



UtahState
University

CURRICULUM SUBCOMMITTEE
Chad Simon, Chair

January 4, 2024
2:00 – 3:00 p.m.
Old Main-Champ Hall
[Zoom](#) (Statewide)

AGENDA

Approval of Minutes – [December 7, 2023](#)

Program Proposals

Request from the Extension Office in the College of Agriculture and Applied Sciences to [establish a Center for Family Life Programs](#).

Request from the Department of Landscape Architecture and Environmental Planning in the College of Agriculture and Applied Sciences to [offer a Design Entrepreneurship Institutional Certificate of Proficiency](#).

Request from the Department of Technology, Design and Technical Education in the College of Agriculture and Applied Sciences to [offer a Plumbing Apprenticeship Certificate of Proficiency](#).

Request from the Departments of Applied Economics, Applied Sciences, Technology and Education, Plants, Soils and Climate and Civil and Environmental Engineering in the College of Agriculture and Applied Sciences and the College of Engineering to [offer a Precision Agriculture Technology Post-Baccalaureate Certificate](#).

Request from the Departments of Plants, Soils and Climate, Applied Economics, Applied Sciences, Technology and Education and Civil and Environmental Engineering in the College of Agriculture and Applied Sciences and the College of Engineering to [offer a Precision Agriculture Technology Institutional Certificate of Proficiency](#).

Request from the Department of Communicative Disorders and Deaf Education in the Emma Eccles Jones College of Agriculture and Applied Sciences to [offer a Deaf Education Bachelor of Arts and Bachelor of Science degree](#).

Request from the Departments of Human Development and Family Studies, Kinesiology and Health Science, and Special Education and Rehabilitation Counseling in the Emma Eccles Jones College of Education and Human Services to [offer a Health Wellness and Equity Certificate of Proficiency](#).

Request from the Department of Kinesiology and Health Science in the Emma Eccles Jones College of Education and Human Services to [offer a Coaching Certificate of Proficiency](#).

Request from the Department of Special Education and Rehabilitation Counseling in the Emma Eccles Jones College of Education and Human Services to [offer a Special Education Associate of Science degree](#).

Request from the Department of Mathematics and Statistics in the College of Science to [offer a Data Literacy Minor](#).

Request from the Department of Environment and Society in the S.J. & Jessie E. Quinney College of Natural Resources to [offer a Remote Sensing and Geospatial Artificial Intelligence Foundations Certificate of Proficiency](#).

Semester Course Approval Reviews:

<https://usu.curriculog.com/>

College of Agriculture and Applied Sciences

ADVS –
APEC –
ASTE – 5
AVTE –
LAEP –
NDFS – 4
PSC –
TDTE - 25

Caine College of the Arts

ART –
MUSC –
THEA -

Jon M. Huntsman School of Business

ACCT – 8
DAIS –
BECN – 7
MHR – 1
MSLE – 6

Emma Eccles Jones College of Education and Human Services

COMD – 24
HDFS – 1
ITLS –
KHS – 4
NURS –
PSY – 1
SPERC – 3
TEAL -

College of Engineering

BENG –
CEE –
ECE –
EED –
MAE –

College of Humanities and Social Sciences

CSPH – 1
ENGL – 2
HIST – 1
JCOM –
POLS –
SWRK –

SOCA –
WGLC – 2

S.J. & Jessie E. Quinney College of Natural Resources

ENVS – 2
WATS – 3
WILD – 1

College of Science

BIOL –
CHEM –
CS –
GEOL –
MATH –
PHYS –

College of Veterinary Medicine

VCLS –

USU Courses

USU - 1

Other Business

Adjourn: 3:00 pm



December 7, 2023
2:00 – 3:00 p.m.
Old Main-Champ Hall

MINUTES

Present: Richard Walker, Caine College of the Arts
Mateja Savoie-Roskos, College of Agriculture and Applied Sciences
Chad Simon, *Chair*, Jon M. Huntsman School of Business
Sylvia Read, Emma Eccles Jones College of Education and Human Services
Thomas Fronk, College of Engineering
Jared Colton, College of Humanities and Social Sciences
Peter Howe, S.J. & Jessie E. Quinney College of Natural Resources
Brynja Kohler, College of Science
Heloisa Rutigliano, College of Veterinary Medicine
Erin Davis, University Libraries
Sunshine Brosi, USU Eastern
Paul Barr, *Chair*, EPC, Provost's Office
Toni Gibbons, Registrar's Office
Michele Hillard, Secretary

Absent: Mark Chynoweth, Statewide Campuses
Richard Cutler, Graduate Council
Sarah Pope, Graduate Senator
Aly Cinq-Mars, USUSA Executive VP

Visitors: Zak Konakis,
Brian Higginbotham,
Brian Warnick,

Approval of Minutes – [November 2, 2023](#)

Motion to approve the November 2, 2023, minutes made by Richard Walker. Seconded by Heloisa Rutigliano. Minutes approved as distributed.

Program Proposals

Request from the Department of Animal, Dairy and Veterinary Sciences in the College of Agriculture and Applied Sciences to offer an [Equine Assisted Services Institutional Certificate of Proficiency](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Animal, Dairy and Veterinary Sciences in the College of Agriculture and Applied Sciences to [discontinue the Equine-Human Science Minor](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Applied Economics in the College of Agriculture and Applied Sciences to offer a [Ranch Economics and Management Bachelor of Science](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Applied Sciences, Technology and Education in the College of Agriculture and Applied Sciences to [change the name from the Agricultural Systems Technology BS-Agricultural Machinery Emphasis to Agricultural Systems Technology BS-Agricultural Machinery and Technology Emphasis](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloise Rutigliano. Proposal approved.

Request from the Department of Applied Sciences, Technology and Education in the College of Agriculture and Applied Sciences to [change the name from Agricultural Systems Technology BS – Farm and Ranch Operations Emphasis to Agricultural Systems Technology BS – Agricultural Operations Emphasis](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Applied Sciences, Technology and Education in the College of Agriculture and Applied Sciences to offer a [College Teaching Post Baccalaureate Certificate](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Aviation Technology in the College of Agriculture and Applied Sciences to [change the name from Aviation Management – Unmanned Aerial Systems Emphasis \(BS\) to Aviation Management – Unmanned Aircraft Systems Emphasis \(BS\)](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Aviation Technology in the College of Agriculture and Applied Sciences to [change the name of the Unmanned Aerial System Certificate of Completion to Unmanned Aircraft Systems Certificate of Completion](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Aviation Technology in the College of Agriculture and Applied Sciences to [change the name of the Unmanned Aerial Systems Minor to Unmanned Aircraft Systems Minor](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Extension Office in the College of Agriculture and Applied Sciences to establish the [Center for Family Life Programs](#).

*Motion to **HOLD** the R401 until discussions have been held between the deans of the College of Agriculture and Applied Sciences and the Emma Eccles Jones College of Education and Human Services made by Mateja Savoie-Roskos. Seconded by Richard Walker. **Proposal HELD**.*

Request from the Extension Office in the College of Agriculture and Applied Sciences to [establish the Davis Agricultural Heritage Center](#).

Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Landscape Architecture and Environmental Planning in the College of Agriculture and Applied Sciences to offer a [Design Entrepreneurship Institutional Certificate of Proficiency](#).
*Motion to **HOLD** the R401 until discussions have been held between the College of Agriculture and Applied Sciences and the Jon M. Huntsman School of Business. **Proposal HELD**.*

Request from the Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences to offer a [Food Processing Certificate of Completion](#).
Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences to offer a [Food Security Studies Institutional Certificate of Proficiency](#).
Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Technology, Design and Technical Education in the College of Agriculture and Applied Sciences to [restructure the Business – Associate of Business degree](#).
Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Technology, Design and Technical Education in the College of Agriculture and Applied Sciences to [restructure the Cosmetology Associate of Applied Science degree](#).
Motion to approve the R401 proposal made by Mateja Savoie-Roskos. Seconded by Heloisa Rutigliano. Proposal approved.

Request from the Department of Communicative Disorders and Deaf Education in the Emma Eccles Jones College of Education and Human Services to offer a [Deaf Education Bachelor of Arts and Bachelor of Science](#).
*Motion to **HOLD** the R401 until the college feels it is ready to move forward made by Sylvia Read. Seconded by Heloisa Rutigliano. **Proposal HELD**.*

Request from the Department of Communicative Disorders and Deaf Education in the Emma Eccles Jones College of Education and Human Services to [change the name from Communicative Disorders and Deaf Education – Specialization in Education of the Deaf and Hard of Hearing Specialization Listening and Spoken Language Track MEd to Deaf Education – Listening and Spoken Language Specialization MEd](#).
Motion to approve the R401 proposal made by Sylvia Read. Seconded by Sunshine Brosi. Proposal approved.

Request from the Department of Communicative Disorders and Deaf Education in the Emma Eccles Jones College of Education and Human Services to [change the name from Communicative Disorders and Deaf Education – Specialization in Speech Language Pathology MA/MS to Speech – Language Pathology MA/MS](#).
Motion to approve the R401 proposal made by Sylvia Read. Seconded by Sunshine Brosi. Proposal approved.

Request from the Department of Human Development and Family Studies in the Emma Eccles Jones College of Education and Human Services to [change the Gerontology Institutional Certificate of Proficiency to a Gerontology Certificate of Proficiency](#).
Motion to approve the R401 proposal made by Sylvia Read. Seconded by Sunshine Brosi. Proposal approved.

Request from the Department of Kinesiology and Health Science in the Emma Eccles Jones College of Education and Human Services to [change the name from Health Education and Promotion – Community Health \(BS\) to Health Education and Promotion – Community and Public Health \(BS\)](#).
Motion to approve the R401 proposal made by Sylvia Read. Seconded by Sunshine Brosi. Proposal approved.

Request from the School of Teacher Education and Leadership in the Emma Eccles Jones College of Education and Human Services to [restructure the Administrative Supervisory Concentration](#).

Motion to approve the R401 proposal made by Sylvia Read. Seconded by Sunshine Brosi. Proposal approved.

Request from the School of Teacher Education and Leadership in the Emma Eccles Jones College of Education and Human Services to [change the name from Instructional Leadership MEd to School Leadership MEd](#).

Motion to approve the R401 proposal made by Sylvia Read. Seconded by Sunshine Brosi. Proposal approved.

Request from the Department of Journalism and Communication in the College of Humanities and Social Sciences to offer a [Social Media Institutional Certificate of Proficiency](#).

Motion to approve the R401 proposal made by Jared Colton. Seconded by Richard Walker. Proposal approved.

Request from the Department of World Languages and Cultures in the College of Humanities and Social Sciences to offer a [Healthcare Interpretation Certificate of Proficiency](#).

Motion to approve the R401 proposal made by Jared Colton. Seconded by Richard Walker. Proposal approved.

Request from the Department of World Languages and Cultures in the College of Humanities and Social Sciences to offer a [Legal and Business Translation and Interpretation Certificate of Proficiency](#).

Motion to approve the R401 proposal made by Jared Colton. Seconded by Richard Walker. Proposal approved.

Request from the Department of World Languages and Cultures in the College of Humanities and Social Sciences to [restructure the Second Language Teaching MSLT](#).

Motion to approve the R401 proposal made by Jared Colton. Seconded by Richard Walker. Proposal approved.

Request from the Department of Mechanical and Aerospace Engineering in the College of Engineering to offer a [Composite Materials and Structures Post Baccalaureate Certificate](#).

Motion to approve the R401 proposal made by Thomas Fronk. Seconded by Richard Walker. Proposal approved.

Request from the Department of Mathematics and Statistics in the College of Science to offer a [Data Literacy Minor](#).

*Motion to **HOLD** the R401 until department heads can discuss it made by Brynja Kohler. Seconded by Mateja Savoie-Roskos. **Proposal HELD**.*

Request from the Department of Physics in the College of Science to offer a [Photonics Certificate of Proficiency](#).

Motion to approve the R401 proposal made by Brynja Kohler. Seconded by Jared Colton. Proposal approved.

Request from the Department of Marketing and Strategy in the Jon M. Huntsman School of Business to offer an [International Business Institutional Certificate of Proficiency](#).

Motion to approve the R401 proposal made by Richard Walker. Seconded by Heloisa Rutigliano. Proposal approved.

Semester Course Approval Reviews:

<https://usu.curriculog.com/>

College of Agriculture and Applied Sciences

Motion to approve the business of the College of Agriculture and Applied Sciences made by Mateja Savoie-Roskos. Seconded by Jared Colton. Business approved.

ADVS – 2
APEC –
ASTE – 2
AVTE – 13
LAEP – 1
NDFS – 4
PSC –
TDTE - 9

Caine College of the Arts

Motion to approve the business of the Caine College of the Arts made by Richard Walker. Seconded by Thomas Fronk. Business approved.

ART –
MUSC – 2
THEA - 3

Jon M. Huntsman School of Business

Motion to approve the business of the Jon M. Huntsman School of Business made by Richard Walker. Seconded by Sylvia Read. Business approved.

ACCT – 11
DAIS –
BECN –
MHR –
MSLE – 2

Emma Eccles Jones College of Education and Human Services

Motion to HOLD the DFED courses business of the Emma Eccles Jones College of Education and Human Services made by Sylvia Read. Seconded by Sunshine Brosi.

Motion to approve the rest of the business made by Sylvia Read. Seconded by Richard Walker. Business approved.

COMD –18 (**HOLD all DFED courses**)
HDFS – 2
ITLS –
KHS – 5
NURS –
PSY – 1
SPERC– 9
TEAL - 4

College of Engineering

Motion to approve the business of the College of Engineering with the amendments proposed made by Thomas Fronk. Seconded by Brynja Kohler. Business approved.

BENG –
CEE –
ECE – 4
EED –
MAE – 2 (5045 & 5050 must be in the professional engineering program or graduate student)

College of Humanities and Social Sciences

Motion to approve the business of the College of Humanities and Social Sciences made by Jared Colton. Seconded by Mateja Savoie-Roskos. Business approved.

AS - 17
CSPH – 24
ENGL –
HIST – 3
JCOM – 1
POLS –
SWRK – 3
SOCA – 1
WGLC – 7

S.J. & Jessie E. Quinney College of Natural Resources

ENVS –
WATS –
WILD –

College of Science

Motion to approve the business of the College of Science made by Brynja Kohler. Seconded by Heloisa Rutigliano. Business approved.

BIOL – 1
CHEM – 2
CS – 1
GEOS – 2
MATH – 2
PHYS – 2

College of Veterinary Medicine

VCLS –

Other Business

Seeing a proliferation of micro credentials with certificates. Need to look at any overlap. Governor Cox is pushing certificates, and the Board of Education agrees with him. Currently working with the micro-credential task force to make sure that we have purpose and meaning for the certificates.

Adjourn: 3:02 pm

CAAS COE - Applied Economics Applied Sciences, Technology and Education Civil and Environmental Engineering Plants, Soils and Climate - Precision Agriculture Technology Post-Baccalaureate Certificate

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE (include all cross listed colleges)*

CAAS

COE

DEPARTMENT (include all cross listed departments)*

Applied Economics

Applied Sciences, Technology and Education

Civil and Environmental Engineering

Plants, Soils and Climate

Current Title (if applicable)* not applicable

Proposed Title* Precision Agriculture Technology Post-Baccalaureate Certificate

CIP Code

Enter the Correct CIP Code by Using the Following Link:
[Classification Instruction Programs](#)

CIP Code (6-digits) * 011102

Minimum Number of
Credits (if
applicable)* 12

Maximum Number of
Credits (if
applicable)* 14

Type of Degree: (BA, Post-Baccalaureate Certificate
BS, etc.)*

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

**New Academic
Program:**

- ☐ Certificates of Completion
- ☐ Certificates of Proficiency
- ☐ CTE - Certificate of Completion
- ☐ CTE - Certificate of Proficiency
- ☐ Institutional Certificate of Proficiency
- ☐ K-12 Endorsement Program
- ☐ Minor
- ☐ New Emphasis for Existing Program
- ☐ Out of Service Area Delivery Program (attach signed MOU)
- ☒ Post-Baccalaureate Certificate
- ☐ Post-Masters Certificate

**Existing Academic
Program Changes:**

- ☐ Name Change of Existing Program
- ☐ Program Restructure (with or without Consolidation)
- ☐ Program Transfer to a New Academic Department or Unit
- ☐ Program Suspension (on hold-not listed in catalog)
- ☐ Program Discontinuation (permanent program removal)
- ☐ Reinstatement of Previously Suspended Program
- ☐ Out-of-Service Area Delivery Program (attach signed MOU)

- Administrative Unit Changes:**
- ☐ Name Change of Existing Unit
 - ☐ Administrative Unit (Transfer)
 - ☐ Administrative Unit (Restructure-with or without Consolidation)
 - ☐ Administrative Unit (Suspension-on hold)
 - ☐ Administrative Unit (Discontinuation-permanent unit removal)
 - ☐ Reinstatement of Previously Suspended Administrative Unit
 - ☐ Reinstatement of Previously Discontinued Administrative Unit

Other: (explain change)

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval*

☐ Yes
☒ No

Teacher Licensure Program Approval (STEP)*

☒ Yes
☐ No

SECTION I: THE REQUEST

R401 Purpose* To create an Post-Baccalaureate Certificate termed "Precision Agriculture Technology".

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale*

Precision agriculture is a multi-faceted science that involves several different disciplines – including plant, soil, and climate sciences, several facets of engineering (electrical, agriculture, biological, irrigation, etc.), agricultural technologies and systems, statistics, mathematics, and geographic information systems. This science has developed rapidly over the past few decades and focuses on more precise management of agricultural systems using site-specific science, engineering, and technologies. This usually applies to inputs used for agriculture such as pesticides, fertilizers, seeding, tillage, irrigation, and related operations. Rather than constant rates, precision agriculture often varies the input rate across fields to optimize input allocation and maximize profit, build soil health, and improve environmental stewardship. Interest in precision agriculture from students and the industry continues to increase rapidly. Further, several federal granting agencies are making new and large investments in precision agriculture programs. Because precision agriculture incorporates many disciplines, no one department has been able to offer a precision agriculture degree or certificate. Therefore, we propose a new certificate that incorporates existing classes from four departments (PSC, CEE, APEC, and ASTE) and two colleges (College of Engineering and College of Agriculture and Applied Sciences). This will increase collaboration among faculty and students interested in precision agriculture – creating new and exciting opportunities that are not possible in a single department or college.

**Labor Market Demand
(if applicable)**

Several agriculture industries in Utah and around the nation are requesting and expecting students with more training in precision agriculture. These include large and small companies that advise farmers and ranchers, like Simplot, Nutrien, Intermountain Farmers Association, Valley Agronomics, Bear River Cooperative, etc. Further, technology developers such as John Deere, Case International, Trimble, Rave Industries, etc. are seeking students with skills in precision agriculture, and the projected growth of precision agriculture and equipment technician jobs is much faster than average (8-11%) ([O*NET](#)). This certificate program will train students that can fill these and related jobs. Further, jobs in agriculture that mention “digital agriculture”—a primary component of precision agriculture—pay, on average, \$6,500 more per year compared to non-digital agriculture jobs ([Purdue Agricultural Job Market Report, 2022](#)). The new practicum course and existing courses will incorporate industry partnerships so students can gain firsthand experiential learning with the latest precision technologies. This will also lead to greater incorporation in the workforce.

**Consistency with
Institutional Mission
& Institutional
Impact***

This proposed certificate is consistent with the USU mission of being a student-centered land-grant university. It should not impact other USHE institutions in that USU is the only institution with all the critical components for making this certificate successful (irrigation engineering, plant science, soil science, agriculture technology, agriculture systems, and applied agriculture economics), and no other USHE institution offers a precision agriculture certificate. It will also provide agriculture students with broader career opportunities.


Finances*

There will be no additional costs and no additional savings with this proposed certificate. All the classes except the precision agriculture practicum course (1 credit) are already currently taught at USU by existing faculty. The one new course will be created and co-taught by current faculty members in engineering, agriculture systems, and plant and soil sciences. This course will help facilitate the certificate program and bring students from the program together for overarching introductions and applied experience in precision agriculture. All department heads with courses involved in this certificate have given their approval of this certificate (Drs. Paul Johnson, Marv Halling, Ryan Bosworth, and Becki Lawver).

SECTION III: CURRICULUM (if applicable)

**Program Curriculum
Narrative**

This certificate is for graduate students. A minimum of 12 credits will be required. The precision agriculture practicum course (PSC 5999 / CEE 5999 / ASTE 5999) will be a required course. This will be a newly developed course that is already being planned by ASTE and CEE faculty. One course in remote sensing (CEE 5003 or PSC 6003) or geographic information systems (GIS) (NR 6910, 6930, WATS 6920) will be required. An additional three courses will be required in plant/soil/water/economics/unmanned aircraft systems (PSC 4320, 4400, 4550, 4700, 6900, APEC 4310, 5015, CEE 5001, 5006, 5007, 5008, 6930).

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the SAVE ALL CHANGES button below.

Scroll to the top left and click on the LAUNCH  icon to launch your proposal.

**CAAS COE - Plants, Soils and Climate Applied Economics Applied
Sciences, Technology and Education Civil and Environmental
Engineering - Precision Agriculture Technology - Institutional
Certificate of Proficiency**

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

**HELPS AND HINTS FOR COMPLETING R401
PROPOSALS**

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

**Click on the college(s) and department(s) that are included on this
request**

**COLLEGE (include all
cross listed
colleges)***

CAAS

COE

**DEPARTMENT
(include all cross
listed departments)***

Plants, Soils and Climate

Applied Economics

Applied Sciences, Technology and Education

Civil and Environmental Engineering

**Current Title (if
applicable)*** no current title

Proposed Title* Precision Agriculture Technology - Institutional Certificate of Proficiency

CIP Code

Enter the Correct CIP Code by Using the Following Link:
[Classification Instruction Programs](#)

CIP Code (6-digits) * 011102

Minimum Number of
Credits (if
applicable)* 12

Maximum Number of
Credits (if
applicable)* 14

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

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

- New Academic Program:**
- ☐ Certificates of Completion
 - ☐ Certificates of Proficiency
 - ☐ CTE - Certificate of Completion
 - ☐ CTE - Certificate of Proficiency
 - ☒ Institutional Certificate of Proficiency
 - ☐ K-12 Endorsement Program
 - ☐ Minor
 - ☐ New Emphasis for Existing Program
 - ☐ Out of Service Area Delivery Program (attach signed MOU)
 - ☐ Post-Baccalaureate Certificate
 - ☐ Post-Masters Certificate

- Existing Academic Program Changes:**
- ☐ Name Change of Existing Program
 - ☐ Program Restructure (with or without Consolidation)
 - ☐ Program Transfer to a New Academic Department or Unit
 - ☐ Program Suspension (on hold-not listed in catalog)
 - ☐ Program Discontinuation (permanent program removal)
 - ☐ Reinstatement of Previously Suspended Program
 - ☐ Out-of-Service Area Delivery Program (attach signed MOU)

- Administrative Unit Changes:**
- ☐ Name Change of Existing Unit
 - ☐ Administrative Unit (Transfer)
 - ☐ Administrative Unit (Restructure-with or without Consolidation)
 - ☐ Administrative Unit (Suspension-on hold)
 - ☐ Administrative Unit (Discontinuation-permanent unit removal)
 - ☐ Reinstatement of Previously Suspended Administrative Unit
 - ☐ Reinstatement of Previously Discontinued Administrative Unit

Other: (explain change)

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval*

☐ Yes
☒ No

Teacher Licensure Program Approval (STEP)*

☒ Yes
☐ No

SECTION I: THE REQUEST

R401 Purpose* To create an Institutional Certificate of Proficiency termed "Precision Agriculture Technology" Certificate for undergraduate students.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale* Precision agriculture is a multi-faceted science that involves several different disciplines – including plant, soil, and climate sciences, several facets of engineering (electrical, agriculture, biological, irrigation, etc.), agricultural technologies and systems, statistics, mathematics, and geographic information systems. This science has developed rapidly over the past few decades and focuses on more precise management of agricultural systems using site-specific science, engineering, and technologies. This usually applies to inputs used for agriculture such as pesticides, fertilizers, seeding, tillage, irrigation, and related operations. Rather than constant rates, precision agriculture often varies the input rate across fields to optimize input allocation and maximize profit, build soil health, and improve environmental stewardship. Interest in precision agriculture from students and the industry continues to increase rapidly. Further, several federal granting agencies are making new and large investments in precision agriculture programs. Because precision agriculture incorporates many disciplines, no one department has been able to offer a precision agriculture degree or certificate. Therefore, we propose a new certificate that incorporates existing classes from four departments (Plants, Soils, and Climate (PSC), Civil and Environmental Engineering (CEE), Applied Economics (APEC), and Applied Sciences, Technology and Education (ASTE)) and two colleges (College of Engineering and College of Agriculture and Applied Sciences). This will increase collaboration among faculty and students interested in precision agriculture – creating new and exciting opportunities that are not possible in a single department or college.

**Labor Market Demand
(if applicable)**

Several agriculture industries in Utah and around the nation are requesting and expecting students with more training in precision agriculture. These include large and small companies that advise farmers and ranchers, like Simplot, Nutrien, Intermountain Farmers Association, Valley Agronomics, Bear River Cooperative, etc. Further, technology developers such as John Deere, Case International, Trimble, Rave Industries, etc. are seeking students with skills in precision agriculture, and the projected growth of precision agriculture and equipment technician jobs is much faster than average (8-11%) ([O*NET](#)). This certificate program will train students that can fill these and related jobs. Further, jobs in agriculture that mention “digital agriculture”—a primary component of precision agriculture—pay, on average, \$6,500 more per year compared to non-digital agriculture jobs ([Purdue Agricultural Job Market Report, 2022](#)). The new practicum course and existing courses will incorporate industry partnerships so students can gain firsthand experiential learning with the latest precision technologies. This will also lead to greater incorporation in the workforce.

**Consistency with
Institutional Mission
& Institutional
Impact***

This proposed certificate is consistent with the USU mission of being a student-centered land-grant university. It should not impact other USHE institutions in that USU is the only institution with all the critical components for making this certificate successful (irrigation engineering, plant science, soil science, agriculture technology, agriculture systems, and applied agriculture economics), and no other USHE institution offers a precision agriculture certificate. It will also provide agriculture students with broader career opportunities.


Finances*

There will be no additional costs and no additional savings with this proposed certificate. All the classes except the precision agriculture practicum course (1 credit) are already currently taught at USU by existing faculty. The one new course will be created and co-taught by current faculty members in engineering, agriculture systems, and plant and soil sciences. This course will help facilitate the certificate program and bring students from the program together for overarching introductions and applied experience in precision agriculture. All department heads with courses involved in this certificate have given their approval of this certificate (Drs. Paul Johnson, Marv Halling, Ryan Bosworth, and Becki Lawver).

SECTION III: CURRICULUM (if applicable)

**Program Curriculum
Narrative**

A minimum of 12 credits will be required for this ICP. The precision agriculture practicum course (PSC 5999 / CEE 5999 / ASTE 5999) will be a required 3-credit course. This will be a newly developed course that is already being planned by ASTE and CEE faculty. One course in remote sensing (CEE 5003 or PSC 6003) or geographic information systems (GIS) (NR 6910, 6930, WATS 6920 or GEO 2800) will be required. An additional three courses will be required in plant/soil/water/economics/unoccupied aerial systems (PSC 3000, 4320, 4400, 6900, 4550, 4700, APEC 3310, 4310, 5015, CEE 5001, 5006, 5007, 5008, 6930, AV 3520 or 3590).

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the SAVE ALL CHANGES button below.

Scroll to the top left and click on the LAUNCH  icon to launch your proposal.

CAAS - Extension - Center for Family Life Programs

4.1.c R401 NEW ADMINISTRATIVE UNIT

Proposal Information

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE or
UNIVERSITY
DIVISION: *

CAAS

DEPARTMENT or
UNIT: *

Extension

PROPOSED UNIT
TITLE: * Center for Family Life Programs

REQUEST

TYPE OF UNIT BEING REQUESTED

Click the change that best reflects your proposal.

Centers typically involve faculty and staff from one or more departments, colleges or units engaged in dedicated research, educational or service activity.

Institute is an organization intended for research and is broader in scope and funding than a center; it is typically associated with a physical organizational infrastructure for conducting research. It involves faculty and staff from multiple units who depend on a set of common facilities for their research. An institute may house within it one or more centers.

Unit Being Requested*

- ☐ New Administrative Unit (new colleges and professional schools - use full template)
- ☒ New Center
- ☐ New Institute
- ☐ New Bureau

DESCRIPTION | NARRATIVE

Administrative Unit Description and Narrative*

The Center will coordinate and conduct cross-department Family Life Extension programming and applied interdisciplinary research. The Center will seek out and administer contracts and grants from public and private entities within and beyond Utah. The Center will be the cost center for externally funded projects related to Extension Family Life education programs. Extension programs integrate research, education, and service. Existing USU programs (and funding sources) that would align with the Center include the Utah Marriage Commission (DWS), the Healthy Relationships Utah initiative (OFA), Strengthening Families (DHHS), and Divorce Education (AOC).

The creation of this Center does not include a request for new money or space. Contracts, grants, and interagency agreements will fund the Center's services. Dr. Brian Higginbotham will serve as the inaugural Director of the Center. He will continue to serve as the AVP of Extension at the pleasure of the VP of Extension. Dr. Higginbotham and his interdisciplinary collaborators have secured continuous funding since 2006 for family life education. For the last ten years, funding has averaged \$3 million in external grants/contracts. If/when he is no longer the AVP of Extension, Dr. Higginbotham will continue as the Center for Family Life Programs Director and focus on growing the Center's services and impact (within and beyond Utah).

Creating a Center will help grow the interdisciplinary team working on family-life-related research, education, and service. It is also anticipated that the Center may support travel to conferences, scholarships, undergraduate/graduate assistantships, postdoc positions, and visiting scholars.

SUBMIT AND APPROVE THE PROPOSAL

Click on the save all changes button below.

Scroll to the top left and click on the launch  icon to launch your proposal.

CAAS - Landscape Architecture and Environmental Planning - Design Entrepreneurship - Institutional Certificate of Proficiency

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE (include all cross listed colleges)*

CAAS

DEPARTMENT (include all cross listed departments)*

Landscape Architecture and Environmental Planning

Current Title (if applicable)*

Design Entrepreneurship - Institutional Certificate of Proficiency

Proposed Title*

Design Entrepreneurship - Institutional Certificate of Proficiency

CIP Code

Enter the Correct CIP Code by Using the Following Link:

Classification Instruction Programs

CIP Code (6-digits) * 04.0601

Minimum Number of
Credits (if
applicable)* 13

Maximum Number of
Credits (if
applicable)* 13

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

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

**New Academic
Program:**

- ☐ Certificates of Completion
- ☐ Certificates of Proficiency
- ☐ CTE - Certificate of Completion
- ☐ CTE - Certificate of Proficiency
- ☒ Institutional Certificate of Proficiency
- ☐ K-12 Endorsement Program
- ☐ Minor
- ☐ New Emphasis for Existing Program
- ☐ Out of Service Area Delivery Program (attach signed MOU)
- ☐ Post-Baccalaureate Certificate
- ☐ Post-Masters Certificate

**Existing Academic
Program Changes:**

- ☐ Name Change of Existing Program
- ☐ Program Restructure (with or without Consolidation)
- ☐ Program Transfer to a New Academic Department or Unit
- ☐ Program Suspension (on hold-not listed in catalog)
- ☐ Program Discontinuation (permanent program removal)
- ☐ Reinstatement of Previously Suspended Program
- ☐ Out-of-Service Area Delivery Program (attach signed MOU)

**Administrative Unit
Changes:**

- ☐ Name Change of Existing Unit
- ☐ Administrative Unit (Transfer)
- ☐ Administrative Unit (Restructure-with or without Consolidation)
- ☐ Administrative Unit (Suspension-on hold)
- ☐ Administrative Unit (Discontinuation-permanent unit removal)
- ☐ Reinstatement of Previously Suspended Administrative Unit
- ☐ Reinstatement of Previously Discontinued Administrative Unit

Other: (explain change)

ADDITIONAL APPROVALS (if applicable)

Graduate Council
Approval* ☐ Yes
☒ No

Teacher Licensure
Program Approval
(STEP)* ☐ Yes
☒ No

SECTION I: THE REQUEST

R401 Purpose* The Department of Landscape Architecture and Environmental Planning (LAEP) proposes to offer an Institutional Certificate of Proficiency in Design Entrepreneurship. All required coursework for this new certificate is presently offered as part of LAEP's curriculum, or will be offered as part of LAEP's Bachelor of Landscape Architecture degree program.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale* The primary goal of the proposed Institutional Certificate of Proficiency in Design Entrepreneurship at Utah State University (USU) is to provide students with an introductory education in entrepreneurial business operations as related to design, engineering and planning professions. The ability to start, grow, and manage a professional practice firm is fundamental to success in the allied fields of architecture, engineering, graphic design, interior design, landscape architecture, product design, and planning. USU's LAEP Department offers professional degrees ranging from both a Bachelor and Master of Landscape Architecture, a Master of Science in Environmental Planning and a new Bachelor of Science in Environmental Planning. However, these and similar degrees at peer institutions nationally, provide minimal training in how practitioners operate successful professional firms. This will make the certificate a unique offering that can distinctly benefit our students. In addition, the Design Entrepreneurship Institutional Certificate of Proficiency would complement multiple allied majors within USU, including Interior Architecture and Design, Civil and Environmental Engineering, Graphic Design, and Outdoor Product Design and Development, by providing foundational education in the unique entrepreneurial market of professional design services. Because these skills are both essential to professionals and absent from existing curricula, students would benefit by earning a directly applicable credential to be more competitive in the marketplace. The certificate would also benefit students because the new content it provides that is specific to entrepreneurship within these professional services fields, which are distinct from much of the business world.

**Labor Market Demand
(if applicable)**

Architectural, engineering, construction and design (AEC+D) professions constituted some 1.4M U.S. jobs in 2021 according to the Bureau of Labor Statistics. With average growth rates exceeding 5% for the coming decade, these allied disciplines represent a substantial job sector. Existing programs at USU provide undergraduate training in the majority of these professions, and result in strong job placement rates, competitive wages, and substantial benefits to society. However, academic degrees in these professional service careers overwhelmingly focus training on technical skills. The same professions report inadequate preparation among entry-level employees in the fundamentals of successful for-profit, professional practice. The Institutional Certificate of Proficiency in Design Entrepreneurship augments all such degree programs at USU, training students for the unique business challenges facing the AEC+D firms and companies that will employ them. The overwhelming majority of these jobs are in the private sector, and this certificate would prepare students for career advancement through training in distinct leadership areas including: business development, value creation, proposal development, project management, team dynamics, bidding and cost estimation, and client relations. As a result, the certificate would support the employability of students pursuing degrees in civil engineering, interior design/architecture, graphic design, outdoor product design, environmental planning, and landscape architecture. For students motivated to create their own business start-ups, the certificate offers training in how such organizations are conceived, managed, and achieve profitability. As a result, the certificate will increase the ability of graduates to start new businesses within their chosen markets.

**Consistency with
Institutional Mission
& Institutional
Impact***

The proposed Design Entrepreneurship Institutional Certificate of Proficiency is consistent with USU's mission "to discover, create, and transmit knowledge through education and training programs at the undergraduate, graduate, and professional levels; through research and development; and through service and extension programs" (R312, 4.1.1). This program specifically addresses the mission of USU to be one of the nation's premier student-centered Land Grant universities through a student-focused and community-engaged program developing future professionals who are prepared to contribute to—and ultimately start and/or lead—AEC+D firms. The Design Entrepreneurship certificate will benefit USHE and the state by serving the public through learning, engagement, and workforce development. Future professionals and leaders exposed to the core principles of entrepreneurship within design and planning firms will elevate the capacity of high-quality solutions to reach the market, thus contributing to solutions for problems facing society and the environment across the Intermountain West and around the world. Undergraduate enrollments in the allied AEC+D disciplines at USU exceed 1,500 students, providing a significant pool of individuals who can benefit from the certificate.

Finances*


The existing resources designated for LAEP degree programs are adequate to offer the Design Entrepreneurship certificate. It is anticipated that the addition of the certificate will have a positive financial impact on LAEP through increased enrollment in LAEP courses.

SECTION III: CURRICULUM (if applicable)

**Program Curriculum
Narrative**

As indicated in the Program Curriculum attachment, the Design Entrepreneurship Institutional Certificate of Proficiency is composed of required professional foundation courses in the Entrepreneurship Core (6 credits), a Professional Office Experience (1 credit), and Business Electives (6 credits min.) in accounting, entrepreneurship, finance, ideation, management, or marketing. A minimum of 13 credits are required for the certificate.

Drawn from various programs across USU, the Electives would allow students from allied AEC+D programs to efficiently complete the Certificate due to overlap in their major requirements (e.g., credit for existing internship experiences). The schedule for the Certificate is left open to when the students can best fit the courses in with their major requirements.

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the SAVE ALL CHANGES button below.

Scroll to the top left and click on the LAUNCH  icon to launch your proposal.

CAAS - Technology, Design and Technical Education - Plumbing Apprenticeship - Certificate of Proficiency

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE (include all
cross listed
colleges)*

CAAS

DEPARTMENT
(include all cross
listed departments)*

Technology, Design and Technical Education

Current Title (if
applicable)* Not Applicable

Proposed Title* Plumbing Apprenticeship - Certificate of Proficiency

CIP Code

Enter the Correct CIP Code by Using the Following Link:

[Classification Instruction Programs](#)

CIP Code (6-digits) * 46.0503

Minimum Number of
Credits (if applicable)* 24

Maximum Number of
Credits (if applicable)* 24

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

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

New Academic Program:

- ☐ Certificates of Completion
- ☐ Certificates of Proficiency
- ☐ CTE - Certificate of Completion
- ☒ CTE - Certificate of Proficiency
- ☐ Institutional Certificate of Proficiency
- ☐ K-12 Endorsement Program
- ☐ Minor
- ☐ New Emphasis for Existing Program
- ☐ Out of Service Area Delivery Program (attach signed MOU)
- ☐ Post-Baccalaureate Certificate
- ☐ Post-Masters Certificate

Existing Academic Program Changes:

- ☐ Name Change of Existing Program
- ☐ Program Restructure (with or without Consolidation)
- ☐ Program Transfer to a New Academic Department or Unit
- ☐ Program Suspension (on hold-not listed in catalog)
- ☐ Program Discontinuation (permanent program removal)
- ☐ Reinstatement of Previously Suspended Program
- ☐ Out-of-Service Area Delivery Program (attach signed MOU)

Administrative Unit Changes:

- ☐ Name Change of Existing Unit
- ☐ Administrative Unit (Transfer)
- ☐ Administrative Unit (Restructure-with or without Consolidation)
- ☐ Administrative Unit (Suspension-on hold)
- ☐ Administrative Unit (Discontinuation-permanent unit removal)
- ☐ Reinstatement of Previously Suspended Administrative Unit
- ☐ Reinstatement of Previously Discontinued Administrative Unit

Other: (explain
change)

ADDITIONAL APPROVALS (if applicable)

**Graduate Council
Approval*** ☐ Yes
☒ No

**Teacher Licensure
Program Approval
(STEP)*** ☐ Yes
☒ No

SECTION I: THE REQUEST

R401 Purpose*

The Department of Technology, Design, and Technical Education (TDTE) at Utah State University (USU) requests the creation of a Certificate of Proficiency in Plumbing, effective Fall semester 2024. This is a standalone certificate designed to be part of the aligned technical certificates offered through Utah's System of Higher Education (USHE) Technical Colleges, including the technical certificate programs at USU Eastern, USU Blanding, and USU Moab, into meaningful degree options at Utah State University. This certificate will leverage students' applied skills and state licensures into a standalone plumbing certificate. This program will be offered face-to-face and online within southeastern Utah for non-traditional and distance learners to accommodate flexible learning and access.

Utah State University (USU) is a land grant university with a specific mission and goals outlined by the Morrill Act of 1862 to provide access to a practical, quality education for all. Additionally, USU serves as a regional community college and technical college for the southeast region. The desire for a workforce development strategy that is both innovative and emphasizes stackable pathways into higher learning opportunities for students is the central mission of USU—the proposed creation of a Certificate of Proficiency in Plumbing centers on the state's diverse needs and skills gap in rural regions of southeastern Utah.

As a leader in education and workforce development, USU aims to provide accessible and relevant education to meet the needs through a program that accommodates the learners' barriers to success. The Certificate of Proficiency in Plumbing contributes to this goal by offering a curriculum that aligns with the needs of the local and regional industries, preparing students for careers in plumbing and closely related fields that local industry partners support and request. This program can equip graduates with the skills and knowledge required to address hiring challenges and contribute to economic development in Utah and beyond by offering a practical and applied education for in-demand skilled trades and building thriving economies with the support of small business entrepreneurship.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale*

The proposed Certificate in Plumbing has been developed from regional workforce partnerships and statewide curriculum collaboration. As a result, curricular development processes were initiated in partnership with industry and internal academic units to help meet the industry's needs while maintaining program fidelity and academic rigor.

The career field of Plumbing is dynamic and constantly evolving, driven by technological advancements and ever-changing industry demands. To offer a relevant program, it is essential to actively involve industry representatives, employers, and professionals in the program development process. By seeking their input, the emerging trends, technological advancements, and skill requirements can be identified that shape the industry's needs. This industry-driven approach will ensure continued program alignment with the diverse business field's current and future demands, thus increasing graduates' employability.

A successful certificate program requires strong collaboration and partnerships with industry stakeholders, governmental departments, and educational partners. By actively engaging employers, professional organizations, and industry experts, valuable partnerships will be established to facilitate internships, cooperative opportunities, and real-world student projects. These collaborations enhance students' practical skills and knowledge and provide them with networking opportunities and potential employment prospects. Moreover, industry partners contribute to curriculum development, ensuring it reflects the latest industry practices and technologies relevant to their future career advancements.

The curriculum of the Plumbing program has been designed based on input from industry partners to ensure its alignment with industry needs and demands. The program will offer a balanced mix of theoretical knowledge and hands-on practical experience, emphasizing applying relevant industry principles and furthering the knowledge of technologies utilized in real-world settings. Additionally, the program incorporates industry-standard tools and equipment to familiarize students with the available resources used in the field.

To deliver a high-quality education that meets industry standards, faculty members possess a combination of academic qualifications and industry experience. This blend of expertise ensures that students receive instruction that combines theoretical knowledge with practical insights. Additionally, Plumbing is a field that requires state licensure to perform job-specific duties. Faculty members engage in ongoing professional development activities, including industry conferences, workshops, and collaborations with industry partners. By staying connected with industry trends and best practices, faculty are better equipped to deliver relevant and up-to-date instruction to students and prepare a qualified and competent workforce.

A robust system of continuous evaluation and improvement will be implemented to ensure the ongoing relevance and quality of the restructured program. Feedback from industry partners, alumni, and employers will be actively sought and incorporated into program reviews and updates. This iterative process will help identify areas for improvement, emerging industry needs, and opportunities for curriculum enhancement. The program will also regularly conduct graduate surveys and track the employment outcomes of graduates to assess the program's effectiveness in meeting industry demands.

**Labor Market Demand
(if applicable)**

Nationally, the Bureau of Labor Statistics (BLS) projects that employment in Plumbing occupations will grow by 4.6% between 2021 and 2031, adding over 2,500 new jobs to Utah's economy, with statewide annual job openings of 930 open positions. The BLS also reports that plumbing occupations offer a local median annual wage of \$58,640 higher than the median annual wage for all occupations of \$41,950.

Furthermore, as technological advances continue to shape various industries, the demand for plumbing professionals with practical, hands-on business experience is expected to increase. The proposed certificate program will expand upon students' practical skills built around specific plumber's functions and knowledge needed to succeed in these rapidly evolving industries and prepare them for the job market upon graduation.

This certificate program is expected to generate significant student demand. Expected enrollments will come from technically minded students looking to learn a profitable trade without significant time investment. Students who wish to enter the plumbing trade are expected to have an apprenticeship ready prior to enrollment, which allows students to complete their academic work with no student debt and leverages the highly attractive model of earning-while-learning apprenticeship. Additional areas of student recruitment will come from individuals seeking to re-enter education to learn a new trade or skill.

The students for whom this certificate has been developed are attracted to these options because it allows them to complete coursework with hands-on application, flexible learning schedules, and the ability to gain specialized knowledge in their chosen field. This will broaden their career prospects, making them eligible for future promotion through their apprenticeship or provide them the skills to create a business designed specifically around their skills and level of certification. The program's emphasis on industry collaboration ensures that the education provided is efficient and aligned with industry demands, making graduates highly employable and an expected curriculum feature. This aspect appeals to technical certificate completers seeking a competitive edge in the job market and the opportunity for upward career mobility.

Additionally, there is a growing trend of individuals with industry experience seeking to re-enter education to enhance their skills, explore new career opportunities, or pursue a career change. The proposed program emphasizes industry input and demand, offering a unique opportunity for these individuals to have hands-on learning that will inform their future careers and acquire formal qualifications. With their practical industry experience, these students bring valuable insights and perspectives to the program from different backgrounds that will help to lead to future innovations. Their presence enriches classroom discussions, enhances collaborative learning, and contributes to a dynamic educational environment.

The program's flexibility in scheduling, including online and evening classes, caters to the needs of individuals juggling work, family responsibilities, or other commitments. This flexibility, combined with the program's industry relevance and hands-on approach, appeals to individuals re-entering education and seeking a program that directly aligns with their professional goals and aspirations while not requiring changing jobs or moving their families to participate in the educational opportunity.

**Consistency with
Institutional Mission
& Institutional
Impact***

The proposed Certificate of Proficiency in Plumbing will be offered through the Division of Technical Education within the Department of Technology, Design, and Technical Education (TDTE) in the Southeast region. Existing faculty, staff, facilities, and equipment will implement and sustain the proposed certificate program. No additional resources will be required.

The certificate program will provide independent, State-regulated certification and a stackable credential toward an Associate of Applied Science in General Technology and The Bachelor's in Technology Systems:

- AAS, General Technology
- BS, Technology Systems, Technical Management

The Technology, Design, and Technical Education Department at Utah State University offers a broad-based Bachelor of Science (BS) degree in Technology Systems, emphasizing areas in STEM, Business & IT, and Allied Health. The proposed Certificate of Proficiency has been approved as part of the current mandated Utah State Board of Higher Education alignment process. The proposed certificate program allows new training opportunities at USU residential campuses and for students within the statewide system where opportunities for furthering their education are limited. This creates a needed framework to lead the state in forming new partnerships with other technical institutions through the USHE alignment process. This updated certificate will provide additional opportunities for students while avoiding duplication and allowing students a pathway into university credentials through initial licensure with supplemental coursework.


Finances*

The proposed certificate of proficiency has been funded through legislative action. There will be no budgetary impact on other programs or units at Utah State University, including cost savings.

SECTION III: CURRICULUM (if applicable)
--

**Program Curriculum
Narrative**

Plumbing Apprenticeship			
Certificate of Program Proficiency (Catalog Year: 2023, 24 Credits/720 Clock-Hours Required, CIP:46.0503)			
Core (24 Credits/720 Clock-Hours)		Credits	Clock-Hours
TEPL 1110	Plumbing IA	3	90
TEPL 1120	Plumbing IB	3	90
TEPL 1210	Plumbing IIA	3	90
TEPL 1220	Plumbing IIB	3	90
TEPL 1310	Plumbing IIIA	3	90
TEPL 1320	Plumbing IIIB	3	90
TEPL 1410	Plumbing IVA	3	90
TEPL 1420	Plumbing IVB	3	90

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the **SAVE ALL CHANGES** button below.

Scroll to the top left and click on the **LAUNCH**  icon to launch your proposal.

**Utah System of Higher Education
New Academic Program Proposal
Cover/Signature Page - Full Template**

Institution Submitting Request: Utah State University

Proposed Program Title: Deaf Education

Are There New Emphases: Yes ☒ No ☐

Names of New Emphases (Separated by Commas): American Sign Language/English, Listening and Spoken Language

Sponsoring School, College, or Division: Emma Eccles Jones College of Education and Human Services

Sponsoring Academic Department(s) or Unit(s): Department of Communicative Disorders and Deaf Education

Classification of Instructional Program Code¹: 6 - Digit CIP: 13.1003

Min/Max Credit Hours Required of Full Program: 120 Min Cr Hr 120 / Max Cr Hr

Proposed Beginning Term²: Fall 2024

Institutional Board of Trustees' Approval Date:

Program Type (mark all that apply with an x):

<input type="checkbox"/> (AAS)	Associate of Applied Science Degree
<input type="checkbox"/> (AA)	Associate of Arts Degree
<input type="checkbox"/> (AS)	Associate of Science Degree
<input type="checkbox"/>	Specialized Associate Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input checked="" type="checkbox"/> (BA)	Bachelor of Arts Degree
<input checked="" type="checkbox"/> (BS)	Bachelor of Science Degree
<input type="checkbox"/> (BAS)	Bachelor of Applied Science Degree
<input type="checkbox"/>	Specialized Bachelor Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/> (MA)	Master of Arts Degree
<input type="checkbox"/> (MS)	Master of Science Degree
<input type="checkbox"/>	Specialized Bachelor Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/>	Doctoral Degree (specify award type ³ :)
<input type="checkbox"/>	K-12 School Personnel Program
<input type="checkbox"/>	Out of Service Area Delivery Program <input type="checkbox"/> Attached MOU
<input type="checkbox"/>	Out of Mission Program
<input type="checkbox"/>	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):

<input type="checkbox"/>	Program Restructure with or without Consolidation
<input type="checkbox"/>	Emphases transfer from another program or academic unit
<input type="checkbox"/>	Name Change of Existing Program or Academic Unit
<input type="checkbox"/>	Program transfer to a different academic unit
<input type="checkbox"/>	Suspension or discontinuation of a unit or program
<input type="checkbox"/>	Reinstatement of a previously suspended/discontinued program or administrative unit
<input type="checkbox"/>	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.

Please type your first and last name _____ 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 Department of Communicative Disorders and Deaf Education requests approval to offer the following degree(s): Bachelor of Arts in Deaf Education, Bachelor of Science in Deaf Education

To be effective on: July 1, 2024

This program was approved by the institutional Board of Trustees on:

Section II: Program Proposal

Program Description

The Department of Communicative Disorders and Deaf Education (COMDDE) proposes a new, fully online Bachelor of Science and Bachelor of Arts degree in Deaf Education. The core Deaf Education coursework will provide content breadth foundations to students interested in providing early intervention and/or educational services to children who are Deaf or Hard of Hearing (D/HH). The core courses will introduce students to the range of language and communication options for children who are D/HH, including American Sign Language (ASL) and Listening and Spoken Language (LSL). Core coursework will also include foundations in early intervention, child language development, special education laws and policies, and an introduction to serving children with disabilities. In addition to core coursework, students must declare one of the following emphasis paths for content depth:

Emphasis Option #1. American Sign Language/English (ASL/English)

This fully online emphasis will train students to provide K-12 educational services to children who are D/HH who use ASL and written English. The program of study includes breadth of teaching pedagogy in K-12 in all core subjects aligned with Utah Effective Teaching Standards. Upon program completion, in addition to earning a Bachelor of Science or Bachelor of Arts degree in Deaf Education, students will be eligible for a Utah Professional Educator License in Deaf Education with a Bilingual-Bicultural Endorsement issued by the Utah State Board of Education (USBE). To ensure students gain the skills and competencies needed to earn the professional educator license, COMDDE faculty will engage in partnerships with the Utah Schools for the Deaf and Blind (USDB) and other local education agencies (LEAs) in Utah and in the Intermountain Region for students to complete fully mentored hands-on practicum requirements for three semesters plus another full semester of student teaching. These partnerships will facilitate the ability of non-traditional students to have access to earning a degree and teaching license. For example, an employee serving as a teacher's aide at USDB or within an LEA could complete the online coursework and complete the practicum requirements in their employment setting, thus allowing them to maintain employment, avoid relocating, and earn a degree that may otherwise be unattainable. The USBE affirmed on 8/23/2022 the proposed ASL/English program of study satisfies requirements for the Utah Deaf Education Professional Educator License with the Bilingual-Bicultural Endorsement.

Emphasis Option #2. Listening and Spoken Language (LSL)

This fully online emphasis will train students to provide early intervention and early educational services to children ages birth through five who are D/HH and who are developing and using LSL. Nine credit hours of coursework from the Department of Human Development and Family Studies (HDFS) is also included in the required coursework, approved by Dr. Sarah Tulane from HDFS. This collaboration between departments maximizes college and department resources and enhances student benefit by gaining skills and expertise from HDFS faculty. Upon program completion, students will earn a Bachelor of Science or Bachelor of Arts degree in Deaf Education and will have completed nine credit hours toward satisfying requirements for a Master of Education degree specializing in LSL Deaf Education currently available in the department of COMDDE, thus serving as a potential feeder for the master's program. In the LSL Master of Education program, students complete the requirements to earn a Utah Professional Educator License with the LSL Endorsement.

Consistency with Institutional Mission

The proposed bachelor's degree program and emphasis options in Deaf Education are consistent with the Utah System of Higher Education (USHE) and USU's mission to:

- *Advance knowledge, drive innovation, discover, create, and impart knowledge through research, teaching, and service at the undergraduate, graduate, and professional levels:* The new proposed degree program will meet this priority through partnerships with USDB and LEAs in Utah and the Intermountain Region and will provide opportunities for both traditional and non-traditional students to earn a bachelor's degree.
- *Provide community outreach and continuing education:* The proposed program is uniquely designed to engage with our community

partners and facilitate educational opportunities for students to earn a degree and a professional educator license (emphasis #1) while maintaining employment and without requiring relocation to live on the USU campus, consistent with USU's land grant mission.

- *Contribute to the quality of life and social, cultural, and economic development of Utah, the nation, and the world.* Through online coursework and engagement with community partnerships, the proposed program will meet the needs of traditional and non-traditional students as previously described. By gaining more educators with Deaf Education expertise, the program will help to ameliorate critical educator shortages and provide more highly skilled professionals to better serve children who are D/HH; thus contributing to quality of life and the social/cultural development of children who are D/HH and their families.

Section III: Needs Assessment

Program Rationale

The current undergraduate program in COMDDE at USU has a primary focus of preparing students for the fields of speech-language pathology and audiology, with the deaf education programs historically offered only at the graduate level. In 2021, it was deemed necessary to suspend the Bilingual-Bicultural Master of Education program and restructure the Bilingual-Bicultural (also called ASL/English) offerings. After multiple discussions with COMDDE faculty and the Dean of the College of Education and Human Services, and upon consideration of the priorities to increase undergraduate educational options, the Department of COMDDE is seeking to expand its undergraduate programs to include deaf education services. This restructure and the expansion of deaf education at the undergraduate level will increase educational options for students and will address teacher shortages within Utah and the Intermountain West by increasing the number of students who can obtain a degree and a teaching license at the undergraduate level and/or prepare them for graduate school, thus improving services to children who are D/HH.

The proposed undergraduate program option will benefit the Department of COMDDE, USU, and the USHE by 1) increasing and improving undergraduate educational options, 2) offering a pathway to a teaching license (emphasis #1), 3) facilitating students' successful entry into a graduate program, and 4) helping to ameliorate the significant shortage of deaf education teachers, as described in the next section.

Labor Market Demand

There is a state and national shortage of personnel to serve children who are D/HH in both ASL/English and LSL communication and language modalities. According to the American Association for Employment in Education (AAEE) (2020), the national shortage of deaf educators (listed as hearing-impaired special education) is designated as having a "considerable shortage". The shortages are similarly felt in Utah and in the Intermountain West, with the Utah State Office of Education rating deaf education 29th in the top areas of critical need in Utah from a list of 68 professional fields (Teaching Field Index of Criticality for 2019). These shortages have persisted for decades and have far-reaching ramifications. When positions go unfilled, it results in higher and more stressful workloads for existing staff and creates challenges for districts to not only recruit newly qualified deaf educators, but to retain those currently hired. These chronic shortages result in children being underserved or receiving services from unqualified personnel, with exacerbated impact for children with culturally and linguistically diverse needs.

This shortage of high-quality well-trained professionals may be further impacted by the declining number of deaf education teacher preparation programs in the United States. In 1985, there were 81 deaf education teacher preparation programs and by 2020, this number had fallen to just 58 graduate and undergraduate teacher training programs (American Annals of the Deaf, 2022). The 2016 AAEE report indicated that deaf education programs were offered by only 5% of colleges and universities. High retirement rates of the baby boomer generation are also likely exacerbating deaf education teacher shortages, with 28-31% of teacher attrition over the past decade due to retirement (Sutcher et al., 2019), and indications are this trend will continue. For early intervention and preschool programs that seek professionals with LSL expertise, the shortage prospects are particularly bleak. A national needs assessment (Behl et al., 2017) found of the deaf education programs in the U.S., 57% offered no credits and only 4% offered six or more credits in early intervention. Currently, less than 20% of existing deaf education teacher training programs offer dedicated training in LSL methodology (American Annals of the Deaf, 2022). Consistent with the overall shortage of early intervention and special education personnel (Mason-Williams et al., 2020; U.S. Department of Education, 2022), the ability to meet the needs of children who are DHH is of high concern.

Student Demand

As a new undergraduate program proposal, we do not have historical enrollment data. Deaf education as a field of study is much less known than other occupations, such as teachers and speech-language pathologists. If approved, this undergraduate option will be highly promoted at high school career fairs, freshman and sophomore events, and other activities to increase program visibility. We will also promote program awareness with Utah and Intermountain Region stakeholders who serve children who are DHH and their families, such as USDB, LEAs, and Part C agencies. We anticipate there will be enough interest in this program to admit approximately 15 students on average per year in each emphasis.

Similar Programs

Children who are D/HH must develop proficiency in their first language, most typically ASL or spoken English. Children who use ASL must have educators who are fluent in ASL, with skills and competencies in evidence-based ASL teaching methods. Children who are developing LSL use hearing technology, such as hearing aids, cochlear implants, or other assistive listening devices to access sound. LSL educators must understand how to support this technology, with skills and competencies in evidence-based LSL teaching methods. As such, the teaching pedagogy for children using ASL and children using LSL are substantially different. Some teacher preparation programs elect to train students in both methodologies (called Comprehensive Programs). There are advantages to this approach such as exposure to a breadth of services. However, USU believes it is critical that students gain depth and expertise in their skills and competencies specific to either ASL or LSL. This is consistent with the Utah Deaf Education Professional Educator licensure structure in which recipients earn a Deaf Education license with either the Bilingual-Bicultural (ASL/English) Endorsement or the LSL Endorsement. There are no other Deaf Education programs in Utah or the Intermountain Region that trains students with an ASL or LSL emphasis that leads to a Deaf Education Professional Educator License.

Collaboration with and Impact on Other USHE Institutions

The University of Utah (U of U) offers a Comprehensive Deaf Education teacher preparation program housed within the Department of Special Education where students earn a teaching license in Special Education and a D/HH Endorsement. Lauri Nelson (USU Deaf Education Division Chair) and Karen Munoz (USU COMDDE Department Head) met with Chris Bischke and Nicole Pilling from the U of U Sensory Impairment Program to describe the proposed USU program and to discuss potential collaboration opportunities. Our programs already have a history of collaboration, as students from the U of U Visual Impairment program take an Audiology course from USU to fulfill a course requirement. Ms. Bischke and Ms. Pilling expressed enthusiasm for the collaboration opportunities and agreed details of a potential collaboration would be explored during the 2023-2024 academic year. Partnership possibilities include joint recruitment efforts to increase visibility of deaf education as a field of study and shared coursework.

External Review and Accreditation

Program content for both the ASL/English and LSL program emphases were developed by USU faculty and adheres to the Council on Exceptional Children and Council on Education of the Deaf (CEC/CED) national standards for teacher preparation programs. The ASL/English program of study was sent to the USBE for review and on 8/23/2022, USU received confirmation the program met all competency requirements for professional educator licensure eligibility. Additionally, Michelle Tanner and Nathan Harrison at USDB reviewed the ASL/English emphasis program of study during summer 2022 and expressed they were pleased and had no additional suggestions. The LSL emphasis was developed by USU LSL faculty consistent with the national standards and as a feeder to the graduate program.

Program faculty will seek professional accreditation for the ASL/English undergraduate emphasis with the Council on Education of the Deaf in 2025. At this time, the accreditation fee is \$1000, valid for a period of four years. An accreditation application for the LSL emphasis will not be submitted to CED since, at this time, this emphasis does not lead to a professional educator license.

Section IV: Program Details

Graduation Standards and Number of Credits

The proposed undergraduate program addresses and fulfills all teacher preparation program standards as outlined by the CEC/CED National Standards. Coursework was carefully mapped to these standards to ensure students will develop breadth and depth of competencies upon program completion.

Graduation Requirements:

- 120 overall credits

- Complete University Studies (general and depth education)
- Deaf Education Core and Options courses specific to declared emphasis program
- Deaf Education courses not older than 10 years
- Must be taken for a letter grade (or credit awarded for AP or CLEP)
- Grade of C or higher in all DFED and COMD-prefix courses
- Cumulative 3.0 GPA or higher

Students should be aware that a minimum grade of C and a minimum GPA of 3.0 is required across all the courses composing a student's Deaf Education major emphasis. The minimum grade of C in DFED and COMD-prefix courses allows students to have occasional marginal performance. However, any course grade below B must be compensated by grades above B to meet the 3.0 GPA requirement. Acceptance into the program is contingent on the student having an eligible sponsoring agency to fulfill practicum requirements.

Admission Requirements

Prospective students will submit the standard undergraduate admissions application through USU. Admissions criteria will be consistent with Department of COMDDE undergraduate admissions requirements:

- Admission to the Deaf Education major typically occurs at the beginning of the junior year (approximately 60 credits).
- Students admitted to the university with less than 60 credits can be admitted to the Deaf Education Pre-Program.
- A minimum 3.0 GPA is required for admission into the Deaf Education major.
- Admission GPA of 3.0 across at least five of the Deaf Education major courses that the student can take in pre-Deaf Education status: Required General Education, Additional Core, DFED 2880, COMD 3200.

Curriculum and Degree Map

Please see Appendix A.

Section V: Institution, Faculty, and Staff Support

Institutional Readiness

The existing COMDDE administrative structure is sufficient to support the proposed program, with no new administrative or organizational components needed. There are no anticipated negative impacts to the delivery of the current COMDDE undergraduate educational programs. The new proposed undergraduate program would be a positive addition to the COMDDE undergraduate offerings.

Faculty

Existing faculty in the Deaf Education Division, plus adjunct faculty to teach four courses in the ASL/English emphasis, will be sufficient for program implementation. The COMDDE department has funding allocated for the adjunct faculty within the department budget.

Staff

Existing staff will be sufficient to support the proposed Deaf Education undergraduate program; no new staff will be needed. Current administrative, advising, and support staff will undergo training to learn of the proposed program components.

Student Advisement

There will be a dedicated COMDDE undergraduate advisor who will be trained in all program components and able to effectively advise students throughout their undergraduate program experience. This individual will incorporate advising into their current work responsibilities. There will not be a need to hire an additional advisor.

Library and Information Resources

No additional library resources will be needed to support this program. Key journals in Deaf Education (e.g., Deaf Studies and Deaf Education, American Annals of the Deaf, Journal of Speech, Language, and Hearing Research, Journal of Language, Speech and Hearing

Services in Schools, Journal of Early Hearing Detection and Intervention, Volta Review) are available digitally at the Merrill-Cazier library.

Projected Enrollment and Finance

Please see Appendix D.

Section VI: Program Evaluation

Program Goals and Assessment

Program Goals:

- Develop online coursework, mapped to CEC/CED professional standards and other established recommended practices within the field.
- Market the new program using all available avenues within COMDDE and the USU College of Education and Human Services.
- Market and recruit students, develop collaborations at USDB and LEAs in Utah and the Intermountain Region.
- Apply for CED accreditation for emphasis #1 ASL/English in 2025 (or soonest opportunity according to CED guidelines).

Program Assessment and Evaluation:

- Annual faculty review of the curriculum.
- Annual student surveys for program feedback and improvement.
- USDB and LEA feedback at the end of each semester for program feedback and improvement.
- Annual COMDDE surveys of current students, alumni, and employers of graduates.
- Course evaluations each semester by students according to the IDEA system that compares USU evaluations to a national database. Student feedback will be used for program evaluation and improvement.
- Student scores on the Praxis Performance Assessment for Teachers (PPAT) (emphasis #1 ASL/English only)

Student Standards of Performance

The Deaf Education program was designed to ensure each student will:

- Demonstrate knowledge of visual and spoken languages and communication modes, anatomy and physiology of the ear and hearing mechanism, type, degree and etiology of hearing loss, auditory development, and provision of services on the development of individuals who are D/HH; the impact of exceptionalities on learning and development; and the importance of advocating for equal access to language and communication in the individual's preferred mode across all educational settings.
- Demonstrate knowledge of educational placement options; influence of family communication, language, culture, and factors impacting visual and/or auditory learning.
- Demonstrate breadth of knowledge in educational services, lesson plan development, assessment and data collection, and differentiation of instruction, including strategies that promote curricular programming that is responsive to diverse populations across multiple educational settings.
- Demonstrate knowledge of laws, policies, and ethical principles guiding equal access to communication in the individuals' preferred communication mode(s), including awareness of the educator's language competence in supporting individual outcomes; and sociocultural, historical, and political considerations unique to Deaf culture and the field of education of children who are D/HH.
- Demonstrate collaborative behaviors across disciplines to best support the individual needs of each child and family.

Each course syllabus in the Deaf Education program will list the student learning objectives and outcomes that are tied to the CEC/CED national standards and the best practices for each specific emphasis area. The knowledge and skills will be assessed as delineated in the syllabus. To be competent, student must achieve a level of 80% or better on the objectives associated with the standard. Performance will be determined on the primary indicators listed, with any subsequent remediations through later assignments, tests, or designed tasks within or outside the course. A knowledge and competencies grading rubric will be used for each hands-on practicum placement, consistent with the specific goals of the placement (e.g., early intervention, K-6, K-12).

Appendix A: Program Curriculum

Can students complete this degree without emphases? ☐ Yes ☒ No

Course Number	NEW Course	Course Title	Credit Hours
Name of Emphasis:		ASL/English	
DFED 2700	X	The Socio-Cultural Context of Deaf Community and Education	3
DFED 2800	X	Introduction to Deaf Literature and Art	3
DFED 2850	X	Educational Technology, Film, and Creative Visual Learning	3
DFED 4800	X	Methods in ASL/English Literacy Development	3
DFED 5420	X	Math Instruction for Children who are Deaf or Hard of Hearing, K-6	3
DFED 5440	X	Math Instruction for Children who are Deaf or Hard of Hearing, 7-12	3
DFED 5600	X	Assessment and Application of Linguistics in the Classroom	3
DFED 5620	X	English Language Arts Curriculum and Instruction Methods, K-6	3
DFED 5640	X	English Language Arts Curriculum and Instruction Methods, 7-12	3
DFED 5700	X	ASL/English Practicum (3 credits x 3 semesters)	9
DFED 5830	X	Student Teaching Seminar: Implementation and Support	3
DFED 5800	X	ASL/English Student Teaching	12
Emphasis Credit Hour Sub-Total			51
Total Number of Credits to Complete Program			120

Add An Emphasis: Listening and Spoken Language

Can students complete this degree without emphases? ☐ Yes ☒ No

Course Number	NEW Course	Course Title	Credit Hours
Name of Emphasis:		Listening and Spoken Language	
COMD 2600		Introduction to Communicative Disorders	3
COMD 3010		American Sign Language I (CI)	4
HDFS 3210		Families & Cultural Diversity	3
COMD 3500		Phonetics and Phonological Development	3
HDFS 3500		Infancy & Childhood	3
COMD 3600		Language Science (CI)	3
COMD 3800		Anatomy and Physiology of Speech and Hearing	3
DFED 4200	X	Introduction to Listening and Spoken Language in Children who are Deaf or Hard of Hearing	3
COMD 4450		Developmental Communication Disorders	3
HDFS 4550		Preschool Methods and Curriculum	3
COMD 5070		Acoustics of Speech and Hearing	3
COMD 5240		Neural Bases of Cognition and Communication	3
DFED 5280	X	Speech and Language Assessment and Intervention for Children who are DHH	3
COMD 5330		Aural Rehabilitation	3
COMD 5580	x	Family-Centered Practices for Children who are Deaf or Hard of Hearing using LSL	3
Emphasis Credit Hour Sub-Total			46
Total Number of Credits to Complete Program			120

Program Curriculum Narrative

Students in the ASL/English emphasis will need to fulfill the Communication Intensive (CI) requirement, consisting of two courses, total of

six credit hours. Students in the LSL program fulfill the CI intensive requirement in major, thus the difference of six credit hours between the two programs in core requirements.

Appendix B: Degree Map for Emphasis #1: ASL/English

First Year Fall	Cr. Hr.	First Year Spring	Cr. Hr.
ENGL 1010: Introduction to Writing (CL1)	3	ENGL 2010: Individualized Writing Instructions (CL2)	3
Breadth Physical Sciences (BPS)	3	Breadth Humanities (BHU)	3
Breadth American Institutions (BAI)	3	Quantitative Literacy (QL) Course	3-5
Breadth Creative Arts (BCA)	3	HDFS 1500: Human Development Across the Lifespan (BSS)	3
Breadth Life Sciences (BLS)	3	Integrated Studies	3
USU 1010: University Connections (recommended, not required)			
Total	15	Total	15
Second Year Fall	Cr. Hr.	Second Year Spring	Cr. Hr.
DFED 2700: The Socio-Cultural Context of Deaf Community and Education	3	DFED 2850: Educational Technology, Film, and Creative Visual Learning for Children DHH	3
DFED 2800: Introduction to Deaf Literature and Art	3	DFED 2880: Speech, Language, and Communication Diversity in Children DHH	3
Quantitative Intensive (QI) Course	3	TEAL 2660: Educational Psychology for Teachers (or equivalent)	2
Communication Intensive (CI1)	3	HEP 2000: First Aid and Emergency Care	2
Elective	3	Depth Humanities/Creative Arts	2-3
		Communication Intensive (CI2)	3
Total	15	Total	15
Third Year Fall	Cr. Hr.	Third Year Spring	Cr. Hr.
COMD 3200: Child Language Development	3	DFED 5620: English Language Arts Curriculum and Instructional Methods, K-6	3
SPED 4000 Education of Students with Disabilities	3	DFED 5420: Math Instruction for Children DHH, K-6	3
DFED 4800: Methods in ASL/English Literacy Development	3	DFED 5600: Assessment and Application of Linguistics in the Classroom	3
Depth Life and Physical Science	3	COMD 5770: Audiology for Teachers of Children who are DHH	3
DFED 5700: ASL/English Practicum	3	DFED 5700: ASL/English Practicum	3
Total	15	Total	15
Fourth Year Fall	Cr. Hr.	Fourth Year Spring	Cr. Hr.
DFED 5220: Birth to Five Instructional Strategies for Children who are DHH	3	DFED 5830: Student Teaching Seminar: Implementation and Support	3
DFED 5640: English Language Arts Curriculum and Instructional Methods, 7-12	3	DFED 5800: ASL/English Student Teaching	12
DFED 5440: Math Instruction for Children DHH, 7-12	3		
DFED 5190: Law, Policies, and Deaf Education Services	3		
DFED 5700: ASL/English Practicum	3		
Total	15	Total	15

Appendix B: Degree Map for Emphasis #2: Listening and Spoken Language

First Year Fall	Cr. Hr.	First Year Spring	Cr. Hr.
ENGL 1010: Introduction to Writing	3	ENGL 2010: Individualized Writing Instructions (CL2)	3
Breadth Creative Arts (BCA)	3	Quantitative Literacy (QL) Course	3-5
Breadth Life Sciences (BLS)	3	Breadth American Institutions (BAI)	3
Breadth Physical Sciences (BPS)	3	Breadth Humanities (BHU)	3
Elective	3	Elective	3
USU 1010: University Connections (recommended, not required)			
Total	15	Total	15
Second Year Fall	Cr. Hr.	Second Year Spring	Cr. Hr.
HDFS 1500: Human Development Across the Lifespan (BSS)	3	DFED 2880: Speech, Language, and Communication Diversity in Children DHH	3
COMD 2600: Introduction to Communicative Disorders	3	TEAL 2660: Educational Psychology for Teachers (or equivalent)	2
Integrated Studies	3	Quantitative Intensive (QI) Course	3
Elective	3	Depth Life and Physical Science	3
Elective	2-3	HEP 2000: First Aid and Emergency Care	2
		Depth Humanities/Creative Arts	2-3
Total	14	Total	15
Third Year Fall	Cr. Hr.	Third Year Spring	Cr. Hr.
COMD 3200: Child Language Development	3	DFED 4200: Introduction to Listening and Spoken Language for Children who are DHH	3
SPED 4000 Education of Students with Disabilities	3	HDFS 3210: Families & Cultural Diversity	3
COMD 3010 American Sign Language I (CI)	4	COMD 3600: Language Science (CI)	3
HDFS 3500: Infancy & Childhood	3	COMD 3800: Anatomy and Physiology of Speech and Hearing	3
COMD 3500: Phonetics and Phonological Development	3	Elective	3
Total	16	Total	15
Fourth Year Fall	Cr. Hr.	Fourth Year Spring	Cr. Hr.
COMD 5330 Aural Habilitation	3	HDFS 4550: Preschool Methods and Curriculum	3
DFED 5190: Law, Policies, and Deaf Education Services	3	DFED 5280: Speech & Language Assessment and Intervention for Children DHH	3
DFED 5220: Birth to Five Instructional Strategies for Children who are DHH	3	COMD 5580: Family-Centered Practices for Children who are DHH	3
COMD 5070: Acoustics of Speech and Hearing	3	COMD 5770: Audiology for Teachers and SLPs of Children who are DHH	3
COMD 4450: Developmental Communication Disorders	3	COMD 5240: Neural Bases of Cognition and Communication	3
Total	15	Total	15

Appendix C: Current and New Faculty / Staff Information

Part I. Current Department Faculty / Staff for Proposed Major

	# Tenured	# Tenure -Track	# Non -Tenure Track	
Faculty: Full Time with Doctorate	1	0	0	
Faculty: Part Time with Doctorate	0	0	0	
Faculty: Full Time with Masters	0	0	3	
Faculty: Part Time with Masters	0	0	0	
Faculty: Full Time with Baccalaureate	0	0	0	
Faculty: Part Time with Baccalaureate	0	0	0	
Teaching / Graduate Assistants			0	
Staff: Full Time	0	0	2	
Staff: Part Time	0	0	0	

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							
	Lauri	Nelson	T	Ph.D.	University of Utah	30%	
	Vicky	Floyd	Other	M.S.	Idaho State University	100%	Lecturer
	Sayard	Benvenuti	Other	M.S.	Northwestern University	20%	Clinical Assistant Professor
	Brian	Burns	Other	M.A.	Gallaudet University	5%	Lecturer
							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	0	0	0		
Faculty: Part Time with Doctorate	0	0	0		
Faculty: Full Time with Masters	0	0	0		
Faculty: Part Time with Masters	0	0	0		
Faculty: Full Time with Baccalaureate	0	0	0		
Faculty: Part Time with Baccalaureate	0	0	0		
Teaching / Graduate Assistants	0	0	0		
Staff: Full Time	0	0	0		
Staff: Part Time	0	0	0		

Appendix D: Projected Program Participation and Finance

Part I.

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	75	78	78	80	83	83
# of Majors in Proposed Program(s)		3	3	5	8	18
# of Graduates from Department	31	31	31	34	34	36
# Graduates in New Program(s)		0	0	3	3	5
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)	\$0	\$0	\$0	\$0		
Operating Expenses (equipment, travel, resources)	\$0	\$0	\$0	\$0		
Other:	\$0	\$0	\$0	\$0		
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	\$0	\$20,400	\$20,400	\$20,400		
Appropriation	\$0	\$0	\$0	\$0		
Special Legislative Appropriation	\$0	\$0	\$0	\$0		
Grants and Contracts	\$0	\$0	\$0	\$0		
Special Fees	\$0	\$0	\$1000	\$0		
Tuition	\$0	\$0	\$0	\$0		
Differential Tuition (requires Regents approval)	\$0	\$0	\$0	\$0		
PROPOSED PROGRAM FUNDING		\$0	\$0	\$0		
TOTAL DEPARTMENT FUNDING	\$0	\$0	\$0	\$0		
Difference						
Funding - Expense	\$0	\$0	\$0	\$0		

¹ We would expect enrollment will continue to increase over time as we establish collaborative agreements.

Part II: Expense Explanation

Expense Narrative

Existing faculty in the Deaf Education Division will teach the courses in the proposed new undergraduate program, with the exception of four courses in the ASL/English emphasis that will be taught by adjunct faculty. The current adjunct rate for a 3 credit hour class is \$5,100. Four courses at \$5,100 is \$20,400 per year, which will be covered by the COMDDE department budget through internal reallocation of funds.

\$1000 is allocated under "Special Fees" for year two to cover the cost associated with the ASL/English accreditation submission to the Council on Education of the Deaf, the national accrediting body for Deaf Education teacher training programs.

No other expenses are anticipated associated with the proposed program.

Part III: Describe funding sources

Revenue Narrative 1

As described above, we anticipate needing an adjunct instructor to teach four courses per year in the ASL/English emphasis. No adjunct instructors are needed for the LSL emphasis. The COMDDE department budget will internally reallocate funds to cover payment to the four ASL/English adjunct instructors per year. We do not anticipate any impact to existing programs or services.

Revenue Narrative 2

No new funding sources are anticipated or needed.

CEHS - Human Development and Family Studies Kinesiology and Health Science Psychology Special Education and Rehabilitation Counseling - Health, Wellness, and Equity - Certificate of Proficiency

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE (include all cross listed colleges)*

CEHS

DEPARTMENT (include all cross listed departments)*

Human Development and Family Studies

Kinesiology and Health Science

Psychology

Special Education and Rehabilitation Counseling

Current Title (if applicable)* Not applicable

Proposed Title* Health, Wellness, and Equity - Certificate of Proficiency

CIP Code

Enter the Correct CIP Code by Using the Following Link:
[Classification Instruction Programs](#)

CIP Code (6-digits) * 51.0001

Minimum Number of
Credits (if
applicable)* 16

Maximum Number of
Credits (if
applicable)* 16

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

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

**New Academic
Program:**

- ☐ Certificates of Completion
- ☒ Certificates of Proficiency
- ☐ CTE - Certificate of Completion
- ☐ CTE - Certificate of Proficiency
- ☐ Institutional Certificate of Proficiency
- ☐ K-12 Endorsement Program
- ☐ Minor
- ☐ New Emphasis for Existing Program
- ☐ Out of Service Area Delivery Program (attach signed MOU)
- ☐ Post-Baccalaureate Certificate
- ☐ Post-Masters Certificate

**Existing Academic
Program Changes:**

- ☐ Name Change of Existing Program
- ☐ Program Restructure (with or without Consolidation)
- ☐ Program Transfer to a New Academic Department or Unit
- ☐ Program Suspension (on hold-not listed in catalog)
- ☐ Program Discontinuation (permanent program removal)
- ☐ Reinstatement of Previously Suspended Program
- ☐ Out-of-Service Area Delivery Program (attach signed MOU)

- Administrative Unit Changes:**
- ☐ Name Change of Existing Unit
 - ☐ Administrative Unit (Transfer)
 - ☐ Administrative Unit (Restructure-with or without Consolidation)
 - ☐ Administrative Unit (Suspension-on hold)
 - ☐ Administrative Unit (Discontinuation-permanent unit removal)
 - ☐ Reinstatement of Previously Suspended Administrative Unit
 - ☐ Reinstatement of Previously Discontinued Administrative Unit

Other: (explain change)

ADDITIONAL APPROVALS (if applicable)

Graduate Council Approval*

☐ Yes
☒ No

Teacher Licensure Program Approval (STEP)*

☐ Yes
☒ No

SECTION I: THE REQUEST

R401 Purpose* The purpose of this abbreviated R401 proposal is to request approval for a Certificate of Proficiency in Health, Wellness, and Equity. The certificate would require a minimum of 16 credits, 14 of which would be required along with at least 2 credits of electives.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale* A certificate in Health, Wellness, and Equity would be a cross-disciplinary certificate combining courses from 4 departments: Special Education and Rehabilitation Counseling, Human Development and Family Studies, Kinesiology and Health Science, and Psychology. Through conversations with key faculty and the department heads of these 4 departments, we determined a need for a certificate that could serve as an on-ramp into majors from each of the departments. The certificate could also be used as a substitute for a minor to provide a depth experience for a student in a major that is not in the College of Education and Human Services. Finally, it could also serve the needs of mid-career professionals who are looking to upskill or learn more about health and wellness and issues of equity in those arenas.

**Labor Market Demand
(if applicable)**

According to the Utah Department of Workforce Services, one relevant occupation is Health Education Specialists, who:

- Provide and manage health education programs that help individuals, families, and their communities maximize and maintain healthy lifestyles.
- Use data to identify community needs prior to planning, implementing, monitoring, and evaluating programs designed to encourage healthy lifestyles, policies, and environments.
- May link health systems, health providers, insurers, and patients to address individual and population health needs.
- May serve as resource to assist individuals, other health professionals, or the community, and may administer fiscal resources for health education programs.

According to Utah DWS, this occupation is expected to experience faster than average employment growth with a moderate volume of annual job openings. The need for replacements, rather than business expansion is projected to make up the majority of job openings in the coming decade.

According to the Bureau of Labor Statistics, employment of health education specialists is projected to grow 7 percent from 2022 to 2032, faster than the average for all occupations.

**Consistency with
Institutional Mission
& Institutional
Impact***

A certificate in Health, Wellness, and Equity supports Utah State's strategic plan, specifically objective 1.2: USU adapts and advances programs to ensure they remain relevant and rigorous. Our academics prioritize dynamic critical thinking and link learners to people with experience and talent, providing transformative educational and creative opportunities that extend student potential.

Finances*

There are no savings associated with offering this certificate. Courses already exist for most of the required courses, but the new courses being developed might need to be taught by a semester hire or a graduate student. Graduate students with funding would be no cost. Grad students without funding or semester hires could incur instructional costs, some of which could be funded by the Dean's office.

SECTION III: CURRICULUM (if applicable)

**Program Curriculum
Narrative**


Required courses:

- HEP 1500 Global Health: Disparities, Determinants, Strategies, and Outcomes, 3 credits (is also a BSS course)
- HEP 2500 Health and Wellness, 2 credits
- PSY 3700/HDFS 3700 Mental Health Advocacy and Awareness, 3 credits
- New course, REH 2060, Health Promotion for Individuals with Chronic Illness and Disability, 3 credits (developed by Brian Phillips)
- New course, REH 2010, Neurodiversity and Society, 3 credits (being developed by Michelle McKnight)

Total = 14 credits

Plus at least one of the following for a total of a minimum of 16 credits:

- PSY 3110 Health Psychology, 3 credits
- PSY 2400 Happiness: An Evolutionary, Experimental, Experiential Course, 3 credits (new course with PSY 1010 and PSY 1400 as prerequisites)
- HEP 2000 First Aid and Emergency Care, 2 credits
- HEP 3000 Drugs and Human Behavior, 3 credits
- HEP 3400 Stress Management, 3 credits
- HEP 3600 Introduction to Community Health, 3 credits (also meets CI requirement),
- HEP 4100 Foundations of Community Health, 3 credits (requires HEP 2500 as prereq)
- HEP 5000 Health Equity (meets CI requirement, has prerequisites, which are ENGL 2010, HEP 2500, HEP 4100)
- HDFS 4250 Addictions and the Family, 3 credits
- HDFS 1010 Balancing Work and Family, 3 credits (also a BSS course)

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the SAVE ALL CHANGES button below.

Scroll to the top left and click on the LAUNCH  icon to launch your proposal.

CEHS - Kinesiology and Health Science - Coaching - Certificate of Proficiency

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE (include all cross listed colleges)*

CEHS

DEPARTMENT (include all cross listed departments)*

Kinesiology and Health Science

Current Title (if applicable)* NA

Proposed Title* Coaching - Certificate of Proficiency

CIP Code

Enter the Correct CIP Code by Using the Following Link:

Classification Instruction Programs

CIP Code (6-digits) * 13.1314

Minimum Number of
Credits (if
applicable)* 17

Maximum Number of
Credits (if
applicable)* 17

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

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

New Academic Program:

- ☐ Certificates of Completion
- ☒ Certificates of Proficiency
- ☐ CTE - Certificate of Completion
- ☐ CTE - Certificate of Proficiency
- ☐ Institutional Certificate of Proficiency
- ☐ K-12 Endorsement Program
- ☐ Minor
- ☐ New Emphasis for Existing Program
- ☐ Out of Service Area Delivery Program (attach signed MOU)
- ☐ Post-Baccalaureate Certificate
- ☐ Post-Masters Certificate

Existing Academic Program Changes:

- ☐ Name Change of Existing Program
- ☐ Program Restructure (with or without Consolidation)
- ☐ Program Transfer to a New Academic Department or Unit
- ☐ Program Suspension (on hold-not listed in catalog)
- ☐ Program Discontinuation (permanent program removal)
- ☐ Reinstatement of Previously Suspended Program
- ☐ Out-of-Service Area Delivery Program (attach signed MOU)

Administrative Unit Changes:

- ☐ Name Change of Existing Unit
- ☐ Administrative Unit (Transfer)
- ☐ Administrative Unit (Restructure-with or without Consolidation)
- ☐ Administrative Unit (Suspension-on hold)
- ☐ Administrative Unit (Discontinuation-permanent unit removal)
- ☐ Reinstatement of Previously Suspended Administrative Unit
- ☐ Reinstatement of Previously Discontinued Administrative Unit

Other: (explain
change)

ADDITIONAL APPROVALS (if applicable)

Graduate Council
Approval* ☐ Yes
☒ No

Teacher Licensure
Program Approval
(STEP)* ☐ Yes
☒ No

SECTION I: THE REQUEST

R401 Purpose* The Certificate of Proficiency in Coaching at Utah State University is tailored to prepare individuals for effective coaching roles across various sports settings. This comprehensive 17-credit program combines theoretical knowledge with practical application in key aspects of sports coaching.

SECTION II: PROGRAM PROPOSAL

**Proposed Action &
Rationale***

Unit Requesting the Action: The Department of Kinesiology and Health Science at Utah State University.

Brief Description of the Proposed Action: Utah State University proposes the introduction of a Certificate of Proficiency in Coaching. This 17-credit certificate program is designed to provide comprehensive training in sports coaching, combining theoretical knowledge with practical skills.

Rationale for the Action: The rationale behind introducing this certificate program is multi-faceted:

1. **Fulfilling Industry Demand:** There is a growing need for well-trained coaches in schools, sports centers, and private organizations. This program addresses this demand by preparing individuals with the necessary skills and knowledge.
2. **Enhancing Educational Offerings:** The certificate will enrich USU's academic portfolio, offering students a specialized pathway in sports coaching.
3. **Promoting Community Health and Engagement:** Trained coaches play a crucial role in promoting sports participation and healthy lifestyles within the community.

Institutional Procedures Used: The proposal for this certificate involved:

1. **Curriculum Development:** Collaborating with faculty experts in Kinesiology and Health Science to design a relevant and comprehensive curriculum.
2. **Stakeholder Consultation:** Engaging with internal and external stakeholders, including academic advisors and potential employers.

Benefits to USU and USHE:

1. **Enhanced Reputation:** USU will strengthen its position as a leader in sports science education.
2. **Increased Enrollment:** The program is expected to attract a diverse group of students, potentially increasing enrollment figures.
3. **Community Impact:** Graduates will contribute to the health and well-being of communities, aligning with USU's mission of community engagement and service.
4. **Alignment with USHE Goals:** The program aligns with the Utah System of Higher Education's (USHE) goals of providing relevant, high-quality education that meets the state's workforce needs.

**Labor Market Demand
(if applicable)**

The growth in this occupation is primarily driven by increased high school enrollment, leading to a higher demand for coaches at this level. Notably, most high school coaches are also academic teachers, requiring typically a Bachelor's degree. Additional training in CPR, first aid, communications, and coaching fundamentals is considered a marketable asset. Demand is also growing outside the traditional sports world, including in areas like life and wellness coaching, as people increasingly seek help for major personal transitions and health-conscious living. (<https://www.careerexplorer.com/careers/coach/job-market/>)

The U.S. Bureau of Labor Statistics further supports this positive outlook. Employment of coaches and scouts is projected to grow nine percent from 2022 to 2032, much faster than the average for all occupations. This growth translates to about 38,400 openings for coaches and scouts each year over the decade, with many of these openings arising from the need to replace workers who transfer to different occupations or retire. The median pay for coaches and scouts in 2022 was \$44,890 per year. <https://www.bls.gov/ooh/entertainment-and-sports/coaches-and-scouts.htm>

While specific data for Utah is not readily available, the national trends provide a strong indication of the demand for coaching professionals. The increasing high school enrollments and the growing interest in personal wellness and life coaching suggest that a Certificate of Proficiency in Coaching from Utah State University would be responding to a significant and growing labor market need, both within Utah and nationally.

**Consistency with
Institutional Mission
& Institutional
Impact***

The Certificate of Proficiency in Coaching at Utah State University is strongly aligned with the university's mission as a premier land- and space-grant institution committed to excellence, access, and inclusion. Embodying academic excellence, this program features a rigorous and high-quality curriculum, including courses such as Athletic Injuries, Motor Learning, and Motivation Strategies for Physical Education and Coaching. These courses reflect the university's high standards and focus on practical skills and applied research, characteristic of a land-grant institution. The program also significantly contributes to USU's commitment to access by expanding educational offerings and addressing the growing demand for qualified coaching professionals. This expansion not only meets community and workforce needs but also provides students with diverse educational pathways. Moreover, the coaching certificate fosters an inclusive learning environment by attracting students from various interests and backgrounds, aligning with USU's dedication to diversity. Graduates of the program are prepared to engage with and positively impact diverse communities, embodying roles that promote physical health, sportsmanship, and personal development. This program thus encapsulates USU's values of academic rigor, accessibility to innovative education, and the nurturing of an inclusive community, enhancing the university's stature and societal impact.

Finances*

There will be no financial cost to add this certificate, as all the classes are currently offered as part of the PE Teaching curriculum.

SECTION III: CURRICULUM (if applicable)

Program Curriculum Narrative

The Certificate of Proficiency in Coaching at Utah State University is a comprehensive program designed to provide aspiring coaches with a robust foundation in various aspects of coaching and sports management. This 17-credit certificate program is structured to offer both theoretical knowledge and practical skills essential for successful coaching careers.

The curriculum is carefully curated to cover key areas in coaching, including first aid, fitness training, sports regulations, athletic injury management, motor learning, administration and management in physical education, and motivation strategies. The program combines classroom learning with hands-on experiences, ensuring that students are well-prepared to meet the diverse challenges of coaching roles in educational institutions, sports centers, or private sports organizations.

Table of Classes Offered in the Certificate of Proficiency in Coaching:

1. HEP 2000: First Aid (2 credits)

- Focuses on basic health and emergency response skills.

2. KIN 3000: Principles of Fitness (3 credits)

- Emphasizes developing fitness programs for athletes.

3. KIN 2050: Sport Rules and Regulations of the Utah High School Athletic Association (1 credit)

- Covers the specific regulatory environment of Utah's high school sports.

4. KIN 3100: Athletic Injuries (3 credits)

- Provides in-depth knowledge of injury prevention and management.

5. KIN 3200: Motor Learning and Technology in Skill Analysis (3 credits)

- Explores the cognitive aspects of learning and performing athletic skills.


6. KIN 4350: Administration and Classroom Management of Physical Education (2 credits)

- Focuses on organizational aspects of physical education settings.

7. KIN 4500: Motivation Strategies for Physical Education and Coaching (3 credits)


- Equips future coaches with techniques to inspire and motivate athletes effectively.

Each course in this curriculum is designed to build upon the knowledge and skills gained in the preceding courses, providing a cohesive and comprehensive educational experience.

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the SAVE ALL CHANGES button below.

Scroll to the top left and click on the LAUNCH  icon to launch your proposal.

**Utah System of Higher Education
New Academic Program Proposal
Cover/Signature Page - Full R401**

Institution Submitting Request: Utah State University

Proposed Program Title: Associate of Science in Special Education

Are There New Emphases: Yes ☐ No ☒

Names of New Emphases (Separated by Commas):

Sponsoring School, College, or Division: Emma Eccles Jones College of Education and Human Services

Sponsoring Academic Department(s) or Unit(s): Special Education and Rehabilitation Counseling

Classification of Instructional Program Code¹ : 13.1015, 13.1017, 13.1018, 13.1019

Min/Max Credit Hours Required of Full Program: 60/ Max Cr Hr

Proposed Beginning Term²: Summer 2024

Institutional Board of Trustees' Approval Date:

Program Type (check all that apply):

<input type="checkbox"/> (AAS)	Associate of Applied Science Degree
<input type="checkbox"/> (AA)	Associate of Arts Degree
<input checked="" type="checkbox"/> (AS)	Associate of Science Degree
<input type="checkbox"/>	Specialized Associate Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/> (BA)	Bachelor of Arts Degree
<input type="checkbox"/> (BS)	Bachelor of Science Degree
<input type="checkbox"/> (BAS)	Bachelor of Applied Science Degree
<input type="checkbox"/>	Specialized Bachelor Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/> (MA)	Master of Arts Degree
<input type="checkbox"/> (MS)	Master of Science Degree
<input type="checkbox"/>	Specialized Master Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/>	Doctoral Degree (specify award type ³ :)
<input type="checkbox"/>	K-12 School Personnel Program
<input type="checkbox"/>	Out of Service Area Delivery Program <input type="checkbox"/> Attached MOU
<input type="checkbox"/>	Out of Mission Program
<input type="checkbox"/>	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 (check all that apply, if any):

<input type="checkbox"/>	Program Restructure with or without Consolidation
<input type="checkbox"/>	Emphases transfer from another program or academic unit
<input type="checkbox"/>	Name Change of Existing Program or Academic Unit
<input type="checkbox"/>	Program transfer to a different academic unit
<input type="checkbox"/>	Suspension or discontinuation of a unit or program
<input type="checkbox"/>	Reinstatement of a previously suspended/discontinued program or administrative unit
<input type="checkbox"/>	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.

Please type your first and last name _____ 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 requests approval to offer the following Associate's degree(s): Associate of Science in Special Education effective Summer 2024. This program was approved by the institutional Board of Trustees on .

Section II: Program Proposal

Program Description

This degree accomplishes two purposes. First, as a stand-alone degree, it will prepare individuals to work as teacher's aides, special education paraprofessionals, and direct support professionals providing support to special education and general education teachers through the delivery of specialized curriculum, behavior interventions, and a variety of support activities related to the education and care of students with disabilities. Second, this degree provides a foundation for continued study toward a bachelor's degree in Special Education, Elementary Education or Secondary Education. Individuals pursuing general education degrees would benefit from instructional and behavioral strategies to meet the needs of students with disabilities in the general education classroom.

Consistency with Institutional Mission

According to USHE's policy, associate degrees from Utah State University's statewide campuses fill a regional university role in its service regions. A regional university's role according to 5.3.1.1 is to offer degrees to meet regional demand. Currently there is a severe shortage of paraprofessionals in special education school settings. This degree addresses that demand.

Additionally, USU's Vision Statement states, "We empower all people to lead successful lives of involvement, innovation, and impact." This degree addresses the shortage of qualified paraprofessionals in the state; paraprofessionals are necessary to provide equity for students with disabilities by helping them meet their full potential.

Section III: Needs Assessment

Program Rationale

To increase access to post-secondary education, the College of Education and Human Services is engaged in efforts to create onramps into bachelor's degrees. The number of students applying to the special education major has declined steadily in the last 20 years. The Special Education and Rehabilitation Counseling Department hopes to use the Associate of Science in Special Education as a recruitment tool. In advising appointments, students often ask if there are classes available to take before they are admitted to the special education major. Many of these students change to other majors because they tire of waiting until they are accepted to their special education upper division coursework. The Associate of Science in Special Education would serve to fill this need. Even if a student decides not to pursue the BS in Special Education after finishing the associate degree, they will still be employable as paraprofessionals or direct support professionals. A poll of current special education majors indicates that most of them would have taken this option had it been available to them.

Labor Market Demand

An Associate of Science in Special Education degree would allow graduates to pursue entry-level positions in the fields of education and childcare, e.g., preschool teachers, teacher's aides, paraeducators, or substitute teachers. Additionally, they may find employment opportunities in diverse childcare settings, which will provide experience to support further degree attainment in education. One of the pathways to a highly-qualified paraprofessional in Utah is

to have an associate degree. These occupations are expected to experience much faster than average employment growth with a high volume of annual job openings. The need for replacements, rather than business expansion is projected to make up most job openings in the coming decade.

Preschool Teacher: The median pay for preschool teachers was \$29,810 per year in 2022.

Childcare Worker: The median pay in 2022 was \$21,150 per year for childcare workers.

Teacher Assistant: 2022 median pay for teacher assistants is \$30,020.

Student Demand

The Department of Special Education and Rehabilitation Counseling has responded to the shortage of special education teachers through innovative programming such as the OPTT (Online Practical Teacher Training) program in collaboration with most school districts throughout Utah. To prepare teachers where they live is especially important to rural school districts. The OPTT program includes students pursuing a first Bachelor's degree currently employed as paraprofessionals, and students pursuing a second Bachelor's degree while working under an emergency license as Special Education teacher. About one third of students are pursuing a first Bachelor's degree. An associate degree would build upon the momentum created by the OPTT program by providing a pathway for paraeducators to become highly qualified wherever they may reside in Utah. The associate degree program would feed be a pathway into the OPTT Special Education bachelor's degree, allowing students to study where they live across the state of Utah.

The number of Special Education majors in the traditional Logan Main Campus has been shrinking in the last 20 years. This is a national trend. The department hopes to recruit more students into the major by providing an avenue to be exposed to special education majors early in a student's USU college experience.

In addition, more and more students with disabilities spend most of their school day in the general education classroom. General educators need more background on teaching students with disabilities and obtaining an Associate of Science in Special Education would better prepare these teacher candidates for future diverse classroom needs. Currently the special education advisor is tracking students who would be eligible to complete this associate degree. Other general education teacher education candidates who also might be interested, especially in secondary education.

Similar Programs

The Associate of Science in Special Education from USU would be a unique offering in Utah. Other institutions offer associate degrees with different emphasis areas. Salt Lake Community College and Weber State University offer associate degrees in Education. Utah Tech University and Utah Valley College offer associate degrees in Early Childhood Education. Snow College offers a Paraprofessional in Education Certificate. Paraprofessionals in Special Education need specific skill sets that are distinct from paraprofessionals in general education settings.

Collaboration with and Impact on Other USHE Institutions

The Special Education and Rehabilitation Counseling department has been working with USHE two-year institutions to create agreements on seamless transfer. A 2+2 agreement between Snow College and USU for special education majors is posted on Snow College's website (https://snow.edu/academics/social_science/education-family/education.html). A similar agreement is in the works with Salt Lake Community College. Students are encouraged to receive an associate degree at these partner institutions. The Associate of Science in Special Education is a unique program for students wishing to complete their entire school program at USU and won't compete with the two-year institutions' offerings.

External Review and Accreditation

USU's educator preparation programs are accredited by the Association for Advancing Quality in Educator Preparation (AAQEP). Accreditation was granted by this body in May 2019. Courses within the Associate of Science in Special Education degree will be subject to accreditation review, with the next full accreditation visit occurring during the spring semester of 2026.

Section IV: Program Details

Graduation Standards and Number of Credits

Students would complete 60 credit hours which is within the permitted range of 60-63 credits. USU requires students completing an associate degree to have a 2.0 GPA and to have at least 20 USU credits.

Admission Requirements

Students would need to hold a high school diploma. This is the USU admission standard.

Curriculum and Degree Map

See appendix A and B.

Section V: Institution, Faculty, and Staff Support

Institutional Readiness

The Associate of Science in Special Education degree falls within the administrative and advising structure of Special Education and Rehabilitation Counseling (SPERC) with additional support from Statewide Campuses. Specific advisement for students in this program will be provided through the SPERC and Statewide Campus advisors assigned to Special Education. This program will impact the delivery of lower-division courses by making more courses available at the lower- division level and possibly increasing enrollment.

Faculty

Instructional assignments for the courses within the Associate of Science in Special Education degree will be made through the regular course scheduling process used by SPERC that involves existing faculty, graduate teaching assistants, and semester hires. The space available in the teacher preparation program now is sufficient to handle the load.

Staff

Staff within existing support structures is sufficient to meet program needs.

Student Advisement

In Logan and on the statewide campuses, the advisor assigned to Special Education will be the advisor to students in this program.

Library and Information Resources

No additional library resources will be needed to support this program.

Projected Enrollment and Finance

See appendix C and D.

Section VI: Program Evaluation

Program Assessment

The goal of the program is to provide highly qualified paraeducators to school districts throughout Utah, to provide more general education teachers with training in special education, and to increase the number of students applying to the special education majors. One of the systems of assessment will be to track the increase of special education majors.

Student Standards of Performance

Utah State University's General Education (GE) program provides the subject-area knowledge and learning skills foundation for its 2- and 4-year degrees. Core courses make up the general education foundation. Breadth courses give an opportunity to explore various subjects. General education courses are highly advisable for concurrent enrollment students; they are required for college graduation and transferable from one Utah System of Higher Education (USHE) institution to another.

Courses taught by the Special Education and Rehabilitation department (REH/SPED 1010: Disability and Society (BSS), SPED 2910: Early Field Experience in Special Education, REH 2020: Neurodiversity and Society, and REH 2060: Health Promotion for Individuals with Chronic Illness and Disability) provide opportunities to explore issues related to disability from a variety of contexts. Students are not only exposed to disability for school age children but also through the lifespan. These skills make students marketable for paraprofessional positions in special education.

The elective courses were chosen to provide analysis of behavior skills and adolescence psychology (PSY 1010, 1400, 1410), provide prerequisite skills to the special education major (MATH 2010/2020, TEAL 2660), incorporate concurrent enrollment courses related to the field (TEAL 1010, SPED 1000), and provide exposure to other contexts where students with disabilities are served (HDFS 2580, 2660, ELED 2480, and DFED 2700).

The program will be evaluated by the Association for Advancing Quality in Educator Preparation (AAQEP) accreditation as well as course completion outcome evaluation and a survey of the graduate.

Appendix A: Program Curriculum

Course Number	New Course	Course Title	Credit Hours
Required Classes			
ENGL 1010 (CL1)		Introduction to Writing	3
ENGL 2010 or 2020 (CL2)		Intermediate Writing or Professional Communication	3
MATH 1050 or 1051		College Algebra or Classical Algebra for Teachers	4
BAI		Any breadth American Institutions	3
BLS		Any breadth Life Science	3
BPS		Any breadth Physical Science	3
BCA		Any breadth Creative Arts	3
BHU		Any breadth Humanities	3
HDFS 1500 (BSS)		Human Development Across the Lifespan (Breadth Social Science)	3
REH 1010 or SPED 1010 (BSS)		Disability and Society	3
SPED 2910	X	Early Field Experience in Special Education (3 credits, repeatable for up to 6 credits)	6
REH 2020	X	Neurodiversity and Society	3
REH 2060	X	Health Promotion for Individuals with Chronic Illness and Disability	3
Required Course Credit Hours			43
Elective Courses (Choose 15 credits from the following)			
ELED 1010 or TEAL 1010		Orientation to Elementary Education	3
TEAL 2660		Educational Psychology for Teachers	2
SPED 1000		Principles of Effective Peer Teaching	2
PSY 1010		General Psychology	3
PSY 1400		Analysis of Behavior: Basic Principles	3
PSY 1410		Analysis of Behavior: Basic Principles Lab	1
PSY 2100		Developmental Psychology: Adolescence	3
HDFS 2660		Parenting and Child Guidance	3
DFED 2700	X	The Socio-Cultural Context of Deaf Community and Education	3
HDFS 2520		Home Visiting and Early Childhood	3
ELED 2480		Early Childhood Education Kindergarten through Grade 3	3
MATH 2010		Algebraic Thinking & Number Sense for Elementary Education School Teachers	3
MATH 2020		Euclidean Geometry and Statistics for Elementary Education School Teachers	3
Total Credits			60

Appendix B: Program Curriculum Narrative

The coursework listed below in the degree map provides a course from the Special Education and Rehabilitation Counseling department every semester during the Associate of Science in Special Education program.

Degree Map for Associate of Science in Special Education

First Year Fall	Cr. Hr.	First Year Spring	Cr. Hr.
ENGL 1010: Introduction to Writing (CL1)	3	ENGL 2010: Individualized Writing Instructions or ENGL 2020: Professional Communication (CL2)	3
REH/SPED 1010: Society and Disability (BSS)	3	SPED 2910: Early Field Experience in Special Education	3
HDFS 1500 Human Development Across the Lifespan (BSS)	3	MATH 1050 Classical Algebra OR 1051 Classical Algebra for Teachers (QL)	4
Breadth Creative Arts (BCA)	3	Breadth American Institutions (BAI)	3
Elective (suggested PSY 1010)	3	Elective (suggested ELED 1010: Orientation to Elementary Education)	2-3
Total	15	Total	15-16
Second Year Fall	Cr. Hr.	Second Year Spring	Cr. Hr.
Breadth Life Science (BLS)	3	Breadth Physical Science (BPS)	3
REH 2020: Neurodiversity and Society	3	REH 2060: Health Promotion for Individuals with Chronic Illness and Disability	3
Breadth Humanities (BHU)	3	SPED 2910: Early Field Experience in Special Education	3
Elective (suggested: PSY 1400: Analysis of Behavior: Basic Principles)	3	Elective	3
Elective (suggested: PSY 1410: Analysis of Behavior: Basic Principles Lab)	1	Elective	3
Elective (TEAL 2660 suggested)	2		
Total	15	Total	15

Appendix C: Current and New Faculty / Staff Information.

Part I. Department Faculty / Staff

	# Tenured	# Tenure - Track	# Non - Tenure Track	
Faculty: Full Time with Doctorate	6	8		
Faculty: Part Time with Doctorate				
Faculty: Full Time with Masters	6			
Faculty: Part Time with Masters				
Faculty: Full Time with Baccalaureate				
Faculty: Part Time with Baccalaureate				
Teaching / Graduate Assistants				
Staff: Full Time	5			
Staff: Part Time	1			

Part II. Proposed Program Faculty Profiles

	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							
	Michelle	McKnight	TT	Ph.D.	Michigan State University	15%	
	Brian	Phillips	T	Ph.D.	Michigan State University	15%	
	Steven	Kwiatek	TT	Ph.D.	University of North Carolina at Charlotte	15%	
	Trent	Landon	T.	Ph.D.	Michigan State University	15%	
							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	0	0	0	NA	
Faculty: Part Time with Doctorate	0	0	0	NA	
Faculty: Full Time with Masters	0	0	0	NA	
Faculty: Part Time with Masters	0	0	0	NA	
Faculty: Full Time with Baccalaureate	0	0	0	NA	
Faculty: Part Time with	0	0	0	NA	

Baccalaureate					
Teaching / Graduate Assistants	0	0	0	NA	
Staff: Full Time	0	0	0	NA	
Staff: Part Time	0	0	0	NA	

Appendix D: Projected Program Participation and Finance.

Part I.

Three Year Projection: Program Participation and Department Budget						
What do these numbers mean? Number of majors or # of students in the majors. Do I separate out lines 1 and 2, 3 and 4.	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
Student Data						
# of Majors in Department	267	270	270	270	270	270
# of Majors in Proposed Program(s)		5	10	15	20	25
# of Graduates from Department	68	70	75	75	75	75
# Graduates in New Program(s)		0	5	10	15	20
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)	0	0	0	0		
Operating Expenses (equipment, travel, resources)	0	0	0	0		
Other:	0	0	0	0		
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	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 (requires Regents approval)	0	0	0	0		
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

Existing faculty in Special Education and Rehabilitation Counseling will teach the courses in the proposed new undergraduate program, with the exception of courses that are already currently offered in partner departments.

No other expenses are anticipated associated with the proposed program.

Part III: Describe funding sources

Revenue Narrative 1

No new funding sources are anticipated or needed.

COS - Mathematics and Statistics - Data Literacy Minor

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE (include all cross listed colleges)*

COS

DEPARTMENT (include all cross listed departments)*

Mathematics and Statistics

Current Title (if applicable)* Data Literacy Minor

Proposed Title* Data Literacy Minor

CIP Code

Enter the Correct CIP Code by Using the Following Link:
[Classification Instruction Programs](#)

CIP Code (6-digits) * 27.0501

Minimum Number of
Credits (if
applicable)* 12

Maximum Number of
Credits (if
applicable)* 14

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

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

New Academic Program:

- ☐ Certificates of Completion
- ☐ Certificates of Proficiency
- ☐ CTE - Certificate of Completion
- ☐ CTE - Certificate of Proficiency
- ☐ Institutional Certificate of Proficiency
- ☐ K-12 Endorsement Program
- ☒ Minor
- ☐ New Emphasis for Existing Program
- ☐ Out of Service Area Delivery Program (attach signed MOU)
- ☐ Post-Baccalaureate Certificate
- ☐ Post-Masters Certificate

Existing Academic Program Changes:

- ☐ Name Change of Existing Program
- ☐ Program Restructure (with or without Consolidation)
- ☐ Program Transfer to a New Academic Department or Unit
- ☐ Program Suspension (on hold-not listed in catalog)
- ☐ Program Discontinuation (permanent program removal)
- ☐ Reinstatement of Previously Suspended Program
- ☐ Out-of-Service Area Delivery Program (attach signed MOU)

Administrative Unit Changes:

- ☐ Name Change of Existing Unit
- ☐ Administrative Unit (Transfer)
- ☐ Administrative Unit (Restructure-with or without Consolidation)
- ☐ Administrative Unit (Suspension-on hold)
- ☐ Administrative Unit (Discontinuation-permanent unit removal)
- ☐ Reinstatement of Previously Suspended Administrative Unit
- ☐ Reinstatement of Previously Discontinued Administrative Unit

ADDITIONAL APPROVALS (if applicable)

Graduate Council
Approval* ☐ Yes
☒ No

Teacher Licensure
Program Approval
(STEP)* ☐ Yes
☒ No

SECTION I: THE REQUEST

R401 Purpose*

The purpose of this R401 is to create a new minor in “Data Literacy” as housed within the Department of Mathematics and Statistics. For the purposes of this proposal, we use Tableau’s definition of data literacy (see <https://www.tableau.com/data-insights/data-literacy/what-is>), which is defined as “the ability to explore, understand, and communicate with data in a meaningful way.” Expounding on this definition, this minor seeks to develop students who:

1. Understand the ways in which data is collected and stored, along with best practices for accessing collected information using basic computer programming and other software.
2. Understand what it means to be statistically significant and how it differs from naturally occurring variations observed in data.
3. Understand how to create basic statistical models that predict hard to measure outcomes based on easier to measure inputs.
4. Understand best practices for communicating insight from data in reports, presentations, and other visuals.

SECTION II: PROGRAM PROPOSAL

Proposed Action & Rationale*

The Department of Mathematics and Statistics proposes to create a new minor in “Data Literacy”. The proposal formalizes a combination of broadly accessible existing courses that are known to collectively provide skill in communicating insight from data. Many students on campus already take one or two of these courses. This minor would incentivize students to take a few additional data-centric courses and will serve to close the data skills gap that exists between what employers demand, and what USU’s general education requirements address. This new credential will help USU prepare a data literate workforce and will serve as a template for other USHE schools to offer similar credentials that appeal to students from broad backgrounds.

The Mathematics and Statistics department has existing undergraduate degrees in Data Science, Statistics, Mathematics, and Mathematics Education with about 310 declared majors. The combination of tenure track and term faculty are immediately positioned to support the core courses in the minor. The diverse set of course offerings also leverage USU’s strengths in cross-department collaboration.

**Labor Market Demand
(if applicable)**

A 2021 Tableau commissioned report (see https://origin-tableau-www.tableau.com/sites/default/files/2021-06/Tableau_Data_Literacy_Report.pdf) surveyed 219 US hiring managers and found that that Data Skills / Data Literacy were #1 in the following categories:

- Skills in highest demand.
- Skills that have increased most in demand over the past 2 years.
- Skills recruiters anticipate will increase most in importance in the next 5 years.

Further, the consulting firm McKinsey has predicted that by 2025, nearly all employees will “naturally and regularly leverage data to support their work” (see <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-data-driven-enterprise-of-2025>). Lastly, our own university president has said that within 10 years, every student from USU should graduate with some sort of data credential. This minor will serve as the most accessible entry point to a “data credential” and complements the Mathematics and Statistics department’s existing offerings in statistics and data science.

**Consistency with
Institutional Mission
& Institutional
Impact***

The accessible nature of this proposed minor will bring together students from departments across campus into a set of common courses, cultivating diversity of thought. Further, this new minor serves the students of USU and the broader public by teaching skills that are foundational to the modern US economy.

There is currently no other USHE institution offering a minor like the one in this proposal. The most similar minor is USU’s Data Analytics Minor as housed in the Data Analytics and Information Systems Department. However, the Data Analytics minor curriculum exists entirely within the school of business and seems primarily designed for students in that school. This new “Data Literacy” minor will appeal to a larger audience of students both within and outside of the business school by allowing students to take courses across multiple departments to satisfy the credential. The “Data Literacy” minor curriculum has been selected to emphasize general data literacy and applications across disciplines rather than specific tools and applications solely within the business context.

Finances*

It is not anticipated that this new minor will result in any increased costs to the institution. As outlined, the minor will consist entirely of existing courses. The breadth of offerings ensures that no single class, except possibly STAT 1080, will have to absorb sudden increases in enrollments due to student demand. For STAT 1080, the Mathematics and Statistics department is already positioned to substantially increase enrollment in that course with little marginal cost.

SECTION III: CURRICULUM (if applicable)

**Program Curriculum
Narrative**

Courses:

Foundations Core

Take the following course:

- STAT 1080 (QL): Foundations of Data Science – 3 credits

Introductory Statistics Core

Take one of the following courses:

- STAT 2000 (QI): Statistical Methods – 4 credits
- STAT 3000 (QI): Statistics for Scientists – 3 credits
- PSY 3010 (QI): Psychological Statistics – 3 credits
- SOC 3120 (QI): Social Statistics I – 3 credits
- DATA 3100: Making Decisions with Data – 3 credits

Data Modeling Core

Take one of the following courses:

- STAT 5100 (QI/CI): Modern Regression Methods – 3 credits
- ECN 4330 (QI): Introduction to Econometrics – 3 credits
- APEC 5330 (QI): Applied Econometrics – 3 credits

Data Communication Core

Take at least three credits of coursework from the following list:

- STAT 5050 Intro to R – 1 credit
- DATA 3400 (CI): Data Visualization with Tableau – 3 credits
- STAT 5550 Statistical Visualization I – 2 credits
- GEOG 3800: Data Visualization – 3 credits
- ITLS 4130: Data Visualization – 3 credits
- CS 5820 - Data Science - Data Visualization – 3 credits
- PSC 4080 Applied Statistics in Agricultural Research – 3 credits
- MSLE 4532 Data Driven Decision making – 2 credits
- MSLE 4533 Big Market Insights from Big Data – 2 credits
- MSLE 4534 Survey Research – 2 credits


Overview:

The minor has four cores and students are required to take at least one course in each core. The foundation of the minor is USU's newest quantitative literacy class called STAT 1080: Foundations of Data Science. This course gives students experience with data management, and introduces them to key concepts in computer programming, data visualization, probability and statistics, and data modeling. All students are required to take this course. The next core in the minor is a formal introduction to statistics that builds upon concepts introduced in STAT 1080. These course options rigorously explore hypothesis testing and making inferences from observations in data. The third core in the minor is an introduction to data modeling. These

course options give students the opportunity to make predictions using data-driven models,

which serves as a crucial introduction to the way that the artificial intelligence systems so prevalent in modern society operate.

The fourth and final core introduces students to the principles of data communication. This occurs either in a data visualization course (DATA 3400, STAT 5550, GEOG 3800, ITLS 4130, or CS 5820) or in the form of a domain-specific course focused on data applications (PSC 4080, MSLE 4532, MSLE 4533, MSLE 4534). Students must take one or two courses, depending on the course credits, to satisfy this level. The result is a minor of 12-14 credits, depending upon the student's course selection, that touches upon all four points of data literacy that were highlighted in the R401 purpose statement.

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the SAVE ALL CHANGES button below.

Scroll to the top left and click on the LAUNCH  icon to launch your proposal.

**Utah System of Higher Education
New Academic Program Proposal
Cover/Signature Page - Full R401**

Institution Submitting Request: Utah State University

Proposed Program Title: Associate of Science in Special Education

Are There New Emphases: Yes ☐ No ☒

Names of New Emphases (Separated by Commas):

Sponsoring School, College, or Division: Emma Eccles Jones College of Education and Human Services

Sponsoring Academic Department(s) or Unit(s): Special Education and Rehabilitation Counseling

Classification of Instructional Program Code¹ : 13.1015, 13.1017, 13.1018, 13.1019

Min/Max Credit Hours Required of Full Program: 60/ Max Cr Hr

Proposed Beginning Term²: Summer 2024

Institutional Board of Trustees' Approval Date:

Program Type (check all that apply):

<input type="checkbox"/> (AAS)	Associate of Applied Science Degree
<input type="checkbox"/> (AA)	Associate of Arts Degree
<input checked="" type="checkbox"/> (AS)	Associate of Science Degree
<input type="checkbox"/>	Specialized Associate Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/> (BA)	Bachelor of Arts Degree
<input type="checkbox"/> (BS)	Bachelor of Science Degree
<input type="checkbox"/> (BAS)	Bachelor of Applied Science Degree
<input type="checkbox"/>	Specialized Bachelor Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/> (MA)	Master of Arts Degree
<input type="checkbox"/> (MS)	Master of Science Degree
<input type="checkbox"/>	Specialized Master Degree (specify award type ³ :)
<input type="checkbox"/>	Other (specify award type ³ :)
<input type="checkbox"/>	Doctoral Degree (specify award type ³ :)
<input type="checkbox"/>	K-12 School Personnel Program
<input type="checkbox"/>	Out of Service Area Delivery Program <input type="checkbox"/> Attached MOU
<input type="checkbox"/>	Out of Mission Program
<input type="checkbox"/>	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 (check all that apply, if any):

<input type="checkbox"/>	Program Restructure with or without Consolidation
<input type="checkbox"/>	Emphases transfer from another program or academic unit
<input type="checkbox"/>	Name Change of Existing Program or Academic Unit
<input type="checkbox"/>	Program transfer to a different academic unit
<input type="checkbox"/>	Suspension or discontinuation of a unit or program
<input type="checkbox"/>	Reinstatement of a previously suspended/discontinued program or administrative unit
<input type="checkbox"/>	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.

Please type your first and last name _____ 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 requests approval to offer the following Associate's degree(s): Associate of Science in Special Education effective Summer 2024. This program was approved by the institutional Board of Trustees on .

Section II: Program Proposal

Program Description

This degree accomplishes two purposes. First, as a stand-alone degree, it will prepare individuals to work as teacher's aides, special education paraprofessionals, and direct support professionals providing support to special education and general education teachers through the delivery of specialized curriculum, behavior interventions, and a variety of support activities related to the education and care of students with disabilities. Second, this degree provides a foundation for continued study toward a bachelor's degree in Special Education, Elementary Education or Secondary Education. Individuals pursuing general education degrees would benefit from instructional and behavioral strategies to meet the needs of students with disabilities in the general education classroom.

Consistency with Institutional Mission

According to USHE's policy, associate degrees from Utah State University's statewide campuses fill a regional university role in its service regions. A regional university's role according to 5.3.1.1 is to offer degrees to meet regional demand. Currently there is a severe shortage of paraprofessionals in special education school settings. This degree addresses that demand.

Additionally, USU's Vision Statement states, "We empower all people to lead successful lives of involvement, innovation, and impact." This degree addresses the shortage of qualified paraprofessionals in the state; paraprofessionals are necessary to provide equity for students with disabilities by helping them meet their full potential.

Section III: Needs Assessment

Program Rationale

To increase access to post-secondary education, the College of Education and Human Services is engaged in efforts to create onramps into bachelor's degrees. The number of students applying to the special education major has declined steadily in the last 20 years. The Special Education and Rehabilitation Counseling Department hopes to use the Associate of Science in Special Education as a recruitment tool. In advising appointments, students often ask if there are classes available to take before they are admitted to the special education major. Many of these students change to other majors because they tire of waiting until they are accepted to their special education upper division coursework. The Associate of Science in Special Education would serve to fill this need. Even if a student decides not to pursue the BS in Special Education after finishing the associate degree, they will still be employable as paraprofessionals or direct support professionals. A poll of current special education majors indicates that most of them would have taken this option had it been available to them.

Labor Market Demand

An Associate of Science in Special Education degree would allow graduates to pursue entry-level positions in the fields of education and childcare, e.g., preschool teachers, teacher's aides, paraeducators, or substitute teachers. Additionally, they may find employment opportunities in diverse childcare settings, which will provide experience to support further degree attainment in education. One of the pathways to a highly-qualified paraprofessional in Utah is

to have an associate degree. These occupations are expected to experience much faster than average employment growth with a high volume of annual job openings. The need for replacements, rather than business expansion is projected to make up most job openings in the coming decade.

Preschool Teacher: The median pay for preschool teachers was \$29,810 per year in 2022.

Childcare Worker: The median pay in 2022 was \$21,150 per year for childcare workers.

Teacher Assistant: 2022 median pay for teacher assistants is \$30,020.

Student Demand

The Department of Special Education and Rehabilitation Counseling has responded to the shortage of special education teachers through innovative programming such as the OPTT (Online Practical Teacher Training) program in collaboration with most school districts throughout Utah. To prepare teachers where they live is especially important to rural school districts. The OPTT program includes students pursuing a first Bachelor's degree currently employed as paraprofessionals, and students pursuing a second Bachelor's degree while working under an emergency license as Special Education teacher. About one third of students are pursuing a first Bachelor's degree. An associate degree would build upon the momentum created by the OPTT program by providing a pathway for paraeducators to become highly qualified wherever they may reside in Utah. The associate degree program would feed be a pathway into the OPTT Special Education bachelor's degree, allowing students to study where they live across the state of Utah.

The number of Special Education majors in the traditional Logan Main Campus has been shrinking in the last 20 years. This is a national trend. The department hopes to recruit more students into the major by providing an avenue to be exposed to special education majors early in a student's USU college experience.

In addition, more and more students with disabilities spend most of their school day in the general education classroom. General educators need more background on teaching students with disabilities and obtaining an Associate of Science in Special Education would better prepare these teacher candidates for future diverse classroom needs. Currently the special education advisor is tracking students who would be eligible to complete this associate degree. Other general education teacher education candidates who also might be interested, especially in secondary education.

Similar Programs

The Associate of Science in Special Education from USU would be a unique offering in Utah. Other institutions offer associate degrees with different emphasis areas. Salt Lake Community College and Weber State University offer associate degrees in Education. Utah Tech University and Utah Valley College offer associate degrees in Early Childhood Education. Snow College offers a Paraprofessional in Education Certificate. Paraprofessionals in Special Education need specific skill sets that are distinct from paraprofessionals in general education settings.

Collaboration with and Impact on Other USHE Institutions

The Special Education and Rehabilitation Counseling department has been working with USHE two-year institutions to create agreements on seamless transfer. A 2+2 agreement between Snow College and USU for special education majors is posted on Snow College's website (https://snow.edu/academics/social_science/education-family/education.html). A similar agreement is in the works with Salt Lake Community College. Students are encouraged to receive an associate degree at these partner institutions. The Associate of Science in Special Education is a unique program for students wishing to complete their entire school program at USU and won't compete with the two-year institutions' offerings.

External Review and Accreditation

USU's educator preparation programs are accredited by the Association for Advancing Quality in Educator Preparation (AAQEP). Accreditation was granted by this body in May 2019. Courses within the Associate of Science in Special Education degree will be subject to accreditation review, with the next full accreditation visit occurring during the spring semester of 2026.

Section IV: Program Details

Graduation Standards and Number of Credits

Students would complete 60 credit hours which is within the permitted range of 60-63 credits. USU requires students completing an associate degree to have a 2.0 GPA and to have at least 20 USU credits.

Admission Requirements

Students would need to hold a high school diploma. This is the USU admission standard.

Curriculum and Degree Map

See appendix A and B.

Section V: Institution, Faculty, and Staff Support

Institutional Readiness

The Associate of Science in Special Education degree falls within the administrative and advising structure of Special Education and Rehabilitation Counseling (SPERC) with additional support from Statewide Campuses. Specific advisement for students in this program will be provided through the SPERC and Statewide Campus advisors assigned to Special Education. This program will impact the delivery of lower-division courses by making more courses available at the lower- division level and possibly increasing enrollment.

Faculty

Instructional assignments for the courses within the Associate of Science in Special Education degree will be made through the regular course scheduling process used by SPERC that involves existing faculty, graduate teaching assistants, and semester hires. The space available in the teacher preparation program now is sufficient to handle the load.

Staff

Staff within existing support structures is sufficient to meet program needs.

Student Advisement

In Logan and on the statewide campuses, the advisor assigned to Special Education will be the advisor to students in this program.

Library and Information Resources

No additional library resources will be needed to support this program.

Projected Enrollment and Finance

See appendix C and D.

Section VI: Program Evaluation

Program Assessment

The goal of the program is to provide highly qualified paraeducators to school districts throughout Utah, to provide more general education teachers with training in special education, and to increase the number of students applying to the special education majors. One of the systems of assessment will be to track the increase of special education majors.

Student Standards of Performance

Utah State University's General Education (GE) program provides the subject-area knowledge and learning skills foundation for its 2- and 4-year degrees. Core courses make up the general education foundation. Breadth courses give an opportunity to explore various subjects. General education courses are highly advisable for concurrent enrollment students; they are required for college graduation and transferable from one Utah System of Higher Education (USHE) institution to another.

Courses taught by the Special Education and Rehabilitation department (REH/SPED 1010: Disability and Society (BSS), SPED 2910: Early Field Experience in Special Education, REH 2020: Neurodiversity and Society, and REH 2060: Health Promotion for Individuals with Chronic Illness and Disability) provide opportunities to explore issues related to disability from a variety of contexts. Students are not only exposed to disability for school age children but also through the lifespan. These skills make students marketable for paraprofessional positions in special education.

The elective courses were chosen to provide analysis of behavior skills and adolescence psychology (PSY 1010, 1400, 1410), provide prerequisite skills to the special education major (MATH 2010/2020, TEAL 2660), incorporate concurrent enrollment courses related to the field (TEAL 1010, SPED 1000), and provide exposure to other contexts where students with disabilities are served (HDFS 2580, 2660, ELED 2480, and DFED 2700).

The program will be evaluated by the Association for Advancing Quality in Educator Preparation (AAQEP) accreditation as well as course completion outcome evaluation and a survey of the graduate.

Appendix A: Program Curriculum

Course Number	New Course	Course Title	Credit Hours
Required Classes			
ENGL 1010 (CL1)		Introduction to Writing	3
ENGL 2010 or 2020 (CL2)		Intermediate Writing or Professional Communication	3
MATH 1050 or 1051		College Algebra or Classical Algebra for Teachers	4
BAI		Any breadth American Institutions	3
BLS		Any breadth Life Science	3
BPS		Any breadth Physical Science	3
BCA		Any breadth Creative Arts	3
BHU		Any breadth Humanities	3
HDFS 1500 (BSS)		Human Development Across the Lifespan (Breadth Social Science)	3
REH 1010 or SPED 1010 (BSS)		Disability and Society	3
SPED 2910	X	Early Field Experience in Special Education (3 credits, repeatable for up to 6 credits)	6
REH 2020	X	Neurodiversity and Society	3
REH 2060	X	Health Promotion for Individuals with Chronic Illness and Disability	3
Required Course Credit Hours			43
Elective Courses (Choose 15 credits from the following)			
ELED 1010 or TEAL 1010		Orientation to Elementary Education	3
TEAL 2660		Educational Psychology for Teachers	2
SPED 1000		Principles of Effective Peer Teaching	2
PSY 1010		General Psychology	3
PSY 1400		Analysis of Behavior: Basic Principles	3
PSY 1410		Analysis of Behavior: Basic Principles Lab	1
PSY 2100		Developmental Psychology: Adolescence	3
HDFS 2660		Parenting and Child Guidance	3
DFED 2700	X	The Socio-Cultural Context of Deaf Community and Education	3
HDFS 2520		Home Visiting and Early Childhood	3
ELED 2480		Early Childhood Education Kindergarten through Grade 3	3
MATH 2010		Algebraic Thinking & Number Sense for Elementary Education School Teachers	3
MATH 2020		Euclidean Geometry and Statistics for Elementary Education School Teachers	3
Total Credits			60

Appendix B: Program Curriculum Narrative

The coursework listed below in the degree map provides a course from the Special Education and Rehabilitation Counseling department every semester during the Associate of Science in Special Education program.

Degree Map for Associate of Science in Special Education

First Year Fall	Cr. Hr.	First Year Spring	Cr. Hr.
ENGL 1010: Introduction to Writing (CL1)	3	ENGL 2010: Individualized Writing Instructions or ENGL 2020: Professional Communication (CL2)	3
REH/SPED 1010: Society and Disability (BSS)	3	SPED 2910: Early Field Experience in Special Education	3
HDFS 1500 Human Development Across the Lifespan (BSS)	3	MATH 1050 Classical Algebra OR 1051 Classical Algebra for Teachers (QL)	4
Breadth Creative Arts (BCA)	3	Breadth American Institutions (BAI)	3
Elective (suggested PSY 1010)	3	Elective (suggested ELED 1010: Orientation to Elementary Education)	2-3
Total	15	Total	15-16
Second Year Fall	Cr. Hr.	Second Year Spring	Cr. Hr.
Breadth Life Science (BLS)	3	Breadth Physical Science (BPS)	3
REH 2020: Neurodiversity and Society	3	REH 2060: Health Promotion for Individuals with Chronic Illness and Disability	3
Breadth Humanities (BHU)	3	SPED 2910: Early Field Experience in Special Education	3
Elective (suggested: PSY 1400: Analysis of Behavior: Basic Principles)	3	Elective	3
Elective (suggested: PSY 1410: Analysis of Behavior: Basic Principles Lab)	1	Elective	3
Elective (TEAL 2660 suggested)	2		
Total	15	Total	15

Appendix C: Current and New Faculty / Staff Information.

Part I. Department Faculty / Staff

	# Tenured	# Tenure - Track	# Non - Tenure Track	
Faculty: Full Time with Doctorate	6	8		
Faculty: Part Time with Doctorate				
Faculty: Full Time with Masters	6			
Faculty: Part Time with Masters				
Faculty: Full Time with Baccalaureate				
Faculty: Part Time with Baccalaureate				
Teaching / Graduate Assistants				
Staff: Full Time	5			
Staff: Part Time	1			

Part II. Proposed Program Faculty Profiles

	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							
	Michelle	McKnight	TT	Ph.D.	Michigan State University	15%	
	Brian	Phillips	T	Ph.D.	Michigan State University	15%	
	Steven	Kwiatek	TT	Ph.D.	University of North Carolina at Charlotte	15%	
	Trent	Landon	T.	Ph.D.	Michigan State University	15%	
							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	0	0	0	NA	
Faculty: Part Time with Doctorate	0	0	0	NA	
Faculty: Full Time with Masters	0	0	0	NA	
Faculty: Part Time with Masters	0	0	0	NA	
Faculty: Full Time with Baccalaureate	0	0	0	NA	
Faculty: Part Time with	0	0	0	NA	

Baccalaureate					
Teaching / Graduate Assistants	0	0	0	NA	
Staff: Full Time	0	0	0	NA	
Staff: Part Time	0	0	0	NA	

Appendix D: Projected Program Participation and Finance.

Part I.

Three Year Projection: Program Participation and Department Budget						
What do these numbers mean? Number of majors or # of students in the majors. Do I separate out lines 1 and 2, 3 and 4.	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
Student Data						
# of Majors in Department	267	270	270	270	270	270
# of Majors in Proposed Program(s)		5	10	15	20	25
# of Graduates from Department	68	70	75	75	75	75
# Graduates in New Program(s)		0	5	10	15	20
Department Financial Data						
Project additional expenses associated with offering new program(s). Account for New Faculty as stated in Appendix C, "Faculty Projections."	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)						
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.						
Personnel (Faculty & Staff Salary & Benefits)	0	0	0	0		
Operating Expenses (equipment, travel, resources)	0	0	0	0		
Other:	0	0	0	0		
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)						
Describe internal reallocation using Narrative 1 on the following page. Describe new sources of funding using Narrative 2.						
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 (requires Regents approval)	0	0	0	0		
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

Existing faculty in Special Education and Rehabilitation Counseling will teach the courses in the proposed new undergraduate program, with the exception of courses that are already currently offered in partner departments.

No other expenses are anticipated associated with the proposed program.

Part III: Describe funding sources

Revenue Narrative 1

No new funding sources are anticipated or needed.

QCNR - Environment and Society - Remote Sensing and Geospatial Artificial Intelligence Foundations Certificate of Proficiency

4.1.a R401 ABBREVIATED PROGRAM PROPOSAL

R401-Abbreviated Program Proposal

HELPS AND HINTS FOR COMPLETING R401 PROPOSALS

[Writing Guidelines/Suggestions](#)

[USHE R401 Policy](#)

[Process and Flowchart](#)

COLLEGE AND DEPARTMENT INFORMATION

Click on the college(s) and department(s) that are included on this request

COLLEGE (include all
cross listed
colleges)*

QCNR

DEPARTMENT
(include all cross
listed departments)*

Environment and Society

Current Title (if
applicable)* not applicable

Proposed Title* Remote Sensing and Geospatial Artificial Intelligence Foundations Certificate of Proficiency

CIP Code

Enter the Correct CIP Code by Using the Following Link:

Classification Instruction Programs

CIP Code (6-digits) * 45.0702

Minimum Number of
Credits (if
applicable)* 16

Maximum Number of
Credits (if
applicable)* 16

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

REQUEST

TYPE OF CHANGE BEING REQUESTED

Click the change(s) that best reflect your proposal.

**New Academic
Program:**

- ☐ Certificates of Completion
- ☒ Certificates of Proficiency
- ☐ CTE - Certificate of Completion
- ☐ CTE - Certificate of Proficiency
- ☐ Institutional Certificate of Proficiency
- ☐ K-12 Endorsement Program
- ☐ Minor
- ☐ New Emphasis for Existing Program
- ☐ Out of Service Area Delivery Program (attach signed MOU)
- ☐ Post-Baccalaureate Certificate
- ☐ Post-Masters Certificate

**Existing Academic
Program Changes:**

- ☐ Name Change of Existing Program
- ☐ Program Restructure (with or without Consolidation)
- ☐ Program Transfer to a New Academic Department or Unit
- ☐ Program Suspension (on hold-not listed in catalog)
- ☐ Program Discontinuation (permanent program removal)
- ☐ Reinstatement of Previously Suspended Program
- ☐ Out-of-Service Area Delivery Program (attach signed MOU)

**Administrative Unit
Changes:**

- ☐ Name Change of Existing Unit
- ☐ Administrative Unit (Transfer)
- ☐ Administrative Unit (Restructure-with or without Consolidation)
- ☐ Administrative Unit (Suspension-on hold)
- ☐ Administrative Unit (Discontinuation-permanent unit removal)
- ☐ Reinstatement of Previously Suspended Administrative Unit
- ☐ Reinstatement of Previously Discontinued Administrative Unit

Other: (explain
change)

ADDITIONAL APPROVALS (if applicable)

Graduate Council
Approval* ☐ Yes
☒ No

Teacher Licensure
Program Approval
(STEP)* ☐ Yes
☒ No

SECTION I: THE REQUEST

R401 Purpose* This R401 is for the establishment of a new Certificate of Proficiency in Remote Sensing and Geospatial Artificial Intelligence Foundations (RS/GeoAI) in the Department of Environment and Society. The Certificate will be offered with both fully online and mixed online and in-person course options.

ENVS applied for and is receiving funding from the Utah Office of the Commissioner of Higher Education to develop and deliver two new certificates, one at the undergraduate level and one at the graduate level, through the Utah System of Higher Education's Deep Technology Talent Initiative. This R401 seeks approval for the undergraduate-level certificate, a "foundations" 16-credit Certificate of Proficiency.

SECTION II: PROGRAM PROPOSAL

**Proposed Action &
Rationale***

The Department of Environment and Society (ENVS) in the S. J. and Jessie E. Quinney College of Natural Resources currently offers a Certificate of Proficiency in Applied Geographic Information Science (GIS) (available in person, or online for USU's statewide-system students). The proposed new Remote Sensing and Geospatial Artificial Intelligence Foundations (RS/GeoAI Foundations) Certificate will be available fully online, or with an option to mix online and in-person courses for students at the Logan campus. Delivery online provides access to students across the state and will facilitate stacking with the curriculum of an existing major, e.g. Geography or Forest Ecology and Management, through scheduling flexibility to provide students in that major with added high-value remote sensing and geospatial artificial intelligence skills. Students will be able to pair the Certificate with any major at USU and can pursue both the Applied GIS and the RS/GeoAI Foundations Certificates for simultaneously broad and deep skillsets in emerging geospatial technologies.

ENVS and the Quinney College of Natural Resources have a strong geographic information science (GIS) program, nationally recognized for applying spatial analyses to natural resource issues. This existing strength is being leveraged to create the two new Certificates (undergraduate and graduate) in Remote Sensing and Geospatial Artificial Intelligence that will form the core of a new and forward-looking program in the development and application of artificial intelligence to remote sensing and data-driven geospatial methods. Geospatial artificial intelligence (GeoAI) is a rapidly developing sector of deep technology with high workforce demand nationally and here in Utah. The new program aims to meet the growing workforce demand for professionals skilled in these technologies. This training will leverage the rapidly growing availability of large spatially explicit datasets, including satellite and drone-based remote sensing data. The convergence of geospatial analysis, remote sensing, and artificial intelligence presents unique opportunities for innovation across various industry and government sectors, including environmental monitoring, urban planning, agriculture, disaster planning and response, and natural resource management. By bridging the gap between geospatial expertise and AI proficiency, this program will produce graduates equipped to leverage technological advancements to tackle real-world challenges in a high-growth sector of Utah's workforce. This proposal will expand the capacity of USU to meet these growing workforce needs.

ENVS is an interdisciplinary department with a majority of its nineteen (19) faculty identifying as environmental social scientists or as geographers. Fourteen faculty are based on the Logan Campus and five are based on either the Moab or Blanding Campus. The Department currently offers three BS degrees (Environmental Studies, Recreation Resource Management, and Geography), the aforementioned Certificate of Proficiency in Applied Geographic Information Science, two graduate-level certificates, and MS and PhD degrees in Environment and Society, Geography, Recreation Resource Management, and Ecology. ENVS is pursuing strategic enrollment growth through new program development, among other strategies. A new BS in Environment Science and Sustainability and a new Certificate of Proficiency in Climate Change Solutions are currently pending approval. The proposed new certificates in Remote Sensing and GeoAI will create new coursework and programmatic opportunities for students on the Geography, or Geospatial Sciences, side of the Department, enhancing student preparation to be workforce participants in jobs requiring deep technology skills.

**Labor Market Demand
(if applicable)**

In recent years, the 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. Several factors contribute to the significant workforce demand for GeoAI graduates: (1) Data Explosion: The proliferation of Earth observation satellites, aerial imaging platforms, and sensor networks has led to a massive influx of geospatial data. Organizations require experts who can extract meaningful insights from these vast datasets (i.e., Big Data). (2) Complex Problem Solving: GeoAI harnesses Big Data to enable the analysis of intricate spatial patterns and relationships. Businesses, governments, and research institutions seek skilled professionals capable of solving complex problems related to land use, environmental change, disaster response, and more.

Globally, *Verified Market Research* projects that the “Geospatial Analytics Market” will grow at a compound annual growth rate of 12.4% from 2023 to 2030. Even more significantly, they project 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/>).

Nationally, the Bureau of Labor Statistics predicts a growth of 36% in data analyst occupations over the next decade, greatly exceeding the average growth rate (<https://www.bls.gov/ooh/math/data-scientists.html>). For the last two years, the American technological research and consulting group Gartner Inc. has included AI Engineering in its top 10 strategic technology trends through 2030 (<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021>). AI Engineering is the next step in sustainable integration of deep learning and automation in the industry, and training in Remote Sensing and GeoAI can be a steppingstone to AI Engineering.

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>).

**Consistency with
Institutional Mission
& Institutional
Impact***

Utah is a rapidly changing state facing significant and ongoing social, economic, and environmental challenges, including the effects of climate unpredictability (e.g., water scarcity, flooding) and a growing population (e.g., expanding infrastructure, urban growth, and housing availability). Geospatial science tools are now standard in many workforce sectors for capturing data about, processing, understanding, and addressing these complex challenges. Geospatial science literacy is a key competency sought by many employers, and it is also a rapidly developing field. Over the past few decades, there have been significant changes in data availability in remote sensing, driven by technological advancements and the democratization of geospatial information. The proliferation of consumer-grade drones has made high-resolution imagery and data collection more accessible than ever before. The surge in drone usage has generated a demand for individuals skilled in gathering, analyzing, and delivering geospatial products. Cloud-based platforms like Google Earth Engine provide extensive collections of geospatial data to the public. Google Earth Engine's infrastructure allows users to process massive datasets and perform complex analyses without requiring users to manage extensive computational resources. Remote sensing from earth observation satellites allows us to monitor and analyze large-scale environmental changes over decades offering invaluable data for making informed decisions and developing sustainable policies. GeoAI, like other types of AI, is swiftly impacting the labor market by necessitating the mastery of deep technological applications across industries. As automation increases efficiency, the role humans play is transforming, moving from lower-level data management tasks to higher-level tasks of problem definition, inquiry, and innovation. Humans must engage with, troubleshoot, and guide AI efforts, drawing upon critical thinking, creative problem-solving, complex reasoning, the application of emotional intelligence, and other distinctively human capabilities. Therefore, there is a crucial need for a workforce that is both (a) equipped with the tools to keep pace with emerging technological developments as well as (b) able to identify, develop, and communicate creative GeoAI solutions to the public and private sectors' interdisciplinary challenges in the state. A workforce trained in RS/GeoAI is uniquely positioned to meet the State of Utah's current and future environmental, economic, and social challenges.

USU is positioned to reach students statewide through the online completion options. With USU's Statewide System, the proposed program can create student-service-supported access to deep technology training for individuals in rural parts of Utah. By making the courses available online, this proposed program will increase workforce opportunities for marginalized communities served by the USU Statewide Campuses.

Finances*

Delivery of the new courses required for this program will carry a cost to the Department. An MOU between OCHE and USU governs the awarding of funds to USU and ENVS for this purpose. These funds will allow the Department to hire two term faculty with teaching roles to deliver a majority of the new courses for the first two years of the program. A minority of the new courses will be delivered by current ENVS faculty, including Dr. Elise Laugier, the Department's new Assistant Professor of Geospatial Analysis who started her position in Fall 2023. Over the coming two years, the Department will be seeking ongoing funds to cover the salaries of the two new term faculty based on successful launch of the program.

SECTION III: CURRICULUM (if applicable)

**Program Curriculum
Narrative**


Program Learning Outcomes: Upon successful completion of this program, students will have a foundational understanding of remote sensing technologies and possess basic skills integrating artificial intelligence for geospatial applications. Students will be prepared to apply image interpretation and analysis techniques to practical scenarios.

Program Requirements: Program requirements consist of 16 credits of required coursework. Included within these 16 credits is the requirement to complete a 1-credit capstone experience that consists of either (1) an internship experience with an industry partner or (2) a project design and implementation experience under supervision of program faculty. Required coursework also allows selection between two coding courses, with one recommended as preferable (Python Programming for GIS) and delivered regularly as an online course.

Students must obtain a minimum grade of C+ in each course taken to meet certificate requirements.

Graduation Requirements: Students must have a 3.0 minimum GPA across all courses used to meet certificate requirements.

Certificate Stacking: Ease of certificate stacking is a program goal. When stacked with the Applied GIS Certificate of Proficiency, the proposed RS/GeoAI Foundations Certificate requires 6-9 additional credits, as the following courses can be applied to both certificates: GEOG/WILD/WATS 2800 (4 cr), GEOG 4860 or GEOG 4870 (3 cr), WILD 5750 (3 cr).

Attach (if applicable) completed [Program Curriculum](#) and [Degree Map](#) to this request by clicking on the Files  icon located on the right-hand side of the screen.

SUBMIT AND APPROVE THE PROPOSAL

Click on the SAVE ALL CHANGES button below.

Scroll to the top left and click on the LAUNCH  icon to launch your proposal.