related courses—further raise concerns about alignment with national standards and peer programs.

Response:

We acknowledge the reviewers' concerns regarding alignment with national norms in Chemical Engineering curricula. While some elements of the proposed curriculum differ from traditional layouts, the program has been intentionally structured to remain fully ABET-compliant within the resource envelope available at launch, while also leveraging strengths unique to Utah State University (USU). As stated in the R401 form, USU does not aim to duplicate the chemical engineering programs at the University of Utah or Brigham Young University. Instead, we aim to create a chemical engineering program that complements existing offerings by other institutions, focusing on upcycling, sustainability, and AI-driven chemical process design. This program builds upon our existing ABET-accredited

Biological Engineering program and research strengths in biomanufacturing, bioenvironmental engineering, wastewater treatment, materials, and bioenergy.

Process Control and Design Distribution:

Although the program does not include a standalone Process Control course, key principles of process dynamics, control concepts, and safety interlocks are integrated across multiple required courses, including:

- Introduction to Chemical Engineering Design
- Unit Operations Laboratory
- Transport Phenomena
- Kinetics & Reaction Engineering
- AI-Driven Molecular and Process Modeling
- The three-course capstone design sequence

The capstone sequence emphasizes:

- Steady-state and transient system modeling
- Control strategy development incorporated into flowsheets
- Risk analysis and safety case development
- Multi-objective optimization, economics, and operability

This distributed model is consistent with ABET expectations, which allow institutions to teach required competencies through integrated curricular experiences rather than specific course titles. The program design ensures students receive adequate exposure to analysis, control, and process safety, even without a dedicated Process Control course.

Laboratory Experience and Process Safety Integration:

We have adopted a model similar to our existing Biological Engineering program, the only ABET-accredited biological engineering program in the state of Utah. While that program features a biological Unit Operations Lab, additional courses incorporate laboratory components, including Properties of Biomaterials, Instrumentation for Biological Systems, Fluid Mechanics in Biological Engineering, and Downstream Processing.

For the new Chemical Engineering program, several courses, including Material and Energy Balances, Heat and Mass Transfer, Chemical Engineering Separations, and Fluid Mechanics, will include hands-on laboratory sessions. Additionally, the Unit Operations Laboratory has been carefully designed to provide experiential, experiment-based training in fluid mechanics, heat transfer, separations, reaction engineering, and instrumentation.

Safety training, including hazard recognition, safe operating procedures, equipment lockout/tagout, and risk assessment, is a formal component of the laboratory curriculum and is reinforced in:

- Materials and Energy Balances (safety in process calculations)
- Thermodynamics (equilibrium limits and safety envelopes)
- Capstone sequence (HAZOP-style evaluation and operability assessment)

- **Thermodynamics, Physics II, and Transport Courses:**

While some national programs employ a two-course thermodynamics sequence, the combined introductory and applied thermodynamics content in our single-course model is tailored to the program's integrated design and fully meets the Chemical Engineering program ABET Criteria requiring that graduates can apply thermodynamics to chemical engineering systems.

In response to reviewer feedback, we have added PHYS 2220 (Physics for Scientists and Engineers II) to the 3rd semester in the curriculum. To maintain a total of 120 credits, BIOL 1010 (Biology I) and PHYS 2215 (Physics I Lab) were removed from the first and second semester, respectively.

Regarding potential redundancy in transport-related courses, the department curriculum committee and course instructors will evaluate all syllabi to ensure courses complement and support each other.

Summary:

With the addition of Physics II and a structured, distributed lab and safety experience, students will receive a modern, hands-on chemical engineering education fully aligned with ABET requirements.

Faculty members raised serious doubts that the currently specified resources are sufficient to support a high-quality Chemical Engineering program. The proposal's plan to hire six new faculty with a total allocation of \$826,500 was viewed as unrealistic, unless substantial other resources were available to address faculty startup packages (assuming mostly tenure-line hires). Similarly, the proposed laboratory funding—\$70,000 in startup costs with \$30,000 ongoing—falls well below what faculty with extensive experience in teaching laboratories consider necessary to establish and maintain state-of-the-art facilities. Without clearly articulated matching funds or long-term institutional commitments, faculty believe that the program risks being under-resourced from inception, potentially compromising educational quality and accreditation prospects.

Response:

We appreciate the concerns regarding resource sufficiency. Several clarifications strengthen the financial foundation of the proposed program.

2.1 Faculty Hiring and Start-Up Resources:

The proposal does not rely solely on the \$826,500 HB265 allocation to hire six faculty members. Specifically:

- The \$826,500 HB265 base budget supports four faculty lines, not six.
- Two additional faculty positions are fully funded through the Talent Ready Utah (TRU) initiative, providing ~\$315,000 in ongoing support (excluding the \$70,000 one-time equipment funding and \$30,000 ongoing funding for teaching supplies).
- The Office of Research funds 50% of all start-up packages, with the remaining portion supported by the College of Engineering and the Department of Biological Engineering.
- Start-up support is staggered and scalable, matching the planned hiring timeline.

Collectively, these commitments make the start-up model realistic, sustainable, and well-supported by institutional partners.

Teaching Laboratory Funding and Long-Term Viability:

Although \$70,000 in one-time funding and \$30,000 annually may appear modest relative to some larger programs, this investment is appropriate and sufficient for launch because:

- The teaching laboratory builds upon our existing department teaching labs, which already contain equipment for biological engineering courses, including heat exchangers, reactors, centrifuges, chromatography systems, etc.
- Instruction relies on modular, bench-scale instructional units, which are cost-effective while providing strong hands-on experiences.
- The College of Engineering maintains shared infrastructure, machine shop, safety systems, analytical equipment, and maintenance personnel, reducing the need for duplicate investments.
- The \$30,000 annual allocation covers small equipment, consumables, repairs, calibration, and incremental enhancements, ensuring the lab remains functional and up to date.
- An additional \$20,000 annual allocation from the College of Engineering supports teaching equipment purchases/upgrades.
- As enrollment increases, incremental laboratory expansions will be funded, consistent with USU's long-term vision for engineering education.

Thus, while the initial laboratory is not designed to replicate the scale of long-established programs, it is adequately funded for a growing new program and aligns with a phased development strategy.

Faculty identified several structural concerns, particularly regarding student transfer and articulation. Introductory and foundational courses in the proposed curriculum may not align well with those at other Utah institutions, potentially creating barriers for students who wish to transfer. Missing or non-equivalent programming and modeling coursework, combined with differing general education alignments, could result in students needing substantial additional coursework to remain on track. More broadly, the curriculum lacks the vertically integrated, hands-on, project-based learning experiences that characterize many established programs, raising concerns about student preparedness and competitiveness.

Response:

Transfer and Articulation:

Our Biological Engineering program regularly accepts transfer students from institutions such as Snow College. In cases where courses are not equivalent, we will evaluate syllabi and create equivalent courses in the TES system. While most first- and second-year courses of this new Chemical Engineering Program are standard general education or chemical engineering courses, we will also coordinate with SLCC, Snow College, Weber State, and other Utah institutions to ensure course numbering, content, and prerequisites are compatible. The department will work with the advising office to provide articulation crosswalks and guidelines to minimize delays for transfer students.

Programming and Modeling:

Although the curriculum does not mandate a standalone lower-division programming course, computing competencies are integrated within Chemical Engineering Computing and reinforced in junior- and senior-level design and modeling courses. Transfer students will be advised on equivalent introductory programming options at their home institutions.

Project-Based Learning:

While the curriculum does not feature a multi-semester project spine, hands-on, design-focused work is embedded across:

- Foundational engineering courses
- Unit Operations Laboratory
- Computational modeling coursework
- Three-course capstone sequence

For the capstone design sequence that would be applied from the current biological engineering program to the chemical engineering program, each team of 3-5 students is sponsored by an industry for an industry-specific project so that the students have project-based learning experiences that are "industry-relevant" and that span a time of one calendar year. Teams address design, analysis, control, and safety under the guidance of industry mentors and are provided support to travel to sponsored industry sites to conduct their design project, depending on industry guidance. Students also learn about the Lean Six Sigma program and apply those principles to their industry-supported design project. A major part of capstone design projects involves laboratory experiential learning both in USU laboratories and at industry sites. These projects will be presented to the Industrial Advisory Board (IAB) and the feedback from the IAB will allow us to continuously improve the program.

Faculty expressed concern about the overall justification and strategic rationale for creating a new Chemical Engineering program in Utah. Market demand data do not clearly demonstrate unmet need, and existing programs report available capacity. Additionally, faculty objected strongly to inaccuracies in how peer programs were characterized in the proposal, noting that these misrepresentations undermine confidence in the analysis. Finally, several reviewers questioned whether establishing this program represents an effective or responsible use of public funds, given the scale of investment required and the absence of compelling evidence that current statewide capacity is insufficient.

Response:

Peer programs:

We appreciate concerns regarding statewide capacity and program justification. We apologize that, due to space limitations, the R401 form did not include a comprehensive summary of the chemical engineering programs at the University of Utah and Brigham Young University. The intent is complementarity, not critique.

USU proposes a Chemical Engineering program emphasizing **upcycling, sustainability, and AI-driven chemical process design**. This program will facilitate interaction and collaboration between

biological and chemical engineers at USU and across Utah. The goal is not duplication, but the creation of new collaborative opportunities to develop sustainable chemical processes and support sustainable development in Utah and nationally.

Market Demand and Regional Access:

While statewide capacity exists, Northern Utah currently lacks a local Chemical Engineering program, creating a geographic access gap for students and employers. Local companies have expressed strong interest in internships, co-ops, and graduates with chemical engineering skills. The program directly supports:

- Biomanufacturing
- Materials and energy industries
- Food processing and biotechnology
- Aerospace and defense manufacturing
- Environmental and sustainability-focused engineering

In addition, there is strong statewide workforce demand for chemical engineers. Based on employment data released by the Utah Department of Workforce Services in January 2025, we identified 11 industry categories that actively hire Chemical Engineering graduates, together accounting for approximately 80,000 average annual jobs with an average monthly wage of \$6,501. The top three categories of chemical engineering–related employment, food manufacturing (22,113), chemical manufacturing (10,230), and scientific research and development services (10,244), employ nearly half (~50%) of all chemical engineers. Notably, food manufacturing combined with waste management (4,216) represents approximately one-third (~33%; 22,113/79,900) of all chemical engineering–related job opportunities in Utah.

As a representative example, we examined the growth of the food manufacturing sector in Utah. A report from the state’s Economic Development Tax Increment Financing (EDTIF) program shows that between 2019 and 2024, 11 investment projects were approved statewide, including four major projects in Cache Valley/Logan with a total investment of \$361 million (Utah Flour Milling, Schreiber Foods, Campbell Soup, and Frulact). The rapid growth of food manufacturing in Cache Valley creates substantial opportunities for collaboration, particularly at the interface of chemical processes and innovative biological processes, as well as internships and long-term employment pathways for students in our new Chemical Engineering program.

While the chemical engineering programs at the University of Utah and Brigham Young University are well established, a new Chemical Engineering program at Utah State University, which focuses on upcycling, sustainability, and AI-driven chemical process design, would complement existing statewide strengths in the field and help meet the needs of today’s job market, support Utah’s sustainable economic growth, and address the following critical challenges:

Advanced recycling of plastic waste.

Utah faces significant challenges in managing plastic waste, as landfills are reaching capacity due to strong population growth and increased consumption (e.g., food packaging materials and electronics). The environmental impacts of plastic pollution affect all stakeholders. In 2023, Utah became the 22nd

state in the nation to adopt legislation (HB 493) regulating advanced recycling as manufacturing. Advanced recycling is a manufacturing process that uses chemistry to enable substantially more plastics to be recycled than traditional recycling technologies, including often hard-to-recycle films and mixed plastics.

The Department of Biological Engineering currently has six faculty members working in waste management and environmental engineering. Additional Chemical Engineering faculty will be hired through the new Chemical Engineering program, whose research will complement existing departmental strengths and help create sustainable processes for advanced plastic waste recycling and valorization.

Sustainability-driven innovations related to energy, food, and water (three of Utah's top priorities) toward a circular economy.

One important example is the application of green chemistry approaches in the design of chemical products and processes to reduce or eliminate the use and generation of hazardous substances throughout their life cycle, thereby minimizing negative impacts on human health and the environment. In November 2024, the Utah Department of Environmental Quality (UDEQ) was awarded \$74 million by the U.S. EPA to support the UDEQ-proposed Beehive Emission Reduction Plan; one of UDEQ's objectives is to implement technologies to reduce methane emissions in the Uintah Basin.

In addition, over the past four years, the food industry in Cache Valley has made significant investments, with five projects totaling \$436 million, creating strong demand for relevant educational programs and workforce development to support continued growth. Thus, it is very timely to establish a new Chemical Engineering program at USU that deepens collaboration with these local food industries and accelerates the development of new technologies to improve production efficiency, as well as to provide cost-effective practices in wastewater treatment and valorization of food waste to support their sustainable growth.

Digital and AI technologies.

Curricula that deliver emerging foundational knowledge and skills in AI (e.g., machine learning, deep learning algorithms, and AI-powered simulation tools) to Chemical Engineering students, covering applications such as process optimization, predictive maintenance, materials discovery, and automation, are critical for preparing modern chemical engineers. The new USU Chemical Engineering curriculum will include its own AI-focused courses as well as cross-listed AI courses offered by the USU Data Science & Artificial Intelligence Center (DSAI), the Department of Mathematics & Statistics, and the School of Computing. DSAI also offers a range of AI certificate programs that Chemical Engineering students will be able to pursue.

The modern Chemical Engineering B.S. program at USU will be supported by strategic faculty hires with research and teaching expertise to meet workforce needs and will be closely aligned with the aims of recently approved state legislation and ongoing programs (Table 1).

Table 1. Recent state legislation and government programs USU’s new Chemical Engineering program can support.

State Government of Utah	Technical Needs	USU’s New Chemical Engineering Program Contribution (with new hires)
Utah GOEO Tax Incentive Program (11 food manuf. projects 2019-2014)	Advanced cycling technologies	Innovative valorization of food waste
Legislation bill H.B.493 “Solid Waste Management Amendments” (2023)	New recycling technologies	Advanced recycling/upcycling technologies for plastic waste
Legislation bill H.B. 453 “Great Salt Lake Revision” (2024)	Mineral extraction	Advanced separation materials & technologies (MDC, electrodialysis)
Utah Wildfire Research Institute Act of 2025 (S.457)	New preventative materials with fire reduction	Algae-derived fire-resistance materials (polymer-based alginates)
Utah Department of Agriculture & Food “Manufactured Food Regulatory Program” (2024)	Hazard analysis, risk-based preventive controls for human food	AI-based approaches to optimize the process control to avoid contamination
Utah Department of Environmental Quality “Beehive Emission Reduction Plan” (2024-2030, \$74M EPA grant)	Greenhouse gas (GHG) reduction technology & application (education/workforce)	Bacteria-based biotransformation of methane to high-value bioproducts
GOEO: Governor’s Office of Economic Opportunity		

National Trends:

The demand for new Chemical Engineering programs continues to grow nationwide. Representative programs launched or accredited in the past 10 years include:

- Benedictine College (2017)
- SUNY College of Environmental Science and Forestry (2023)
- University of Pittsburgh at Johnstown (2018)
- University of Texas at San Antonio (2020)
- University of Texas at Tyler (2021)
- University of Texas of the Permian Basin (2022)
- University of Wisconsin–Stevens Point (2019)

Responsible Use of Public Funds:

The combined funding model, HB265 support for four faculty plus TRU support for two additional positions, supplemented by institutional investment in start-up and facilities, ensures a phased, fiscally responsible, and scalable program. Resource commitments are aligned with enrollment projections and do not exceed the program's sustainable trajectory.

Overall Summary:

The proposed Chemical Engineering program at USU is ABET-compliant, resource-viable, and strategically designed to leverage institutional strengths, and it will complement existing programs in Utah and support the state's sustainable economic growth.

END OF COMMENTS

**Utah System of Higher Education
R401 Program Proposal
New Full Program (AAS or higher)**

SECTION 1: PROGRAM INFORMATION

Institution Utah State University
Department Biological and Chemical Engineering
Proposed Award Name Chemical Engineering

Award Type - Please select only one

- ☐ Associate's Degree (including AAS degrees)
☒ Bachelor's Degree
☐ Master's Degree
☐ Doctor Degree

Will this proposal include emphases? (If no, leave unchecked and move to next item.)

- ☐ Yes, this proposal has emphases
☐ An emphasis is required to complete this program

----- For proposals with emphases, please note if any of the following attributes are different for a particular emphasis -----

Additional Departments

CIP Code (Provide a 6-digit CIP Code. Omit the period.): 14.0701

Award Acronym (ex. AAS, AA, BS, BA/BS, etc. Acronym field allows for 2 to 6 characters. Omit periods.) BS

Quantitative Literacy Course recommended for this program (for undergraduate programs only. Select one option.)

- ☐ MATH 1030 Quantitative Reasoning
☐ MATH/STAT 1040 Intro to Statistics
☐ MATH 1050 College Algebra
☐ Any QL course is acceptable
☒ Other (please list in Curriculum table)

Program Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☒ Entire program can be completed in person
☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
☐ Entire program can be completed Online
☐ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program (including emphasis if applicable; use whole numbers) 120

Maximum Credit Hours to Complete Program (including emphasis if applicable; use whole numbers) 120

Expected First Semester Students May Enroll in Program Fall 2026

Expected First Year Students May Enroll in Program 2026

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description

Present a brief program description. (1-2 paragraphs.)

The Bachelor of Science in Chemical Engineering at Utah State University is designed to address critical workforce needs in Utah's rapidly growing sectors, including biotechnology, clean energy, food production, advanced materials, and environmental technologies. This modern program emphasizes three transformative focus areas: upcycling, sustainability, and AI-driven chemical process modeling. Students will gain a strong foundation in core chemical engineering principles while developing specialized skills in green chemistry, waste valorization, and digital process optimization.

Housed within the Department of Biological and Chemical Engineering, the program leverages USU's existing strengths in biological engineering and interdisciplinary research. Through a rigorous 120-credit curriculum, hands-on laboratory experiences, and industry-partnered capstone projects, graduates will be equipped to lead innovation in sustainable chemical manufacturing and contribute to Utah's circular economy. The program is designed to prepare students for high-demand careers and future graduate studies in chemical and related engineering fields.

Consistency with Institutional Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals (see Board policy R312 found at <https://ushe.edu> in the Board of Higher Education section under Policies) or, for "out of mission" program requests, the rationale for the request.

The proposed Bachelor of Science in Chemical Engineering program at USU is fully aligned with the institution's Board-approved mission, roles, and goals as outlined in Board Policy R312. As one of Utah's two designated public research universities, USU is charged with providing undergraduate, graduate, and research programs that advance knowledge, drive innovation, and contribute to the economic development and quality of life in Utah and in our nation.

This new program supports USU's role as a land-grant and space-grant institution by addressing critical workforce needs in the state's growing sectors, including biotechnology, clean energy, food production, and sustainable manufacturing. The program's emphasis on upcycling, sustainability, and AI-driven process modeling reflects USU's commitment to interdisciplinary research, innovation, and public service. By preparing students for high-demand careers and fostering industry partnerships, the Chemical Engineering program will enhance USU's capacity to fulfill its mission of serving the public through education, research, and community engagement.

SECTION III: NEEDS ASSESSMENT

Market Demand

Provide local, state, and/or national labor market data that speak to the need for this program. What business and industry sectors seek the knowledge base and skills graduates will offer? Are there known Utah employers? How many annual job openings are available? What wage will graduates earn? How strong is the employment sector for graduates of the program? Are numbers of job openings increasing? How does the median wage for these jobs compare to statewide median wage for all workers and/or for workers with the same education level?

NOTE: Occupational demand, wage, and number of annual openings information may be found at sources such as Utah DWS Occupation Information Data Viewer (jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do) and the Occupation Outlook Handbook (www.bls.gov/oco). Utah DWS Firm Find also provides Utah employer data (<https://jobs.utah.gov/jsp/firmfind/#/>).

Local/Regional Market Demand (include a short description to clarify the geographic parameters for this data)

The demand for chemical engineers in Utah is robust and growing, particularly in the northern region Cache Valley, home to USU, is experiencing significant industrial growth, especially in food and beverage manufacturing. Between 2019 and 2024, five major projects in Cache County alone—by companies such as Frulact, Schreiber Foods, Utah Flour Milling, Campbell Soup, and West Point Dairy—accounted for over \$436 million in investments and created hundreds of new jobs. This regional expansion underscores the urgent need for a local talent pipeline in chemical engineering to support these industries. The proposed program will directly serve this need by preparing graduates with the technical and interdisciplinary skills required in the region’s evolving industrial landscape.

State Market Demand

of the state, including Cache Valley and Logan, where Utah State University is located. According to the Utah Department of Workforce Services (January 2025), approximately 80,000 jobs annually are available in industries that actively hire chemical engineering graduates. These include food manufacturing, chemical manufacturing, pharmaceuticals, scientific R&D services, and waste management. The average monthly wage for these positions is \$6,501—24% higher than the statewide average—indicating strong compensation and demand for skilled professionals.

National Market Demand

According to the U.S. Bureau of Labor Statistics (BLS), employment of chemical engineers is projected to grow 3% from 2024 to 2034. The median annual wage for chemical engineers was \$121,860 in May 2024, significantly higher than the national median for all occupations. The demand for chemical engineers is driven by the need to develop and improve manufacturing processes across a wide range of industries, including energy, pharmaceuticals, food production, and environmental sustainability. Emerging areas such as alternative energy, biotechnology, and green manufacturing are expected to continue fueling demand for chemical engineering expertise. This national outlook underscores the importance of establishing a modern Chemical Engineering program at USU to prepare graduates for these evolving and high-paying career opportunities.

Student Demand

Provide evidence of student interest and demand that supports potential program enrollment and your plan for attracting under-represented student groups. NOTE: Student enrollment projections will be called for in the finance section of this proposal.

The Utah Department of Workforce Services projects a 12% increase in demand for chemical engineers in Utah by 2030, highlighting a strong and growing need for expanded educational opportunities in this field. Both the University of Utah and Brigham Young University offer established chemical engineering programs with strong foundations in traditional curricula and research.

The proposed modern Chemical Engineering program at USU will complement these existing offerings by focusing on emerging technologies and interdisciplinary applications. As a land-grant university, USU is uniquely positioned to serve a broad and diverse student population, particularly in northern Utah and rural communities.

Students will be drawn to this program for its forward-looking curriculum and practical relevance. The integration of sustainability, upcycling, and artificial intelligence into chemical engineering coursework reflects current industry trends and future workforce needs. Additionally, the program's emphasis on hands-on learning, real-world problem solving, and professional licensure pathways will appeal to students seeking a clear and impactful career trajectory.

To support enrollment and broaden access, we will implement a comprehensive recruitment strategy that includes outreach to high schools, community colleges, and regional STEM programs. The program will emphasize its distinctive features, including:

- Strong industry partnerships,
- State-of-the-art laboratory facilities,
- Focus areas in sustainability, upcycling, and artificial intelligence, and
- Clear pathways to professional licensure.

These elements will help attract a diverse and motivated student body while preparing graduates to meet the evolving demands of the chemical engineering workforce.

Similar Programs

List similar programs offered elsewhere in the USHE, the state, or Intermountain Region. In comments field, describe unique characteristics of proposed program to similar program(s), if any.

Institution	Award Type	Program Award Name	Link to Program	Comments
University of Utah	BS, MS, PhD	Chemical Engineering	https://www.che.utah.edu/	Focusing on combustion; no specific application of molecular simulation; no specified biomass production; no upcycling, or AI-driven design of biological reactors
Brigham Young University	BS, MS, PhD	Chemical and Biological Engineering	https://chemicalengineering.byu.edu/	Mainly focusing on high-value products from coal; no biomass generation or food chemicals; no sustainability of environmental chemicals (only conversion to natural gas); no

				bioconversion of waste to hydrogen

Transfer Check

For transfer associate degrees, provide information on bachelor degrees that graduates can transfer into; at end of proposal form, attach at least one draft articulation agreements with a 4-year program. For 4-year degrees, list 2-year degrees that may transfer into the degree, if any. Use comments field to unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments

Collaboration with and Impact on Other Degree-granting or Technical College USHE Institutions

Assess the impact the new program will have on other USHE institutions. Describe any discussions with other institutions pertaining to this program. Include any collaborative efforts that have taken place. Indicate if the program will be delivered outside of designated service area; provide justification. Service areas are defined in Board policy R315 found at <https://ushe.edu> in the Board of Higher Education section under Policies.

The proposed program has been carefully evaluated to ensure minimal overlap and no adverse impact on existing programs offered by other institutions within the Utah System of Higher Education (USHE). We are seeking to establish collaborative partnerships with the chemical engineering programs at the University of Utah and Brigham Young University to enhance research and training opportunities. These collaborations aim to complement the existing strengths of each institution and foster the development of a modern chemical engineering program. Our vision is to create a forward-looking curriculum and research environment focused on upcycling, sustainability, and AI-driven chemical process design, preparing students to tackle emerging challenges in the chemical industry. In accordance with Board Policy R315, the program will be delivered within the institution's designated service region, as defined by the Utah Board of Higher Education. No out-of-region delivery is planned at this time; therefore, no formal justification for out-of-region instruction is required.

Accreditation

If the program will seek special professional program-level accreditation, identify the accrediting body, and project timeline and anticipated costs for initial approval, and a date for accreditation review cycle.

The proposed BS in Chemical Engineering program will seek professional program-level accreditation through the Accreditation Board for Engineering and Technology (ABET), which is the recognized accrediting body for college and university programs in applied and natural science, computing, engineering, and engineering technology.

Projected Accreditation Timeline:

- Fall 2026: First cohort of students begins.
- Fall 2027: Initiate ABET pre-accreditation process and begin collecting assessment data.
- Spring 2030: First cohort graduates; all students will be required to take the Fundamentals of Engineering (FE) exam.
- 2029–2032: Prepare for full ABET accreditation review.
- 2032: Target year for full ABET accreditation.

Anticipated Costs:

- Initial ABET accreditation costs typically range from \$10,000 to \$15,000, including application fees, evaluator travel, and preparation of self-study reports.
- Additional costs may include faculty time, administrative support, and potential investments in facilities or curriculum enhancements to meet ABET criteria.

These efforts align with the program's commitment to academic excellence and ensure that graduates are well-prepared for professional licensure and competitive careers in chemical engineering.

External Review

Describe how external consultants, program advisory committee members, industry experts, or other non-institutional stakeholders were involved in the development of the proposed program. For programs that address specific industry or occupational needs, indicate the extent to which the applicable industry representatives have provided input.

The proposed modern Chemical Engineering program demonstrates substantial involvement from external consultants, industry experts, and other non-institutional stakeholders in its development. Here's a summary of their contributions:

1. Industrial Advisory Board (IAB):

The program plans to establish an active IAB composed of representatives from regional and national chemical companies. This board will provide ongoing feedback on curriculum relevance, employment trends, and internship opportunities, ensuring alignment with industry needs and emerging technologies.

2. Industry Partnerships:

Seventeen industrial partners—including Thermo Fisher Scientific, Frulact, BASF, WesTech, Northrop Grumman, and Idaho National Laboratory—have committed to supporting the program through:

- Guest lectures and seminars
- Curriculum development and feedback
- Capstone design sponsorship
- Research collaborations
- Internships and job placements
- Facility tours and mentoring

3. Work-Based Learning Integration:

The program incorporates industry-sponsored Capstone Design projects, where students work directly with industry mentors on real-world problems. These projects span three semesters and include weekly performance tracking by both faculty and industry sponsors.

4. Employer Feedback Mechanisms:

Post-graduation, employer surveys will assess graduates' workforce readiness, including technical competency, adaptability, communication skills, and teamwork. This feedback will inform continuous curriculum improvement.

5. Alignment with State and Federal Initiatives:

The program is designed to support recent Utah legislation and government programs such as HB 493 (Solid Waste Management Amendments), HB 453 (Great Salt Lake Revision), and the Beehive Emission Reduction Plan. These initiatives were developed with input from industry and government stakeholders and reflect the technical needs that the program aims to address.

6. Curriculum Synergy with Industry Needs:

The curriculum includes specialized courses in green chemistry, waste management, AI-driven process modeling, and sustainable manufacturing--developed in response to input from industry partners and state economic development priorities.

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program. List all courses, including college-level prerequisites (and pre-major placements or condition) and new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences). Indicate new courses with an X in the appropriate columns. The total number of credit hours should reflect the number of credits required to be awarded for the degree. For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the Program Curriculum Narrative text field.

INSERT ROWS IN TABLE BELOW AS NEEDED

College Level Prerequisite Courses (list courses students commonly must take to be able to enroll in the program's courses listed below)

Course Prefix & Number	New Course?	Course Title	Credit Hours
MATH 1220	No	Calculus II	3
MATH 2250	No	Linear Algebra and Differential Equations	3
PHYS 2210	No	Physics for Scientists and Engineers I	4
PHYS 2215	No	Physics for Scientists and Engineers Lab I	1
CHEM 2300	No	Principles of Organic Chemistry	3
CHEM 2315	No	Organic Chemistry Laboratory I	1
CHEM 3060	No	Physical Chemistry I	3

General Education Courses (list specific courses if recommended for program; otherwise, list "any QL" of "any Humanities")

Course Prefix & Number	New Course?	Course Title	Credit Hours
MATH 1210	No	Calculus I	3
BIOL 1610	No	Biology 1	3
ENGL 2010	No	Research and Argument Across Perspectives	3
	No	Breadth Creative Arts	3
	Np	Breadth American Institutions	3
	No	GENERAL EDUCATION Breadth Course	3
	No	Breadth Humanities	3
	No	Gen ED Depth Course	2

Program Required Courses (list "and/or" conditions and reflect such conditions in credit hours)

Course Prefix & Number	New Course?	Course Title	Credit Hours
CHE 1000	Yes	Introduction to Modern Chemical Engineering	1
CHE 1880	Yes	Material and Energy Balances	3
ENGR 2140	No	Mechanics of Materials	3
BENG/CHE 2400	No	Thermodynamics	3
CHE 2330	Yes	Chemical Engineering Materials	3
CHE 3500	Yes	Fluid Mechanics	3
STAT 3000	No	Statistics for Scientists	3
CHE 3000	Yes	Heat and Mass Transfer	3
CHE 3400	Yes	Chemical Engineering Computing	3
ENGR 3080	No	Technical Communication for Engineers	3
ENGR 2450	No	Numerical Methods for Engineers	3
CHE 3870	Yes	Chemical Engineering Design I	1
CHE 3300	Yes	Chemical Engineering Separations	3
BENG/CHE 3670	No	Transport Phenomena	3
CHE 4880	Yes	Chemical Engineering Design II	3
CHE 4890	Yes	Chemical Engineering Design III	3
CHE 4100	Yes	Kinetics & Reaction Engineering	3
CHE 4200	Yes	Unit Operations Laboratory	3
CHE 4200	Yes	AI-Driven Molecular and Process Modeling	3

Program Elective Courses (list "and/or" conditions and reflect such conditions in credit hours)

Course Prefix & Number	New Course?	Course Title	Credit Hours
CHE 5660	Yes	Green Catalysis	3
CHE 5670	Yes	Sustainable Process Engineering	3
CHE 5680	Yes	Green Chemistry	3
CHE 5690	Yes	Waste Management and Upcycling	3
CHE 5700	Yes	Polymer Engineering	3
CHE 5710	Yes	Pharmaceutical Engineering	3

<i>CHE 5720</i>	Yes	<i>Life Cycle Assessment and Techno-Economic Analysis</i>	3
<i>CHE/BENG 5810</i>	No	<i>Biochemical Engineering</i>	3
<i>CEE 4200</i>	No	<i>Engineering Economics</i>	3
<i>BENG/CHE 4250</i>	No	<i>Cooperative Practice</i>	3

Emphasis Courses (duplicate this table if there are multiple emphases)

Name of Emphasis

Course Prefix & Number	New Course?	Course Title	Credit Hours

Degree Map

Provide a program Degree Map, also referred to as a graduation plan (for undergraduate programs ONLY). This map provides a suggested semester-by-semester class schedule for a full-time student that includes prefix, number, title, and semester hours.

Enter the degree map in the table below. If a specific general education course is required, list course and include GE fulfilled. If the program does not require a specific general education, write "Any Fine Art" or "Any QL" and check GE fulfilled.

INSERT ROWS IN TABLE BELOW AS NEEDED

For General Education courses, use the following acronyms or leave blank if not GE:

C Written Communication / QL Quantitative Literacy / AI American Institutions /
FA Fine Art / H Humanities / LS Life Science / PS Physical Science / SS Social Science

First Year Fall			First Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
CHE 1000 Introduction to Modern Chemical Engineering	1		CHE 1880 Material and Energy Balances	3	
BIOL 1610 Biology I	3	LS	ENGL 2010 Research and Argument Across Perspectives	3	C
CHEM 1210 Principles of Chemistry I	4		MATH 1220 Calculus II	4	
CHEM 1215 Chemical Principles Laboratory I	1		PHYS 2210 Physics for Scientists and Engineers I	4	PS
MATH 1210 Calculus I	3	QL	PHYS 2215 Physics for Scientists and Engineers Lab I	1	
Breadth Creative Arts	3	FA			
Second Year Fall			Second Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
MATH 2250 Linear Algebra and Differential Equations	4		BENG/CHE 2400 Thermodynamics	3	
CHEM 2300 Principles of Organic Chemistry	3		CHE 2330 Chemical Engineering Materials	3	
CHEM 2315 Organic Chemistry Laboratory I	1		ENGR 2210 Fundamental Electronics for Engineers	3	
ENGR 2140 Mechanics of Materials	3		CHEM 3060 Physical Chemistry I	3	
Breadth American Institutions	3	AI	GENERAL EDUCATION Breadth Course	3	SS
CHE 2200 Introduction to Chemical Engineering Design	1				
Third Year Fall			Third Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
CHE 3500 Fluid Mechanics	3		CHE 3870 Chemical Engineering Design I	1	
STAT 3000 Statistics for Scientists	3		ENGR 2450 Numerical Methods for Engineers	3	
CHE 3000 Heat and Mass Transfer	3		ENGR 3080 Technical Communication for Engineers	3	
CHE 3400 Chemical Engineering Computing	3		BENG/CHE 3670 Transport Phenomena	3	
Breadth Humanities	3	H	CHE 3300 Chemical Engineering Separations	3	

			Gen ED Depth Course	2	H/FA
Fourth Year Fall			Fourth Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
CHE 4880 Chemical Engineering Design II	3		CHE 4890 Chemical Engineering Design III	3	
CHE 4100 Kinetics & Reaction Engineering	3		CHE 4200 AI-Driven Molecular and Process Modeling	3	
CHE 4200 Unit Operations Laboratory			Chemical/Biological Engineering Elective	3	
Chemical/Biological Engineering Elective	3		Technical Elective	3	
Technical Elective	3		Engineering Elective	3	

Program Curriculum Narrative

Describe any variable credits as well as internships, clinicals, or other external learning experiences. Include additional curriculum information that differentiates this program's curriculum such as mandatory summer terms, accelerated schedule options or paths for part-time students.

Program Admission Requirements

List selective admission requirements specific to the proposed program. Describe cohort-driven admissions, if applicable.

Any students accepted into USU can be accepted into this program.

Program Graduation Standards and Number of Credits

Provide graduation standards. Include standards specific to the program that are beyond the institution's standard graduation requirements. Provide justification if number of credits exceeds credit limit for this program type described in R402-6 Table 1, which can be found at <https://ushe.edu> in the Board of Higher Education section under Policies.

1. Fulfill the required credits for the major (core Chemical Engineering courses + electives) as specified in the program's catalog.
2. Complete General Education / University Studies requirements.
3. Complete a minimum of 120 credits.
4. Maintain at least a 2.0 GPA overall (as a minimum for graduation eligibility).
5. For courses in the professional program (upper division chemical engineering major courses), maintain eligibility which includes that upper division GPA also be ≥ 2.0 .
6. Pass the chemical engineering FE exam.

SECTION V: INSTITUTION, FACULTY, AND STAFF SUPPORT

Institutional Readiness

How do existing administrative structures support the proposed program? Identify new organizational structures that may be needed to deliver the program. Will the proposed program impact the delivery of undergraduate and/or lower-division education? If yes, describe how?

The Department of Biological Engineering at Utah State University is well-positioned to support the proposed Chemical Engineering program through its existing administrative infrastructure. The department currently manages an accredited undergraduate Biological Engineering program and has established procedures for curriculum development, student advising, faculty recruitment, and program assessment. These existing structures will be leveraged to support the new Chemical Engineering program.

To accommodate the strategic expansion, the department proposes a name change to Biological and Chemical Engineering, reflecting its broadened academic and research scope. This change will not require the creation of entirely new administrative units but will involve adjustments in faculty assignments, curriculum committees, and advising responsibilities to ensure effective delivery of both programs.

The addition of six new chemical engineering faculty will enhance the department's capacity to offer specialized instruction and lead research initiatives in emerging areas such as upcycling, sustainability, and AI-driven chemical process design. These hires will ensure that the new program is adequately staffed and supported without compromising the quality of the existing Biological Engineering program.

The proposed Chemical Engineering program is expected to enrich undergraduate education by offering additional pathways for students interested in engineering disciplines. While it will share some foundational courses with the Biological Engineering program, it will introduce new upper-division courses tailored to chemical engineering competencies. This expansion is not anticipated to negatively impact lower-division education; rather, it will provide students with more diverse options and foster interdisciplinary learning opportunities.

Student Advisement for this Program

Describe how prospective and current students in the proposed program will be advised. Does the sponsoring department have advisors or are students referred to campus advising? Are there advisements for part-time student participants?

The College of Engineering has an advising office with experienced academic advisors. These advisors work closely with the departments to provide advice and guidance during their journey in the Chemical Engineering program. The chemical engineering faculty are also available to provide advice in study and career planning for the students.

Professional Licensure

Will graduates of this program need to seek certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

N/A

Library and Information Resources

Describe library resources students will need to complete this program, if any. Describe the library resources the institution already possesses. Describe new library resources to be acquired. Identify additional costs to support library and information resources needs in the finance table.

No additional library resources are required at this time. Needs will be determined by course instructors.

Facility (Space) / Material Needs

Describe special space or equipment needs for program, if any. Describe the space and technology needs the institution already possesses. Describe new space or technology to be acquired.

We will utilize our existing teaching spaces in ENGR 408 and EL 223 for laboratory courses. Through USHE's Talent Ready Utah program, we have received \$70,000 in funding to purchase teaching equipment for the new Chemical Engineering program, along with an ongoing annual allocation of \$30,000 for software, instructional supplies, and equipment upgrades. Our goal is to establish a well-equipped, state-of-the-art Chemical Engineering teaching laboratory to support coursework and student design projects.

Current and New Department Faculty / Staff Information

Identify current # of department faculty / staff (headcount) to be involved with the program and faculty / staff to be hired along with their qualifications and tenure status. Include additional cost for these faculty / staff members in budget narrative and table.

In the Expense Narrative field later in the proposal, please indicate when new faculty and staff hires will occur in year 1 or a subsequent year of the program.

Current Faculty/Staff					Faculty/Staff to be Hired				
<i>For faculty: academic or industry credential held:</i>	# Fulltime	# Parttime	# Tenure or Tenure-Track	# Non-Tenure Track	# Fulltime	# Parttime	Est. % of time committed to new program	# Tenure-Track	# Non-Tenure Track
Doctorate Degrees	16		16		6		100%	6	
Masters Degrees									
Bachelor Degrees	2								
Associates Degrees									
Industry Credential									
Staff	2								
Teaching/Grad Assistants									
TOTAL	0	0			0	0			

Faculty

Describe faculty development activities that will support this program. Will existing faculty/instructors, including teaching/graduate assistants, be sufficient to instruct the program or will additional faculty be recruited? If needed, provide plans and resources to secure qualified faculty. The narrative should be consistent with the budget and faculty tables.

The Department of Biological and Chemical Engineering currently includes eighteen faculty members whose expertise spans a wide range of fields, including biomedical devices, lab-on-chip technologies, therapeutics, biomaterials, environmental engineering, synthetic biology, metabolic engineering, biosensors, bioenergy, wastewater treatment, fuels, pyrolysis, and biophotonics. These established research strengths will provide valuable support and opportunities for collaboration with the proposed Chemical Engineering program. Notably, three current faculty members, Dr. Foster Agblevor, Dr. Keith Roper, and Dr. Jixun Zhan, hold BS/Ph.D. degrees in chemical or biochemical engineering and will contribute to the development and instruction of the new program.

To build a robust Chemical Engineering program, we plan to recruit six additional faculty members with expertise in areas such as upcycling, sustainability, and AI-driven chemical process design. Faculty positions will be advertised on national platforms including the American Chemical Society (ACS), the American Institute of Chemical Engineers (AIChE), Academic Keys, and the Chronicle of Higher Education to attract a diverse and highly qualified applicant pool.

New faculty will receive support through the Provost's Office orientation program and ongoing professional development opportunities offered by the Center for Empowering Teaching Excellence (ETE), which provides regular workshops focused on enhancing teaching effectiveness. These faculty development activities will ensure that both existing and new instructors are well-prepared to deliver high-quality education and contribute to the program's success.

Together, our current and future faculty will be sufficient to support the instructional and research needs of the new Chemical Engineering program.

Staff

Describe the staff development activities that will support this program. Will existing staff such as administrative, secretarial/clerical, laboratory aides, advisors, be sufficient to support the program or will additional staff need to be hired? If needed, describe the circumstances such as growth in students in the program, that will signal the additional hires. Provide plans and resources to secure qualified staff, as needed.

Currently, the Department of Biological and Chemical Engineering has one full-time administrative staff member, one full-time business manager, and a part-time media specialist. These staff members will support both the existing Biological Engineering program and the new Chemical Engineering program during its initial phase.

As the Chemical Engineering program launches and student enrollment grows, we plan to hire an additional full-time staff member to help manage increased administrative, recruiting and advising demands. This expansion will be guided by enrollment trends, faculty growth, and programmatic needs.

To ensure continued support and operational efficiency, the department will work with the College of Engineering and university administration to secure funding and recruit qualified staff. Professional development opportunities will be provided to both existing and new staff to ensure they are equipped to support the evolving needs of the department.

SECTION VI: PROGRAM EVALUATION

Program Assessment

Describe program academic and professional goals. Identify program performance goals. Describe the system of assessment to be used to evaluate program success in meeting performance goals.

The academic and professional goals of the proposed Chemical Engineering program at USU are centered on preparing students to meet the evolving demands of Utah's industries, including chemical manufacturing, food production, pharmaceuticals, energy, and environmental technologies. The program emphasizes three strategic focus areas: Upcycling, Sustainability, and AI-driven Chemical Process Modeling, aligning with state priorities and recent legislation supporting circular economy and sustainable development.

Program Performance Goals:

- Achieve ABET accreditation by 2032, following a structured pre-accreditation and data collection process beginning in Fall 2027.
- Maintain an 80% student retention rate and a 90% job placement rate within six months of graduation.
- Graduate 60-80 students annually by year five, with a long-term goal of reaching 300-400 total enrollment.
- Ensure all students pass the Fundamentals of Engineering (FE) exam prior to graduation.
- Integrate work-based learning (WBL) through industry-sponsored capstone projects, internships, and collaborative research.

Assessment System: The program will implement a comprehensive assessment framework aligned with ABET accreditation standards, including:

- Student Learning Outcomes (SLOs): Outcomes will be assessed through exams, lab reports, design projects, presentations, and participation in professional conferences.
- Capstone Design Evaluation: A three-semester capstone sequence (CHEN 3870, 4880, 4890) will be used to assess students' ability to apply engineering design, teamwork, communication, and ethical judgment in real-world industry projects.
- Continuous Improvement: The department's Undergraduate Curriculum Committee will review course content, student performance, and faculty effectiveness regularly, using both internal evaluations and external feedback from the Industrial Advisory Board (IAB).
- Employer Feedback: Post-graduation surveys will be conducted to assess graduates' workforce readiness, including technical competency, adaptability, communication skills, and teamwork effectiveness.
- Documentation and Reporting: All assessment activities will be documented to support ABET requirements and guide program enhancements.

This system ensures that the Chemical Engineering program remains responsive to industry needs, maintains high academic standards, and continuously improves through data-driven decision-making and stakeholder engagement.

Student Standards of Performance

List the program learning outcomes including standards, competencies, and marketable skills students will have achieved at the time of graduation. How will student attainment of program learning outcomes be

assessed/evaluated? How will student attainment of professional competencies be assessed/evaluated?

Graduates of the Chemical Engineering program at Utah State University will achieve a comprehensive set of academic and professional competencies aligned with ABET accreditation standards and industry expectations. Upon graduation, students will demonstrate the following program learning outcomes, competencies, and marketable skills:

Program Learning Outcomes

Students will be able to:

1. Apply principles of chemical engineering, mathematics, chemistry, biology, and physics to solve complex engineering problems.
2. Design chemical processes and systems that meet specified needs, considering public health, safety, global, cultural, social, environmental, and economic factors.
3. Conduct experiments, analyze data, and draw conclusions using engineering judgment.
4. Communicate effectively with diverse audiences through written, oral, and visual formats.
5. Function effectively on multidisciplinary teams, demonstrating leadership, collaboration, and accountability.
6. Recognize ethical and professional responsibilities and make informed decisions in engineering contexts.
7. Use modern engineering tools, including AI-driven modeling and simulation, for chemical process design and optimization.
8. Demonstrate understanding of sustainability principles and life-cycle analysis in chemical engineering applications.
9. Integrate upcycling and waste valorization strategies into chemical process design to support a circular economy.

Professional Competencies

- Process design and optimization
- Reaction engineering and separations
- AI and data science applications in chemical engineering
- Green chemistry and sustainable manufacturing
- Polymer and pharmaceutical engineering
- Safety, ethics, and regulatory compliance
- Technical communication and project management

Marketable Skills

- Proficiency in chemical process simulation software
- Data analysis and machine learning for process control
- Hands-on lab and pilot-scale experimentation
- Capstone project experience with industry sponsors
- FE exam preparation and professional licensure readiness

Assessment and Evaluation

Student attainment of learning outcomes and competencies will be assessed through:

- **Course-level evaluations:** Exams, lab reports, design projects, and presentations.
- **Capstone Design sequence:** A three-semester industry-sponsored project (CHEN 3870, 4880, 4890) evaluated by faculty and industry mentors.
- **ABET-aligned rubrics:** Used to assess student performance in areas such as design, teamwork, ethics, and communication.
- **Professional presentations:** At conferences and to the Industrial Advisory Board.
- **Post-graduation employer surveys:** To evaluate workforce readiness and identify areas for curriculum improvement.

This comprehensive assessment system ensures that graduates are well-prepared for professional practice and contribute meaningfully to Utah's growing chemical engineering industries.

SECTION VII: PROJECTED PROGRAM ENROLLMENTS & FINANCE

Three Year Projection Student Participation

Provide projected enrollment and information on related operating expenses and funding sources. Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty and staff as described in the faculty section of this proposal. Project five years' enrollments and graduates. Note: If the proposed program is an expansion of an existing program, present several years enrollment trends by headcount and/or by student credit hours that justify expansion.

NOTE: Highlighting blue cells in the table below and pressing f9 on your keyboard will auto calculate the cell's value.

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
Student Data						
# Majors in Department	163	188	238	313	413	488
# Majors in Proposed Program		25	50	75	100	100
# Graduates from Department	32	35	35	40	45	70
# Graduates in New Program		0	0	0	0	25
Department Financial Data						
Project additional expenses associated with offering new program. Account for new hires as stated in "Current and New Department Faculty / Staff" table.	Department Budget					
	Year Preceding Implementation	Year 1	Year 2	Year 3		
	(base budget)	Addition to base budget for new program(s)				
EXPENSES - nature of additional costs required for proposed program(s)						
List salary and benefits for additional faculty and staff each year the positions will be filled. Ex: if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the one year.						
Personnel (1)	2,628,895	478,500	826,500	826,500		
Operating Expense (2)	65,000	180,000	150,000	150,000		
Space Needs and Utilization		70,000				
Other	40,000	100,000	100,000	100,000		
TOTAL Program Expenses		828,500	1,076,500	1,076,500		
TOTAL EXPENSES	2,733,895	828,500	1,076,500	1,076,500		
FUNDING - source of funding to cover additional costs generated by proposed program(s)						
Describe internal reallocation using "Existing Funding Source Narrative" following this table. Describe new sources of funding using "New Revenue Narrative" on the following page.						
Internal Reallocation		282,160	282,160	282,160		
Appropriation	2,693,895	405,550	345,798	345,798		
Special Legislative Appropriation						
Grants and Contracts			250,000	500,000		
Special Fees						
Tuition		112,500	225,000	337,500		
Differential Tuition (3)	40,000	60,000	80,000	100,000		
PROPOSED PROG FUNDING		860,210	1,182,958	1,565,458		
TOTAL DEPT FUNDING	2,891,395	860,210	1,182,958	1,565,458		
DIFFERENCE						
Funding - Expense	0	31,710	106,458	488,958		

(1) faculty and staff salary and benefits

(2) equipment, travel, resources

(3) requires UBHE approval

Expense Narrative

Describe expenses associated specifically with the proposed program. Please indicate in which year(s) new faculty and staff hires for the program will occur.

The primary expenses associated with the proposed program include the hiring of six new chemical engineering faculty members over the next two years, with the goal to hire three in year 1 and three in year 2. Additional costs will cover faculty startups to support the development of the research programs in the field of chemical engineering, as well as teaching equipment and instructional supplies necessary to support the curriculum and ensure high-quality student learning experiences.

Existing Funding Sources Narrative

Describe what internal reallocations, if applicable, are available and any impact to existing programs or services.

The HB265 reallocations included a total of \$846,480 for a chemical engineering program with 4 faculty positions and additional operating budget. This will be spread out evenly over three years. These funding sources are not expected to negatively impact existing programs or services.

New Revenue Narrative

Describe new funding sources and plans to acquire the funds. Does the institution anticipate assessing students course-fees or program-based fees?

We received two additional positions along with some one-time costs associated with equipment and program supplies from a Talent Ready Utah Workforce Initiative. This would bring the total program positions to 6 new faculty lines.

To support the program's sustainability, we anticipate assessing course fees for 1000- and 2000-level courses. For upper-division classes, differential tuition will be implemented to reflect the specialized instruction and resources required.

SECTION VIII: ADDITIONAL DOCUMENTATION

Feedback and discussion

Add a comment in the discussion of this proposal:

Provide draft articulation agreement for transfer associate degrees and/or additional documentation such as letters of support from advisory groups, employers, or published studies as separate documents. Please include institution acronym and name of proposed program in the title of the document.



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Full Program: Energy Engineering Bachelor of Science
College of Engineering

In accordance with [Utah Board of Higher Education Policy R401](#), the College of Engineering proposes offering an Energy Engineering Bachelor of Science.

This interdisciplinary undergraduate degree prepares students to address complex and evolving energy needs by integrating mechanical, electrical, biological, civil, and chemical engineering with energy policy, environmental sustainability, and regional resource management.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

COE-Energy Engineering BS-Full Program





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 2, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Bachelor of Science in Energy Engineering to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Bachelor of Science in Energy Engineering

The College of Engineering proposes the establishment of a Bachelor of Science in Energy Engineering, designed to address the unique energy landscape and opportunities within the Intermountain West.

Proposers are in the process of forming an Industry Advisory Board and plan to pursue ABET accreditation. With legislative funding support, the College intends to hire nine new faculty members—five in early 2026 and four in subsequent years. Several of these faculty will be based at the branch campuses in Price and Vernal, enabling students to benefit from field study in the eastern region of the state.

The labor market research supporting the program is strong, despite the challenge of obtaining precise data for “energy engineering,” which is not a distinct category tracked by the Utah Department of Workforce Services or the U.S. Bureau of Labor Statistics.

The program will require the development of several new focus-area and elective courses. The curriculum anticipates that entering students will be prepared to take MATH 1210 (Calculus I) in their first semester. Students who have not completed the required prerequisites before enrollment may experience a longer time to degree completion.

Proposers are optimistic about student interest in this degree. They project initial enrollment of 10 students in the first year, growing to 120 students by year five. These projections are based on historically strong enrollments in existing engineering courses with energy-related content. The proposal also

acknowledges existing Energy Engineering programs at the University of Utah and Brigham Young University, and outlines how the new program will differentiate itself from those programs.

CIP Code Classification

Proposers have selected CIP code 14.4801 to classify this program, which aligns with Board Policy R402 and authorizes Utah State University to offer academic programs with this classification.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal was submitted for peer review by academic colleagues across the Utah System of Higher Education (USHE).

Feedback on the proposal was received from the Commissioner's Office, Weber State University, Southern Utah University, and the University of Utah.

Weber State University expressed support for the program and recommended that the proposal more clearly define its core requirements. For recruitment purposes, they also encouraged the proposers to clearly articulate how this program differs from other engineering degrees.

Southern Utah University advised the proposers to develop long-term funding strategies to ensure adequate investment in equipment and laboratory facilities, particularly as technology evolves.

Reviewers at the University of Utah raised several concerns. They questioned whether the program, as currently designed, could achieve ABET accreditation and emphasized the need to more clearly specify the required courses for degree completion. They also noted that the current faculty alignment may not fully meet the program's instructional demands and raised concerns about course sequencing. Additionally, reviewers agreed with the Commissioner's Office that the projected number of annual degree completers may be overly optimistic.

The faculty proposers provided detailed responses to each concern raised by the University of Utah reviewers (see attached peer review report).

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,



Geoffrey Landward
Commissioner of Higher Education

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Economic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Janalyn Brown, Board Secretary

Utah State University | Bachelor of Science in Energy Engineering Peer Review Council Written Comments January 2025

Steve Hood, Commissioner's Office

The College of Engineering proposes a Bachelor of Science in Energy Engineering degree. The degree has been designed to focus on energy options in the intermountain west. Proposers are engaged in organizing an Industry Advisory Board and will seek ABET accreditation of the new program.

Proposers selected CIP 14.4801 to classify this program. Board Policy authorizes Utah State University to offer a degree program in this academic area.

Working with funds provided by the legislature, the College intends to hire nine faculty members to teach in this program, five in early 2026 and four in the following years. Several faculty members will be working at branch campuses in Price and Vernal to take advantage of energy options in the eastern part of the state.

The labor research for the program is very good. It is not easy to find labor statistics in energy engineering because it is not a field where specific data is kept by the Utah Department of Workforce Services or the U.S. Bureau of Labor and Statistics.

This program will require the creation of several new courses in focus areas and electives. The proposers assume students enrolling in the program will be taking MATH 1210 (calculus) their first semester. This will require some students to complete prerequisites for this course if they have not already done so, which may delay graduation.

The proposers are enthusiastic at the number of students they expect to enroll in this new program. They project enrollments of ten students in the first year, but by year five, they are expecting the number of enrolled students to be at 120. They base their assumptions on strong enrollments in existing engineering courses with an energy focus.

Proposers note existing programs in Energy Engineering at the University of Utah and Brigham Young University and describe the differences between these programs and the proposed program. They also note Weber State has an Energy Engineering major, but they do not discuss the curricular relationship between this program and the proposed program. This information can be helpful for peer reviewers to know.

Thank you for this submission.

Gail Niklason, Weber State University

This proposal was shared with An Ho, director of Weber State's Energy Engineering program:

Overall, the proposed USU BS in Energy Engineering is ambitious, timely, and well-supported politically, with strong research synergies and faculty hiring plans. However, some suggestions from an external academic review perspective:

- The curriculum would benefit from clearer core energy engineering requirements (thermodynamics, fluids, energy systems)
- Considering sharpening the program identity to distinguish it from both traditional engineering degrees and existing energy programs in the state.
- Additional detail on dedicated teaching labs for energy systems would strengthen the proposal. In particular limited lab capabilities at satellite campus should be addressed.

Thank you for the opportunity to provide feedback.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The curriculum distinguishes itself from traditional chemical engineering programs by focusing on three transformative areas: upcycling, sustainability, and AI-driven chemical process modeling. The 120-credit plan includes essential engineering foundations such as Thermodynamics, Fluid Mechanics, and Kinetics and Reaction Engineering, while the inclusion of AI-Driven Molecular and Process Modeling reflects an industry-forward approach to digital process optimization. A notable strength is the requirement for students to pass the Fundamentals of Engineering exam as a graduation standard, ensuring graduates meet national professional benchmarks.

Resource Adequacy and Future Needs

USU demonstrates significant commitment by adding six new faculty lines specifically for this program, with two positions supported by a Talent Ready Utah Workforce Initiative grant. The program will be housed in the renamed Department of Biological and Chemical Engineering, leveraging infrastructure from the existing ABET-accredited Biological Engineering program. To ensure sustainability, the department plans to assess course fees for lower-division classes and differential tuition for upper-division courses. However, chemical engineering labs are notoriously expensive to maintain, and while one-time equipment costs were covered by the grant, the long-term equipment refresh cycle for unit operations laboratories will require significant ongoing funding beyond standard tuition.

Structural and Programmatic Concerns

Unlike some engineering programs with high barriers to entry, this program allows any student accepted into USU to join the major, potentially broadening the pool of future engineers. The proposed departmental rebranding to Biological and Chemical Engineering is a logical structural move that avoids redundant administrative units while clearly signaling the new program's scope. The program adheres to the 120-credit standard, balancing high technical requirements with general education without exceeding USHE credit limits.

Equity, Access, and System Alignment

Currently, chemical engineering degrees in Utah are available only at the University of Utah and BYU. This proposal creates a public option in Northern Utah, significantly increasing geographical equity for students in Cache Valley and surrounding rural communities. USU avoids unnecessary duplication by strategically differentiating its curriculum—while the U of U focuses on combustion and BYU on coal-to-products, USU emphasizes biomass generation, green chemistry, and bioconversion of waste. The proposal identifies a critical local talent pipeline need, with \$436 million in industrial investments from companies like Schreiber Foods and Campbell Soup creating hundreds of jobs requiring chemical engineering expertise. The program is entirely in person, which is standard for lab-intensive engineering; however, USU should consider hybrid models for non-laboratory components to better serve students at regional campuses.

The proposal presents a well-differentiated, strategically positioned program that addresses a clear geographical gap in public higher education access while aligning with regional workforce demands. Two primary areas warrant attention:

1. developing a long-term funding strategy for the expensive equipment refresh cycles inherent to chemical engineering laboratories beyond the initial grant support; and
2. exploring hybrid delivery options for non-laboratory coursework to extend access to students at USU's regional campuses.

The significant faculty investment, innovative curriculum focusing on sustainability and AI-driven modeling, and FE exam graduation requirement are notable strengths that position this program as a modern alternative to existing offerings in the state. Overall, SUU supports the proposal and we wish you the very best as you seek final approval for this new degree program.

Camille Thomas
Assistant Provost
Southern Utah University

Provost's Office, University of Utah (cao@utah.edu)

Our faculty feedback indicates that while the intent of the curriculum aligns with national needs in energy engineering, the current proposal does not yet meet disciplinary or accreditation expectations due to insufficient specificity in required coursework. A major and nearly unanimous concern is the lack of clearly defined courses. Required courses are described only with placeholders (e.g., “Energy Engineering Focus Area Course”). How will these be chosen? Do they even exist? How will they fit with the technical electives, which have the same issues? There is overall concern that graduates would lack depth and a coherent skill set, undermining the credibility of the degree. Our faculty emphasized that clearly defined courses are essential for assessing rigor, alignment with ABET expectations, and comparability to peer programs.

The State of Utah appears to be funding the program at a level of \$2.1 million/year, so the financial resources seem adequate. Our faculty raised concerns that the proposed staffing model (9 new faculty for 12 courses) and associated hiring timeline are not well-aligned with instructional needs or workload norms, particularly given new USHE requirements. While institutional funding and approval for faculty lines appear to exist, our faculty questioned whether nine new faculty are justified for the BS program alone and whether the proposed hiring schedule is feasible. It is not clear that any existing faculty in the college are planning to be a focus of this degree program and that might help it gain momentum. 9 faculty should easily be able to teach the added courses (it is probably more than they need). No discussion of added labs and the needed funding is included in the document. The program should reassess its faculty deployment plan, clarify the instructional roles in terms of tenure-line versus lecturing faculty as that impacts hiring resources and timelines, and more clearly distinguish resources supporting undergraduate instruction from those intended for future graduate programs.

Our faculty identified several structural concerns. Chief among them is the overly general nature of the degree, which risks producing graduates without a clearly defined skill set. Transferability and curricular coherence may also be challenged if upper-division courses lack disciplinary grounding. To address this, the program should:

- ensure appropriate sequencing of foundational math, science, and engineering courses;
- evaluate whether stronger integration with traditional engineering disciplines is needed, potentially through structured pathways or required concentrations; and
- reassess supporting coursework (e.g., chemistry requirements) to ensure alignment with energy-sector applications. These steps will improve academic rigor, student mobility, and employer clarity.

These types of programs essentially already exist in other engineering disciplines. Essentially this is a rebrand with minimal additional courses. It is not clear how this proposal provides anything new. It also raises concerns about how students with the degree will be able to market themselves outside of the narrow engineering landscape. Our faculty noted concerns regarding the realism of enrollment and graduation projections, which appear mathematically inconsistent (80 graduates/year from a total of 120

majors). The program should revise these projections using conservative, data-driven assumptions aligned with historical trends at USU and peer institutions. The program should refine curricular details, clarify student outcomes, and strengthen alignment between stated goals and implementation plans before final approval. The UU Mechanical Engineering Industrial Advisory Board has clearly advocated against degrees of this type.

Mike Free

Materials Science & Engineering

Bruce Gale

Chair, Mechanical Engineering

Eric Eddings

Chair, Chemical Engineering

Harrison Kleiner, Utah State University

USU engineering provides the following response to UU's concerns:

We are grateful for the input received from our engineering colleagues at the University of Utah regarding the Energy Engineering department. The questions posed and the concerns raised by the faculty at the University of Utah highlight the difficulties in launching a new program that carries enormous expectations from industry and government alike. We are grateful for the opportunity to further explain the plan we have regarding this innovative and much-needed degree. The following is in response to the specific questions and concerns by the faculty and department heads at the University of Utah.

Technical Electives

The concern arose because of the lack of detail in the technical electives. Many of the details were not included because a) we were unaware there would be an interest and b) the list is dynamic and won't be complete until the new faculty are hired. However, there are enough courses currently offered or will be reactivated by the fall to form a core for the degree to be offered.

As you are aware, the faculty and administration in the College of Engineering at USU have spent the past 2 years meeting with industrial, governmental and academic representatives in the energy sector. Through our discussions, the interests that emerged are in electives categorized in three areas, a) Energy Policy & Security Electives, b) Energy Foundations Electives, and c) Energy Systems Focus Electives.

In the fall of 2026, the following courses in each of the elective categories will be available,

Energy Policy & Security Electives

CAI	5000	American National Security Framework
CAI	5400	Ethics and Emerging Technology
CAI	5010	Dynamics of Disruptive Technology
CAI	5020	Cybersecurity and the Citizen
CS	4460	Introduction to Cybersecurity

CS	5215	Computer Networks & Security
ENGR	5180	Energy Policy and Regulation

Energy Foundations Electives

MAE	5430	Advanced Thermodynamics
MAE	5450	Hybrid Energy
ECE	5110	Fundamentals of Electric Power Systems
ECE	5210	Introduction to Photonics & Devices
CEE	3670	Transport Phenomena in Bio-Environmental Systems
BENG	5500	Systems Biology Modeling
BENG	5630	Biofuels
GEO	3150	Energy in the Twenty-First Century
GEO	5420	Ore Deposits
CS	4460	Introduction to Cybersecurity

Energy Systems Focus

Electives

MAE	5370	Optimization for Engineers
MAE	5430	Advanced Thermodynamics
MAE	5450	Hybrid Energy
ECE	5110	Fundamentals of Electric Power Systems
ECE	5120	Introduction to Power Electronics
ECE	5150	Power Electronics for Electric Drive Vehicles
ECE	5160	Electric Vehicle Design Laboratory
ECE	5210	Introduction to Photonics and Devices
CS	4350	Applied Machine Learning
CS	4460	Introduction to Cybersecurity
CS	5215	Computer Networks and Security
CS	5710	Software Security
CEE	3670	Transport Phenomena in Bio-Environmental Systems
CEE	3780	Solid and Hazardous Waste Management
CEE	4000	Municipal Engineering
CEE	5009	Groundwater Systems Engineering I
CEE	5100	Infrastructure Evaluation and Renewal
CEE	5205	Transportation Data Analysis and Research Methods
CEE	5220	Traffic Engineering

CEE	5430	Groundwater Engineering
BENG	5500	Systems Biology Modeling
BENG	5630	Biofuels
BENG	5660	Environmental Quality Analysis
GEO	5420	Ore Deposits

These electives are sufficient to launch the degree. Additionally, the following elective courses will either be reactivated or created by Spring 2027 depending on the first cohort of faculty hired:

Energy Policy & Security Electives

ENGR 5190 Nuclear Reactor Policy

Energy Systems Focus Areas

ENGR 5100 Petroleum & Natural Gas

ENGR 5110 Foundations of Nuclear Engineering

ENGR 5120 Radiation & Radiochemistry

ENGR 5130 HVAC

ENGR 5140 Combustion Engineering

ENGR 5150 Solar & Geothermal Engineering

ENGR 5160 Energy Distribution Systems

ENGR 5170 Energy Storage

ENGR 5200 Mineral Processing

A revised four-year plan is attached that updates the elective categories and reflects the new USHE directives concerning general education and the limit of 120 credits.

- There is a concern that number of faculty does not match the required work. We will be submitting requests for graduate programs once all of the faculty have been hired. The mandate is also to deliver the degree to rural Utah, requiring faculty to be placed throughout the state.
- The curriculum presented meets the requirements for ABET accreditation according to the General EAC criterion. USU has a strong history in meeting and exceeding ABET accreditation standards. However, if others have spotted weaknesses in the proposed curriculum, we would be happy to know about it.
- Finally, the value, utility and attractiveness of the degree. Our meetings with the aforementioned stakeholders and with prospective students indicate a desperate need and desire for the BS degree in Energy Engineering. In our conversations specifically with faculty at the University of Utah we emphasized that rather than duplicating the efforts at the other universities we were seeking to compliment the work prompting Energy Engineering education. Indeed, the addition of 9 faculty and a BS degree seem insufficient to address the

energy engineering problems facing the intermountain west and the state of Utah. In our proposal we mention graduating up to 80 students a year out of an enrollment of 300-400 (the R401 listed 300-400 enrolled by year 5. We misunderstood the table as “new” enrollments. Thanks for pointing that out.).

We look forward to further collaboration with other USHE institutions as we launch the Energy Engineering program.

First Year Fall			First Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
MATH 1210 Calculus I	4		MATH 1220 Calculus II	4	QL
CHEM 1210 Chemistry I	4		PHYS 2210 Physics I	4	QI/BPS
CHEM 1215 Chemistry Lab	1		PHYS 2215 Physics I Lab	1	
ENGR 1010 Engineering Foundations	3		ENGR 1400 Computer Programming	4	
Breadth American Institutions	3	BAI	Breadth Life Science	3	BLS
	15			16	
Second Year Fall			Second Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
MATH 2210 Multivariable Calculus	3	QI	MATH 2250 Lin. Alg/ Dif. Eq	4	
ENGR 2010 Engr Mech. Statics	3		ENGR 2030 Engr Mech. Dynamics	3	
ENGL 2020 Professional Communication	3	CL2	ENGR 2140 Mech. Of Solids	3	
ENGR 2210 Electrical Circuits	3		MAE 2300 Thermodynamics I	3	
PHYS 2220 Physics II	4		MAE 2160 Material Science	3	
PHYS 2225 Physics II Lab	1		MAE 2165 Mat. Sci Lab	1	
	17			17	
Third Year Fall			Third Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
MAE 3420 Fluid Mechanics	3		MAE 3440 Heat Transfer	3	
ENGR 3080 Creativity and Communication in Design	3	CI	ENGR 3120 Thermal System Design	3	

CEE 3610 Environmental Management	3		Energy Foundations Elective (See List)	3	
ENGR 3100 Energy Systems	3				
ENGR 3105 Energy Systems Lab	1		ENGR 3600 Professional & Ethics in Energy Engineering	1	
ENGR 3110 Sustainable Energy	3		Breadth Social Science	3	BSS
	16			13	
Fourth Year Fall			Fourth Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
ENGR 4800 Engineering Design I	3	CI	ENGR 4810 Engineering Design II	3	
Energy Policy & Security Elective (See List)	3		Energy Engineering Focus Area (See List)	3	
Energy Engineering Focus Area (See List)	4		Energy Engineering Focus Area (See List)	4	
Breadth Humanities	3	BHU	Integrated DSS & DHU	3	Uni. Studies
	13			13	

END OF COMMENTS

**Utah System of Higher Education
R401 Program Proposal
New Full Program (AAS or higher)**

SECTION 1: PROGRAM INFORMATION

Institution

Department

College of Engineering

Proposed Award Name

Award Type - Please select only one

- ☐ Associate's Degree (including AAS degrees)
- ☒ Bachelor's Degree
- ☐ Master's Degree
- ☐ Doctor Degree

Will this proposal include emphases? (If no, leave unchecked and move to next item.)

- ☐ Yes, this proposal has emphases
- ☐ An emphasis is required to complete this program

----- For proposals with emphases, please note if any of the following attributes are different for a particular emphasis -----

Additional Departments

CIP Code (Provide a 6-digit CIP Code. Omit the period.): 14.4801

Award Acronym (ex. AAS, AA, BS, BA/BS, etc. Acronym field allows for 2 to 6 characters. Omit periods.) BS

Quantitative Literacy Course recommended for this program (for undergraduate programs only. Select one option.)

- ☐ MATH 1030 Quantitative Reasoning
- ☐ MATH/STAT 1040 Intro to Statistics
- ☒ MATH 1050 College Algebra
- ☐ Any QL course is acceptable
- ☐ Other (please list in Curriculum table)

Program Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☐ Entire program can be completed in person
- ☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
- ☐ Entire program can be completed Online
- ☒ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program (including emphasis if applicable; use whole numbers) 120

Maximum Credit Hours to Complete Program (including emphasis if applicable; use whole numbers) 120

Expected First Semester Students May Enroll in Program Fall

Expected First Year Students May Enroll in Program 2026

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description

Present a brief program description. (1-2 paragraphs.)

The Bachelor of Science in Energy Engineering is an interdisciplinary undergraduate program designed to prepare students to meet the complex and evolving energy needs of Utah and intermountain west. Based in engineering fundamentals, the program blends mechanical, electrical, biological, civil and chemical engineering with a strong focus on energy policy, environmental sustainability, and regional resource management. The degree program will be available state-wide with faculty members placed at the USU campuses in the Uintah Basin and at Price.

Students explore a broad range of energy systems, including renewable technologies, nuclear energy, and the development and optimization of carbon-based and natural gas energy sources. Emphasis is placed on balancing energy production with clean air initiatives and emissions reduction strategies critical to both environmental and public health in the region. The curriculum also includes specialized training in the exploration, processing, and responsible use of critical minerals essential to energy infrastructure and emerging technologies.

With a focus on the unique energy landscape of the Intermountain West—characterized by abundant fossil and renewable resources, growing energy demands, and proximity to national laboratories—graduates are well-prepared to lead in diverse sectors. Career pathways include energy production and management, environmental consulting, clean technology development, and advanced research, supporting a transition toward a more sustainable and resilient energy future.

Consistency with Institutional Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals (see Board policy R312 found at <https://ushe.edu> in the Board of Higher Education section under Policies) or, for "out of mission" program requests, the rationale for the request.

The Energy Engineering academic program aligns well with the mission at USU as the land grant university of the state and as a research university. The topic of energy engineering is also well within the role of the institution and the college of engineering.

Utah possesses abundant opportunities across the state for energy engineering positions. The opportunities for completing the BS degree will be available away from the Logan campus with faculty being located at the USU Eastern campus in Price, Utah and in Vernal, Utah.

Faculty will not only be responsible for preparing an energy engineering workforce but also in conducting research that supports the state's goals in improving the energy production, transmission and availability.

In the future the number of highly-skilled energy engineers coming from ABET-accredited universities, appears to be increasing. USU produces many well-trained engineers in mechanical, electrical, civil and biological engineering. By providing engineers in these majors the opportunity to earn a dual degree in energy engineering, the number of engineers trained in energy engineering can be ramped up fairly quickly.

SECTION III: NEEDS ASSESSMENT

Market Demand

Provide local, state, and/or national labor market data that speak to the need for this program. What business and industry sectors seek the knowledge base and skills graduates will offer? Are there known Utah employers? How many annual job openings are available? What wage will graduates earn? How strong is the employment sector for graduates of the program? Are numbers of job openings increasing? How does the median wage for these jobs compare to statewide median wage for all workers and/or for workers with the same education level?

NOTE: Occupational demand, wage, and number of annual openings information may be found at sources such as Utah DWS Occupation Information Data Viewer (jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do) and the Occupation Outlook Handbook (www.bls.gov/oco). Utah DWS Firm Find also provides Utah employer data (<https://jobs.utah.gov/jsp/firmfind/#/>).

Local/Regional Market Demand (include a short description to clarify the geographic parameters for this data)

“Energy engineer” as a job title is not always precisely coded in official statistics; many people doing energy-engineering work might be categorized under mechanical engineering, electrical engineering, systems engineering, environmental engineering, etc. So, tracking “energy engineering” demand directly is difficult.

There **is** national demand for energy engineering competencies, both in clean/renewable energy and in traditional energy sectors (natural gas, petroleum, nuclear), especially as systems change.

Many engineering roles in power generation, grid operations, renewables, energy efficiency, carbon capture, electrification, and transmission all require engineers with knowledge of energy conversion, materials, thermodynamics, environmental regulation, etc. Those are exactly the things an Energy Engineering degree emphasizes.

Because energy transitions require new infrastructure, retrofits, and cross-sector integration, the demand for engineers with holistic energy domain skills is growing.

In Utah / the Intermountain West, there are emergent and existing energy and resource firms (e.g. operators in natural gas, mining, geothermal startups) as well as energy research labs, plus public utility companies, which could absorb graduates.

State Market Demand

Graduates of an energy engineering degree bring a cross-disciplinary skill set (mechanical/electrical/chemical fundamentals; energy systems modeling; materials / critical minerals; emissions control; nuclear knowledge; resource extraction; grid integration). Some employer sectors that particularly value those capabilities include:

- **Electric utilities** (generation, transmission, distribution, grid modernization, decarbonization)
- **Renewable energy developers and operators** (solar, wind, geothermal, storage, hydrogen)
- **Oil & gas / natural gas companies** (especially as they manage transitions, capture carbon, optimize legacy infrastructure)
- **Engineering, procurement, and construction (EPC) firms** working on energy infrastructure, microgrids, carbon capture, etc.
- **Mining / mineral extraction & processing firms**, especially for critical minerals (e.g. lithium, rare earths, vanadium)
- **Nuclear power / small modular reactor (SMR) developers & vendors** specifically working on applications for direct heating and cooling applications including data centers.
- **Consulting firms** in energy, environmental, climate, and regulatory compliance (air quality, lifecycle analysis)
- **Government agencies, utilities commissions, regulatory bodies, and policy organizations**
- **National laboratories and energy research centers** (e.g. INL)
- **Manufacturers of energy hardware / components** (e.g. turbines, PV, control systems, energy storage)

National Market Demand

The U.S. energy sector employs roughly **8.3–8.5 million people** as of 2023-2024. This includes many roles: generation, transmission & distribution, storage, efficiency, fuels, vehicles/components, etc.

Within that large pool, a fraction are engineers; many are technicians, operators, support staff, etc. But the overall size signals a large, complex system with many engineering needs.

The employment sector for graduates is strong: graduates are not solely dependent on a niche “energy engineer” title; their skills are broadly relevant. The number of job openings is steady and the incremental premium for energy specialization may increase over time. Trend signals (e.g. clean energy growth, regional adoption) suggest upward momentum. Even if “energy engineer” is not a discrete occupational category in many data sets, industries needing graduates (utilities, renewables, infrastructure, mining, policy, consulting) are growing and actively hiring engineers.

Student Demand

Provide evidence of student interest and demand that supports potential program enrollment and your plan for attracting under-represented student groups. NOTE: Student enrollment projections will be called for in the finance section of this proposal.

At Utah State University, existing engineering students have shown **growing interest in sustainability, energy systems, and climate technology**, particularly within the Mechanical and Electrical Engineering programs. Adding a dual-degree option would capitalize on this existing interest and provide a **value-added academic pathway**.

Students in all engineering majors at USU have shown an increase in energy-related topics with increased enrollment in elective course such as ECE 5110 Power Systems, BENG 5640 Biofuels and MAE 5450 Hybrid System.

Students remotely located from the state's universities have a particular interest in energy engineering related opportunities. These students will be able to access the engineering education in the locations where the jobs are located. This will not only encourage traditional students coming out of high school but also include non-traditional students that are currently working professionals.

Utah State University is well-positioned to lead in energy education in the intermountain west. By offering an **Energy Engineering BS with dual-degree options and providing the opportunity to earn the degree at remote locations**, the university can:

- Meet both **student interest** and **employer demand**,
- Enhance **interdisciplinary training** aligned with the future of energy,
- And produce graduates ready to solve pressing energy challenges—from Utah to the world.

Similar Programs

List similar programs offered elsewhere in the USHE, the state, or Intermountain Region. In comments field, describe unique characteristics of proposed program to similar program(s), if any.

Institution	Award Type	Program Award Name	Link to Program	Comments
Weber State University	BS	Energy Engineering	https://www.weber.edu/majors/energy-engineering.html	

Transfer Check

For transfer associate degrees, provide information on bachelor degrees that graduates can transfer into; at end of proposal form, attach at least one draft articulation agreements with a 4-year program. For 4-year degrees, list 2-year degrees that may transfer into the degree, if any. Use comments field to unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments

Collaboration with and Impact on Other Degree-granting or Technical College USHE Institutions

Assess the impact the new program will have on other USHE institutions. Describe any discussions with other institutions pertaining to this program. Include any collaborative efforts that have taken place. Indicate if the program will be delivered outside of designated service

area; provide justification. Service areas are defined in Board policy R315 found at <https://ushe.edu> in the Board of Higher Education section under Policies.

Significant opportunities for collaboration and resource integration have been identified within the Utah System of Higher Education (USHE). Researchers at the University of Utah are currently leading initiatives in nuclear energy generation, and preliminary discussions have highlighted areas for potential joint research and curriculum alignment. Although Brigham Young University is a private institution, its faculty members are conducting complementary research, and coordination efforts have already been established between their teams and Utah State University's leadership.

At the applied and technical education level, workforce-aligned programs across the state are contributing essential expertise. For example, the trades programs in Price, Utah, are actively training electricians, automation technicians, plumbers, welders, and other skilled workers essential to the energy sector. Leadership from these programs is directly engaged in the development of the proposed Energy Engineering degree to ensure a cohesive educational pathway that addresses statewide workforce needs. Bridgerland Technical College, another USHE institution, offers automation and controls certificate programs that will integrate into this broader, holistic strategy for energy production education. One of the founding faculty members of the proposed program currently serves on Bridgerland's advisory board, ensuring ongoing collaboration and alignment.

As the demand for energy production capacity grows, the need for professionals in energy generation, transmission, and thermal systems integration will correspondingly increase. The next wave of demand will include infrastructure designers, engineers, and technical specialists, followed by a significant expansion in skilled trades—machinists, fabricators, welders, electricians, plumbers, and construction professionals—needed to realize new projects. Once facilities are operational, a substantial number of controls technicians will be required to configure, program, and commission plant systems. Collectively, these developments underscore the necessity of a coordinated, statewide response to workforce development in the energy sector. The proposed Energy Engineering program at Utah State University is positioned to serve as the central hub for this integrated effort, connecting research, technical education, and industry to meet Utah's growing energy workforce needs.

Accreditation

If the program will seek special professional program-level accreditation, identify the accrediting body, and project timeline and anticipated costs for initial approval, and a date for accreditation review cycle.

The BS in Energy Engineering will pursue accreditation through the Accreditation Board for Engineering and Technology (ABET), the nationally recognized body for engineering and applied science programs.

Projected Timeline

- Fall 2026: First student cohort begins
- Fall 2027: Begin ABET pre-accreditation process and data collection
- Spring 2030: First graduates (earlier for dual majors)
- 2029–2032: Prepare for full ABET review
- 2033: Target for full accreditation

Estimated Costs

- Initial accreditation: \$10,000–\$15,000 (fees, evaluator travel, self-study reports)
- Additional costs: Faculty time, administrative support, and potential curriculum or facility updates

Accreditation supports the program's commitment to academic quality and ensures graduates are eligible for licensure and competitive engineering careers.

External Review

Describe how external consultants, program advisory committee members, industry experts, or other non-institutional stakeholders were involved in the development of the proposed program. For programs that address specific industry or occupational needs, indicate the extent to which the applicable industry representatives have provided input.

The COE formed an industrial advisory board in the spring of 2024. The board met in Salt Lake City and the following members attended and provided input.

1. *Jake Barker*, Director of Transmission and Distribution Planning, PacifiCorp
jake.Barker@PacifiCorp.com
2. *Michael Clark*, Advisory Research and Design Engineer – Idaho National Laboratory
michael.clark@inl.gov
3. *Dana Dean*, Deputy Division Director Division of Oil, Gas, Mining – State of Utah
danadean@utah.gov
4. *Kevin Emerson*, Building Efficiency and Decarbonization, Utah Clean Air
kevin@utahcleanenergy.org
5. *Chris Hayter*, President & COO – Hi Tech Solutions
Chrishayter@htsnuclear.com
6. *Rohit Nair*, Director of Engineering Standards and Grid Modernization, PacifiCorp
Rohit.nair@pacifiCorp.com
7. *Brian Somers*, Utah Mining Association
mining@utahminning.org
8. *Mick Thomas*, Director of Oil, Gas, Mining – State of Utah
mickthomas@utah.gov

In the past year, members of the faculty from the COE at USU have consulted with government agencies, faculty from other universities and industrial representatives. The following is a partial but representative list.

Dr. Laura Nelson, INL
Dr. Kody Powell, U of U.
Dr. Jeremy Pearson, Governor's office of Energy Development
Dr. Richard Boardman, National Technical Director at INL
Dr. Seth Lyman, USU Vernal
Robert Peterson, USU Vernal
Dr. Kristian Olsen, USU Eastern
Dr. Zac Konakis, USU Eastern,
John Houston, Intermountain Electronics
Bryan Hanna, plant manager at Westinghouse Zirconium
Emily Lesofski, Utah Office of Energy Development
Dr. Michael Stoddard, Director of Fuel Cycle & Reactor Chemistry at Natura Resources

Meetings with each of these people have occurred in most cases at their place of business. The COE has consulted with a wide variety of companies and individuals within the energy sector. Additionally, the COE has circulated potential research topics and course offerings with the intent to gather feedback on the direction of this program. Industry input has played an important role in shaping the direction of this program.

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program. List all courses, including college-level prerequisites (and pre-major placements or condition) and new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences). Indicate new courses with an X in the appropriate columns. The total number of credit hours should reflect the number of credits required to be awarded for the degree. For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the Program Curriculum Narrative text field.

INSERT ROWS IN TABLE BELOW AS NEEDED

College Level Prerequisite Courses (list courses students commonly must take to be able to enroll in the program's courses listed below)

Course Prefix & Number	New Course?	Course Title	Credit Hours
MATH 1210	No	Calculus I	4
MATH 1220	No	Calculus II	4
MATH 2210	No	Multivariable Calculus	3
MATH 2250	No	Linear Algebra and Differential Equations	4
PHYS 2210	No	Physics for Scientists & Engineers I	4
PHYS 2215	No	Physics for Scientists & Engineers Lab I	1
CHEM 1210	No	Principles of Chemistry I	4
CHEM 1215	No	Chemical Principles Laboratory I	1
ENGR 1400	Yes	Fundamentals of Computer Programming	3
ENGR 1010	Yes	Foundations of Engineering	3

General Education Courses (list specific courses if recommended for program; otherwise, list "any QL" of "any Humanities")

Course Prefix & Number	New Course?	Course Title	Credit Hours
Breadth American Institutions	N	Any American Institutions	3
Breadth Life Science	N	BIOL 1620	3
Breadth Humanities	N	Any Humanities	3
Breadth Creative Arts	N	Any Creative Arts	3
Breadth Social Sciences	N	Any Social Sciences	3

Program Required Courses (list "and/or" conditions and reflect such conditions in credit hours)

Course Prefix & Number	New Course?	Course Title	Credit Hours
MATH 1210	N	Calculus I	4
MATH 1220	N	Calculus II	4
MATH 2210	N	Multivariable Calculus	3
MATH 2250	N	Linear Algebra/Differential Equations	4
CHEM 1210	N	Chemistry I	4
CHEM 1215	N	Chemistry I Lab	1
PHYS 2210	N	Physic I	4
PHYS 2215	N	Physics I Lab	1
ENGR 1010	Y	Engineering Exploration: Mission to Mars	3
ENGR 1400	Y	Engineering Computer Programming	4
ENGR 2010	N	Statics	3
ENGL 2010 or ENGL 2020	N	Inter. Writing or Professional	3

		Communications	
ENGR 2030	N	Dynamics	3
ENGR 2140	N	Mechanics of Materials	3
ENGR 2210	N	Electronics	3
CEE 3610	N	Environmental Management	3
ENGR 3080	N	Technical Communications	3
MAE 3440	N	Heat Transfer	3
ENGY 4800	Y	Capstone I	3
ENGY 4810	Y	Capstone II	3
ENGY 4XXX	Y	Energy Engineering Focus Area Course	3
ENGY 4XXX	Y	Energy Engineering Focus Area Course	3
ENGY 4XXX	Y	Energy Engineering Focus Area Course	3
ENGY 4XXX	Y	Energy Engineering Focus Area Course	3

Program Elective Courses (list “and/or” conditions and reflect such conditions in credit hours)

Course Prefix & Number	New Course?	Course Title	Credit Hours
5XXX	Y	Energy Engineering Tech Elective	3
5XXX	Y	Energy Engineering Tech Elective	3
5XXX	Y	Energy Engineering Tech Elective	3
5XXX	Y	Energy Engineering Tech Elective	3

Emphasis Courses (duplicate this table if there are multiple emphases)

Name of Emphasis

Course Prefix & Number	New Course?	Course Title	Credit Hours

Degree Map

Provide a program Degree Map, also referred to as a graduation plan (for undergraduate programs ONLY). This map provides a suggested semester-by-semester class schedule for a full-time student that includes prefix, number, title, and semester hours.

Enter the degree map in the table below. If a specific general education course is required, list course and include GE fulfilled. If the program does not require a specific general education, write "Any Fine Art" or "Any QL" and check GE fulfilled.

INSERT ROWS IN TABLE BELOW AS NEEDED

For General Education courses, use the following acronyms or leave blank if not GE:

C Written Communication / QL Quantitative Literacy / AI American Institutions /
FA Fine Art / H Humanities / LS Life Science / PS Physical Science / SS Social Science

First Year Fall			First Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
MATH 1210	4		MATH 1220	4	
CHEM 1210	4		PHYS 2210	4	PS
CHEM 1215	1		PHYS 2215	1	
ENGR 1010	3		ENGR 1400	4	
Breadth American Institutions	3	AI	Breadth Life Science	3	
	15			15	
Second Year Fall			Second Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
MATH 2210	3	QL	MATH 2250	4	
ENGR 2010	3		ENGR 2030	3	
ENGL 2010 or ENGL 2020	3	C	ENGR 2140	3	
BENG 2330 or CEE 2240 or ECE 1410	3		BENG 2400 or MAE 2300	3	
CHEM 2300 or GEO 1110 or PHYS 2220	3-4		ENGR 2210	3	
CHEM 2315 or GEO 1115 or PHYS 2225	1				
	16			16	
Third Year Fall			Third Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
BENG 3500 or CEE 3500 or ECE 3620 or MAE 3420	3		MAE 3440	3	
BENG 1200 or CEE 2270 or MAE 1200	2		Energy Engineering Focus Area	3	
CEE 3610	3		Energy Engineering Focus Area	3	
ENGR 3080	3		Emphasis Area Course	3	
CEE 3160 or MAE 2160	2		Breadth Social Science	3	SS
CEE 3165 or MAE 2165	1				
Breadth Creative Arts	3	FA			
	17			15	
Fourth Year Fall			Fourth Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
Design I	3		Design II	3	
Energy Engineering Focus Area	3		Emphasis Area Course	3	
Energy Engineering Focus Area	3		Energy Engineering Tech Elective	3	

Energy Engineering Technical Elective	3		Energy Engineering Tech Elective	3	
Breadth Humanities	3	H	Depth Humanities Creative Arts	2	
			Depth Social Science	3	
	15			17	

Program Curriculum Narrative

Describe any variable credits as well as internships, clinicals, or other external learning experiences. Include additional curriculum information that differentiates this program's curriculum such as mandatory summer terms, accelerated schedule options or paths for part-time students.

The energy engineering industrial and government affiliates have encouraged opportunities for internships. It is anticipated that students may choose an internship and receive technical elective credit for their experience.

Program Admission Requirements

List selective admission requirements specific to the proposed program. Describe cohort-driven admissions, if applicable.

Students accepted to the university as freshman are also accepted into the energy engineering program.

Program Graduation Standards and Number of Credits

Provide graduation standards. Include standards specific to the program that are beyond the institution's standard graduation requirements. Provide justification if number of credits exceeds credit limit for this program type described in R402-6 Table 1, which can be found at <https://ushe.edu> in the Board of Higher Education section under Policies.

A BS degree may be obtained with a minimum of 120 semester credits. The general education requirements of the university are also required to obtain a BS degree in Energy Engineering. A minimum GPA of 2.80 must be maintained to complete the BS degree.

SECTION V: INSTITUTION, FACULTY, AND STAFF SUPPORT

Institutional Readiness

How do existing administrative structures support the proposed program? Identify new organizational structures that may be needed to deliver the program. Will the proposed program impact the delivery of undergraduate and/or lower-division education? If yes, describe how?

The BS degree will be administered under the direction of the college. As noted, the Utah State Legislature has funded nine faculty positions for the program. Also, a director of the energy engineering degree and program will be selected. Searches for these positions are active. In the first year 5 faculty will be hired and the subsequent year 4 more faculty will be hired. Several of the faculty will reside on the campuses in Vernal and at USU Eastern in Price.

Student Advisement for this Program

Describe how prospective and current students in the proposed program will be advised. Does the sponsoring department have advisors or are students referred to campus advising? Are there advisements for part-time student participants?

The COE at USU advises all majors in the college. The number of advisors is commensurate with the number of students in the program. State-wide advising will also participate in advising students at locations outside of the Logan campus.

Professional Licensure

Will graduates of this program need to seek certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

Students may begin the process of becoming Professional Engineers (PE) by completing the Fundamentals of Engineering exam (FE) at the conclusion of their BS degree. USU has a stellar history of students passing the FE with over 90% passing on their first attempt.

Library and Information Resources

Describe library resources students will need to complete this program, if any. Describe the library resources the institution already possesses. Describe new library resources to be acquired. Identify additional costs to support library and information resources needs in the finance table.

The USU library currently has excellent resources including access to the journals and instructional books to supply the energy engineering program with the essential resources for success.

Facility (Space) / Material Needs

Describe special space or equipment needs for program, if any. Describe the space and technology needs the institution already possesses. Describe new space or technology to be acquired.

The College of Engineering (COE) at Utah State University (USU) currently provides laboratory facilities within each of its academic departments, including Biological Engineering, Civil Engineering, Electrical Engineering, Mechanical and Aerospace Engineering, and the School of Computing. These labs are equipped with technology and instrumentation that support research and teaching in areas such as materials testing, wind energy, hydrology, instrumentation and sensors, and biological and chemical processes. Several existing research centers within the COE also support energy-related research and education. For example, the Utah Water Research Lab (UWRL) conducts scale-model testing in hydrology and hydraulics—key areas in energy production that often rely on substantial water resources.

USU also houses the recently established Sustainable Waste-to-Bioproducts Engineering Center (SWBEC), which is dedicated to developing biofuels such as biodiesel and biomethane from algae grown in engineered systems. SWBEC offers significant opportunities for hands-on learning and research in sustainable energy technologies. The Advancing Self-sufficiency through Powered Infrastructure for Roadway Electrification (ASPIRE) Center is another key asset. This interdisciplinary center supports research, development, and deployment of electrified transportation infrastructure, including plug-in and wireless charging systems integrated into roads, parking structures, and smart grid systems. ASPIRE also provides internship and employment opportunities for both undergraduate and graduate students, and actively collaborates with partners from industry, government, and the community across disciplines such as engineering, social sciences, policy, and business.

Additional laboratory and teaching spaces are available at USU Eastern and the USU Vernal campus. While these sites offer some advanced equipment, the range of technology is more limited compared to the main Logan campus.

As the program grows, there may be a need to expand specialized lab space and acquire additional technology, particularly in emerging areas of energy systems, transportation electrification, and sustainable bioengineering.

Current and New Department Faculty / Staff Information

Identify current # of department faculty / staff (headcount) to be involved with the program and faculty / staff to be hired along with their qualifications and tenure status. Include additional cost for these faculty / staff members in budget narrative and table.

In the Expense Narrative field later in the proposal, please indicate when new faculty and staff hires will occur in year 1 or a subsequent year of the program.

Current Faculty/Staff					Faculty/Staff to be Hired				
<i>For faculty: academic or industry credential held:</i>	# Fulltime	# Parttime	# Tenure or Tenure-Track	# Non-Tenure Track	# Fulltime	# Parttime	Est. % of time committed to new program	# Tenure-Track	# Non-Tenure Track
Doctorate Degrees		6	5	1	9		100	9	
Masters Degrees									
Bachelor Degrees									
Associates Degrees									
Industry Credential									
Staff					1		100		
Teaching/Grad Assistants					10		100		
TOTAL	0	6			20	0			

Faculty

Describe faculty development activities that will support this program. Will existing faculty/instructors, including teaching/graduate assistants, be sufficient to instruct the program or will additional faculty be recruited? If needed, provide plans and resources to secure qualified faculty. The narrative should be consistent with the budget and faculty tables.

The faculty are expected to secure funding through federal agencies such as the DOE and private industry to perform research to the benefit of the state of Utah and the nation. It is anticipated that the faculty will form collaborative agreements with INL and other federal and state agencies.

In addition to the nine faculty that will be hired from the state funding there are currently 6 other faculty that are working in the energy engineering field. The faculty are teaching courses that support the energy engineering objectives. They are also conducting research and securing funding that align with the mission of the energy engineering program.

Staff

Describe the staff development activities that will support this program. Will existing staff such as administrative, secretarial/clerical, laboratory aides, advisors, be sufficient to support the program or will additional staff need to be hired? If needed, describe the circumstances such as growth in students in the program, that will signal the additional hires. Provide plans and resources to secure qualified staff, as needed.

An administrative assistant will be employed to support the director and faculty.

SECTION VI: PROGRAM EVALUATION

Program Assessment

Describe program academic and professional goals. Identify program performance goals. Describe the system of assessment to be used to evaluate program success in meeting performance goals.

The proposed Energy Engineering program at Utah State University is designed to address Utah's evolving energy landscape by preparing graduates with the technical expertise, professional competencies, and real-world experience necessary to lead in both conventional and renewable energy sectors.

Academic and Professional Objectives

The program aims to deliver a rigorous, applied engineering education that equips students to meet statewide and national energy workforce needs. Professional goals include preparing students to pass the Fundamentals of Engineering (FE) exam, succeed in multidisciplinary teams, and contribute meaningfully to Utah's energy industry through innovation and ethical practice.

Program Performance Goals

- **ABET Accreditation** by 2033, with pre-accreditation preparation beginning Fall 2027.
- **Student Success Metrics:** 80% retention rate; 90% job placement within six months of graduation.
- **Enrollment Targets:** 80 graduates annually by year five; 300–400 total enrollment long-term.
- **Licensure Readiness:** All students prepared to pass the FE exam before graduation.
- **Work-Based Learning:** Industry-sponsored capstone projects, internships, and research partnerships embedded in the curriculum.

Assessment and Continuous Improvement

The program will implement a structured assessment system aligned with ABET standards to ensure continuous quality and relevance:

- **Student Learning Outcomes** evaluated through coursework, labs, projects, presentations, and conference participation.
- **Capstone Design Sequence** (ENGY 4800/4810) used to assess practical skills in design, communication, teamwork, and ethics.
- **Curriculum Oversight** by the Undergraduate Curriculum Committee, with input from an active Industrial Advisory Board.
- **Employer Feedback** gathered via alumni and industry surveys to assess workforce preparedness.
- **Ongoing Documentation** supports both accreditation and data-driven program enhancements.

This outcomes-focused approach ensures the Energy Engineering program aligns with Utah's higher education goals, supports workforce development, and maintains high academic standards.

Student Standards of Performance

List the program learning outcomes including standards, competencies, and marketable skills students will have achieved at the time of graduation. How will student attainment of program learning outcomes be

assessed/evaluated? How will student attainment of professional competencies be assessed/evaluated?

Program Learning Outcomes and Assessment

Graduates of the Energy Engineering program will demonstrate the following learning outcomes aligned with ABET standards and workforce needs:

- **Technical Competency:** Apply principles of thermodynamics, fluid mechanics, heat transfer, and energy systems design.
- **Problem Solving:** Identify, formulate, and solve complex engineering problems using modern tools and practices.
- **Design Skills:** Design energy systems that meet specified needs with consideration for sustainability, safety, and economic factors.
- **Professional Communication:** Communicate effectively with diverse audiences through written, oral, and graphical formats.
- **Teamwork:** Function effectively on multidisciplinary teams, demonstrating leadership and collaboration.
- **Ethics and Responsibility:** Recognize ethical and professional responsibilities and make informed decisions in engineering contexts.
- **Marketable Skills:** Proficiency in data analysis, energy modeling software, project management, and applied research.

Assessment of Learning Outcomes

Student attainment of learning outcomes will be evaluated through:

- Performance in core coursework, lab reports, and exams.
- Completion and evaluation of the senior capstone design project (ENGY 4800/4810).
- Presentations, technical writing assignments, and professional engagement (e.g., conferences, internships).
- FE exam pass rates and employer feedback via post-graduation surveys.

Assessment of Professional Competencies

Professional skills—including communication, teamwork, adaptability, and leadership—will be assessed through:

- Team-based design projects and peer evaluations.
- Industry-sponsored internships and capstone collaborations.
- Faculty assessments of presentations and written deliverables.
- Feedback from industry partners and the Industrial Advisory Board.

This integrated evaluation system ensures students graduate with both the technical expertise and professional competencies required to succeed in Utah's energy sector and the broader engineering workforce.

SECTION VII: PROJECTED PROGRAM ENROLLMENTS & FINANCE

Three Year Projection Student Participation

Provide projected enrollment and information on related operating expenses and funding sources. Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty and staff as described in the faculty section of this proposal. Project five years' enrollments and graduates. Note: If the proposed program is an expansion of an existing program, present several years enrollment trends by headcount and/or by student credit hours that justify expansion.

NOTE: Highlighting blue cells in the table below and pressing f9 on your keyboard will auto calculate the cell's value.

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
Student Data						
# Majors in Department						
# Majors in Proposed Program		10	20	40	100	120
# Graduates from Department						
# Graduates in New Program				15	40	80
Department Financial Data						
Project additional expenses associated with offering new program. Account for new hires as stated in "Current and New Department Faculty / Staff" table.	Department Budget					
	Year Preceding Implementation	Year 1	Year 2	Year 3		
	(base budget)	Addition to base budget for new program(s)				
EXPENSES - nature of additional costs required for proposed program(s)						
List salary and benefits for additional faculty and staff each year the positions will be filled. Ex: if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the one year.						
Personnel (1)	123000	1,000,000	2,100,000	2,100,000		
Operating Expense (2)		250,000	200,000			
Space Needs and Utilization						
Other		400000	800000	600000		
TOTAL Program Expenses		1,650,000	3,100,000	2,700,000		
TOTAL EXPENSES	123000	1,773,000	3,223,000	2,823,000		
FUNDING - source of funding to cover additional costs generated by proposed program(s)						
Describe internal reallocation using "Existing Funding Source Narrative" following this table. Describe new sources of funding using "New Revenue Narrative" on the following page.						
Internal Reallocation						
Appropriation						
Special Legislative Appropriation	2550000	2100000	2100000	2100000		
Grants and Contracts			200000	500000		
Special Fees						
Tuition		45000	90000	180000		
Differential Tuition (3)		7500	15000	30000		
PROPOSED PROG FUNDING		2152500	2405000	2810000		
TOTAL DEPT FUNDING	2550000	2152500	2405000	2810000		
DIFFERENCE						
Funding - Expense	2427000	379500	-818000	-13000		

(1) faculty and staff salary and benefits

(2) equipment, travel, resources

(3) requires UBHE approval

Expense Narrative

Describe expenses associated specifically with the proposed program. Please indicate in which year(s) new faculty and staff hires for the program will occur.

The 9 new faculty will be hired over the calendar year of 2026. The first 5 will be hired in the early part of 2026 and after their hire the final four will be hired with the advice of the first hires. Each faculty will likely require a startup package to get the program going, which would fund equipment, grad students, and more. There will also be one staff member hired to support the program.

Existing Funding Sources Narrative

Describe what internal reallocations, if applicable, are available and any impact to existing programs or services.

The state legislature funded the Energy Engineering program in the spring of 2024 with an on-going fund of \$2.1M. The state also funded a one-time funding of approximately \$450,000. Also, several of the existing faculty in the COE and in other colleges on campus will be teaching courses to support the educational goals.

New Revenue Narrative

Describe new funding sources and plans to acquire the funds. Does the institution anticipate assessing students course-fees or program-based fees?

The faculty are expected to seek external funding to support research in energy engineering including undergraduate and graduate researchers. The college does not collect course fees for lower division courses but does collect a differential tuition that is used to support the educational mission of the college. The entire differential tuition is returned to the students in the form of course materials and supports for the courses in which they are enrolled.

SECTION VIII: ADDITIONAL DOCUMENTATION

Feedback and discussion

Add a comment in the discussion of this proposal:

--

Provide draft articulation agreement for transfer associate degrees and/or additional documentation such as letters of support from advisory groups, employers, or published studies as separate documents. Please include institution acronym and name of proposed program in the title of the document.



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

MEMORANDUM

TO: Utah State University Board of Trustees
FROM: Paul Barr, Executive Vice Provost
DATE: April 29, 2026
RE: Full Program: Master of Geographic Information Science and Technology
Department of Environment and Society
S.J. & Jessie E. Quinney College of Agriculture and Natural Resources

In accordance with [Utah Board of Higher Education Policy R401](#), the Department of Environment and Society, in the S.J. & Jessie E. Quinney College of Agriculture and Natural Resources, proposes offering a Master of Geographic Information Science and Technology.

This degree is designed to formalize existing certificate coursework into a professional master's pathway that provides advanced training in Geographic Information Science, remote sensing, and geospatial artificial intelligence through a primarily online program.

On March 27, 2026, the Board of Trustees Research and Academic Approval Committee reviewed the proposal and recommended it for full board approval.

The President and Provost endorse the proposal and respectfully request approval from the full Board.

Attachments:

QANR-ENVS-Master of Geographic Information Science and Technology-Full Program





UTAH SYSTEM OF
HIGHER EDUCATION

MEMORANDUM

February 2, 2026

Tessa White
Board of Trustees Chair
Utah State University
1400 Old Main Hill
Logan, UT 84322

Dear Chair White,

Peer Review Report and Commissioner's Office Assessment

Pursuant to Utah Code 53H-3-603(5)(b)(ii), below is the commissioner's office assessment and peer review report for the proposed Master of Science in Geographical Information Science and Technology to be considered by the Utah State University Board of Trustees in an upcoming meeting.

Master of Science in Geographical Information Science and Technology

The Department of Environment and Society proposes a 30-credit online Master of Science in Geographical Information Science and Technology (GIST). This professional master's program is designed as a career-ready and career-advancement degree, rather than a research-focused program. The proposed degree builds on the department's existing post-baccalaureate certificates in Geographic Information Science and Remote Sensing & Geospatial Artificial Intelligence, the latter of which has experienced low enrollments. Proposers anticipate that elevating the credential to a full master's program, along with relocating it to a new college within the university, will strengthen visibility and increase enrollment. The program requires no new courses, faculty, or significant financial resources, making it a cost-efficient and structurally feasible addition to the university's graduate offerings.

CIP Code Classification

The proposers have designated CIP Code 30.7001 for this program. However, in conducting the labor market analysis, the USHE Chief Economist recommends that Utah State University instead classify the program under CIP Code 45.0702, which she believes more accurately reflects the program's emphasis on the scientific foundations of Geographic Information Science. Utah State University is already authorized to offer degree programs within this academic classification under Board Policy R402.

Peer Review

In accordance with Utah Board of Higher Education (UBHE) policy, the proposal underwent peer review by members of the academic community within the Utah System of Higher Education (USHE). Feedback was received from the Commissioner's Office, Southern Utah University, Weber State University, and the University of Utah.

Staff in the Commissioner's Office note that the proposers anticipate 10 students in the first year and 30 students by year five. Given the historically low enrollments in the *Remote Sensing Geospatial AI* certificate, whose courses significantly overlap with the proposed curriculum, staff question whether these projections may be overly optimistic. The proposal does not clearly explain the substantive changes or improvements that would lead to stronger enrollment in the new master's program. Additionally, the proposal does not address target student populations or outline a marketing or recruitment strategy, leaving uncertainty about how the program intends to attract and retain students.

Weber State University suggest that the program could be strengthened by adding a course focused on spatial statistical analysis and modeling, which they believe would enhance the program's technical rigor and appeal.

The University of Utah point out an oversight in the proposal regarding existing programs in the state since they already offer a professional Master's in Geospatial Information Science, and express concern that introducing another MSGIS program in Utah may negatively affect their enrollments.

Labor Analysis from the USHE Chief Economist

As required for all proposed master's degrees, a specialized labor market analysis was conducted by the USHE Chief Economist. Based on her review, she concludes that this is a high-yield degree leading to a four-star occupation with strong employment opportunities for graduates.

Commissioner's Office Recommendation

The Commissioner's Office has determined this proposal is ready for consideration by the Utah State University Board of Trustees. If the trustees approve this program, the Chief Academic Officer will notify our office of your actions, and a notification will be sent to the Utah Board of Higher Education.

Sincerely,



Geoffrey Landward
Commissioner of Higher Education

CC: Brad Mortensen, President
Larry Smith, Provost and Chief Economic Officer
Harrison Kleiner, Associate Vice Provost for General Education
Janalyn Brown, Board Secretary

Attachment: Peer Review Report

Utah State University
Master of Science in Geographical Information Science and Technology
Peer Review Council Written Comments
January 2025

Steve Hood, Commissioner's Office

The Department of Environment and Society proposes a 30-credit, online Master's of Science in Geographical Information Sciences and Technology degree. This professional master's program is intended to be a job-ready or job-enhancement program rather than a research-based degree. The program builds on existing post-baccalaureate certificates in Geographic Information Science and Remote Sensing Geospatial Artificial Intelligence (which has had very low enrollments). The proposers are hoping the new program, coupled with moving the program to a new college home within the University will bolster enrollments.

The degree requires no additional courses, staffing, or significant expenses.

The proposers believe the program will have ten enrollments in the first year, and by year five have 30 students enrolled. We are wondering, given the low enrollments in the Remote Sensing Geospatial AI certificate, if this number is overly optimistic. The curriculum of the proposed program seems to draw heavily from some of the same courses as the certificate program that is under enrolled. We are wondering if there are other changes afoot that will help the Department overcome this deficit in enrollment? What will change with the master's program that will result in higher enrollments? There is no discussion in the program as to where students will be coming from and how the Department hopes to market the program.

Proposers have selected CIP Code 30.7001 to classify this program. This is an academic classification and Utah State University is authorized in Board Policy R402 to offer degree programs in this academic area.

Master's degree proposals require special labor analysis to be completed by the Chief Economist at the Utah System of Higher Education. When she has completed her study, she will send her analysis to our office and we will share her findings with the proposers and the Board of Trustees at Utah State University.

Thank you for this proposal.

Camille Thomas, Southern Utah University

Colleagues,

I shared the proposal with my colleagues here at SUU. The following feedback was provided.

Curriculum Standards and Faculty Assessment

The program is efficiently designed by stacking two existing online post-bachelor's certificates: the Geographic Information Science certificate and the more advanced Applied Remote Sensing and Geospatial Artificial Intelligence (GeoAI) certificate. By combining these certificates with additional application credits, the 30-31 credit curriculum meets standard rigor for a professional master's degree. The curriculum is explicitly designed to be comparable to other advanced professional GIS programs nationally, focusing on modern tools like GeoAI to meet workforce demands. The program is housed within the Department of Environment and Society and leverages existing faculty who already deliver the foundational certificates and the related Master of Natural Resources program.

Resource Adequacy and Future Needs

The proposal requires no new expenses or funding to launch. Sustainability is built into a revenue-sharing model with USU Online, where generated revenues will support program growth and additional course sections as enrollment increases. Costs for specialized software licenses are covered through course fees, and administrative support is partially funded by existing differential tuition from the MNR program. Unlike proposals highlighting challenges with adjunct pay or requesting high starting salaries, this represents a highly efficient use of existing resources and grant-funded development through the Talent Ready Utah Deep Technology grant.

Structural and Programmatic Concerns

The program provides a clear, incremental pathway for professionals to advance from a certificate to a full master's degree without redundant coursework. The transition of the GIS certificate into the ENVS department ensures all program components are under unified administrative structure, facilitating smoother student advising and course scheduling. As a professional master's degree, it appropriately prioritizes applied skills and workplace readiness over a traditional research thesis for its target audience.

Equity, Access, and System Alignment

The entirely online delivery directly serves working professionals who may find in-person attendance at the Logan campus a barrier to advancement. While primarily online, the program offers in-person options for Logan-based students, providing flexibility that maximizes institutional facility use while maintaining statewide reach. By focusing specifically on GeoAI and Advanced Remote Sensing, USU differentiates this degree from more general GIS offerings in the state, fulfilling a high-tech niche specifically identified and funded by a USHE Deep Technology grant.

The proposal presents an exemplary model of efficient program development—a stackable credential pathway that leverages existing certificates, faculty expertise, and infrastructure without requiring new state investment. No significant concerns are identified.

The revenue-sharing model with USU Online provides a sustainable growth mechanism, and the unified administrative structure under ENVS ensures coherent program management. The online delivery appropriately serves working professionals statewide, while the GeoAI specialization fulfills a distinct high-tech niche within USHE. This program demonstrates how institutions can create valuable graduate credentials by strategically building on existing strengths and grant-funded initiatives. Overall, SUU

supports the proposal and we wish you the very best as you seek final approval for this new degree program.

Camille Thomas
Assistant Provost
Southern Utah University

Gail Niklason, Weber State University

The proposal was shared with faculty in our Earth and Environmental Science department:

1. Does the proposed curriculum meet the standards of the degree area as assessed by your relevant faculty- specify specific concerns based on your accepted curriculum or national standards, and/or accreditation standards?

- Yes. The proposed curriculum covers the major areas in the geospatial field expected in professional Master's degree programs, including the incorporation of GeoAI components.
- One area of concern is including a course focused on spatial statistical analysis and modeling, which is an important focus in graduate geospatial programs. Through some online research, we think NR 6950 (Geospatial Analysis for Natural Resource Management) might introduce this area based on using R, but if not, we want to encourage the program to incorporate this focus area explicitly in the curriculum.

2. Do the resources exist to adequately to offer a quality program of study and are future resource needs adequately specified? Provide examples of how the resources available in your program look so as to give context on where and why you feel deficiencies exist.

- Yes, we feel that there are enough resources to cover the program. We do not feel that there are deficiencies.

3. Are there any structural or programmatic concerns with the degree? Will students be able to transfer without difficulty (3000 and 4000 level curriculum in the first 2 years, etc.), etc., etc.- Be specific in your examples

- No structural or programmatic concerns; this is a Master's degree with no course prerequisites (students must have earned a Bachelor's degree with a 3.0 or higher GPA). We think it is good that the program requires students to earn the stackable graduate GIS certificate before commencing the GEO AI course work.

4. Are there any other concerns not addressed above?

- No; we have no additional concerns. The proposal has sufficiently explained the long-term sustainability of the degree (ample faculty, resources, advising, etc.).

Thank you for the opportunity to provide feedback!

University of Utah Provost's Office

Yes, the proposed curriculum meets professional standards for GIS/geospatial education. However, there does not appear to be a lot of differentiation between the proposed MSGIST and the existing certificates. The differentiation appears to be two additional classes, which can be satisfied by internship or individual project credits. Reliance on internships or individual projects to reach 30 credits may dilute the rigor of the degree; the professional MSGIS at the University of Utah does not include internship or project credit.

Yes, this proposal primarily builds off existing certificates/courses and the outlined resources are adequate.

Students can enter MSGIST at the start or after completing one of the post-baccalaureate certificates providing multiple entry and exit points, which should benefit students.

The proposal seems to imply that the University of Utah degree is not a professional masters. This is incorrect, and the existing degree at the University of Utah targets the same pool of professionals. We think that adverse impacts on our own MSGIS program are very likely, given that there is finite demand for professional GIS training at the master's level within the state of Utah.

Philip Dennison

Chair, Environment, Society & Sustainability

END OF COMMENTS

**Utah System of Higher Education
R401 Program Proposal
New Full Program (AAS or higher)**

SECTION 1: PROGRAM INFORMATION

Institution Utah State University
Department Department of Environment and Society
Proposed Award Name Master of Geographic Information Science and Technology

Award Type - Please select only one

- ☐ Associate's Degree (including AAS degrees)
☐ Bachelor's Degree
☒ Master's Degree
☐ Doctor Degree

Will this proposal include emphases? (If no, leave unchecked and move to next item.)

- ☐ Yes, this proposal has emphases
☐ An emphasis is required to complete this program

----- *For proposals with emphases, please note if any of the following attributes are different for a particular emphasis* -----

Additional Departments N/A

CIP Code (Provide a 6-digit CIP Code. Omit the period.): 307001

Award Acronym (ex. AAS, AA, BS, BA/BS, etc. Acronym field allows for 2 to 6 characters. Omit periods.) MGIST

Quantitative Literacy Course recommended for this program (for undergraduate programs only. Select one option.)

- ☐ MATH 1030 Quantitative Reasoning
☐ MATH/STAT 1040 Intro to Statistics
☐ MATH 1050 College Algebra
☐ Any QL course is acceptable
☐ Other (please list in Curriculum table)

Program Delivery Method(s)

How will students complete this program? Indicate all program delivery methods considered for this program:

- ☐ Entire program can be completed in person
☐ Entire program can be completed via Interactive Videoconferencing (EDNET)
☒ Entire program can be completed Online
☒ Students can take different courses through a variety of delivery methods

Minimum Credit Hours to Complete Program (including emphasis if applicable; use whole numbers) 30

Maximum Credit Hours to Complete Program (including emphasis if applicable; use whole numbers) 31

Expected First Semester Students May Enroll in Program Fall 2026

Expected First Year Students May Enroll in Program 2026-2027

SECTION II: INSTITUTIONAL ROLES & MISSION

Program Description

Present a brief program description. (1-2 paragraphs.)

The Department of Environment and Society (ENVS) proposes a Master of Geographic Information Science and Technology (MGIST). The MGIST builds on two existing, stackable online post-bachelor's certificates to provide students who complete both certificates with the option to receive a professional master's degree (30-31 credits) with the completion of 5-6 additional credits. Students will first complete the Geographic Information Science (GIS) Post-Bachelor's Certificate, after which they will move on to the more advanced Applied Remote Sensing and Geospatial Artificial Intelligence (GeoAI) Post-Bachelor's Certificate. Pursuing those two online certificates earn students 24-25 credits, dependent on course selection. The Department proposes that students have the option to add two application courses to reach the minimum of 30 credits required for a professional master's degree. Completion of the two existing certificates and additional application courses provides students with the advanced GIS training comparable to existing professional masters in GIS at other institutions in the United States. The proposed MGIST can be completed fully online, but some additional in-person course options will be available to Logan-based students.

The Department is in the process of a unit transfer (under a separate R401 proposal) for the GIS Post-Bachelor's Certificate to move from the S. J. and Jessie E. Quinney College of Agriculture and Natural Resources to the Department of Environment and Society within this same college. The Department launched the second Remote Sensing and GeoAI Post-Bachelor's Certificate in Fall 2024, following receipt of a USHE Talent Ready Utah Deep Technology grant for this purpose. The proposal to stack the two certificates for the development of a MGIST degree was part of the original proposal approved by USHE for funding. This current R401 is to meet the Department's commitment to develop and launch the MGIST. The MGIST will coordinate/cooperate with the existing Master of Natural Resources (MNR) program, as "sister" programs, utilizing many of the same courses. The MNR program is currently in transition from a college-level program to a shared multi-department program, and the Department of Environment and Society will be one of the participating departments, facilitating smooth coordination. Development of this MGIST proposal has been discussed with the full set of ENVS faculty and has been shared with the current faculty director of the MNR program (a member of the faculty in the Department of Wildland Resources) and with the current department heads for the Department of Wildland Resources and the Department of Watershed Sciences.

Consistency with Institutional Mission

Explain how the program is consistent with the institution's Board approved mission, roles, and goals (see Board policy R312 found at <https://ushe.edu> in the Board of Higher Education section under Policies) or, for "out of mission" program requests, the rationale for the request.

This proposed new program aligns with workforce development goals for Utah State University by emphasizing advanced credentials for high-tech and deep-tech employment sectors. The existing certificates and the proposed master's degree are structured to allow working professionals to obtain and credential advanced skills through coursework delivered fully online (with some in-person course options for Logan Campus students). The proposed MGIST will have a strong applied aspect to natural resource and agricultural management arenas, in line with Utah State University's land-grant mission. Student ability to complete the degree fully online will provide access to individuals throughout Utah, including rural areas with limited access to resources.

SECTION III: NEEDS ASSESSMENT

Market Demand

Provide local, state, and/or national labor market data that speak to the need for this program. What business and industry sectors seek the knowledge base and skills graduates will offer? Are there known Utah employers? How many annual job openings are available? What wage will graduates earn? How strong is the employment sector for graduates of the program? Are numbers of job openings increasing? How does the median wage for these jobs compare to statewide median wage for all workers and/or for workers with the same education level?

NOTE: Occupational demand, wage, and number of annual openings information may be found at sources such as Utah DWS Occupation Information Data Viewer (jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do) and the Occupation Outlook Handbook (www.bls.gov/oco). Utah DWS Firm Find also provides Utah employer data (<https://jobs.utah.gov/jsp/firmfind/#/>).

Local/Regional Market Demand (include a short description to clarify the geographic parameters for this data)

In Logan, the geospatial job market is relatively modest but active, with opportunities primarily in academia, private research, and planning. The Department is currently conducting an employment survey of geospatial program current students and alumni (the majority of whom are not in the Logan area). Responses to-date support the Department's understanding that geospatial skills are in high demand across various sectors of the workforce, and that geospatial program alumni secure jobs that require GIS skills.

State Market Demand

Across Utah, the demand for geospatial professionals is robust, driven by urban development, environmental management, and infrastructure projects. Salt Lake City, in particular, is a hub for GIS employment, with positions such as GIS Analysts and Specialists available in both public and private sectors. State agencies like the divisions within the Utah Department of Natural Resources also contribute to the demand, overseeing statewide GIS initiatives. More generally, Utah's Department of Workforce Services reports a 5% growth in the state for computer information and data analyst occupations (~290 annual job openings) expecting "much faster than average employment growth" (<https://jobs.utah.gov/wi/data/library/employment/occprojections.html>).

National Market Demand

Nationally, the geospatial job market is experiencing steady growth. The Bureau of Labor Statistics predicted a growth of 36% in data analyst occupations over the next decade, greatly exceeding the average growth rate for all jobs (<https://www.bls.gov/ooh/math/data-scientists.html>). Notably, the field of geospatial intelligence is expanding, with increasing reliance on location-based data across various industries. Graduates with advanced GIS skills are finding opportunities in sectors such as government, environmental consulting, urban planning, and technology. Employers often seek proficiency in GIS software like ArcGIS or QGIS, along with programming skills in languages such as Python. Facility and applied work with these tools is a part of this proposed program.

The recent integration of geospatial analysis, remote sensing, and artificial intelligence has gained substantial momentum across industries (<https://www.fortunebusinessinsights.com/geospatial-analytics-market-102219>). This convergence has led to an increased demand for professionals who possess a deep understanding of geospatial data, remote sensing technologies, and the ability to develop and apply AI-driven solutions. Globally, Verified Market Research projected that the "Geospatial Analytics Market" will grow at a compound annual growth rate of 12.4% from 2023 to 2030. Even more significantly, they projected that the "Geospatial Imagery Analytics Market" will grow at a compound annual growth rate of 15.9% from 2023 to 2030 (<https://www.verifiedmarketresearch.com/product/global-geospatial-imagery-analytics-market-size-and-forecast-to-2025/>).

Student Demand

Provide evidence of student interest and demand that supports potential program enrollment and your plan for attracting under-represented student groups. NOTE: Student enrollment projections will be called for in the finance section of this proposal.

For Fall 2025, enrollment in the existing GIS Post-Bachelor's Certificate is 49 students. Enrollment in the Applied Remote Sensing and GeoAI Post-Bachelor's Certificate (just introduced) is very low, with only 1 student enrolled in Fall 2025. The option to earn the MGIST is expected to encourage more students in the GIS certificate program to also pursue the second, more advanced certificate and earn the master's degree.

With ENVIS now a part of the larger merged College of Agriculture and Natural Resources, the Department has access to expanded resources for marketing and student recruitment. In past years, because of limited resources and competing priorities, little effort was made in this area for the existing GIS certificate. Despite this history, attainment of the GIS certificate has grown since its introduction, growing from 27 in 2018-19 (the first year with completions), to 31 in 2021-22, to 40 in 2024-25. With some marketing effort, the Department anticipates high potential for growth in student enrollment due to the fully online option for completing this degree.

Similar Programs

List similar programs offered elsewhere in the USHE, the state, or Intermountain Region. In comments field, describe unique characteristics of proposed program to similar program(s), if any.

Institution	Award Type	Program Award Name	Link to Program	Comments
University of Utah (UofU)	MSGIS	MS in Geographic Information Science	https://catalog.utah.edu/programs/GIS.MS	In contrast to the UofU's program, this online MGIST will be embedded in the land-grant context of the College of Agriculture and Natural Resources, providing a strong emphasis on GIS and geospatial technologies for natural resource and agricultural management. It is a professional masters and not a master's of science.

Transfer Check

For transfer associate degrees, provide information on bachelor degrees that graduates can transfer into; at end of proposal form, attach at least one draft articulation agreements with a 4-year program. For 4-year degrees, list 2-year degrees that may transfer into the degree, if any. Use comments field to unique transfer requirements such as minimum GPA, if any.

Institution	Award Type	Program Award Name	Link to Program	Comments
N/A				

Collaboration with and Impact on Other Degree-granting or Technical College USHE Institutions

Assess the impact the new program will have on other USHE institutions. Describe any discussions with other institutions pertaining to this program. Include any collaborative efforts that have taken place. Indicate if the program will be delivered outside of designated service area; provide justification. Service areas are defined in Board policy R315 found at <https://ushe.edu> in the Board of Higher Education section under Policies.

We do not expect any adverse impact on another USHE institution.

Accreditation

If the program will seek special professional program-level accreditation, identify the accrediting body, and project timeline and anticipated costs for initial approval, and a date for accreditation review cycle.

N/A

External Review

Describe how external consultants, program advisory committee members, industry experts, or other non-institutional stakeholders were involved in the development of the proposed program. For programs that address specific industry or occupational needs, indicate the extent to which the applicable industry representatives have provided input.

In Spring 2025, the Department established a Geospatial Advisory Board with eleven industry partners across Utah who now serve as major advisors in shaping our geospatial curriculum. At their September 2025 meeting, advisory board members emphasized the growing demand for geospatial professionals who combine foundational GIS knowledge with advanced technical skills such as programming, automation, and remote sensing with geospatial AI. Their feedback highlighted the importance of hands-on, applied learning that prepares students to solve real-world geospatial problems, something that this master's degree will advance. Members also noted that flexible, stackable pathways—linking the existing graduate certificates—provide a strong foundation for working professionals seeking advanced credentials while addressing workforce needs in government, industry, and research.

SECTION IV: PROGRAM DETAILS

Program Curriculum

Provide a list of courses required to complete the program. List all courses, including college-level prerequisites (and pre-major placements or condition) and new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences). Indicate new courses with an X in the appropriate columns. The total number of credit hours should reflect the number of credits required to be awarded for the degree. For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the Program Curriculum Narrative text field.

INSERT ROWS IN TABLE BELOW AS NEEDED

College Level Prerequisite Courses (list courses students commonly must take to be able to enroll in the program's courses listed below)

Course Prefix & Number	New Course?	Course Title	Credit Hours
N/A			

General Education Courses (list specific courses if recommended for program; otherwise, list "any QL" of "any Humanities")

Course Prefix & Number	New Course?	Course Title	Credit Hours
N/A			

Program Required Courses (list "and/or" conditions and reflect such conditions in credit hours)

Course Prefix & Number	New Course?	Course Title	Credit Hours
Complete 4 of the following 5 courses:		Coursework for the GIS Certificate	12 Total Below
NR6910		Geographic Information Systems for Natural Resource Applications	3
NR6920		Python Programming for GIS	3
NR6930		Advanced GIS for Natural Resource Applications	3
NR6940		Principles of Remote Sensing of Natural Resources	3
NR6950		Geospatial Analysis for Natural Resource Management	3
Complete the following courses:		Coursework for the Remote Sensing GeoAI Certificate	12-13 Total Below
NR6805		Introduction to Geospatial Artificial Intelligence: The Remote Sensing and GeoAI Frontier	3
NR6815		Insights from Above: Processing and Analyzing Drone Data	1
NR6825		Geospatial Artificial Intelligence, Ethics, & Society	1
NR6835		Geovisualization for Remote Sensing Applications	1
NR6855		Advanced Geospatial Artificial Intelligence	3
NR6890		Advanced Project Design and Implementation for Remote Sensing & GeoAI	1
		(Elective for Remote Sensing GeoAI Certificate)	2-3

Program Elective Courses (list "and/or" conditions and reflect such conditions in credit hours)

Course Prefix & Number	New Course?	Course Title	Credit Hours
Select among the following options to reach a grand total of 30 credits minimum:		Additional Application Coursework	5-6 Total
		(approved application course elective)	3

		(approved application course elective)	3
NR6880		Advanced Remote Sensing & GeoAI Internship	2-3
GEOG6800		GIS Advanced Individual Projects	2-3

Emphasis Courses (duplicate this table if there are multiple emphases)

Name of Emphasis

Course Prefix & Number	New Course?	Course Title	Credit Hours
N/A			

Degree Map N/A

Provide a program Degree Map, also referred to as a graduation plan (for undergraduate programs ONLY). This map provides a suggested semester-by-semester class schedule for a full-time student that includes prefix, number, title, and semester hours.

Enter the degree map in the table below. If a specific general education course is required, list course and include GE fulfilled. If the program does not require a specific general education, write "Any Fine Art" or "Any QL" and check GE fulfilled.

INSERT ROWS IN TABLE BELOW AS NEEDED

For General Education courses, use the following acronyms or leave blank if not GE:

C Written Communication / **QL** Quantitative Literacy / **AI** American Institutions /
FA Fine Art / **H** Humanities / **LS** Life Science / **PS** Physical Science / **SS** Social Science

First Year Fall			First Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
Second Year Fall			Second Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
Third Year Fall			Third Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE
Fourth Year Fall			Fourth Year Spring		
Course	Cr Hr	GE	Course	Cr Hr	GE

Program Curriculum Narrative

Describe any variable credits as well as internships, clinicals, or other external learning experiences. Include additional curriculum information that differentiates this program's curriculum such as mandatory summer terms, accelerated schedule options or paths for part-time students.

Students will have the option to enroll directly into the MGIST or to first pursue the GIS Certificate and then count these credits, along with the credits from the Remote Sensing and GeoAI Certificate) towards the MGIST as an added program. For the final 5-6 elective credits (additional to the 24-25 credits earned through the two stacking certificates), students will have flexibility to select a combination of the following options to meet their intended career pathway: application courses (3 credits each), internship credits (2-3 credits), and/or an additional project (2-3 credits), which can stand alone or build on the student's completed one-credit capstone for the Remote Sensing and GeoAI Certificate. There are various available approved online and arranged course options making it easy for completion fully online.

Approved application course electives (3 credits each) offered through online delivery include:

ENVS 6010: Applying Human Dimensions Concepts to Natural Resource Management

ENVS 6100: Introduction to Modeling Human-Environment Systems

ENVS 6110: Human Dimensions of Wildlife Management

ENVS 6310: Introduction to Environmental Laws and Policy

ENVS 6320: Water Law and Policy in the United States

NR 6570: Ecological Foundations of Natural Resource Management

NR 6580: Data Analysis and Programming for Natural Resource Managers

WATS 6530: Water Quality and Pollution

WILD 6400: Ecology of Animal Populations

Program Admission Requirements

List selective admission requirements specific to the proposed program. Describe cohort-driven admissions, if applicable.

There are no program-specific admission requirements. General requirements for admission include:

1. A bachelor's degree
2. 3.0 or higher grade-point average

Program Graduation Standards and Number of Credits

Provide graduation standards. Include standards specific to the program that are beyond the institution's standard graduation requirements. Provide justification if number of credits exceeds credit limit for this program type described in R402-6 Table 1, which can be found at <https://ushe.edu> in the Board of Higher Education section under Policies.

This program conforms with the standards for master's degrees outlined by the Utah State Board of Higher Education.

SECTION V: INSTITUTION, FACULTY, AND STAFF SUPPORT

Institutional Readiness

How do existing administrative structures support the proposed program? Identify new organizational structures that may be needed to deliver the program. Will the proposed program impact the delivery of undergraduate and/or lower-division education? If yes, describe how?

Current departmental administrative resources are sufficient to support the proposed MGIST, and no new organizational structures will be needed. There will be no impact on undergraduate and/or lower-division education.

Student Advisement for this Program

Describe how prospective and current students in the proposed program will be advised. Does the sponsoring department have advisors or are students referred to campus advising? Are there advisements for part-time student participants?

The Department's Graduate Program Coordinator (GPC), a senior staff assistant, will have capacity to support and advise the students. The Department is phasing out our graduate National Environmental Protection Act (NEPA) Certificate, which was eliminated under the University's HB 265 reinvestment plan, and this opens additional capacity on the part of the GPC.

Professional Licensure

Will graduates of this program need to seek certification or licensure to be employed in the field? If no, type N/A. If yes, describe how the program meets the educational requirements of the license both in Utah and in other states. Reference specialty accreditation and compact or reciprocity agreements, if applicable.

N/A

Library and Information Resources

Describe library resources students will need to complete this program, if any. Describe the library resources the institution already possesses. Describe new library resources to be acquired. Identify additional costs to support library and information resources needs in the finance table.

No library resources are required for completion of this program due to the heavy skills-based orientation of all coursework.

Facility (Space) / Material Needs

Describe special space or equipment needs for program, if any. Describe the space and technology needs the institution already possesses. Describe new space or technology to be acquired.

Program courses will continue to utilize the technology required for online course deliveries and the University's ESRI site license. Any future specialized software license needs will be met through course fees.

Current and New Department Faculty / Staff Information

Identify current # of department faculty / staff (headcount) to be involved with the program and faculty / staff to be hired along with their qualifications and tenure status. Include additional cost for these faculty / staff members in budget narrative and table.

In the Expense Narrative field later in the proposal, please indicate when new faculty and staff hires will occur in year 1 or a subsequent year of the program.

Current Faculty/Staff					Faculty/Staff to be Hired				
<i>For faculty: academic or industry credential held:</i>	# Fulltime	# Parttime	# Tenure or Tenure-Track	# Non-Tenure Track	# Fulltime	# Parttime	Est. % of time committed to new program	# Tenure-Track	# Non-Tenure Track
Doctorate Degrees	16	1	14	3	1		10-20%	1	
Masters Degrees	1			1					
Bachelor Degrees									
Associates Degrees									
Industry Credential									
Staff	1	1							
Teaching/Grad Assistants		19							
TOTAL	18	21			1	0			

Faculty

Describe faculty development activities that will support this program. Will existing faculty/instructors, including teaching/graduate assistants, be sufficient to instruct the program or will additional faculty be recruited? If needed, provide plans and resources to secure qualified faculty. The narrative should be consistent with the budget and faculty tables.

The above table provides data for the Department of Environment and Society as of Fall 2025. The proposed MGIST will rely fully on existing courses, the large majority of which are offered through the Department or the online “sister” Masters of Natural Resources. These courses all have capacity for much higher enrollment than they currently experience.

Staff

Describe the staff development activities that will support this program. Will existing staff such as administrative, secretarial/clerical, laboratory aides, advisors, be sufficient to support the program or will additional staff need to be hired? If needed, describe the circumstances such as growth in students in the program, that will signal the additional hires. Provide plans and resources to secure qualified staff, as needed.

No additional staff will be hired.

SECTION VI: PROGRAM EVALUATION

Program Assessment

Describe program academic and professional goals. Identify program performance goals. Describe the system of assessment to be used to evaluate program success in meeting performance goals.

Program goals for the MGIST include enrollment and completion goals both for the MGIST and for the two building-block certificates. In the first year our goal is to enroll 10 students into the MGIST who are already enrolled in the GIS certificate (approximately 20%). We then have goals of increasing that percentage to 50% (50% of all GIS certificate students go on to pursue the MGIST), while simultaneously leveraging the MGIST program to increase enrollment in both certificates by 10% per year through enhanced marketing and student recruitment efforts across the board.

A parallel goal for all three programs (the MGIST and the two post-bachelor's certificates) is to increase the active role of our new Geospatial Advisory Board to enhance (1) curricular alignment with geospatial sector and workforce needs; (2) student program recruitment and job placement; and (3) availability of advanced internship and real-world project opportunities.

Long-term program goals include job placement and career advancement rates (as many students enroll as working professionals to advance within their existing organizations). Appropriate goals for these rates will be established with the assistance of our Advisory Board. Data for assessing progress towards program goals will be collected in part through regular survey campaigns of program alumni, which we have already initiated. Program performance goals will also be assessed through tracking enrollment and completion rates, salary outcomes, and program learning outcomes assessment (see below).

Student Standards of Performance

List the program learning outcomes including standards, competencies, and marketable skills students will have achieved at the time of graduation. How will student attainment of program learning outcomes be assessed/evaluated? How will student attainment of professional competencies be assessed/evaluated?

Program Learning Objectives:

1. Demonstrate understanding of core principles and theories of geographic information systems (GIS), remote sensing, spatial analysis, and machine learning.
2. Collect, access, pre-process, and manage vector, raster, and imagery data. Apply data integration techniques and management.
3. Demonstrate proficiency in industry-standard geospatial software platforms and geospatial analysis techniques. Apply GIS and remote sensing knowledge and skills toward geospatial analysis and problem solving.
4. Develop and use programming language to automate geoprocessing workflows and enhance spatial analysis. Integrate machine learning.
5. Evaluate the quality, reliability, and accuracy of spatial data. Analyze data uncertainty and its implications for decision-making.
6. Demonstrate understanding of the ethical considerations of spatial data use, decision-making, and responsible AI implementation.
7. Create effective, ethical, and visually appealing maps using geospatial tools. Present geospatial findings through clear writing, visualizations, and/or oral presentations.
8. Demonstrate problem-solving skills and project management principles to geospatial analysis projects.

Program and Student Outcomes Assessment:

Outcomes assessment will be based on direct assessment of course artifacts designated for this purpose, most of which will be course final projects. This assessment will be for both program assessment and assessment of individual student attainment, which additionally will occur through grades attained. The program requires students maintain a 3.0 minimum GPA, and grades below a B minus are not accepted for the fulfillment of program requirements.

SECTION VII: PROJECTED PROGRAM ENROLLMENTS & FINANCE

Three Year Projection Student Participation

Provide projected enrollment and information on related operating expenses and funding sources. Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty and staff as described in the faculty section of this proposal. Project five years' enrollments and graduates. Note: If the proposed program is an expansion of an existing program, present several years enrollment trends by headcount and/or by student credit hours that justify expansion.

NOTE: Highlighting blue cells in the table below and pressing f9 on your keyboard will auto calculate the cell's value.

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
Student Data						
# Majors in Department	146 (BS, MS, PhD only); 49 for the GIS Cert					
# Majors in Proposed Program		10	15	20	25	30
# Graduates from Department	49 (BS, MS, PhD only); 40 for the GIS Cert					
# Graduates in New Program		0	5	10	15	20
Department Financial Data						
Project additional expenses associated with offering new program. Account for new hires as stated in "Current and New Department Faculty / Staff" table.	Department Budget					
	Year Preceding Implementation (base budget)	Year 1	Year 2	Year 3		
		Addition to base budget for new program(s)				
EXPENSES - nature of additional costs required for proposed program(s)						
List salary and benefits for additional faculty and staff each year the positions will be filled. Ex: if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the one year.						
Personnel (1)	\$0	0	0	0		
Operating Expense (2)	0	0	0	0		
Space Needs and Utilization	0	0	0	0		
Other	0	0	0	0		
TOTAL Program Expenses		\$ 0.00	\$ 0.00	\$ 0.00		
TOTAL EXPENSES	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00		
FUNDING - source of funding to cover additional costs generated by proposed program(s)						
Describe internal reallocation using "Existing Funding Source Narrative" following this table. Describe new sources of funding using "New Revenue Narrative" on the following page.						
Internal Reallocation	0	0	0	0		
Appropriation	0	0	0	0		
Special Legislative Appropriation	0	0	0	0		
Grants and Contracts	0	0	0	0		
Special Fees	0	0	0	0		
Tuition	0	0	0	0		
Differential Tuition (3)	0	0	0	0		
PROPOSED PROG FUNDING		\$ 0.00	\$ 0.00	\$ 0.00		
TOTAL DEPT FUNDING	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00		
DIFFERENCE						
Funding - Expense	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00		

(1) faculty and staff salary and benefits

(2) equipment, travel, resources

(3) requires UBHE approval

Expense Narrative

Describe expenses associated specifically with the proposed program. Please indicate in which year(s) new faculty and staff hires for the program will occur.

There are no new expenses associated with this program. The program does however depend financially on the Department securing ongoing funding through the USHE Talent Ready Utah Deep Technology program, following the 2 years of piloting funding received for two faculty lines to support the Remote Sensing and GeoAI Certificate program (supporting both the post-bachelor's certificate that serves as one of the building blocks for the proposed MGIST and an undergraduate certificate). The Request for Applications for these ongoing funds will be released to the Department in Spring 2026.

Existing Funding Sources Narrative

Describe what internal reallocations, if applicable, are available and any impact to existing programs or services.

No internal reallocation will be necessary, other than the reallocation of the Graduate Program Coordinator's time (as described above).

New Revenue Narrative

Describe new funding sources and plans to acquire the funds. Does the institution anticipate assessing students course-fees or program-based fees?

As an online program, the Department anticipates the MGIST will be included in an anticipated new revenue sharing model being developed by USU Online. Generated revenues will support program growth over time, should growing program enrollments led to the need for additional course sections. Course-related expenses for software licenses will be covered through course fees. Enrollments in courses that are part of the Master's in Natural Resources (MNR) program will continue to generate differential tuition that can be used to support the salary of the MNR graduate program coordinator.

SECTION VIII: ADDITIONAL DOCUMENTATION

Feedback and discussion

Add a comment in the discussion of this proposal:

Provide draft articulation agreement for transfer associate degrees and/or additional documentation such as letters of support from advisory groups, employers, or published studies as separate documents. Please include institution acronym and name of proposed program in the title of the document.



*Tessa White, Chair | Gina Gagon, Vice Chair
Ryan Dent | Brett Hugie | David H. Huntsman
Luke Johnson | Kacie Malouf | David A. Petersen
Jacey Skinner | Brandon Sorensen | Clark Whitworth
Janalyn Brown, Secretary*

EXECUTIVE MEMORANDUM

TO: Utah State University Board of Trustees
FROM: David T. Cowley, Vice President for Finance & Administrative Services
CC: Wendy Keller, Controller
DATE: April 29, 2026
RE: Report of Investments for December 2025

FOR INFORMATION PURPOSES ONLY. NO ACTION REQUIRED.

In accordance with [Utah Board of Higher Education Policy R541](#), Management and Reporting of Institutional Investments requires institutional boards to review monthly investment reports.

The following is a report of Utah State University's investment holdings for the month ended December 2025. Investments are executed in accordance with the State Money Management Act, Rules of the State Money Management Council, and Uniform Prudent Management of Institutions Funds Act.

Attachments:

Signature Page
Investment Pool Holding Totals
Funds Separately Invested
Bonded Debt Investments





UTAH STATE UNIVERSITY
REPORT OF INVESTMENTS
December 2025

The following report is a list of Utah State University's investment holdings for the month ended December 2025. To the best of my knowledge, Utah State University is in compliance with the Utah State Money Management Act, Rules of the Utah State Money Management Council, Utah State Uniform Prudent Management of Institutional Funds Act, and Utah Board of Higher Education and University policies.

Wendy Keller

Wendy Keller
Controller

04/03/2026

Date

David T. Cowley

David T. Cowley
Vice President
for Finance and Administrative Services

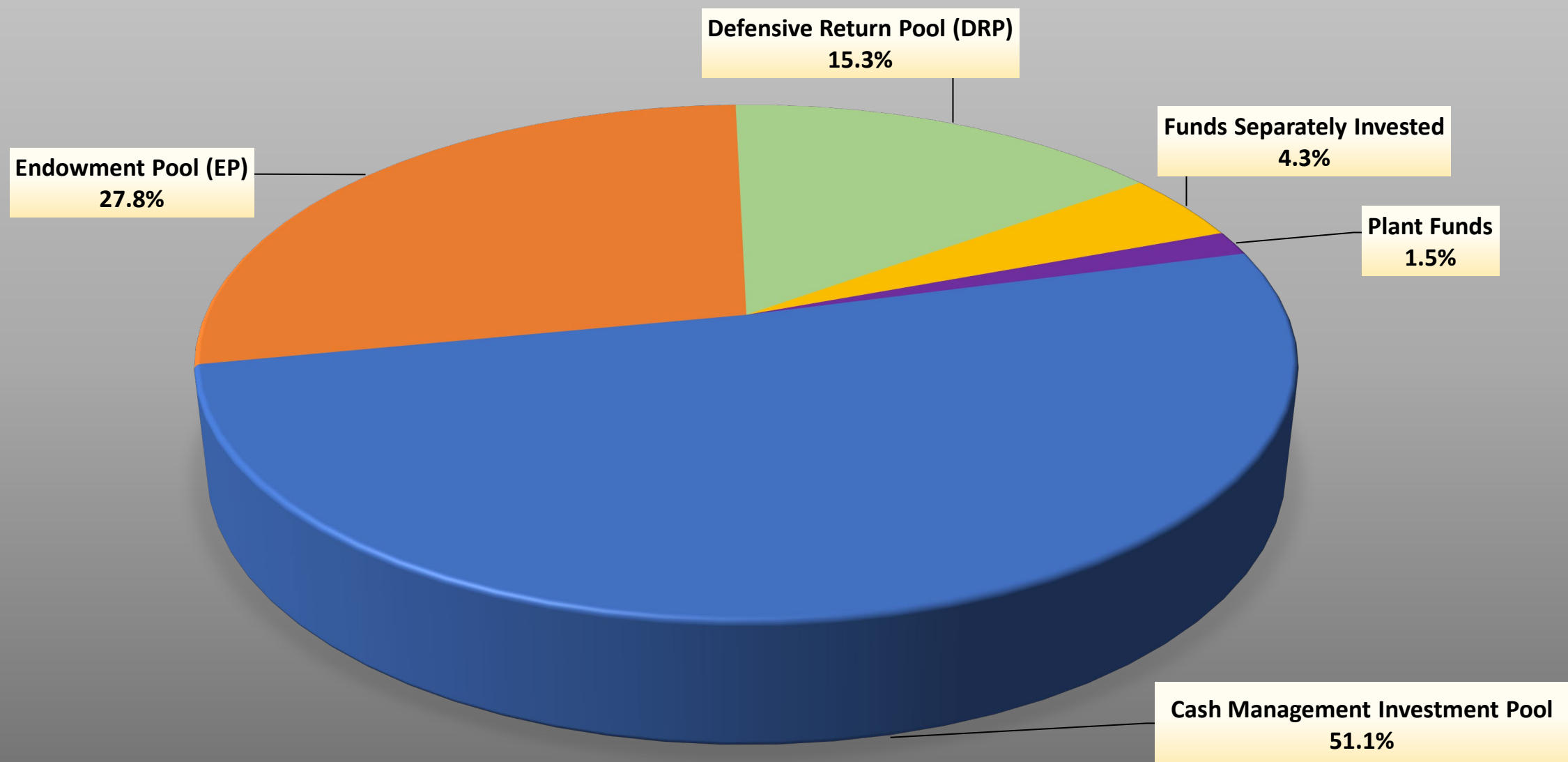
04/15/2026

Date



Investment Pool Holding Totals		December 2025 Fair Value
Cash Management Investment Pool		\$618,679,095
Endowment Pool (EP)	<i>(Does not include \$16.8 M invested in CMIP)</i>	335,533,156
Defensive Return Pool (DRP)	<i>(Does not include \$75.8 M invested in CMIP)</i>	185,748,229
Funds Separately Invested	<i>(Donor Restricted Individual Securities, Donor Required External Management)</i>	52,518,643
Plant Funds	<i>(Bond Proceeds during Construction and Debt Service Reserves)</i>	18,574,600
Total		\$1,211,053,723

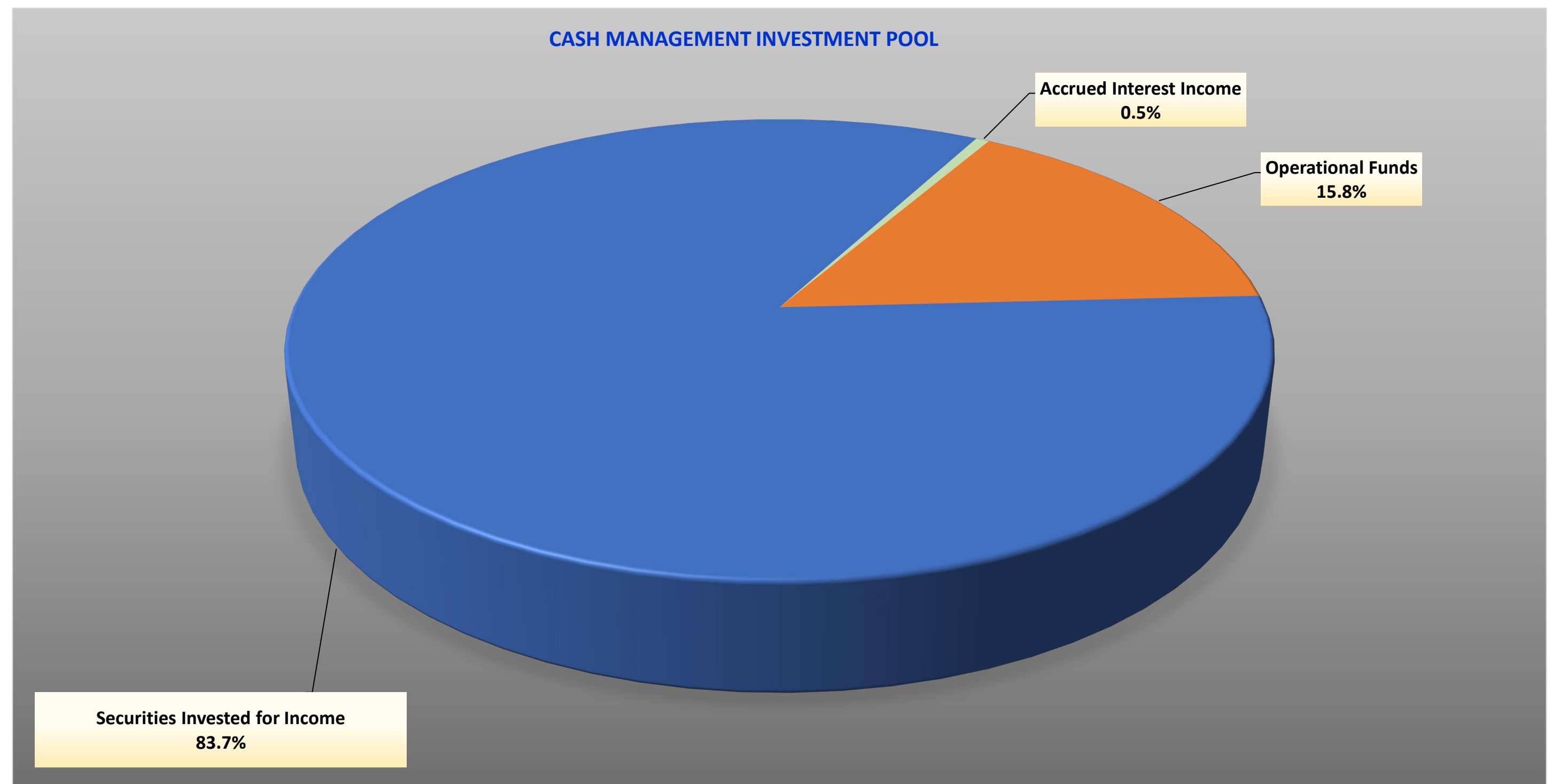
INVESTMENTS AS OF DECEMBER 31, 2025





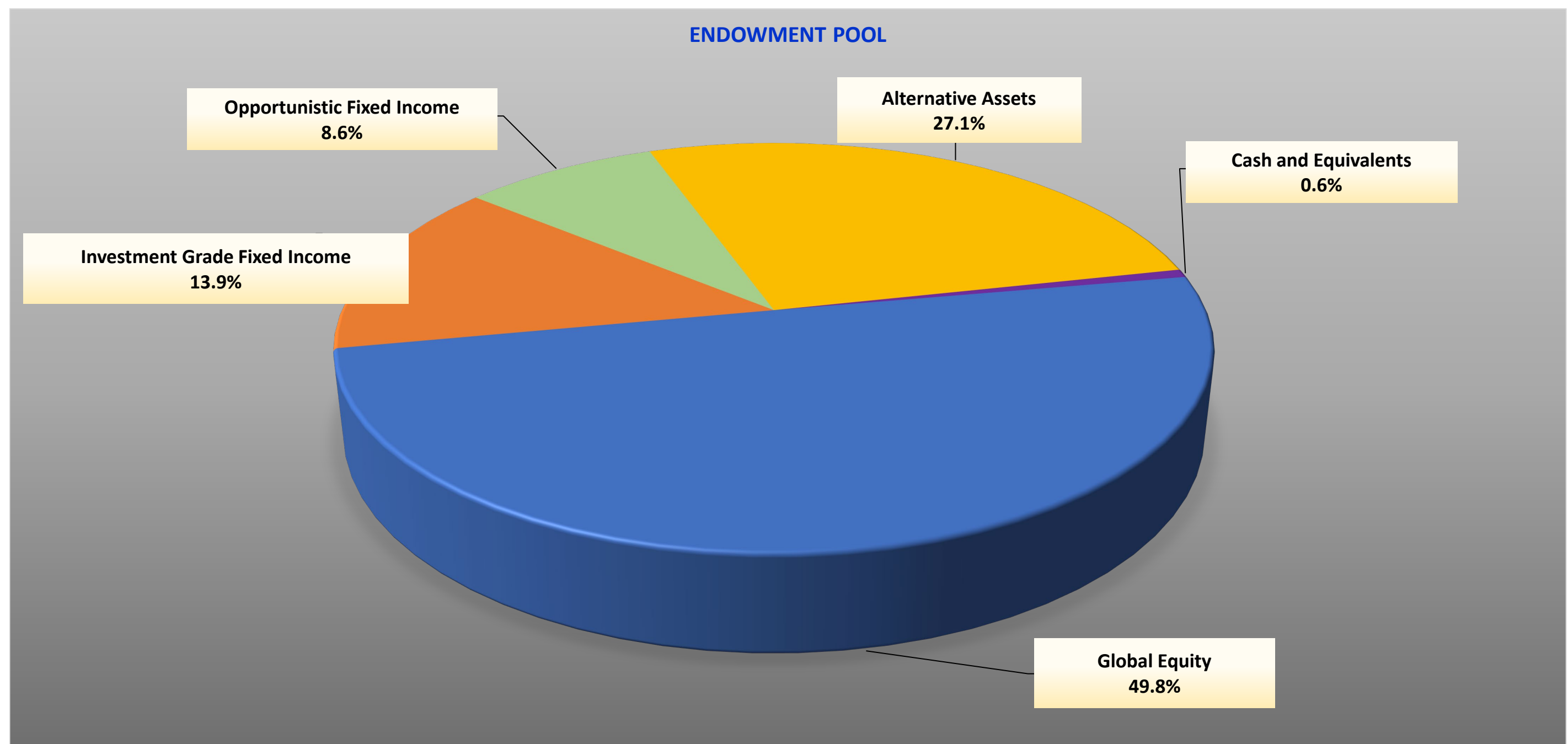
Investment Pool Holding Totals		Annualized Yield	December 2025 Par Value	December 2025 Cost Basis	December 2025 Fair Value	Unrealized (G/L)*
Operational Funds	(Cash and Cash equivalents & investments where maturities are one year or less)		\$97,932,000	\$97,972,692	\$97,933,944	(\$38,748)
Securities Invested for Income	(Investments intended to generate a consistent stream of income year over year with maturities between one and ten years)		536,807,000	537,151,224	517,528,962	(19,622,262)
Accrued Interest Income					3,216,189	
Total		3.69%	\$634,739,000	\$635,123,916	\$618,679,095	(\$19,661,010)

* Changes in unrealized gains or losses are based on the difference between the cost and current fair value. Like other public institutions, Utah State University practices a buy and hold to maturity strategy, therefore at maturity, principal balances will be returned at full par value. All investments are in compliance with the State of Utah Money Management Act.



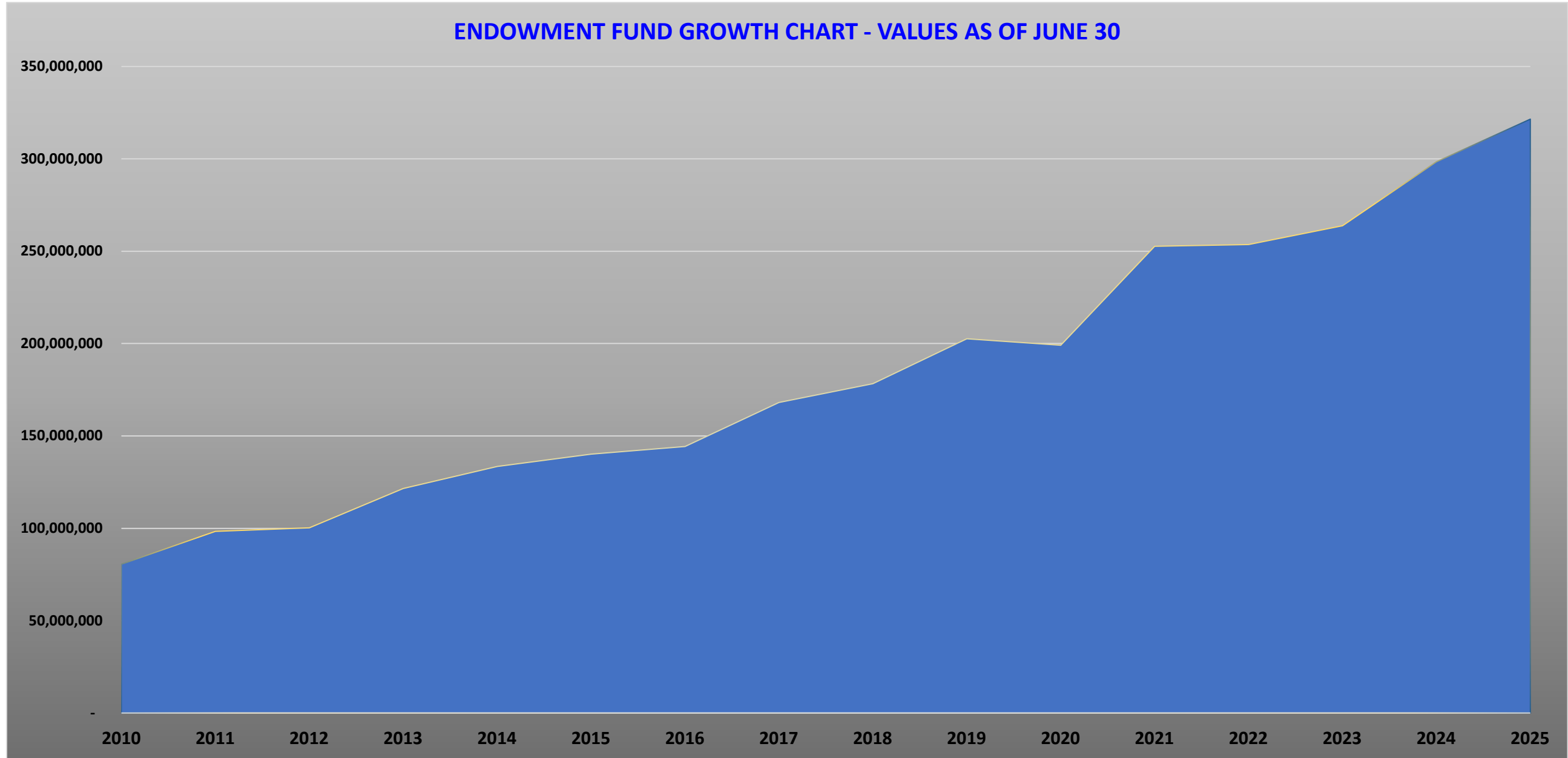


Investment Pool Holding Totals	Change From Prior Year			Change From Prior Month		
	December 2024 Fair Value	December 2025 Fair Value	Net Change from Prior Year	November 2025 Fair Value	December 2025 Fair Value	Net Change from Prior Month
Global Equity	\$151,872,603	\$175,423,825		\$174,200,791	\$175,423,825	
Investment Grade Fixed Income	43,922,010	49,132,350		47,978,495	49,132,350	
Opportunistic Fixed Income	27,785,245	30,138,429		29,457,519	30,138,429	
Alternative Assets	87,462,234	95,351,056		94,510,807	95,351,056	
Cash and Equivalents	2,496,002	2,249,984		1,641,669	2,249,984	
Total	\$313,538,094	\$352,295,644	\$38,757,550	\$347,789,281	\$352,295,644	\$4,506,363



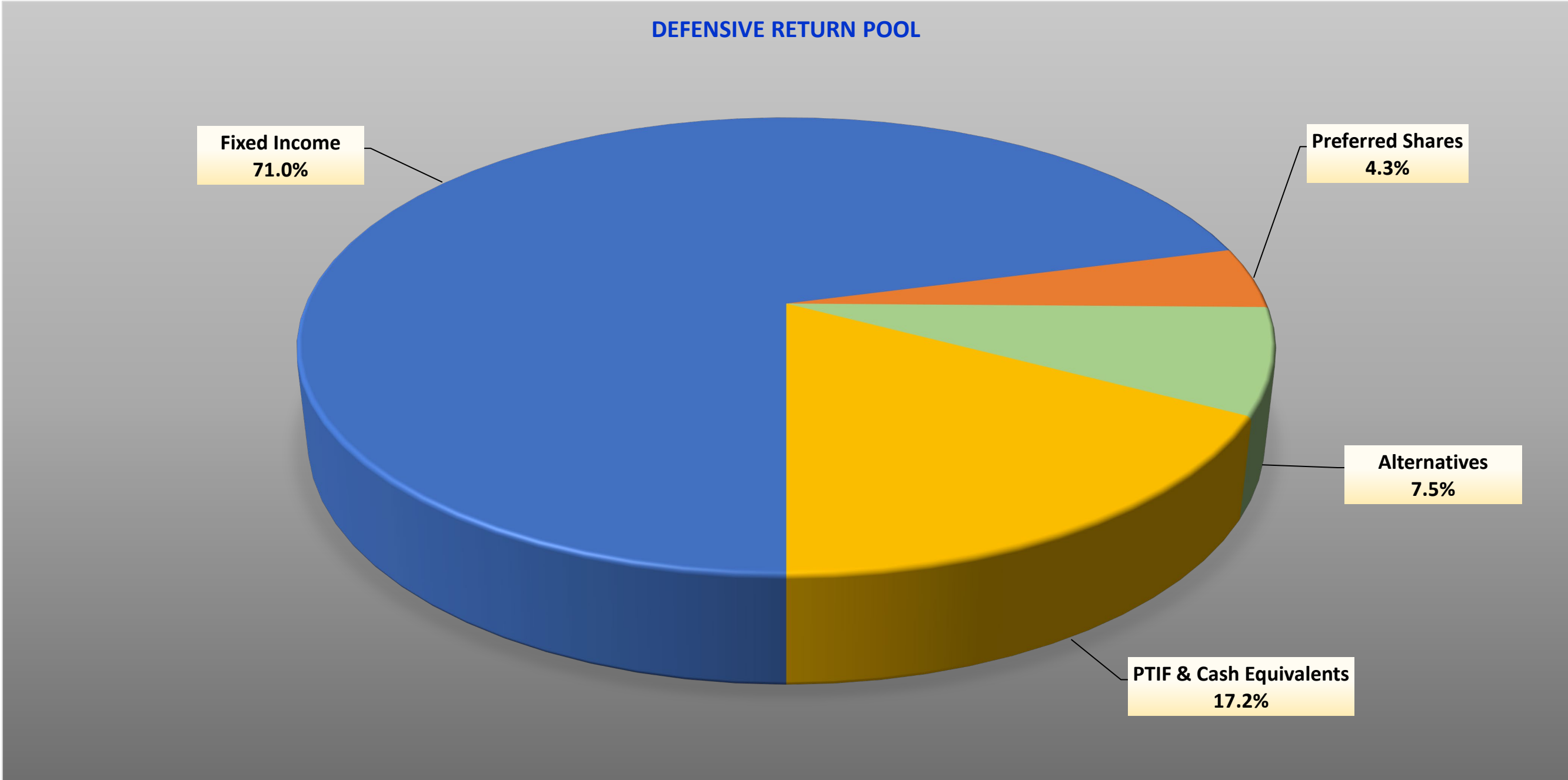


Asset Allocation			Performance as of December 31, 2025			
Investment Pool Holding Totals	Current Allocation	Target	1 Year %	3 Years %	5 Years %	10 Years %
Global Equity	49.8%	48.0%				
Investment Grade Fixed Income	13.9%	11.5%				
Opportunistic Fixed Income	8.6%	7.5%				
Alternative Assets	27.1%	33.0%				
Cash and Equivalents	0.6%	0.0%				
Total Fund Aggregate	100%	100%	10.7%	10.0%	7.5%	8.2%
Benchmark			15.1%	12.7%	8.2%	8.7%





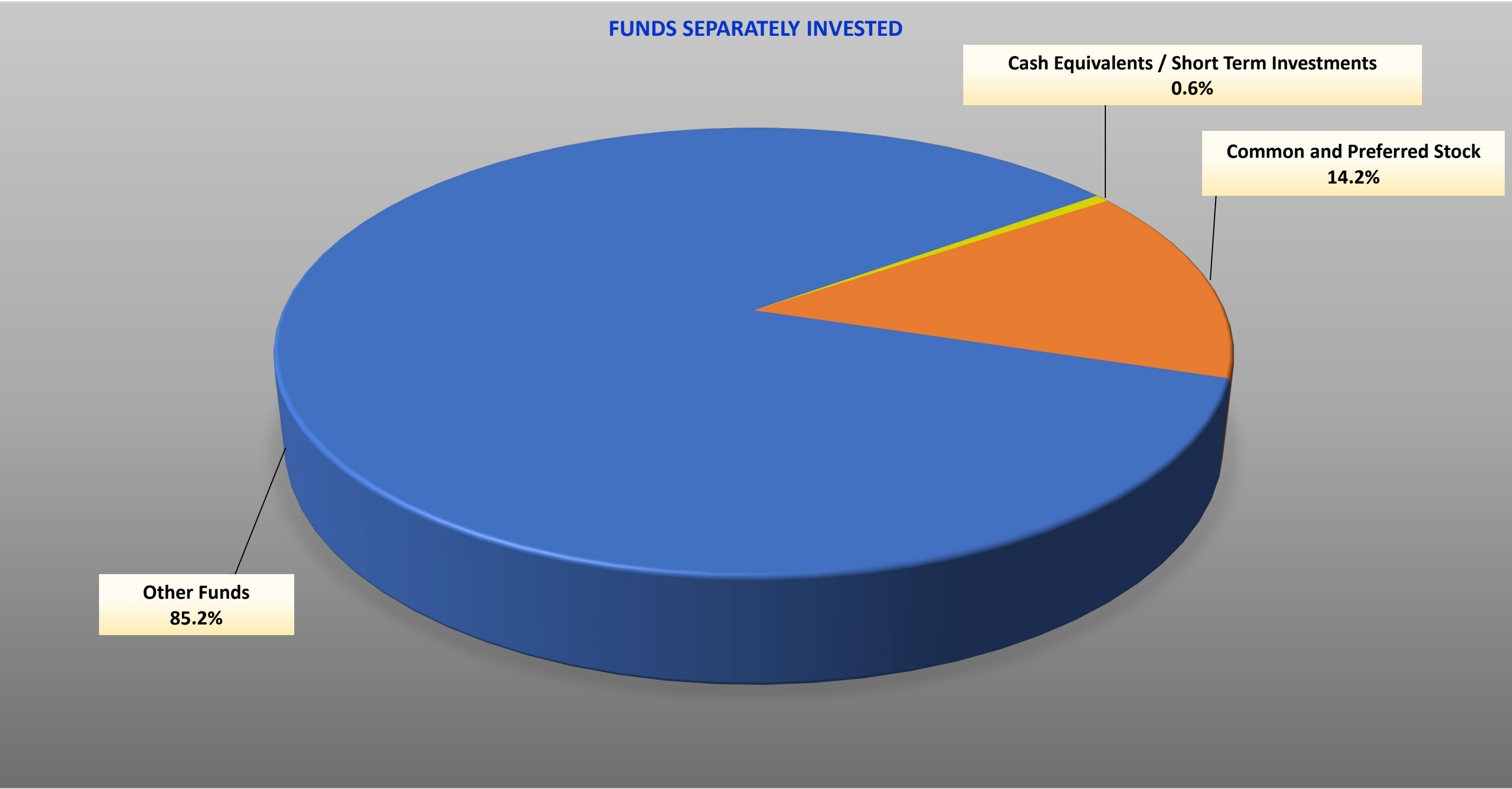
Investment Pool Holding Totals		November 2025 Fair Value	December 2025 Fair Value	Net Change in Fair Value
Fixed Income	(Includes \$75.8 M invested in CMIP)	\$187,395,897	\$185,460,940	
Preferred Shares		11,508,695	11,367,240	
Alternatives		19,779,239	19,658,286	
PTIF & Cash Equivalents		44,015,794	45,065,279	
Total		\$262,699,625	\$261,551,745	(\$1,147,880)





Funds Separately Invested*	December 2025 Cost Basis	December 2025 Fair Value	Change in Unrealized (G/L)
Cash Equivalents / Short Term Investments	\$291,560	\$291,560	
Common and Preferred Stock	6,856,488	7,486,280	
Other Funds	10,321,936	44,740,803	
Total	\$17,469,984	\$52,518,643	\$35,048,659

* Funds Separately Invested primarily consists of donor restricted individual securities donated to the University and managed by outside investment managers.





Bonded Debt Investments		November 2025 Fair Value	December 2025 Fair Value	Net Change in Fair Value
Utah Public Treasurers' Investment Fund	(Bond Proceeds during Construction and Debt Service Reserves)	\$27,720,171	\$18,574,600	
Total		\$27,720,171	\$18,574,600	(\$9,145,571)

