CSCU **Board of Regents**

AGENDA - JOINT MEETING
Academic & Student Affairs Committee and HR Committee
Friday, December 6, 2024 @ 9:30 a.m.
Conducted Via Remote Participation
Meeting will stream live at: https://youtube.com/live/ve3HjhMKFK0?feature=share

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1. **Call to Order and Declaration of Quorum**

2. **Introductory Remarks – Lori Lamb**

3. **Informational Item - Sexual Misconduct Report**
   Kim Pacelli
   Interim CSCU Title IX Coordinator
   Connecticut State Colleges and Universities (CSCU)

   a. Report Findings
   b. Training

HR & Administration Committee members
Sophia Jappinen, Chair
Richard J. Balducci
Elease E. Wright

Academic & Student Affairs Committee members
Ira Bloom, Chair
Juanita James
Rick Porth
Colena Sesanker, ex officio

BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE
AGENDA
Friday, December 6th, 2024 @ 9:30 a.m.
Conducted via Remote Participation
Meeting will live stream at:
https://youtube.com/live/ve3HjhMKFK0?feature=share

1. Call to Order: Declare Quorum

2. Approval of Minutes
   a. October 10th, 2024 – Regular Meeting – *Page 1*
   b. November 5th, 2024 – Special Meeting – *Page 12*

3. Eastern Connecticut State University – Dr. Ben Pauley, Interim Provost
   a. Academic Updates
   b. No Action Items for December 2024

4. Southern Connecticut State University – Dr. Julia Irwin, Interim Provost
   a. Academic Updates
   b. No Action Items for December 2024

5. Western Connecticut State University – Dr. Stephen Hegedus, Interim Provost
   a. Academic Updates
   b. New Program
      i. Atmospheric Climate Science – Bachelor of Science – *Page 15*

6. Central Connecticut State University – Dr. Kim Kostelis, Provost
   a. Academic Updates
   b. Modification
      i. Student Development in Higher Education – Master of Science – Name Change – *Page 41*
   c. Below Threshold
      i. Student Development in Higher Education – Master of Science – Modification – *Page 44*
   d. Endowed Chair Reports – Information Items
      i. American Savings Foundation Endowed Chair in Finance and Banking – *Page 49*
      ii. Governor William A. O'Neill Endowed Chair in Public Policy and Practical Politics – *Page 54*
      iii. Robert C. Vance Endowed Chair in Journalism and Mass Communication – *Page 61*

7. CT State Community College – Dr. Karen Hynick, Interim Provost
   a. Academic Updates
   b. Modification
      i. General Studies (GNST) – Associate of Arts – Modification of an Accredited Program – *Page 65*
   c. Below Threshold
      i. Tech Studies Industrial Technology – Associate of Science – Program Modification – *Page 78*

8. Charter Oak State College – Dr. David Ferreira, Provost
   a. Academic Updates
   b. New Programs
      i. Curriculum and Instruction – Master of Science – *Page 84*

ii. Data Analytics – Bachelor of Science – *Page 107*
iii. Marketing – Bachelor of Science – *Page 126*

c. Modifications
   i. Health Informatics – Master of Science – Name Change – *Page 149*
   ii. Healthcare Administration – Bachelor of Science – Name Change – *Page 153*
   iii. Healthcare Administration – Master of Science – Name Change – *Page 157*

d. Discontinuations
   i. Clinical Documentation Improvement – Certificate – *Page 159*
   ii. Health Insurance Customer Service – UG Certificate – *Page 163*
   iii. Leadership in Health Care Administration – UG Certificate – *Page 167*

e. Below Thresholds
   i. Software Development – Bachelor of Science – Program Modification – *Page 171*
   ii. AI Practitioner – New Certificate – *Page 179*
   iii. Early Childhood Education – Associate of Science – Program Modification – *Page 188*
   iv. Health Informatics – Master of Science – Program Modification – *Page 194*
   v. Health Information Management – Certificate – Program Modification – *Page 202*
   vi. Health Information Management – Bachelor of Science – Program Modification – *Page 208*

If any member of the public is unable to attend the meeting in real-time due to a lack of physical location or electronic equipment, they may request assistance by email to PHeleen@commnet.edu at least 24 hours before the meeting.

BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE
AGENDA
Thursday, October 10th, 2024 @ 2:30 p.m.
Conducted via Remote Participation

Regents Present:	Committee Chair Ira Bloom, Regent Juanita James, Regent Richard Porth
Members:	Professor Colena Sesanker
Staff Present:	Lloyd Blanchard, Aynsley Diamond, Pamela Heleen, Tamara O'Day Stevens, Kaylah Davis
Other Attendees:	Stephen Hegedus (WCSU), Karen Hynick (CT State), Julia Irwin (SCSU), Kerry Kelley (CT State), Kimberly Kostelis (CCSU), John Maduko (CT State), Benjamin Pauley (ECSU), Brian Vernon (WCSU)

1. Call to Order: Declare Quorum

2. Approval of Minutes
   a. September 6, 2024 – Regular Meeting
   Committee Chair Ira Bloom asked for a motion to approve the September 6th, 2024 minutes. On a motion by Regent Juanita James, second by Regent Richard Porth, a vote was taken, and the minutes were approved unanimously.

3. Connecticut State Colleges and Universities – Information Items
   a. CSCU Student Enrollment and Completions Report
   Dr. Lloyd Blanchard and Dr. Tamara O'Day Stevens presented an enrollment report that includes data on undergraduate and graduate headcounts, certificate participants, and metrics related to access, completion, and employment. The report covers demographic information, retention and graduation rates, transfer rates, and graduate employment percentages, but faces challenges in linking program codes to industry standards. Regent Richard Porth shared his appreciation for the report and responsiveness to feedback and inquired if it would be possible to do a comparison amongst comparable educational institutions or similar benchmarks, in effort to better understand how we are doing comparatively. Dr. Blanchard confirmed that IPEDS data can be used, and his suggestion for comparison is to use the Carnegie classifications and compare each institution with its own set of peers. Regent Richard Porth inquired if there is a way to connect this information with the needs of CT's major industries and workforce. Dr. Blanchard advised that this information isn't readily available, however, there are older data sets that can provide information. Regent Juanita James emphasized the importance of identifying key performance indicators to understand barriers to success and the need for stakeholder engagement. Dr. Blanchard suggested tracking year-over-year enrollment metrics and creating briefs to analyze retention metrics. Provost Hegedus highlighted the complexities of retention post-COVID, while Dr. O'Day Stevens recommended starting data analysis from 2023 onward to better reflect the pandemic's impact.
   The full discussion occurs from minute 2:04 to 45:20.
   b. Update on Reinstatement of CT State Student Services
   Dr. John Maduko provided an update on efforts to restore student-facing services across the institution. Joined by Provost Karen Hynick and VP of Finance Kerry Kelley, they highlighted the need to enhance seven key areas of student services, including library hours, tutoring, and mental health support. The plan will be data-driven, utilizing student surveys to assess needs and ensure transparency throughout the process. They emphasized the goal of prioritizing services that support student success while

remaining open to mid-year adjustments based on enrollment trends. President Maduko advised that plans will be discussed further at the upcoming board meeting on October 25th. In addition, a dedicated website for this initiative has been created to keep stakeholders informed. Regent Juanita James expressed appreciation for the progress made in restoring student services at CT State. She asked whether the same thorough examination applied to reducing services during deficit mitigation as was used when reinstating them, seeking clarity on the decision-making process. President Maduko acknowledged the importance of prioritizing specific areas like student support and teaching during the deficit mitigation process, emphasizing that input from campus leaders was sought to minimize harm. Regent Juanita James added the suggestion to explore alternative funding sources beyond tuition and state support and highlighted the need for innovative partnerships with the philanthropic and business communities to sustain student services. Regent Richard Porth expressed gratitude for the ongoing discussions about tuition and student costs and emphasized the importance of making informed decisions when restoring support services. President Maduko responded by highlighting the importance of aligning services with student needs and schedules and emphasized the affordability of CT State, with 59% of students paying no tuition due to financial aid programs; he also shared that combining free tuition with guided pathways advising significantly boosts student persistence rates, particularly for underrepresented groups. He reaffirmed the commitment to a thoughtful restoration of services based on student feedback and needs, and looked forward to presenting the final report in November.
The presentation is attached, and the full discussion occurs from minute 45:45 to 1:08:53.

4. CT State Community College – Dr. Karen Hynick, Interim Provost
    a. Academic Updates
    Dr. Karen Hynick shared academic updates relating to CT State during the discussion of item 3. b.
    b. No action items for October 2024

5. Southern Connecticut State University – Dr. Julia Irwin, Interim Provost
    a. Academic Updates
    Dr. Julia Irwin shared that SCSU's concurrent enrollment headcount is now 1703 students. SCSU has recently announced the Yale Teaching fellowship, a collaboration with SCSU, Yale, New Haven Public Schools, and New Haven Promise. SCSU has also been invited to participate in workshops that focus on systemic improvements as an emerging HIS. The university has also received a grant from the Community Foundation for Creative Connections, a program for homeless youth.
    Committee Chair Ira Bloom asked a follow up question from the September BOR-ASA meeting, inquiring on the number of students in the Exercise and Sports Science program. ,It was confirmed that there are 15 students.
    The full academic update occurs from minute 1:21:40 to 1:23:30.
    b. No action items for October 2024

6. Eastern Connecticut State University – Dr. Ben Pauley, Interim Provost
    a. Academic Updates
    Dr. Benjamin Pauley shared an update regarding two projects underway at ECSU. The first project, funded by the National Endowment for the Humanities, involves collaboration among Eastern and four other universities to develop curricular modules that explore the intersection of humanities and AI. This initiative aims to create classroom interventions that help humanities students critically engage with AI, culminating in a repository of exercises and a conference for faculty to share insights. The second, supported by a grant from the Davis Educational Foundation, involves two cohorts of teaching scholars. Six faculty members from various disciplines will develop and study new teaching exercises and will transform their findings into manuscripts suitable for publication, promoting scholarship in teaching and learning.
    The full academic update occurs from minute 1:11:00 to 1:16:05.
    b. No Action Items for October 2024

7. Central Connecticut State University – Dr. Kim Kostelis, Provost
    a. Academic Updates
    Dr. Kimberly Kostelis shared that CCSU has passed an updated general education curriculum and is working on the implementation. CCSU also recently held an AI conference. In addition, the AI Corridor

is in the process of installing a synthetic human there and in the gymnasium and recreation center. Finally, CCSU is celebrating its 175th anniversary with ribbon cuttings and events, all culminating on homecoming weekend with a Gala on November 2nd.
The full academic update occurs from minute 1:16:10 to 1:18:17.

b. Endowed Chair Appointment
    i. Recommendation to Appoint Gabe Rosenberg to the Governor William A. O'Neill Endowed Chair in Public Policy and Practical Politics
    Central Connecticut State University requested approval for the appointment of Gabe Rosenberg to the Governor William A. O'Neill Endowed Chair in Public Policy and Practical Politics. Mr. Rosenberg's resume was provided in the agenda materials, noting that he currently serves as the chief of staff for the Connecticut Secretary of the State. As an Endowed Chair, he would teach one course annually in the political science department. The specific course he plans to teach has yet to be determined, but initial discussions are underway.
    Committee Chair Ira Bloom asked for a motion to approve the Endowed Chair appointment. On a motion by Regent Juanita James, second by Regent Richard Porth, a vote was taken, and the Endowed Chair appointment was approved unanimously.

8. Western Connecticut State University – Dr. Stephen Hegedus, Interim Provost
    a. Academic Updates
    Dr. Stephen Hegedus provided an update on the reconfiguration of the Graduate School at WCSU, which now integrates the International, Graduate Admission, and Career Success Offices to enhance and prioritize graduate programs. This restructuring will create more opportunities for 4+1 programs and micro credentials, with WCSU partnering with Charter Oak and Coursera to launch their first micro credential. The strategic focus on reconfigured programs and new concentrations within master's and doctoral programs aims to ensure future enrollment stability both regionally and internationally. Regent Richard Porth followed up on the WCSU "Blueprint to Success" document that was discussed at the September meeting. The document was shared with the Committee by the WestConn Academic and Student Affairs Office, and receipt of the document will be confirmed again at the next meeting. Provost Hegedus advised that he is happy to host and meet with the Regents to discuss this further at any time.
    The full academic update occurs from minute 1:23:40 to 1:30:50.
    b. Below Threshold
        i. Art – Bachelor of Arts – Modification of an Accredited Program
        Dean Brian Vernon discussed changes to the program, focusing on the reduction in major credits to align more closely with the standard liberal arts degree programs and in response to feedback as provided from the National Association of School Art and Design. This modification aims to enhance the program's effectiveness for students, particularly those interested in art education. Dean Vernon confirmed that the modified 49-credit degree will still meet the requirements for teacher education in art.

9. Charter Oak State College – Dr. David Ferreira, Provost
    a. Academic Updates
    Dr. David Ferreira shared that new program development is underway and will go through their governance process soon, along with modifications and discontinuations of existing programs. Notably, Charter Oak was recognized on Forbes' list of America's Top Colleges. Charter Oak ranked as the top online institution on this list, outperforming other online schools like the University of Florida and the University of Maryland Global Campus. Provost Ferreira also discussed ongoing work regarding a partnership with CT State, with a goal to create a seamless enrollment process for students transitioning between institutions, ensuring that the experience feels unified and straightforward. Regent Richard Porth and Regent Juanita James congratulated Provost Ferreira on these achievements.
    The full academic update occurs from minute 1:33:10 to 1:36:40.
    b. No Action Items for October 2024

Committee Chair Ira Bloom asked for a motion to adjourn. On a motion by Regent Juanita James, second by Regent Richard Porth, a vote was taken, and the motion to adjourn was approved unanimously at 4:08pm.

CT STATE
COMMUNITY COLLEGE

Progress Report on Board Resolution to Restore Student Facing Services

October 10, 2024

Your Community. Your College.

CT STATE COMMUNITY COLLEGE | WHO WE SERVE

In July of 2023, CT State became the **LARGEST COLLEGE** in Connecticut. Currently enrolling **64,883** students.

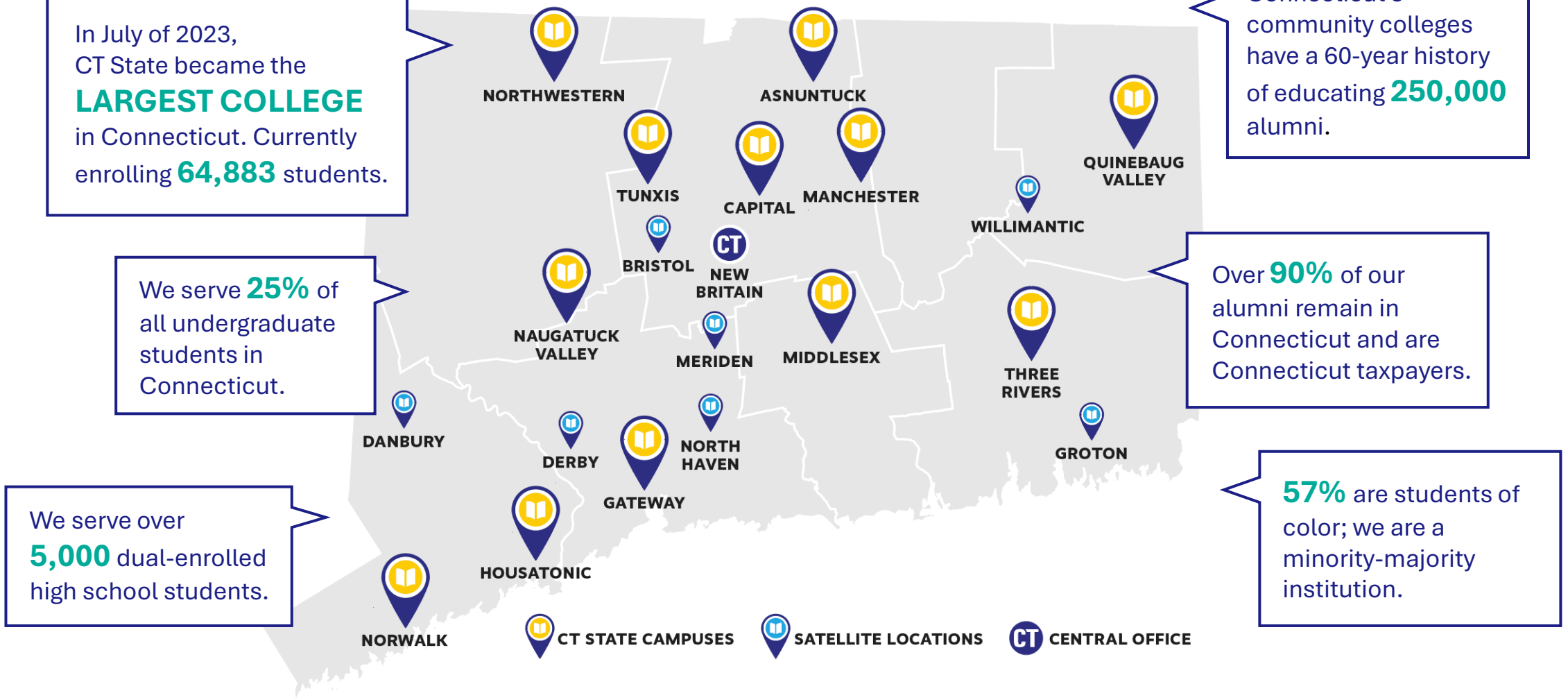
We serve **25%** of all undergraduate students in Connecticut.

We serve over **5,000** dual-enrolled high school students.

Connecticut's community colleges have a 60-year history of educating **250,000** alumni.

Over **90%** of our alumni remain in Connecticut and are Connecticut taxpayers.

57% are students of color; we are a minority-majority institution.



CT STATE COMMUNITY COLLEGE | WHO WE SERVE

Credit Student Profile

40,320 **Are Degree-Seekers** Others are pursuing a certificate or short-term workforce training.	**27,166** **Are First Generation Students**	**38,829** **Attend Part-Time**	**27,952** **Are Students of Color** We are a minority-majority institution.
30,000 **Work While Going to School** 6,300 are parents attending school.	**11,000** **Are Latine** Five of our campuses are Hispanic-serving institutions.	**15,071** **Attend Classes at More Than One CT State Campus** (up from about 600 per term pre-merger)	**2,500** **Have a Disability or Accommodation Needs**

300
Credit Programs

15:1
Student to Faculty Ratio

221:1
Student to Advisor Ratio

98% of CT State students are from Connecticut, representing all CT school districts.

CT STATE
COMMUNITY COLLEGE

Resolution to Restore Student Facing Services

The Board directed CT State to develop a plan to strategically restore student services affected by the FY 24 & 25 deficit mitigation

Plan should prioritize the key student services such as:

- **Library Hours**
- **Tutoring Services**
- **Disability Services**
- **Academic Advising and Counseling**
- **Mental Health and Wellness**
- **Wraparound Support** (food pantry, transportation, childcare)
- **Emergency Student Funding**

CT STATE
COMMUNITY COLLEGE

The CT State Plan Will

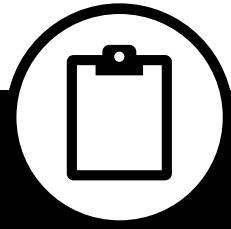
- Align with CT State's strategic priorities and goals
- Leverage the Holistic Student Support Surveys on student needs & challenges
- Recognize that no two years are the same & analyze the makeup of the student body and how they access our campuses/offerings
- Honor our Principles of Shared & Participatory Governance
- Provide a timeline for implementation
- Identify a funding source
- Be transparent

CT STATE
COMMUNITY COLLEGE

CT State Progress in Developing the Plan

Campus leaders have engaged with local stakeholder groups to identify student needs

Initial recommendations submitted on 9/27/24 Finance Division is analyzing the cost for each



CT State completed a survey on the Hours of Operation by for student facing services by campus and satellite location

With support from College Senate leaders, the timeline to develop the plan was extended to allow for statewide shared governance

CT STATE
COMMUNITY COLLEGE

CT State is Committed to Transparency

The college has established a webpage that will contain:

- Documentation of Campus Stakeholder Engagement
- Updates on the Process to Develop the Plan
- Copies of Holistic Student Services Surveys
- Copies of the Campus Plans
- Hours of operation for student services by campus & satellite location
- Links to College Senate Meetings

Thank You

CT STATE
COMMUNITY COLLEGE

SPECIAL MEETING - BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE
AGENDA
Tuesday, November 5, 2024 @ 8:30 a.m.
Conducted via Remote Participation

Regents Present: Committee Chair Ira Bloom, Regent Juanita James, Regent Richard Porth

Members: Professor Colena Sesanker

Staff Present: Terrence Cheng, Aynsley Diamond, Tamara O'Day Stevens, Pamela Heleen, Kaylah Davis

Other Attendees: Stephen Hegedus (WCSU), Karen Hynick (CT State), Julia Irwin (SCSU), Kerry Kelley (CT State), Kimberly Kostelis (CCSU), Benjamin Pauley (ECSU), Elle Van Dermark (CT State)

1. Call to Order and Declaration of Quorum

2. Adopt Agenda

3. Action Item

3.a. Reinstatement of Student Services at CT State Community College

Dr. John Maduko, CT State Community College President and Kerry Kelley, CT State Community College Vice President of Finance and Administration presented a plan on the restoration of student facing services at CT State Community College. The plan focuses on seven key areas of student services: library hours, tutoring, disability services, academic advising, counseling, emergency student funding, wraparound services such as childcare, food pantries, and transportation. The process leading to this proposal included comprehensive engagement, collaboration and consultation with various stakeholders, including campus leaders, central office staff, and faculty. The team used data from the Holistic Student Support survey, conducted annually to capture the needs of students, including demographics, access to technology, transportation issues, and more. The restoration plan was shaped by this data, as well as feedback from governance bodies and collective bargaining units. A challenge during the process was balancing a tight timeline while involving diverse stakeholder groups. In total, 76 service restoration requests were submitted for consideration from the campuses. Some requests, such as those for faculty positions or non-student services, were not included in the restoration plan because they did not meet the defined categories of student-facing services. Input was also gathered through town halls at various campuses, where issues such as transportation accessibility emerged as key concerns. Several campuses, particularly those outside major urban areas, face challenges due to unreliable or nonexistent public transportation options. Key presidential initiatives were introduced as part of the restoration plan, one being a partnership with Uber, which will provide subsidized transportation for students at campuses facing transportation barriers. Another initiative includes the pilot of embedded peer tutoring.

The estimated cost of implementing the plan is $1.7 million for FY 2025, with an annualized cost of $2.1 million. The budget breakdown allocates funds across various student service categories. The process of developing the plan is not seen as final. There is a commitment to ongoing budget reviews throughout the year to adapt to emerging needs and reallocate resources as necessary.

To ensure transparency, the team has created a dedicated website that outlines every aspect of the process, including the original deficit mitigation plan, data analysis, and stakeholder feedback. The website serves as a reference for the public to understand the work done and the decisions made.

Regent Juanita James commended the clarity and comprehensiveness of the presentation, highlighting the complexity of the plan and managing variables that are outside of CT State's control, i.e., public transportation.

Regent Juanita James asked about creating a sustainable cost model, including opportunities, resources, support systems, and process improvement, that can streamline this work, so that a process of continual improvement can be adapted, adding that partnerships may help in providing tools and resources for this work. President Maduko agreed in bettering the process to do this work and commended the Senate and leaders across CT State's campuses who are willing to participate in the process.

Regent Richard Porth echoed Regent James' comments, and inquired on how it was decided which of the 76 submissions would move forward to the recommendation stage. President Maduko responded that upon gathering information from the campuses, Kerry Kelley and her team cross referenced the requests with the deficit mitigation plan, which was then presented to him to make the final determination, adding that items not included in this plan, will be looked at again at the mid-year point.

Regent Richard Porth inquired about how this plan will be received by stakeholders upon formal approval. President Maduko advised that despite some pushback through the process, he is hopeful, adding that there has been approval and involvement with college senators. Chair Ira Bloom confirmed with President Maduko the endorsement of the college senate.

Chair Ira Bloom inquired about the continuing reassessment and review in January. President Maduko advised that they continue to adjust and added that there is an opportunity to leverage the survey data and engage with SGA groups across the campuses, hearing directly from students regarding their needs.

Chair Ira Bloom inquired about the potential of a shared services option, where one placement director could work with students across various campuses. President Maduko advised that though that type of situation may occur in limited instances, they honor the current collective bargaining agreements, which are campus specific.

Professor Sesanker commended the thoughtfulness of the presentation and noted that the issue has been well-documented on the CT State website. She expressed surprise at the scope of the restoration plan, pointing out that the resolution called for prioritizing certain aspects of the restoration, but the cuts made last year seem to be much larger than the restoration suggests. She also raised concerns about whether the surplus funds allocated for this purpose will be used to reinstate future cuts once more permanent funding is secured. President Maduko agreed that the push for additional funds was beneficial and emphasized the potential for ongoing improvement. Kerry Kelley explained that the RSA allocation for the current fiscal year was not reflected in the budget initially, but CT State received $7 million, which turned the FY 25 budget from a deficit into a surplus. They plan to use $1.7 million of this surplus to fund the restoration initiatives, leaving a balance of $3 million. Moving forward, the FY 25 budget development process will involve soliciting input from campuses about restoration needs and new strategic priorities. In January, the leadership will revisit the list of priorities and discuss the next steps, keeping in mind the importance of maintaining a process for collaboration with shared governance.

Professor Sesanker inquired about the status of the restoration efforts and how it compares to the size of last November's reduction. She also inquired whether the remaining $3 million would mean additional funds for CT State. Kerry Kelley advised that the forecasted shortfall last year was $33.6 million, but the mitigation plan from last year resulted in $24 million, which is roughly 10% when fully annualized.

Chair Bloom reiterated the importance of this review, as it highlights the varying needs across campuses, and emphasized the importance that this breakdown of services across campuses is valuable to both the ASA and Finance committees. Regent Richard Porth added that the start of this continuous process of review and discussion will provide some understanding of what students need for success over time.

Chancellor Cheng expressed appreciation for President Maduko and the administrative team, praising their thoughtfulness and proactive planning. He highlighted that the model being discussed represents an effort to engage in a multi-campus conversation, ensuring inclusivity and transparency with various stakeholder groups. He viewed this as a positive start, noting that planning of this nature often involves overlapping discussions between academics and finance. Chancellor Cheng also acknowledged and thanked Professor Sesanker and Professor Van Dermark for their active engagement and representation.

Chair Ira Bloom asked for a motion to approve the resolution. On a motion by Regent Juanita James, second by Regent Richard Porth, a vote was taken, and the motion to approve the resolution was approved unanimously.

4. Adjournment

Committee Chair Ira Bloom asked for a motion to adjourn. On a motion by Regent Juanita James, second by Regent Richard Porth, a vote was taken, and the motion to adjourn was approved unanimously at 9:18 a.m.

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Approval of a New Program

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the licensure of an Atmospheric and Climate Science program (CIP Code: 30.3501, OHE# TBD) leading to a Bachelors of Science at Western Connecticut State University; and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020.

A True Copy:

_____

Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Establishment of a new program, Atmospheric and Climate Science program leading to a Bachelors of Science at Western Connecticut State University.

Name of Institution	Western Connecticut State University	
Name of Program	Atmospheric and Climate Science	
CIP Code	30.3501	
OHE# (Leave blank for new programs)		
Degree Level	Bachelors of Science	
Number of Collegiate Credits	120	
Date of Action (Anticipated)	12/19/2024	
Nature of Request	X Licensure and Accreditation _ Program Change _ Phase-out Program _ Terminate Program	
If Name Change, New Name		
Delivery	Current (If not a new program) _ On Ground _ Hybrid _ Online	Future X On Ground _ Hybrid _ HyFlex _ Online
Effective Term	August 2025	
If a Discontinuation, date of Termination	N/A	
If a Suspension, dates of Suspension	N/A	

BACKGROUND AND PROGRAM OVERVIEW

The Bachelor of Science in Atmospheric and Climate Sciences offers a comprehensive education in the fundamental principles of meteorology, climate systems, and environmental sciences. This interdisciplinary program blends physics, chemistry, and mathematics to explore the dynamic processes that govern Earth's atmosphere and climate. Through a combination of theoretical coursework, hands-on lab experience, and field research, students will be equipped with the skills necessary to analyze weather systems and predict climate trends.

Western's BS in Atmospheric and Climate Sciences (ACS), with an accelerated option for MS in Meteorology attainment, will complement existing WCSU Science programs by developing students that can predict weather, analyze climate patterns, and contextualize the importance of this study in building an equitable and climate resilient workforce, as well as offering access and opportunity for diverse students to apply current technological advances (i.e., AI, weather forecasting, climate modeling) towards building a more climate resilient community.

IDENTIFIED NEEDS
This new program introduction is concurrent with the discontinuation of the BS in Meteorology program thereby fulfilling the need for a higher education degree in climate science in southern New England.

Initiatives in Connecticut, and elsewhere, to include climate studies in the K-12 curriculum of primary and secondary public schools will fuel the interest in this relevant and important environmental topic. There is a societal need to address climate change and its impact on our planet and society. This program, drawing on expertise of faculty across disciplines (e.g., physics, meteorology, mathematics, chemistry, computer science), will collaboratively work with students towards solving the most pressing environmental issue of our time.

Nationally, employment of atmospheric scientists, including meteorologists, is projected to grow by 6% which is faster than the average for all occupations. About 900 openings for atmospheric scientists, including meteorologists, are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force through retirement. These roles will continue to be essential for addressing weather forecasting, climate change, and environmental impacts in various sectors.

Southern New England, with its varied climate, coastal influence and vulnerability to severe tropical weather events, and increased focus on climate adaptation, offers specific opportunities in both public and private sectors. The federal government, especially the National Weather Service (NWS), along with research institutions and private environmental firms, remains a significant employer. Additionally, local research universities and broadcasting outlets in the region provide roles for both research and communication-oriented atmospheric scientists.

PRO FORMA

RECOMMENDATION
Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this new program. CSCU Academic and Student Affairs concurs with this recommendation.

CSCU Academic & Student Affairs

Application for **New Program Approval**

SECTION 1: GENERAL INFORMATION

Date of Submission to CSCU Office of the Provost: 10.22.24

Institution: Western Connecticut State University (WCSU)

Most Recent NECHE Institutional Accreditation Action and Date: Continued in Accreditation, March 2024

Program Characteristics

Name of Program: Bachelor of Science in Atmospheric and Climate Sciences

Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: BS

Modality of Program *(check all that apply)*: [X] On ground [ ] Online [ ] Hybrid, % of fully online courses

Locality of Program: [X] On Campus [ ] Off Campus [ ] Both

Anticipated Program Initiation Date: August 2025

Anticipated Date of First Graduation: May 2029

Total # Credits in Program: 120

Credits in General Education: 46

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: 4 years (BS only); or 5 years (BS+MS)

CIP Code Number: 30.3501 Title of CIP Code: Climate Science

Department where program is housed: Biology

Location Offering the Program *(e.g., main campus)*: Midtown Campus

Provide estimated cost of program (tuition and fees): $ OR URL for link to tuition/fee information: https://www.wcsu.edu/cashiers/tuition-2/

Request for SAA Approval for Veterans Benefits? [X] Yes [ ] No

Program website: https://www.wcsu.edu/biology/

Provide the intended catalog description for this program: The Bachelor of Science in Atmospheric and Climate Sciences offers a comprehensive education in the fundamental principles of meteorology, climate systems, and environmental sciences. This interdisciplinary program blends physics, chemistry, and mathematics to explore the dynamic processes that govern Earth's atmosphere and climate. Through a combination of theoretical coursework, hands-on lab experience, and field research, students will be equipped with the skills necessary to analyze weather systems and predict climate trends.

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:

Program Discontinued: BS Meteorology CIP: 40.0401 OHE#: 2555 BOR Accreditation Date: 01/17/1989

Phase Out Period 4 years Date of Program Termination 05/2027

Discontinuation of a program requires submission of form 301. Discontinuation form submitted? [X] Yes [ ] No

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review: N/A
- If program prepares graduates eligibility to state/professional licensure,
  - identify credential: N/A
  - confirm NC-SARA requirements met: [☒] Yes [ ] No

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

CSCU Academic & Student Affairs

Application for **New Program Approval**

Institutional Contact for this Proposal

Name: Theodora Pinou

Title: Department Chair and Professor, Biology

Phone: 203-837-8793

Email: pinout@wcsu.edu

When was the program approved by (insert date in mm/dd/yyyy format):

- College/School: 05/10/2024
- Curriculum committee: 09/29/2024
- Faculty senate: 10/16/2024
- Institutional president: 10/22/2024

NOTES:

- Please rename your completed application to include your institution and the degree name and type in the file name (e.g., SCSU DataSci MS 101 New Program Application) and submit your completed application to CSCU-ACandASASub@ct.edu by the posted deadlines (https://www.ct.edu/academics/approval)
- All applications to establish a new program will be considered for both Licensure and Accreditation by the BOR
- New programs include: degrees, degrees with option(s), degrees with certificates(s), stand-alone credit bearing certificates
- Use Form 102 *New Academic Offering – Below Threshold Report* for new:
  - degree minors, concentrations, or specializations
  - undergraduate certificates or programs ≤ 30 credits within an approved program
  - undergraduate certificates ≤ 15 credits
  - graduate certificates ≤ 12 credits
  - non-credit bearing certificates
  - programs that do not qualify students to become eligible for federal financial aid

SECTION 2: PROGRAM OVERVIEW: PURPOSE AND GOALS

In this section, provide an overview of the purpose and goals of the proposed program. Your narrative should include the following:

- clear statement of the program's purpose
- statement describing how the program meets students' educational goals and career objectives
- description of relevant national or local educational trends and connection of these to the program
- discussion of relevant faculty expertise and commitment with respect to the program
- description of other relevant specific institutional strengths and/or distinctive attributes that contribute to program
- the relationship of the program to the mission of the institution and CSCU (specifically, the program's relationship to current strategic priorities)
- the impact of the program on the institution; and the extent to which the program complements existing programs at the institution.
- the potential quality of the proposed program in relation to comparable programs within and outside CSCU

Program Purpose: Western's BS in Atmospheric and Climate Sciences (ACS), with an accelerated option for MS in Meteorology attainment, will complement existing WCSU Science programs by developing students that can predict weather, analyze climate patterns, and contextualize the importance of this study in building an equitable and climate resilient workforce, as well as offering access and opportunity for diverse students to apply current technological advances (i.e., AI, weather forecasting, climate modeling) towards building a more climate resilient community. This new BS in ACS will replace the discontinued BS in Meteorology, thereby fulfilling the need for a higher education degree in climate science in southern New England.

The ACS program will provide a basic understanding of the science behind the physical processes that govern the behavior of the atmosphere; both in terms of short-term weather events and longer term climate trends. The inclusion of interdisciplinary coursework in biology, mathematics, and social science general electives adds solid understanding of global impact of, and potential solutions to, climate change. This knowledge will equip students to contribute meaningfully to the field and address complex climate and meteorological related challenges from a position of knowledge. Students will foster collaborations with experts from different disciplinary backgrounds; a crucial element in tackling climate change as a multidimensional problem.

Program Achievement of Student's Education and Career Objectives: The ACS program will provide a basic understanding of the science behind the physical processes that govern the behavior of the atmosphere; both in terms of short-term weather events and longer term climate trends. The inclusion of interdisciplinary coursework in biology, mathematics, and social science general electives adds solid understanding of global impact of, and potential solutions to, climate change. This knowledge will equip students to contribute meaningfully to the field and address complex climate and meteorological related challenges from a position of knowledge. Students will foster collaborations with experts from different disciplinary backgrounds; a crucial element in tackling climate change as a multidimensional problem.

Degree requirements include hands-on research, fieldwork, and laboratory experiences, allowing students to develop practical skills in computer science (artificial intelligence (AI)), data analysis, modeling, and environmental monitoring. These skills are highly valued in various careers related to climate science, such as research, policy development, and/or environmental consulting. Students who complete this program will also be attractive to employers in the area of broadcast meteorology. Developing weather forecasting skills is integral to several courses and elective coursework will be available for those specifically interested in pursuing careers in this growing field.

Those that follow the accelerated course path will be well-prepared to enter the M.S. Meteorology program that will provide additional coursework in meteorology that will meet National Weather Service employment requirements, American Meteorology Society (AMS) recommendations, and course requirements to be eligible to become AMS Certified Broadcast Meteorologists.

Overall, students in this ACS program will have access and opportunity to pursue careers in meteorology and climate science by gaining in-depth knowledge, practical skills, interdisciplinary perspectives, and communication abilities needed to contribute meaningfully to these fields, and be prepared to address the urgent local and global challenges posed by climate change.

Program Connection to Relevant National/Local Trends: The biodiversity found in nature is essential for healthy ecosystems and human well-being. However, the disruption and decline of Earth's biodiversity is currently occurring at an unprecedented rate. Shifting biodiversity dynamics in turn influence functional biodiversity, which includes the roles of traits, organisms, species, communities, and ecosystem processes in natural systems. Changes in biodiversity dynamics are essential factors for future planetary resilience under environmental change, including climate change. Proper understanding of these shifting patterns requires knowledge and training in predicting weather, and experience in evaluating climate science data for a more resilient society.

Initiatives in Connecticut, and elsewhere, to include climate studies in the K-12 curriculum of primary and secondary public schools will fuel the interest in this relevant and important environmental topic. There is a societal need to address climate change and its impact on our planet and society. This program, drawing on expertise of faculty across disciplines (e.g., physics, meteorology, mathematics, chemistry, computer science), will collaboratively work with students towards solving the most pressing environmental issue of our time. Students interested in careers in meteorology will benefit from this broad education, preparing them for a variety of careers in environmental science and provide an excellent point from which to enter a variety of graduate degree science programs; as well as professional degree programs in business and law.

The broad appeal of this program to those interested in both a traditional meteorology curriculum, and climate science, along with its uniqueness in the region, will provide a solid base from which to draw potential students and ensure that the program is viable and sustainable. This atmospheric and climate sciences program will also offers students a minor in mathematics and the opportunity to earn a M.S. Meteorology degree in an additional year, which will solidify American Meteorological Society educational learning outcomes and meet important industry-wide professional organization recommendations and/or employment requirements. This will enhance the qualifications of students who enter a wide variety of private and public industry positions in meteorology, climate science, and related environmental employment sectors.

Degree requirements include hands-on research, fieldwork, and laboratory experiences, allowing students to develop practical skills in computer science (artificial intelligence (AI)), data analysis, modeling, and environmental monitoring. These skills are highly valued in various careers related to climate science, such as research, policy development, and/or environmental consulting. Students who complete this program will also be attractive to employers in the area of broadcast meteorology. Developing weather forecasting skills is integral to several courses and elective coursework will be available for those specifically interested in pursuing careers in this growing field.

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Climate science is increasingly being recognized as an important study at both national and local levels. Many states, including Connecticut, have recently mandated that topics in climate studies be included in secondary school curriculum. Additionally, climate studies are being integrated in multiple subject areas; including the biological and social sciences. The proposed program is aligned with these trends because of its significant multidisciplinary design including required courses in mathematics, computer science and biology, and general electives in the social sciences that address sustainability. Environmental literacy and sustainability education is also increasingly being emphasized nationally, and will be an emphasis in the climate science courses that are part of this new degree program.

Meteorology, while somewhat of a niche study, has a long history in both the U.S. and internationally as an undergraduate degree program that is a pervasive and societally impactful application of a quantitative physical science. It continues to be a significant area of study within the earth sciences in secondary schools, and especially important in secondary education teacher training of earth science and general science teaching certification. .

Relevant Faculty Expertise and Program Commitment: Western has committed the following faculty with relevant expertise to this program:

Faculty	Expertise	Teaching Commitment
Dr. J.P. Boyle	B.S., Nuclear Engineering; Master's and Ph.D. degrees in Physics and significant graduate level-training in meteorology, physical oceanography and engineering fluid mechanics. 20 years of experience	Continuing: college-level, calculus-based physics courses, the energy and the environment course and the physical oceanography course at the undergraduate level.

	teaching computer programming with the MATLAB software package. Has received federal research grant funding for oceanographic instrument development.	New: developed a new atmospheric and climate science data analysis and visualization course (proposed ACS 3XX) which would be taught in the new accelerated meteorology and climate science program. Dr. Boyle would also participate in the master's degree program by teaching the advanced thermodynamics and scientific methods courses as well as being an advisor for the (seminar and) independent thesis course(s), as necessary.
Dr. Dennis Dawson	Ph.D. in Astronomy from New Mexico State University. Specializations include variable stars, star clusters and innovative teaching methods of astronomy. Director of the WCSU Observatory and Planetarium.	Would oversee all activities that relate to planetary atmospheres. Connections between climates on distant planets and Earth, and searching for the conditions that would make life possible such as climates on other worlds beyond Earth, can help us better understand climate and climate change on Earth. Dr. Dawson will teach students to operate WCSU telescopes, and guide students to apply data from the Hubble Space Telescope and James Webb Space Telescope allow to identify elements within the atmospheres of those distant worlds.
Prof. Rob Eisenson	Academic and operational expertise in the areas of weather forecasting, theoretical meteorology, climatology, and broadcast meteorology. Degrees in meteorology from Cornell University (B.S. 1979) and the University of Utah (M.S. 1984). American Meteorological Society Certified Broadcast Meteorologist for the News 12 Networks in the New York Metro area.	Will teach courses in these areas in the new degree program. Prof. Eisenson will continue to train students in the skills of broadcast meteorology and on-camera communication (along with other contemporary broadcast media platforms), as well as scientifically informed climate disaster communication. Also developed a new ACS course (2XX) that teaches only the math skills necessary for disciplinary success in higher level BS ACS courses, without attaining the math minor.
Dr. Mitch Wagener	An ecologist with broad training and experience in the environment in Missouri, Alaska, and Connecticut. Extensive experience explaining climate change and its impacts to the public.	Teaches a climate change lab science course required for the new program, and several climate related courses for the WCSU Honors program. Graduate teaching experience in Limnology, Stream Ecology, Ecosystem Ecology, and Soil Ecology.

Other Relevant Institutional Strengths and/or Distinctive Attributes: The Western Connecticut State University Meteorological Studies and Weather Center promotes instruction, research, invention, discovery, development and the dissemination of information in the field of meteorology and related sciences. The Weather Center/Weather Lab is a multi-faceted forecasting/educational center, with academic and public service goals, some of which include the forecasting for various subscriber clients such as the print and digital media, legal entities and industrial clients. Student interns train in the Weather Center, on both a paid and volunteer basis, giving them an opportunity to gain invaluable forecasting experience in a professional setting. The Weather Center strengthens its research activities through collaborations with local industry and senior researchers. Students involved with the research have structured experiences in the operation of scientific weather equipment and research methodology in meteorology.

The WCSU Weather Center maintains a wealth of weather data for the region, which is utilized in faculty and student climate-related research. Mr. Gary Lessor runs the day to day operations of the Weather Center and Weather Lab. Mr. Lessor has been with the Weather Center for over thirty years, and is a full-time SUOAF employee. He is the advisor for the Meteorology Club and helps provide unique educational experiences for the students by attending on and off campus

conferences such as the American Meteorological Society Annual Conference, the Northeast Storms Conference and the Western Connecticut State University Tri-State Weather Conference. The Western Connecticut State University Meteorological Studies and Weather Center offers educational programs in meteorology, provides weather forecasting and monitoring services, and conducts research related to atmospheric science and meteorology. It also serves as a valuable resource for students, weather enthusiasts, and the local community in terms of weather information and research opportunities. Additionally, the Weather Center generates revenue by providing services for various media, legal, and industrial clients. Mr. Lessor has hosted numerous students in their 399 Independent Study class to not only enhance their understanding of meteorology, but greatly improve their technical writing. In addition to Mr. Lessor's duties at WCSU, he has been a broadcast meteorologist for 30 years for various regional radio stations including Danbury's own WLAD. Mr. Lessor has worked with local towns and the National Weather Service to make the Greater Danbury area a Weather Ready Community. The Weather Center is now recognized as a Weather Ready Nation Ambassador by the National Weather Service, and this status will support efforts to raise federal and state grant funds for Climate Resilience community training.

Furthermore, Western Connecticut State University is a unique institution that houses the largest telescope in the Connecticut State University system. The 20-inch telescope, housed at the Westside campus, has been used for research by undergraduate and graduate student and for observatory night programs with the general public. Within the same building is the WCSU Planetarium, with a SPITZ A3P optical star projector, that can easily accommodate 40 visitors per show. The planetarium has been used as part of university astronomy courses, with visiting school groups and in presentations to the general public. The observatory and planetarium events have historically been very popular with students and families from the WCSU community, including visitors from Western Connecticut and the local New York Community. The Midtown campus houses a 14-inch telescope on the roof of the Science Building. This telescope has been used for classes, undergraduate research and public events. Astronomy connects with climate change on many levels. Astronomy 150 is a required course for this program that introduces students to other worlds of our solar system, exoplanets beyond our solar system, atmospheres, geology, surface conditions and solar-terrestrial connections. Exposure to these topics provides a valuable foundation for understanding topics of meteorology, and builds the foundation for the upper-level undergraduate and graduate classes, as well as research opportunities. We continuously receive requests for public programming and outreach.

Climate is a vital context for ecology, zoonotic disease and public health, and environmental biology. Biology faculty scholarship in shifting pollination and phenology science, changing organismal distributions and corridors, emerging vector borne disease and invasive species, and changing organismal physiological and behavioral systems that respond to temperature change can support student independent research and thesis in atmospheric and climate sciences and meteorology. Existing biology courses in Conservation Biology, GIS, Climate Ecology, Microbiology, and other topics are complementary to the proposed ACS program and will provide context and enrichment to those students aiming for advanced degrees, and provide an alternative bachelor and masters degree completion pathway for students who change their mind midway into the program.

Biology department resources that will support this new ACS program include a Greenhouse and herbarium, microscopy facility with up to date image visualization analysis software capability, molecular genetics lab with associated RTPCR capability, water sampling probes and field technology, canoes, boats and associated trailers including electric motor, underwater rover and cameras for photo documentation. The department also supports permaculture gardens, rain gardens, and annual symposia (i.e., Community Lake Symposia, and Jane Goodall Lecture Series). The Biology department also stewards the Herndon G. Dowling Herpetological Collection, which includes field notes and species distribution records and research specimen collections that can support research in organismal dispersal and vicariance in relation to climate change.

Program Relationship to WCSU and CSCU Missions and Strategic Priorities: The mission of CSCU is to "contribute to the creation of knowledge and the economic growth of the state of Connecticut by providing affordable, innovative, and rigorous programs. Our learning environments transform students and facilitate an ever-increasing number of individuals to

achieve their personal and career goals." The proposed ACS program contributes to the creation of knowledge and the economic growth of Connecticut in several ways:

1. Research and Innovation: The ACS degree will foster research and innovation in understanding weather patterns, climate dynamics, and environmental processes that will lead to a better understanding of climate change, extreme weather events, and their impacts. This knowledge can be applied to develop strategies for adaptation, mitigation, and risk management, benefiting various sectors of the economy.

2. Forecasting and Early Warning Systems: Meteorologists play a crucial role in weather forecasting and the development of early warning systems for severe weather events like hurricanes, tornadoes, and storms. Many graduates of this program will continue to reside and develop their careers in the state of Connecticut. In combination with strong training in oral and written communication skills, accurate and timely forecasts enable preparedness and response measures, safeguarding lives, property, and critical infrastructure. Early warning of critical weather events can have significant economic benefits by reducing the impact of weather-related disasters.

3. Climate and Environmental Policy: Climate science and meteorology experts contribute to the formulation of climate and environmental policies at local, regional, and national levels. Their expertise helps in developing sustainable practices, energy policies, and conservation strategies. These policies can create opportunities for economic growth by promoting clean energy industries, sustainable agriculture, and climate-resilient infrastructure development.

4. Industry Applications: The knowledge and skills gained through the ACS degree program can be applied in various industries. For example, renewable energy companies rely on accurate weather and climate data for optimal energy production and resource management. Agriculture, transportation, aviation, and insurance sectors also benefit from meteorological information to enhance productivity, optimize logistics, and manage risks.

5. Education and Outreach: The ACS program will contribute to the education and training of future professionals in the field. Graduates can become educators, researchers, and policymakers, spreading knowledge and awareness about climate change, sustainability, and environmental stewardship. This helps create a more informed society capable of making informed decisions regarding climate-related challenges.

Overall, a degree program in climate science and meteorology fosters scientific expertise, supports evidence-based decision-making, and contributes to sustainable development. It empowers individuals to address climate-related issues, positively impacting the economy, environment, and society as a whole. Students who pursue a specialized science graduate degree such as one in meteorology are focused and passionate about their chosen field. The degree program in ACS can help students achieve their personal and career goals in several ways:

1. Specialized Knowledge and Skills: The program will equip students with in-depth knowledge of meteorology, climate science, and related disciplines. They will gain a solid understanding of atmospheric processes, weather patterns, climate dynamics, and data analysis techniques. This specialized knowledge provides a strong foundation for pursuing various career paths within the field.

2. Career Opportunities: Graduates with a degree in meteorology and climate science have diverse career opportunities. They can work as meteorologists, climate scientists, atmospheric researchers, weather forecasters, environmental consultants, and more. These professions exist in sectors such as government agencies, research institutions, private weather companies, media organizations, renewable energy companies, and environmental organizations.

3. Weather and Climate Services: A degree in meteorology and atmospheric & climate science enables students to provide valuable weather and climate services to society. They can contribute to weather forecasting, climate modeling, and

analysis of environmental data. By helping to improve weather predictions, assess climate impacts, and provide valuable information to stakeholders, students can make a meaningful impact on society.

4. Pursue Graduate Studies: The degree program can serve as a foundation for students interested in pursuing advanced studies and research in meteorology, atmospheric sciences, or related fields. Graduate programs offer opportunities for further specialization, advanced research, and career advancement in academia, research institutions, and industry. This quantitative degree can lead to professional studies in business and climate justice law, and employment with the NWS.

5. Mitigating Climate Change: Climate change is one of the most pressing global challenges. A degree program in ACS equips students with the knowledge and tools to understand climate change impact, develop mitigation strategies, and contribute to community climate resilience efforts. Students can actively work towards addressing climate change through research, policy development, and advocacy.

6. Personal Growth: Pursuing a degree program in ACS allows students to explore their passion for weather, climate, and the environment. It fosters personal growth by providing opportunities for scientific inquiry, critical thinking, problem-solving, and lifelong learning. Students develop computer science skills such as AI, data analysis, computer modeling, communication, and teamwork, which are valuable 21st century job skills.

Program Impact on WCSU and its Existing Programs: The former B.S. Meteorology program, formally a flagship program at WCSU, had a long and proud academic history. This new ACS program proposal will continue WCSU's legacy of meteorology training and offer opportunity for students to complete the math rich curriculum in 5 rather than 4 years, and continue to qualify for National Weather Service certification. Furthermore, the proposed ACS degree program will have a positive impact on Western Connecticut State University in several ways:

1. Academic Excellence: Introducing a specialized program in atmospheric and climate sciences, and MS in meteorology, enhances the academic offerings of the university, providing students with an opportunity to pursue in-depth studies in a crucial field. It promotes excellence by attracting passionate students who are dedicated to understanding and addressing climate-related challenges from a broad geographic area.

2. Interdisciplinary Approach: Atmospheric and Climate Sciences involve interdisciplinary collaboration, drawing from fields such as physics, biology, earth and planetary sciences, social sciences, and environmental studies. By establishing a dedicated degree program, the university fosters interdisciplinary interactions, encouraging students and faculty to collaborate across departments and enriching the academic environment.

3. Research Opportunities: Atmospheric & Climate Sciences are rapidly evolving fields with significant research potential. Developing a degree program in this area allows the university to cultivate a research culture focused on climate-related issues. Faculty and students can engage in cutting-edge research projects, contributing to scientific knowledge, and addressing real-world challenges.

4. Addressing Societal Needs: Climate change and its associated impacts are of utmost importance in today's world. By establishing a meteorology and climate science program, WCSU demonstrates their commitment to addressing these urgent challenges. They contribute to creating a more sustainable future by producing graduates who are well-versed in climate science, climate modeling, and mitigation strategies.

Potential Quality of the Proposed Program Relative to Comparable CSCU and External Programs: The proposed degree program, with courses focusing on both atmospheric & climate sciences, and meteorology, would appeal to a broad range of students interested in environmental sciences related to atmospheric processes. There is no program in the CSU system that is comparable to the proposed degree program. Additionally, there are no such existing undergraduate programs in southern/central New England. Closely related programs in the region include:

University of Connecticut (UConn): UConn offers a Bachelor of Science degree program in Environmental Sciences with a concentration in Climate Science. Students in this program study climate change, atmospheric science, and the impacts of climate variability on ecosystems.

University of Rhode Island (URI): URI offers a Bachelor of Science degree program in Climate Science that focuses on studying the Earth's climate system, climate change impacts, and sustainable solutions. They also offer a Master of Science program in Oceanography with a specialization in Physical Oceanography, which includes research on climate dynamics.

University of Massachusetts (UMass) Amherst: UMass Amherst offers a Bachelor of Science degree program in Environmental Science with a concentration in Climate Systems and Policy. This program explores climate science, policy, and the intersection of climate change with societal and environmental issues.

University of Massachusetts (UMass) Lowell: UMass Lowell offers a Bachelor of Science degree program in Meteorology and Atmospheric Science with courses that focus on meteorology, weather forecasting, climatology and air pollution.

SECTION 3: NEED AND JUSTIFICATION

Addressing Identified Needs

How does the program address CT workforce needs and/or the wellbeing of CT communities? In your response, provide evidence of employment prospects, including specific job titles and estimated salary ranges, for graduates of the proposed program. For liberal arts and transfer-specific programs, demonstrate the need for the program in terms of student demand and/or program value, and, if applicable, describe specific transfer or employment opportunities for program graduates. *(Include and identify data sources, e.g., JobsEQ, Dept of Labor statistics, etc. Sample job postings, letters of support from employers and/or transfer/graduate/professional programs can be included as an appendix)*

How the Program Addresses CT Workforce Needs/Community Wellbeing: Sectors such as renewable energy, agriculture, and transportation are also likely to require more specialized climate analysis as climate resilience becomes a higher priority for state governments and industries throughout New England. So while the growth rate may not be explosive, the steady need for weather and climate expertise in this region should create sustained demand for professionals. Specifically in Connecticut, with training in climate science becoming mandatory in secondary public schools, there will be an increased need to provide advanced degrees for students that will ultimately aiming towards careers in atmospheric and climate science.

With severe and life-threatening weather events becoming increasingly common due to climate change, there will be an increasing need for science communicators, i.e. broadcast meteorologists with solid science backgrounds in the atmospheric and climate sciences. Broadcast meteorology training will continue to play an important role in this proposed program via elective courses available to interested students, helping to fulfill that need in the southern New England. New types of computer models have vastly improved the accuracy of forecasts, allowing atmospheric scientists to tailor forecasts to specific purposes. This should support demand for atmospheric scientists as businesses require more specialized weather information.

Businesses increasingly rely on just-in-time delivery to avoid the expenses incurred by traditional inventory management methods. Severe weather can interrupt ground or air transportation and delay inventory delivery. Businesses have begun to maintain forecasting teams around the clock to advise delivery personnel, and this availability helps them stay on schedule. In addition, severe weather patterns have become widely recognizable, and industries have become increasingly concerned

about their impact, which will create demand for work in atmospheric science. As utility companies continue to adopt wind and solar power, they depend more heavily on weather forecasting to arrange for buying and selling power.

The ACS program addresses Connecticut's workforce needs and contributes to community wellbeing in several ways:

Weather Forecasting and Emergency Management: Connecticut is prone to various weather-related hazards, including severe storms, hurricanes, and winter weather. A meteorology program can produce skilled meteorologists who can work with local and state agencies to provide accurate weather forecasts and help in emergency management efforts. Timely and accurate forecasts are crucial for ensuring the safety of Connecticut residents during extreme weather events.

Climate Change Adaptation: As climate change continues to impact the state, there is a growing need for experts who can assess local climate trends and develop strategies for adaptation and mitigation. A meteorology and climate science program can equip students with the knowledge and skills to address these challenges and help communities prepare for and respond to climate-related threats.

Environmental Sustainability: Connecticut is committed to sustainability and reducing greenhouse gas emissions. Graduates of a meteorology and climate science program can work with government agencies, businesses, and non-profit organizations to develop strategies for reducing emissions and promoting sustainability in various sectors, such as transportation, energy, and agriculture.

Air Quality Monitoring: Poor air quality can have adverse effects on public health. Meteorologists and climate scientists can contribute to the wellbeing of Connecticut communities by monitoring air quality, assessing the impacts of pollutants, and helping develop strategies to improve air quality.

Research and Education: The program can also foster research and education in meteorology and climate science. Research conducted by faculty and students can provide valuable insights into local climate patterns and trends. Outreach and education efforts can help raise awareness about climate change and its local implications, empowering communities to take action.

Collaboration with Local Institutions: Establishing partnerships with local institutions, such as government agencies, research centers, and environmental organizations, can facilitate internships, research opportunities, and collaborative projects for students. This not only benefits students but also provides valuable support to these organizations in addressing climate and weather-related challenges.

Data Analysis and Modeling: An ACS program can equip students with data analysis and modeling skills that are valuable in various sectors, including energy, insurance, and agriculture. Graduates can help these industries make informed decisions and develop strategies that account for climate variability and change.

Community Resilience: By understanding local climate patterns and trends, meteorologists and climate scientists can assist in building community resilience. This may involve helping communities plan for infrastructure improvements, such as better stormwater management systems, floodplain mapping, and disaster preparedness.

Overall, an ACS program can play a crucial role in addressing Connecticut's workforce needs and enhancing the wellbeing of its communities by providing expertise, data, and strategies to address climate and weather-related challenges. Collaboration with local stakeholders and a focus on practical applications can ensure that graduates have a positive impact on the state's resilience and sustainability efforts.

Some potential job titles and estimated salary ranges for meteorology and climate science graduates in Connecticut:

1. Meteorologist: Meteorologists analyze and predict weather patterns. They can work in various settings, including television stations, government agencies, and private companies.

- Entry-Level Salary: $40,000 - $60,000 per year
- Mid-Career Salary: $60,000 - $90,000 per year
- Experienced Salary: $90,000 - $150,000+ per year (for senior or specialized positions)
- Overall median salary for meteorologists: $83,780*

Source: Atmospheric Scientists, Including Meteorologists : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics (bls.gov)

2. Climate Scientist: Climate scientists study long-term weather patterns and climate change. They may work for research institutions, government agencies, or environmental organizations.
   - Entry-Level Salary: $45,000 - $65,000 per year
   - Mid-Career Salary: $65,000 - $100,000 per year
   - Experienced Salary: $100,000 - $150,000+ per year (for senior or specialized positions)

3. Environmental Consultant: Environmental consultants assess the impact of weather and climate on various projects, such as construction or land use planning. They often work for consulting firms.
   - Entry-Level Salary: $45,000 - $65,000 per year
   - Mid-Career Salary: $65,000 - $90,000 per year
   - Experienced Salary: $90,000 - $130,000+ per year (for senior or specialized positions)
   - Overall median salary for environmental scientists and specialists: $76,480*

   Source: Environmental Scientists and Specialists : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics (bls.gov)

4. Government Positions: Graduates can find opportunities with state and federal government agencies such as the National Weather Service, where they can work as meteorologists, climatologists, or environmental analysts.
   - Salary ranges for government positions vary widely but are often competitive and include benefits.

5. Private Sector Opportunities: Some graduates may find work with private companies, such as energy companies, insurance firms, or consulting companies, where they can apply their meteorological and climate science expertise.
   - Salaries in the private sector can vary widely based on the specific company and job responsibilities.

6. Broadcast Meteorologist: Graduates interested in communicating weather information to the public can pursue careers as broadcast meteorologists on television or radio stations.
   - Salary varies depending on market size, with larger markets offering higher salaries. Entry-level salaries can start around $30,000 to $60,000 per year. .

Evidence of Employment Prospects for Western's BS in Atmospheric and Climate Science Graduates: Nationally, employment of atmospheric scientists, including meteorologists, is projected to grow by 6% which is faster than the average for all occupations. 1 About 900 openings for atmospheric scientists, including meteorologists are projected each year, on average, over the decade.1 Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force through retirement. These roles will continue to be essential for addressing weather forecasting, climate change, and environmental impacts in various sectors .

Job prospects for atmospheric and climate scientists in southern New England over the next decade are positive, though growth is expected to be moderate. Southern New England, with its varied climate, coastal influence and vulnerability to severe tropical weather events, and increased focus on climate adaptation, offers specific opportunities in both public and private sectors. The federal government, especially the National Weather Service (NWS), along with research institutions

and private environmental firms, remains a significant employer. Additionally, local research universities and broadcasting outlets in the region provide roles for both research and communication-oriented atmospheric scientists.

The U.S. Bureau of Labor Statistics' Employment Projections program forecasts an increase of 600 jobs, or 6%, for Atmospheric and Space Scientists from 2023 to 2033.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s) in the table below, along with the median estimated earnings (or salary range) for each. Add rows as needed.

SOC Code	SOC Title	Median Estimated Earnings
19-2042	Geoscientist: Oceanographer	$ 76,500 - $ 95,200
11-3020	Computer and Information Systems Manager	$76,500 - $95,000
11-9120	Natural Science Managers	$76,500 - $95,000
11-9161	Emergency Management Directors	$76,500 - $95,000
15-0000	Computer and Mathematical Occupations	$95,000 – $130,000
17-1021	Cartographers and photogrammetrists	$76,500 - $95,000
19-1030	Conservation Scientist	$65,000 - $100,000
19-2011	Astronomer	$76,500 - $95,000
19-2021	Atmospheric and Space Scientist	$76,500 - $95,000
19-2099	Physical Scientists	$76,500 - $95,000
19-4040	Environmental Science and Geoscience Technicians	$76,500 - $95,000

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide the NAICS code(s) and title(s) in the table below. Add rows as needed.

NAICS Code	NAICS Title
541511	Custom Computer Programming Services

541715	R & D in the Physical Sciences
516110	Radio Broadcasting Stations
516120	Television Broadcasting Stations
516210	Media Streaming Services
611310	Colleges, Universities and Professional Schools

Career/Program Pathways

Does this program prepare students for another program? [X] Yes, specify program: Western's MS in Meteorology, and other university graduate programs in Environmental Science, Earth Science, Ecology, and Law [ ] No

Impact on related programming at the home institution

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at your institution: None
- ***Include enrollment and completion data for the past 5 years for each of these programs as an Appendix***
- How will the proposed program impact enrollment and completion in these existing programs? N/A
- Are there plans to discontinue any of the existing similar programs? N/A
- What is the value added of the proposed program in relation to the existing programs? N/A
- Briefly comment on the resources required for the proposed program in relation to the existing programs, e.g., does the proposed program make use of existing faculty and courses, how will the institution insure that reassignment of faculty or other resources from an existing program does not negatively impact that program, etc. (*specific details should be provided in the Budget section*): Faculty who will teach in the new program are crrently teaching out the discontinued BS in Meteorology through a series of Student Independent Studies. Completing this process will have no adverse impact on the new program.

Impact on related programming across CSCU

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at other institutions within CSCU: No other CSCU offers a BS in Atmospheric and Climate Science, or an MS in Meteorology to be proposed separately and for which this proposed BS includes a path to 4+1 completion. Western's proposed BS in Atmospheric and Climate Science is distinct from any other CSU degree programs due to its specific focus on atmospheric and weather-related interactions with and impacts on other aspects of the environment. The table below lists CSCU programs offered in general or other specific areas of environmental and climate studies.

CSU	**Degree Programs**
Central	BA Climate Change Studies BS Climate Change Studies
Eastern	N/A
Southern	BA Earth Science BS Earth Science, with concentrations in Environmental, Geology, General, Natural Hazards, and Natural Resources MS Environmental Studies

- ***Attach supplement 101a for each CSCU institution that has one or more similar programs***.
- How is the new program distinct from these existing programs? N/A (not similar)
- Explain why student or employer demand is not met through existing CSCU programs and provide an assessment of the sustainability/growth of the proposed and existing programs: N/A (different employment pathways)

SECTION 4: STUDENT ENROLLMENT & RETENTION

Enrollment Projections

Complete Supplement B – Pro Forma Budget.

Summarize expected student enrollment and completion in the program over the first three years. Identify the sources for these projections, and describe any assumptions made. Note, in particular, any existing CSCU programs or stakeholder groups from which enrollment may be drawn.

The target annual graduation numbers in the out-years are 15 undergraduates and 10 master's degree students.

Based on the past enrollment Western's discontinued BS Meteorology program saw an average of 54 applicants over the last 13 years, but with an average of only about 16 enrolled per annum, about 30% of those that applied. With the attractiveness of the climate science component (now a required curriculum topic in Connecticut secondary schools) to the new degree program along with the flexibility of either a 4-year degree or an accelerated degree, we conservatively expect that the average number of applicants can be increased to 60 with an increase of the percentage of enrollees to more than 40%, leading to expected annual enrollment of roughly 25 students annually.

The uniqueness of this new program in the heavily populated southern New England and the New York metro area should foster a good deal of attention from prospective students interested in atmospheric, climate, meteorological, and environmental sciences. Western has already established a regional reputation as a weather studies university from hosting a biennial Weather Conference attracting professional speakers, researchers, and students from across the tri-state metro and New England regions.

Based on the prior experience with the discontinued BS in Meteorology, we recognize that enrollment in an undergraduate atmospheric and climate sciences program was never a concern. However, retention and completion were the issues, with the program classified as "low completing" from 2018 onward as numerous students struggled to complete foundational calculus and statistics requirements. The table below illustrates these trends.

BS Meteorology	2018	2019	2020	2021	2022	2023
Enrollment	34	31	25	27	34	30
Graduates	3	10	7	8	1	3

The proposed BS in Atmospheric and Climate Science program structure addresses the prior issues identified above. While the previous meteorology program saw significant attrition and thus low graduation rates, the flexibility of the new BS ACS program will allow students who are not able to succeed in the mathematically intense National Weather Service required curriculum, still complete a BS degree in a field that is growing and will demand a skills and knowledgeable workforce. As a result, we anticipate a significant increase in retention and graduate rates.

The new ACS program will improve retention and degree completion by offering degree options that support diverse learners interested in atmospheric and climate sciences. The BS ACS provides a calculus and a non-calculus track of study.

Students can transfer tracks seamlessly within the first 30 credits. This immediately improves retention compared to prior program opportunity. Students with 30 or more credits in the BS ACS calculus track, a 2.0 or better GPA and a C or better in Calculus I & II, will be conditionally accepted into the accelerated BS ACS program should students wish to join. After the completion of semester 3 (Calc III, Physics 110, and Chem 110) with an overall 2.0 GPA they will be invited to remain in the accelerated program. At the end of semester 7 they will be reevaluated. If they maintain a 2.7 GPA and B or better in the cross listed graduate courses, they can choose to remain for the extra year and complete the MS meteorology degree. Students who do not meet these requirements, will still be able to complete the BS ACS degree, and they will be prepared to apply to graduate programs, and professional schools, including the Biology MS IBD program. Students completing the BS ACS degree with a 3.0 or higher GPA, but do not wish to continue a 5th year for NWS certification will also be eligible to enroll in the Biology MS IBD program and other graduate and professional programs. Required capstone projects and internships will prepare all the BS ACS students with marketable workforce skills, and these students will be prepared for the emerging green and blue economies, including AI/computer science intensive jobs, and community climate resiliency and outreach communication jobs. The diverse options for degree completion strengthen enrollment, retention, and degree completion, and provides opportunity for students to build academic excellence and confidence in a field that is highly quantitative and often lacks women and racial/cultural diversity.

As indicated above attracting and enrolling a minimum of 25 students to the new degree should not be a challenge. The challenge has not been attracting students, but rather program completers that are eligible to enroll in courses with calculus pre-requisites and can meet the quantitative rigor of the program and National Weather Service standards. What will further improve program retention and completion is targeted recruitment that focuses on accepting students that have completed pre-calculus and introductory physics in high school. WCSU is a co-recipient of a CSU-wide NSF Louis Stokes Alliances Minority Participation (LSAMP) grant. A focus of this grant is math literacy and preparation, and support strategies provided through this grant will improve student success in completing the BS ACS with calculus component of the degree and the embedded mathematics minor. Program recruitment also includes Community College TAP transfers (or other schools) if they have enrolled in mathematics and physics tracks their first year. We also estimate international students, a major current recruiting strategy for WCSU.

The program is designed to maximize faculty workloads by leveraging interdisciplinarity across the atmospheric and climate science curriculum. Students in BS ACS will successfully complete mathematics requirements, adding overall math minors and enrollments in graduate mathematics and cross-listed ACS courses without requiring additional faculty.

Students would be able to transfer into this program from community colleges. It is also anticipated that students with undergraduate degrees in math, engineering and science external to WCSU would be able to enroll in the Master's degree program in meteorology and complete it in two years.

Prospective Students

Describe the prospective students for the program *(this information will be provided to OHE and become publicly available; your response can help market your program and recruit students)*: Students with pre-calculus mastery interested in careers associated with weather phenomena, climate science (*i.e.*, climate change, pollution, oceanography), and preparation for employment with the National Weather Service.

Student Recruitment / Student Engagement

- Describe the marketing, advising, and other student recruitment activities to be undertaken to ensure the projected enrollments are achieved: Standard enrollment services will be used at WCSU for all programs. We will also revise our program website to include social media (shown to improve Biology site engagement), and expand the meteorology and astronomy club responsibilities to include peer mentoring on-site visits and virtual meet and greets.
- What student engagement strategies will be employed to advance student retention and completion in program? There is much to learn from the LSAMP grant program recently awarded to WCSU that will help build fellowship and mentorship among the cohort. Additionally, graduate students are exemplary for mentoring undergraduates. Success mentoring and fellowship practices implemented in the MS IBD program in biology will be implemented

in the accelerated program for student success and engagement. Furthermore, structured internships and career development opportunities with external partners will be expanded and documented for tracking purposes.

Admission Requirements

Does this program have special admission requirements (i.e., beyond those required for the institution as a whole)?

☒ Yes ☐ No

If yes, describe the selection process, including all criteria: High school precalculus and physics, both with a B- or higher

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ Yes ☐ No

If yes, describe: Research capstone

Experiential Learning Requirements

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☒ Yes ☐ No

If yes, describe here and attach copies of the contracts or other documents ensuring program support in an appendix: WCSU oceanographic research and meteorology studies: existing WCSU Weather Center internships

SECTION 5: CURRICULUM & ASSESSMENT

Table 1: **Program Sheet Comparison of BS-only versus Accelerated Option**

BS Atmospheric & Climate Science	Credits	BS Atmospheric & Climate Science with Accelerated Option for 4+1 BS + MS Meteorology	Credits
Program Core: Required Courses and Cognates			
		PHY 110 (General Physics I, calculus-based)	4
		PHY 111 (General Physics II, calculus-based)	4
PHY 120 (General Physics I, algebra-based)	4		
PHY 121 (General Physics II, algebra-based)	4		
ES 210 (Physical Oceanography and Climate)	4	ES 210 (Physical Oceanography and Climate)	4
MTR 231 (Weather analysis and Forecasting)	4	MTR 231 (Weather analysis and Forecasting)	4
MTR 240 (Climatology)	3	MTR 240 (Climatology)	3
MTR 430 (Instruments and Remote Sensing)	4	MTR 430 (Instruments and Remote Sensing)	4
ACS 3XX (Acquisition & Analysis of AOC Data)	3	ACS 3XX (Acquisition & Analysis of AOC Data)	3
ACS 4XX (Concepts in Climate Modeling)	3	ACS 4XX (Concepts in Climate Modeling)	3
ACS 2XX (Quantitative Concepts in Atmos. & CS)	4		
MTR 370 (Internship) / MTR 450 (Research)	4		
MAT 118 (Elementary Applied Mathematics)	3		
MAT 120 (Elementary Statistics)	3		
		MAT 182 (Calculus II) [QR]	4
		MAT 281 (Calculus III)	4
		MAT 282 (Differential Equations)	3
		MAT 222 (Introductory Statistics)	3
CS 140 (Introduction to Programming)	4	CS 140 (Introduction to Programming)	4
CHE 110 (General Chemistry I)	4	CHE 110 (General Chemistry I)	4
		Graduate Credits (MS/MTR): Fourth Year	
		ACS 4AA/5AA (Atmos. Thermodynamics)*	3
		ACS 4BB/5BB (Atmospheric Dynamics)*	3
		PHY 520/4CC (Scientific Methods)*	3
		EPS 530/4DD (Planetary Physics)*	3
Program-specific General Education Courses			

PHY/ENV 136 (Energy) [QR]	4	PHY/ENV 136 (Energy) [QR]	4
ES 103 (Planet Earth) team taught [FY]	3	ES 103 (Planet Earth) team taught [FY]	3
BIO 150 (The Science of Climate Change) [IL/SI]	4	BIO 150 (The Science of Climate Change) [IL/SI]	4
MTR 150 (Meteorology) [SI]	4	MTR 150 (Meteorology) [SI]	4
		MAT 181 (Calculus I) [QR]	4
Required Core Credits	51	Required Core Credits	63
Required Gen Ed Credits	15	Required Gen Ed Credits	19
Total Program	**66**	**Total Program**	**82**
Additional Gen Ed and Elective Credits	54	Additional Gen Ed Credits	38
Total Degree	120	**Total Degree**	120

*Revised existing or discontinued course

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. With as much detail as possible, map these learning outcomes to courses listed under the "Curriculum" section below.

1. Explain climate science as complex interactions both within and external to the Earth system, including effects of changing climate on humanity and ecology of living organisms.
2. Use data analytics for visualizing and forecasting weather and evaluating climate systems.
3. Apply the principles and tools of meteorology to model weather and climate.
4. Communicate weather and climate science issues, including climate mitigation, adaptation, and resilience, to a variety of stakeholders.
5. Evaluate the anthropogenic influence on climate across temporal and spatial scales.
6. Explain the fundamental physics and governing dynamics of meteorology and climate science.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

All courses are taught by content faculty member experts in the department and assessed through exams, presentations, and creative student work. Additionally, an Assessment Committee devoted to the BS ACS will devise a rubric for summative assessment of the above learning outcomes during the student capstone projects of the BS degree component.

Table 2: **Program Sheet & Curriculum – BS Program in Atmospheric & Climate Science – Accelerated Option; MS in Meteorology**

Course Number and Name	L.O. # (from Section 5)	Pre-Requisite(s)	Credit Hours
Program Core: Required & Elective Courses			
PHY 110 (General Physics I, calculus-based)		MAT 182 or eq.	4
PHY 111 (General Physics II, calculus-based)		PHY 110	4
ES 210 (Physical Oceanography and Climate)	2, 6	PHY 111 or 121	4
MTR 231 (Weather analysis and Forecasting)	2, 3, 6	ACS 2XX & MTR 150	4
MTR 240 (Climatology)	5, 6	MTR 150	3
MTR 430 (Instruments and Remote Sensing)	6	ACS 3XX,PHY 111or121	4
ACS 3XX (Acquisition & Analysis of AOC Data)	2, 3	CS 140	3
ACS 4XX (Concepts in Climate Modeling)	2, 3, 6	ACS 3XX,PHY 111or121	3
MAT 182 (Calculus II)		MAT 181 or placement	4
MAT 281 (Calculus III)		MAT 182	4
MAT 282 (Differential Equations)		MAT 182 (≥C grade)	3
MAT 222 (Introductory Statistics)		MAT 181 (≥C grade)	3
CS 140 (Introduction to Programming)		MAT 100	4
CHE 110 (General Chemistry I)		CHE 100 or placement	4
Graduate Credits (MS/MTR): Fourth year			
ACS 4AA/5AA (Atmos. Thermodynamics)	6	PHY 111	3
ACS 4BB/5BB (Atmospheric Dynamics)	6	PHY 111	3
PHY 520/4CC (Scientific Methods)	2, 3	PHY 111	3
EPS 530/4DD (Planetary Physics)	1, 6	PHY 111	3
Program-specific General Education Courses			
PHY/ENV 136 (Energy) [QR]	1, 5	none	4
ES 103 (Planet Earth) team taught [FY]	1	none	3
BIO 150 (The Science of Climate Change) [IL/SI]	1	none	4
MTR 150 (Meteorology) [SI]	2, 6	MAT 100	4
MAT 181 (Calculus I) [QR]		MAT 133 or placement	4
Required Core Credits			63
Required Gen Ed Credits			19
Total Program			**82**
Additional Gen Ed Credits			38
Total Degree			120

Table 3: **Program Sheet & Curriculum – BS Program in Atmospheric & Climate Science**

Course Number and Name	L.O. # (from Section 5)	Pre-Requisite(s)	Credit Hours
Program Core: Required & Elective Courses			
PHY 120 (General Physics I, algebra-based)		MAT 100	4
PHY 121 (General Physics II, algebra-based)		PHY 120 or eq.	4
ES 210 (Physical Oceanography and Climate)	2, 6	PHY 110 or 121	4
MTR 231 (Weather analysis and Forecasting)	2, 3, 6	ACS 2XX & MTR 150	4
MTR 240 (Climatology)	5, 6	MTR 150	3
MTR 430 (Instruments and Remote Sensing)	6	ACS 3XX,PHY 111or121	4
ACS 3XX (Acquisition & Analysis of AOC Data)	2, 3	CS 140	3
ACS 4XX (Concepts in Climate Modeling)	2, 3, 6	ACS 3XX,PHY 111or121	3
ACS 2XX (Quantitative Concepts in Atmos. & CS)	2	MAT 118 & PHY 121	4
MTR 370 (Internship) / MTR 450 (Research) – BS only	1, 2, 3, 4, 5, 6	MTR 231/ACS 3XX	4
MAT 118 (Elementary Applied Mathematics)		MAT 100 (≥C grade)	3
MAT 120 (Elementary Statistics)		MAT 100 (≥C grade)	3
CS 140 (Introduction to Programming)		MAT 100	4
CHE 110 (General Chemistry I)		CHE 100 or placement	4
Program-specific General Education Courses			
PHY/ENV 136 (Energy) [QR]	1, 5	none	4
ES 103 (Planet Earth) team taught [FY]	1	none	3
BIO 150 (The Science of Climate Change) [IL/SI]	1	none	4
MTR 150 (Meteorology) [SI]	2, 6	MAT 100	4
Required Core Credits			51
Required Gen Ed Credits			15
Total Program			**66**
Additional Gen Ed and Elective Credits			54
Total Degree			120

SECTION 6: COST EFFECTIVENESS AND RESOURCES

Institutions should demonstrate that they have the necessary resources and faculty expertise to maintain the proposed program and demonstrate reasonable evidence that the program is, or will be, fiscally sustainable.

Cost Effectiveness and Availability of Adequate Resources

Complete Supplement B: PRO FORMA Budget – Resources and Expenditure Projections.

Provide a narrative below regarding the cost effectiveness, availability of adequate resources, and sustainability for the proposed program. Add any annotations for the budget form below, as well.

The proposed program is cost effective. The BS ACS and BS ACS Accelerated option proposed course offerings combined require an annual total of 94 teaching credits during an academic year. The existing four full-time, tenure-track faculty at WCSU, by contract, are typically assigned to teach a combined 96 credits during an academic year.

Adequate resources are available. No new resources are required. Existing facilities (laboratory space student computer rooms and laboratory instructional space) in Wing C of the Science Building is adequate. There is a request for an annual initial $10,000 request for service and maintenance contracts for equipment, and resources to hire graduate student ($6,000).

The proposed program is designed to be sustainable with an annual course offering of 94 credits and if supported by four fulltime, tenure-track faculty and one adjunct instructor with expertise in meteorology, oceanography, and physics (including astrophysics) for enrollments of approximately 25 new students per year.

Special Resources

Provide a brief description of resources needed specifically for this program, including facilities (lab space, computer classrooms), instructional materials and equipment, specialized library collections, etc. Distinguish resources currently available and those requiring additional expenditures (*Include all costs in the Resources and Expenditures Projections spreadsheet*)

Existing WCSU resources are sufficient – no new resources needed.

Program Administration

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): The program will be managed by a committee within the Biology Department until a tenure-track Ph.D. faculty member can be hired with expertise in atmospheric science, meteorology or climate science. It is anticipated this hire will be completed before fall 2027.

Describe the qualifications and assigned FTE load of the administrator/faculty member responsible for the day-to-day operations of the proposed academic program. A Program Coordinator will be necessary to assure the needs of the program are being met, including recruitment, resources needs and acquisition, and work with the chair to assure course rotation and faculty assignments. Additionally, the coordinator will help monitor program completers in all options, and maintain communication and community building between department and students. This individual will meet regularly with the biology department chair.

Program Faculty

How many new full-time faculty, if any, will need to be hired for this program? The pro forma budget is based on 4 dedicated full-time faculty members including 1 dedicated climate scientist who recently retired, which will necessitate 1 replacement hire.

If any new full-time hires, what percentage of program credits will they teach? 100

How many full-time faculty, if any, will teach in the program's core curriculum, including any proposed new hires? (*note: OHE requires a numerical response to this item*) 5

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? (*note: OHE requires a numerical response to this item*) 1

What percentage of program credits will be taught by adjunct faculty? 5% to 10%

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program: MS and PhD in meteorology, physics, and atmospheric sciences

Complete the table below to include current full-time faculty who will be teaching in this program and their qualifications. If you anticipate hiring new faculty for this program, you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program. Add rows as needed.

Faculty Name and Title	Highest Degree & Institution of Highest Degree	Area of Specialization/ Pertinent Experience	Other Administrative or Teaching Responsibilities
Stephen Mitch Wagener	Ph.D. University of Alaska, Fairbanks	Soil Ecology	Ecology Professor, Climate Change Educator
Robert Eisenson	MS University of Utah	Weather Analysis & Forecasting	Broadcast Meteorology
Tenure-track Faculty (FT faculty member retired August 2024)	Ph.D. Meteorology or Atmospheric & Climate Sciences	Meteorology, Climate Variability	Replacement → Director of WCSU Weather Center
J.P. Boyle	Ph.D. Univ.of Wisconsin-Madison	Physics, Physical Oceanography	Physics with Calculus
Dennis Dawson	Ph.D. New Mexico State University	Star Clusters, Astronomy Education	Director , WCSU Observatory and Planetarium.

***Reminder:** Be sure the document name includes the names (or abbreviations) of your institution and program when you submit this document.

Completed forms should be submitted to CSCU Academic and Student Affairs office by email (CSCU-ACandASASub@ct.edu)

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

*APPLICATION FOR **NEW PROGRAM APPROVAL — SUPPLEMENT B***

PRO FORMA BUDGET

Institution: Western CT State University Program: BS Climate and Atmospheric Sciences

Resources and Expenditures Projections (whole dollars only)

PROJECTED Enrollment	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Internal Transfer (from other programs								0										
New Students (first time matriculating)	25		25				26	0	26				29		29			
Continuing Students progressing to credential							23	0	23				45		45			
Headcount Enrollment	25	0	25	0	0	0	49	0	49	0	0	0	74	0	74	0	0	0
Total Estimated FTE per Year[1]	50						98						148					

PROJECTED Program Revenue	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Tuition[2]	185,013		185,013				377,383		377,383				603,807	14,220	603,807	14,220		
Tuition from Internal Transfer[2]																		
Program Specific Fees (lab fees, etc.)	7500		7500				26,950		26, 950				48,100		48,100			
Other Revenue (annotate in narrative)																		
Total Annual Program Revenue	$385,025						$808,677						$1,332,254					

PROJECTED Program Expenditures[3]	First Year	Second Year	Third Year
Administration (Chair or Coordinator)[4]	$ 6,876	$7,186	$7,509
Faculty (Full-time, total for program)[4]	$120,148	$240,297	$360,445
Faculty (Part-time, total for program)[4]	$31,785	$33,215	$34,710
Support Staff (lab or grad assist, tutor)	$6,000	$6,000	$6,000
Library Resources Program	$5,000	$6,000	$6,000
Equipment (List in narrative)	$10,000	$10,000	$20,000
Other[5] -OE and Fringe at 30%	$36,044	$72,089	$108,133
Estimated Indirect Costs[6]	$21,585	$37,478	$54,279
Total Expenditures per Year	$237,438	$412,265	$597,076

NOTE: Existing regulations require that: "an application for a new program shall include a complete and realistic plan for implementing and financing the proposed program during the first cycle of operation, based on projected enrollment levels; the nature and extent of instructional services required; the availability of existing resources to support the program; additional resource requirements; and projected sources of funding. If resources to operate a program are to be provided totally or in part through reallocation of existing resources, the institution shall identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

[1] 1 FTE = 12 credit hours for both undergraduate and graduate programs; both for Fall & Spring, the formula for conversion of part-time enrollments to Full-Time Equivalent (FTE): Divide part-time enrollment by 3, and round to the nearest tenth - for example 20 part-time enrollees equals 20 divided by 3 equals 6.67 or 6.7 FTE.

[2] Revenues from all courses students will be taking.

[3] Capital outlay costs, instructional spending for research and services, etc. can be excluded.

[4] If full-time person is solely hired for this program, use rate time; otherwise, use a percentage. Indicate if new hires or existing faculty/staff. Record Salary and Fringe Benefits, accordingly.

[5] e.g. student services. Course development would be direct payment or release time; marketing is cost of marketing that program separately.

[6] Check with your Business Office – community colleges have one rate; the others each have their own. Indirect Costs might include such expenses as student services, operations, and maintenance.

Deficit Mitigation Plan Alignment
New program is in alignment with the deficit mitigation plan as presented at the November 2023 BOR Meeting (*President Signature*): X_____

From: Manohar Singh
To: Diamond, Aynsley J (System Office)
Cc: Hegedus, Stephen (WCSU); Davis, Kaylah (System Office)
Subject: Re: Presidential Response

Dear Aynsley,
I trust all is well.
It is to confirm that the proposed program is in alignment with the WCSU's budget mitigation plan.
Best
Manohar Singh

Happy Thanksgiving to you and your loved ones.

Manohar Singh, Ph.D.
President (Interim)
Western Connecticut State University

Diamond, Aynsley J (System Office) wrote:

> Dear President Singh,
>
> I hope that you and your students, faculty, and staff have a wonderful and well-deserved break this week. As per instructions from BOR-ASA Committee Chair, I am requesting you to confirm that the following new program (to be presented to BOR-ASA on October 10th) is in alignment with CSCU's Deficit Mitigation Plan as presented to BOR on November 15, 2023.
>
> New Programs – Western Connecticut State University
> Atmospheric Climate Science -BS
>
> Your response to this email will be added to the BOR-ASA Minutes of the Meeting as evidence of alignment with the Deficit Mitigation Plan, only if someone asks this question during the meeting.

Aynsley Diamond, Ed.D. (she, her, hers)
Associate Vice President of Academic Affairs
Connecticut State Colleges and Universities

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Modification of a Program

Master of Science in Counselor Education:
Specialization in Student Development in Higher Education
Central Connecticut State University

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the modification of a program – specifically a name change to the Master of Science in Counselor Education: Specialization in Student Development in Higher Education at Central Connecticut State University.

A True Copy:

_____

Pamela A. Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Name change to the Master of Science in Counselor Education: Specialization in Student Development in Higher Education at Central Connecticut State University.

BACKGROUND AND PROPOSAL

The rationale for the name change, allows the program to "stand out" as separate from the more traditional counseling programs offered by the departments (Marriage and Family Therapy, School Counseling, Professional Counseling). While this program is housed within a counseling department, graduates from this program enter careers in various units found in higher ed, including student support services, student affairs, student activities, and academic affairs.

Old Name: Counselor Education: Specialization in Student Development in Higher Education
New Name: Student Development in Higher Education

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this modification. CSCU Academic and Student Affairs concurs with this recommendation.

12/6/2024 – BOR - Academic and Student Affairs Committee
12/19/2024 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

*APPLICATION FOR **NAME CHANGE – MODIFICATION OF ACCREDITED PROGRAM***

NAME CHANGE REQUEST		
Institution: Central	Please enter the following dates: Final approval by institution: 10/21/24 Submission to CSCU Office of the Provost for Academic Council: 11/1/24	
NOTE: Use this form if modifying only the name of the program.		
Current Program Characteristics Name of Program: Counselor Education: Specialization in Student Development in Higher Education OHE #: 00049 Modality of Program *(check all that apply)*: ☒On ground ☐ Online ☐ Hybrid, % of fully online courses Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both (some classes have combined on ground/online) Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Masters, MS** Date Program was Initiated: 01/05/1970 Total # Credits in Program: 42 # Credits in General Education: NA CIP Code Number: 131101 Title of CIP Code: Counselor Education/School Counseling and Guidance Services Department where program is housed: Counselor Education and Family Therapy Location Offering the Program *(e.g., main campus)*: main campus		
Proposed New Name of Program: Student Development in Higher Education		
Proposed Date Name Change Becomes Effective: Summer 2025		
Explanation / Justification *Provide a concise rationale for the name change request, and discuss any anticipated impact upon the institution, its mission, and its students.* The rationale for the name change, allows the program to "stand out" as separate from the more traditional counseling programs offered by the departments (Marriage and Family Therapy, School Counseling, Professional Counseling). While this program is housed within a counseling department, graduates from this program enter careers in various units found in higher ed, including student support services, student affairs, student activities, and academic affairs.		
Programmatic Changes *If applicable, provide a concise discussion regarding any programmatic changes to be necessitated by the requested name change.* There is a modification of credits, and a change to course designator (SDHE) – see form 205		
Cost and Availability of Adequate Resources *If applicable, provide a one paragraph narrative addressing additional cost and resources necessitated by the requested name change.* No additional costs or resources required		
Institutional Contact for this Proposal: Jelane Kennedy	Title: Professor	Tel.: 832-2119 e-mail: jakennedy@ccsu.edu

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: Central CT State University	Please enter the following dates: Final approval by institution: 10/21/24 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Most Recent NECHE Institutional Accreditation Action and Date: Continued in accreditation; approved at the Commission's meeting on 4/12/19

Use this form for modifications that fall below the threshold required for full BOR review, defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program". For changes not below this threshold, use form 201 (*Application for Modification of an Accredited Program*).

Total Number of courses and course credits to be modified by this application: **9 in total- removing 6 credits from program and replacing one elective with a specified course.**

For the singular changes noted below, alternate forms are available:

- If only modifying modality, use form XXX *Application to Modify Instructional Modality*
- If only modifying program name, use form XXX *Application for Name Change*
- If only modifying CIP code, use form XXX *Application to Change CIP Code*
- If only adding auxiliary site, use form XXX *Application for Adding an Auxiliary Instructional Site*

Original Program Characteristics

Name of Program: Counselor Education: Specialization in Student Development in Higher Education
OHE #: 00049
Modality of Program *(check all that apply)*: ☒ On ground ☐ Online ☐ Hybrid, % of fully online courses
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Master of Science, MS**
Date Program was Initiated: 01/05/1970
Total # Credits in Program: 42
Credits in General Education: not applicable
CIP Code Number: 131101 Title of CIP Code: Counselor Education/School Counseling and Guidance Services

Modified Program Characteristics

Name of Program: Student Development in Higher Education
Modality of Program *(check all that apply)*: ☒ On ground ☐ Online ☐ Hybrid, % of fully online courses
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Master of Science, MS**
Initiation Date for Modified Program: Summer 2025
Anticipated Date of First Graduation: Spring 2026
Total # Credits in Program: 36
Credits in General Education: not applicable
CIP Code Number: 13.1102 Title of CIP Code: College Student Counseling and Personnel Services

Department where program is housed: Counselor Education and Family Therapy
Location Offering the Program *(e.g., main campus)*: main campus

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

If modification of the program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: CIP: OHE#: BOR Accreditation Date:
Phase Out Period Date of Program Termination
Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Institutional Contact for this Proposal: Jelane Kennedy	Title: Professor	Tel.: 832-2119 e-mail: jakennedy@ccsu.edu

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Rationale for Modification

Describe the context and need for the proposed modification(s) and the relationship to the originally approved program:

Changes in the Council for the Advancement of Standards in Higher Education (CAS) Standards for Masters-Level Student Affairs Professional Preparation Programs the standards changed the academic credit required and to be competitive in the market with other colleges and universities Masters level programs in New England. By reducing the credit requirement to 36, students will graduate in a more timely manner and consistent with other similar programs. The rationale for the name change, allows the program to "stand out" as separate from the more traditional counseling programs offered by the departments (Marriage and Family Therapy, School Counseling, Professional Counseling). While this program is housed within a counseling department, graduates from this program enter careers in various units found in higher ed, including student support services, student affairs, student activities, and academic affairs. Also as part of the modification, several courses were assigned a new designator (SDHE) to distinguish the courses from the counseling (CNSL) courses. No other changes was made to the content of these courses. One final note, we are requesting a new OHE number

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

Original Program		**Proposed Modified Program**	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
CNSL 500 The Dynamics of Group Behavior	3	CNSL 501 Theories and Techniques in Counseling	6
CNSL 501 Theories and Techniques in Counseling	6	CNSL 521 Career Counseling and Development	3
CNSL 521 Career Counseling and Development	3	CNSL 525 Multicultural Counseling	3
CNSL 525 Multicultural Counseling	3	CNSL 598 - Research Methods	3
CNSL 503/511 Supervised Counseling Practicum	3	SDHE 530 Student Development in HE	3
CNSL 598 - Research Methods	3	SDHE 531 Student Services in HE	3
CNSL 530 Student Development in HE	3	SDHE 532 Program Design in Student Svcs	3
CNSL 531 Student Services in HE	3	SDHE 533 Legal, financial and policy issues in Student Affairs	3
CNSL 532 Program Design in Student Svcs	3	SDHE 592 Supervised Practicum in HE	6
CNSL 533 Legal, financial and policy issues in Student Affairs	3	SDHE 534 Case Studies in Higher Education	3
CNSL 592 Supervised Internship in HE	6		
Elective	3		
Total Credits Original Program	**42**	**Total Credits Modified Program**	**36**

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. Map these learning outcomes to courses listed under the "Curriculum" section below.

1. Articulate and apply knowledge of theory, practice, and ethical standards relative to the practice of Student Development in Higher Education
2. Demonstrate appropriate counseling, advising, and group facilitation techniques for use with students, staff, and faculty in higher education.
3. Demonstrate the ability to use and critique appropriate Student Development theory to understand, support, and advocate for student learning and development by assessing needs and creating opportunities for the learning and development.
4. Identify the effects of their cultural worldview with an emphasis placed on the development of culturally appropriate skills for use with diverse populations and the development of various learning approaches to support student, faculty and staff on a college campus.
5. Identify and apply knowledge of federal and state laws pertinent to the roles and functions of student development professionals and to the responsible management of colleges and Universities.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

High impact standards for master's degree programs in student affairs from the Council for the Advancement of Standards in Higher Education(CAS) have been selected. Each standard is tied to key signature assignments in the program courses. The assignments are graded on a rubric. The data is then gathered using an electronic system.

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	Learning Outcome # (from above)	Pre-Requisite(s)	Credit Hours
CNSL 501 Theories and Techniques in Counseling	3		6
CNSL 521 Career Counseling and Development	3	CNSL 501	3
CNSL 525 Multicultural Counseling	4	CNSL 501	3
CNSL 598 - Research Methods	3		3
SDHE 530 Student Development in HE	3	CNSL 525	3
SDHE 531 Student Services in HE	1		3
SDHE 532 Program Design in Student Svcs	2,4		3
SDHE 533 Legal, financial and policy issues in Student Affairs	1,5		3
SDHE 592 Supervised Practicum in HE	1,2,3,4,5	CNSL 521, 525 and SDHE 530	6
SDHE 534 Case Studies in Higher Education	2.5		3
Open Electives (*Indicate number of credits of open electives*)			0
Total Program Credits:			36

Description of Related Modification(s)

Provide a summary of other changes, if any, necessitated by curricular modification, such as admissions or graduation requirements

Reduced number of letters of recommendations from 3 to 1—who can speak to the candidate's suitability for student affairs. Also added submission of resume as part of admission requirements.

Description of Resources Needed

As appropriate, summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost. All resources are currently in place as this has been a long-standing program. Modification only reduces total credits required, changes the designator on some of the discipline specific courses.

SECTION 3: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: https://www.ccsu.edu/programs/counselor-education-specialization-student-development-higher-education-ms

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: 2

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information: https://www.ccsu.edu/bursar

Request for SAA Approval for Veterans Benefits? ☒ Yes ☐ No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable): The mission of the student development master's degree program is to prepare graduates to function effectively as student development specialists in rapidly changing institutions of higher education. Students are trained to understand and to meet the developmental needs of college students, taking into account worldviews and expectations which are influenced by age, ethnic background, national origin, gender, sexual orientation, disability status, and other "non-traditional" perspectives. Graduates are prepared to function as student affairs professionals in higher education settings, such as student activities, academic advising, career counseling, orientation, first-year experience programs, residence halls, and learning centers.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): 21.1012

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? $69-85K –variable depending on position. Numerous opportunities for advancement.

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): 611

Career/Program Pathways

Does this program prepare students for another program? ☐ Yes, specify program: ☒ No

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): Dr. Jelane Kennedy, jakennedy@ccsu.edu, 832-2119

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? 1 (CNSL courses are also full time, but are now "service courses".

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? 4

Admissions Requirements

What are the admissions requirements for the program?

Applicants must hold a bachelor's degree from a regionally accredited institution of higher education. Admissions to Student Development in Higher Education program is made on a competitive basis only once per year. All applications must be completed and received by February 1 for summer admission.

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

For consideration, applicants must submit the following:

1. A completed online application with supplemental materials (ccsu.edu/apply):
    A. Submit one name and contact information for professional or academic reference
    B. Essay (2-3 pages, double spaced) describing:
        i. Reason for entering the student affairs/services profession
        ii. Experiences that influenced your decision
        iii. Personal characteristics you believe will contribute to your success A student affairs/services practitioner
2. Official undergraduate and graduate transcripts from a regionally accredited institution of higher education (GPA of 2.7 or higher)
3. Current resume
4. A personal interview by the program's faculty admissions committee.

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ Yes ☐ No
If yes, describe: Capstone-like project embedded in the practicum.

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☒ Yes ☐ No
If yes, describe and attach copies of the contracts or other documents ensuring program support: Students complete a practicum, typically in one of the units on campus (or other CSU's). Many of the students are Graduate Interns during this process, receiving compensation for full time work in a unit, such as the learning center, student center, student affairs etc.

Prospective Students

Describe the prospective students for the program: Students interested in pursuing careers in higher ed such as Residence Life, Career Services, Learning Centers, Student Activities, Advising, Multicultural centers, First Gen centers, Tutoring, and student facing roles in academic affairs such as Assistant Dean.

CENTRAL CONNECTICUT STATE UNIVERSITY | 175 YEARS

AMERICAN SAVINGS FOUNDATION ENDOWED CHAIR IN BANKING AND FINANCE

Annual Report
July 1, 2023 – June 30, 2024

2023-2024 Annual Report
CCSU Foundation, Inc.
Statement of Revenues and Expenditures
From 7/1/2023 through 6/30/2024

Income	
Investment Income	$121,340
Realized Gains (Loss)	$27,137
Unrealized Gains (Loss)	$117,103
Total Income	$265,580
Expenses	
Contract Services	$41,194
Meals & Entertainment	$3,232
Travel	$724
Grants	$19,933
Subscriptions & Software	$3,736
Registrations & Memberships	$6,293
Custodial Fee Expense	$20,603
Total Expenses	$95,715
Changes in Net Assets	$169,865
Beginning Net Assets	
Fund Balance	$1,000,000
Fund Balance Expendable	$1,277,326
Unrealized Gains/Losses	$255,158
Fund Balance CT Match Received	$366,507
Total Beginning Net Assets	$2,868,991
Ending Net Assets	$3,038,322

2023-2024 ANNUAL REPORT
NARRATIVE

The American Savings Foundation (ASF) Endowed Chair for Banking and Finance at Central Connecticut State University was established on March 7, 2003 with funding support generously provided by a $1,000,000 pledge from the American Savings Foundation. The mission of the Endowed Chair is to bring "real-world" academic preparation to CCSU students through teaching, programming and networking. In December 2022, Martin J. Geitz was designated by the Connecticut Board of Regents to fill the Endowed Chair role. Mr. Geitz brings a distinguished 40-year career in banking to the role that included leadership positions with national and community banks as well as industry and not-for-profit organizations. Predecessors in this role include CCSU alum and COCC president & CEO, Richard Leone, former CT Banking Commissioner, Howard Pitkin, and Bankers Bank Northeast founder, Peter Sposito.

Student Instruction

For the 2023 – 2024 academic year, the School of Business Dean directed Mr. Geitz to continue to teach Bank Management – FIN 420. Mr. Geitz organized the course to cover the major drivers of bank performance and risk management. He supplemented the text book material with 17 banking industry leader guest speakers in both the Fall 2023 and Spring 2024 semesters who provided real world perspectives on each topic. The speakers also provided the students with career advice in the form of sharing experiences leading to their current leadership positions. Students found great value in hearing from industry leaders and rated the course very highly in the My CourseEval survey. Thirty-five students comprised the Fall 2023 class while 30 students comprised the Spring 2024 class.

In the Fall 2023 semester, Mr. Geitz also taught one section of Personal Finance – FIN 210 with 40 students.

American Savings Foundation Distinguished Lecture Series

Mr. Geitz worked with Dean Frank and her team to present the 2024 edition of the American Savings Foundation Distinguished Lecture Series. The program entitled "Fallout from the Silicon Valley Bank Failure" was presented to an audience of approximately two hundred student, faculty, staff, government and banking industry attendees. The program brought together industry, regulatory and legislative perspectives represented by moderator, George Hermann, Chair of Windsor Federal Bank and CCSU alum, Thomas Curry, former OCC Comptroller of the Currency, and James Ballentine, former head of ABA's Congressional advocacy efforts. The three participants engaged in a lively discussion of the circumstances leading to four of the largest bank failures in US history and offered insights into actions by bank leadership teams and regulators to deal with the challenges, as well as legislative responses. The program was well received by attendees. In particular, students gained valuable insights into the crisis from industry and regulatory leaders.

Banking Excellence Program

Mr. Geitz worked with Dean Frank and several CCSU alumni to develop a proposal for a more robust banking education program. The proposed program was modeled after successful programs offered by Marquette University, Texas Tech University and Texas A&M University. The proposed program would be

the first of its kind in New England. The Finance Department faculty reviewed the proposal in April / May 2024 and offered suggestions that will be incorporated into the final proposal. Additionally, during the summer, Mr. Geitz met with 12 banks and 4 institutions that are part of the broader banking ecosystem to seek feedback and support for the proposed program. All industry participants believe that the proposed program would bring significant value to their organizations and all non-governmental institutions committed to financially support the program if it is approved by CCSU's curriculum committee and the Board of Regents.

Financial Report

The ASF Endowed Chair Budget was set at $116,750 for FY 2024.

Based upon a review of the General Ledger accounting of activity in the ASF Fund (Fund 4002), expenditures for FY 2024 were $21,035 lower than Budget.

The principal expenditures during FY 2024 were as follows:

Endowed Chair Compensation	$57,504
Distinguished Lecture Series	$ 7,579
Custodial Fees	$20,603
Refinitiv Subscription	$ 3,736
License Reimbursement	$ 6,293
Total Expenditures	$95,715

The principal sources of income to the Fund were as follows:

Investment Income	$121,340
Realized and unrealized gains	$144,240
Total Income	$265,580

The Fund's Net Assets increased $169,865 during FY 2024 from $2,868,991 to $3,038,322.

Financial Forecast

During the 2024 – 2025 academic year, we anticipate modest new expenditures to support new educational opportunities for students.

We have only had preliminary discussions about the 2025 Distinguished Lecture Series program. However, if we are successful in attracting a speaker who can share insights into the impact of November's elections on banking and financial legislative and regulatory agendas, it is likely that expenses for the program would be less than 2024 as it is unlikely that a speaker's fee would be required saving $2500.

Mr. Geitz will take the 35 Fall 2025 FIN 420 students on a field trip to Boston to meet with representatives of the Federal Home Loan Bank (FHLB) of Boston, the Federal Reserve Bank of Boston, and the Massachusetts Depositors Insurance Fund. The Dattco round trip bus service will cost slightly less than $3000. FHLB Boston will provide lunch to the students. Refreshments and snacks for the bus ride are expected to cost less than $500.

During the Fall semester, Mr. Geitz is working with the Finance Association and Dean Frank's team to produce two educational programs for students. These programs will be late in the afternoon and be followed by light dinner while students interact informally with the program participants. The first program was hosted on September 26th and was entitled "Women in Finance". The program included three women, two of whom are Chief Financial Officers of Connecticut community banks and one of whom is Chief Financial Officer of Travelers Personal Insurance line of business. The second program is planned for November and will focus on commercial banking. Planning is underway. Expenditures associated with these events are anticipated to be under $2500 for each event and comprised of refreshments and marketing materials and photography.

Mr. Geitz also recommends that the ASF Fund support his recommendation to subscribe to the Risk Management Association's (RMA) resources which is anticipated to cost $1500 for one year. This will allow the university to determine whether the RMA's products and services will provide value to students and to the School of Business.

Report respectfully submitted by:
Martin J. Geitz
American Savings Foundation Endowed Chair

CENTRAL CONNECTICUT STATE UNIVERSITY | 175 YEARS

GOV. WILLIAM A. O'NEILL ENDOWED CHAIR IN PUBLIC POLICY AND PRACTICAL POLITICS

Annual Report
July 1, 2023 – June 30, 2024

1849 — 175 — 2024
YEARS
Central to a Legacy of Excellence

2023-2024 Annual Report
CCSU Foundation, Inc.
Statement of Revenues and Expenditures
From 7/1/2023 through 6/30/2024

	Year To Date 06/30/2024 Actual
▼ Changes in Net Assets	
▼ Income	
▶ Investment Income	127,761
▶ Realized and unrealized gains (losses)	151,154
Total Income	278,915
▼ Expense	
▶ Contract Services	76,614
▶ Scholarships	17,500
▶ Grants	28,901
▶ Custodial Fees	21,997
Total Expense	145,012
Total Changes in Net Assets	133,903
▶ Beginning Net Assets	3,019,251
▶ Ending Net Assets	3,153,154

2023-2024 Annual Report – Narrative

Prepared by
Beth Merenstein, Executive Director
CCSU Center for Community Engagement and Social Research

The William A. O'Neill Endowed Chair is housed in the Center for Community Engagement and Social Research (CCESR) at CCSU. Previously named the Center for Public Policy and Social Research (CPPSR), the Executive Director successfully submitted the name change to the Board of Regents in the fall of 2022 to reflect the new purpose and mission of the Center. CCESR and the Chair are integrated administratively and the programs of the two entities are mutually supportive. CCESR is designated as a Connecticut Higher Education Center of Excellence, pursuant to Connecticut General Statutes and has operated at CCSU since 2000.

Proactive financial management, particularly over the last five years, coupled with successful efforts to secure additional state funding, has allowed the Center and the O'Neill Chair far greater financial flexibility and the ability to be more responsive to the priorities of CCSU President Zulma Toro.

After successfully changing the name and mission of the Center to best reflect the efforts of community and civic engagement, the Center for Community Engagement and Social Research (CCESR) has had successful programming and initiatives throughout the past academic year. There has also been an increased emphasis on engaging students in high impact practices, particularly focused on experiential learning. Students are exposed to new challenges, strengthened by relationships with local businesses and industries to provide internships and improved job readiness. The new Center for Community Engagement and Social Research continues to archive the papers of Governor O'Neill's administration and create related oral history programs; provide a wide range of information, training, research and consulting services to communities, municipal and state government, and non-profit agencies, serve as a resource to policymakers on critical issues facing Connecticut and to preserve the legacy of Governor O'Neill. The Center also serves the needs of students, faculty, and larger community by recognizing its responsibility to contribute to the public good in its role as a Center for Community Engagement.

In all the endeavors undertaken this past year, the Center and the Chair consistently focused its programming on its primary mission to promote a better understanding of civic engagement, Connecticut government and communities, and the public policies affecting its people.

After a national search for a new O'Neill Endowed Chair, we had the honor of welcoming former CT State Representative Edwin Vargas as the new William A. O'Neill Endowed Chair and he began his tenure in February 2023. After much consideration, Mr. Vargas made the decision to retire from this position in May 2024. We are currently in the process of a search for the new Chair.

Following is a summary of the Chair's and Center's accomplishments during 2023-2024.

1. **Expanding Governor William A. O'Neill EOP Public Service Scholarships**

The O'Neill Chair previously established a relationship with CCSU's Educational Opportunity Program (EOP). Currently, the fund awards $17,500.00 for this academic year to eleven students. Since 2009, the Chair has provided $385,000 in Governor William A. O'Neill Public Service Scholarship program funds for EOP students. To date, 86 individual EOP students have received 222 scholarships. These scholarships contribute to the University's goal of recruitment and retention of a diverse group of under-represented students.

The major change to our initiatives to reach a larger underrepresented student body was the creation of our internship stipend program. We offer a stipend of up to $3,000 for students doing unpaid internships or undergraduate research. Our rubric for selecting students gives priority to Pell grant recipients and student parents. In the Summer 2023: 13 students were awarded a total of $31,837; Fall 2023: 14 students were awarded a total of $43,560; Spring 2024: 35 students were awarded a total of $71,656 (as of May 1st, 2024).

2. **Student Support Services and Teaching**

Mr. Vargas was able to interest some nonprofit organizations in having our students as interns in their organizations. Among the organizations he met with were the Hartford Public Library, the Wadsworth Athenium, and the Connecticut Citizens' Action Group. Although most of these internships will have to wait until the fall 2024, we were able to place two interns this year in the Hartford Public Library's "Citizen Ambassador Program" with the assistance of Ms. Cecilia Zygmont and thanks to a grant to offer a stipend at no cost to the library.

During both the fall of 2023 and spring 2024 semesters Mr. Vargas was able to teach a political science class covering state and local government. He was assisted in this experience by his assigned student worker, Ms. Nhu Nguyen.

3. **Veterans History Project (VHP) Community Outreach**

The Veterans History Project (VHP) is a collaboration between CCESR's Governor William A. O'Neill Oral History Project and the Elihu Burritt Library at CCSU. The VHP continues to be an archival partner with the United States Library of Congress.

Over the past year, the VHP at CCSU has continued to employ a graduate assistant/student worker whose main objective is to scrub the metadata in our database to make searching more effective. He has continued writing blog posts highlighting different veterans from our collections. Brian Matzke, a co-project manager, wrote an article for CT Explored Magazine providing background and information about adding the VHP collections to the Connecticut Digital Archive (CTDA). The VHP is also collaborating with the Connecticut Museum of Culture and History on a National Endowment for the Humanities Grant that

would, among other things, utilize the oral histories in order to facilitate conversations between civilians and veterans, as well as train students to conduct oral history interviews for the VHP.

4. **CCSESR and the Institute for the Study of Crime and Justice Public Safety and Justice Community Engagement Project; Amplifying Neighborhood Voices: Community Perceptions of Public Safety (CPPS) Survey**

The CPPS initiative started in Summer 2022. The project is supported by CCESR and is implemented by faculty of the Institute for the Study of Crime and Justice of the Department of Criminology and Criminal Justice. The goal of this initiative is to support a neighborhood to assess its perception of public safety to inform the efforts of stakeholders to advocate for the neighborhood. The initial objective of this initiative was to start with one under-served neighborhood of New Britain.

The purpose of the CPPS survey was to understand residents' perceptions of public safety and their local police department. It was created using items from prior efforts to assess citizen perceptions of public safety along with input from several organizations within the North-Oak neighborhood. Survey questions asked residents about their sociodemographic and living situations, experiences and assessment of the New Britain Police Department (NBPD), and perceptions of public safety and police enforcement. Their efforts yielded 128 usable surveys from a range of demographic backgrounds.

The faculty overseeing this project spent part of the academic year reviewing the data and provided a 60-page report detailing their findings. They reported out on these findings to the New Britain police department, as well as at our Community Engagement Advisory Board meeting. The police department have agreed to be part of a conversation with North-Oak stakeholders this Fall 2024 to discuss the outcomes of the report and next steps.

Overall, they found residents have a generally favorable view of the NBPD in terms of physical presence in the neighborhood and job performance. However, there is a desire for NBPD to increase their engagement with the community and enforcement of some crimes. An examination of responses by demographic category (race/ethnicity, age, gender) did reveal a few noteworthy differences.

5. **O'Neill Chair Guest Speaker Program**

Ed Vargas' greatest involvement during the academic year was with the Latin American, Latino and Caribbean Center (LALCC). He served on their Advisory Board at the request of and under the Leadership of the center's director, Dr. Mary Ann Mahony.

As part of his collaboration with the LALCC center he contacted several speakers for the center's Talking Tuesdays and Brown Bag Wednesday events. Among the speakers that he urged to participate, and who accepted, were individuals such as state Rep. Hilda Santiago, Mrs. Sylvia Vargas, and Mr. Jose Oro. Among the many events he was directly involved with at the LALCC, he had the honor of co-organizing and performing, with his guitar and vocals, at an event that focused on political activism through music. He also promoted participation among Central students by encouraging them to attend these talks and all

the other events sponsored by the center that in some manner addressed the theme of civic engagement.

His advocacy for student participation was not limited to the LALCC events. He encouraged student participation in all campus activities that were in any way related to civic engagement such as our annual Rainbow Breakfast. His advocacy for attendance in these events was not limited to the students in his political science class. He also promoted these events to students that he encountered on campus, either individually or at scheduled events, especially those students that he engaged with when serving as a guest speaker at the invitation of their professors.

During the academic year he was able to accompany two classes to the state capital. The first was at the request of Prof. Carolyn Soper and Prof. Julie Schnobrich-Davis, and the second at the request of Dr. Reinaldo Rojas. During both visits he was able to speak to the students about the legislative process and to introduce them to several legislators and their staff. During the visit with Dr. Rojas, he was able to arrange for a Question-and-Answer session between the students and one of our two state auditors, Mr. John Geragosian. Dr. Rojas also had Mr. Vargas serve a few times on a mock legislative committee so that his class could gain experience in legislative advocacy. Furthermore, he served as a resource to seniors doing their practicum to become school social workers and offered himself as a resource to Dr. Loiselle's (History education professor) students who were doing their student teaching this spring.

6. **International Programming**

Mr. Vargas was able to host a visit from a delegation representing the higher education ministry of the Republic of Cuba in the fall of 2023. Among the members of the visiting delegation was Cuba's Deputy Minister of higher education and a president of one of their major universities. As a result of Central's hospitality, which included greetings from our president, Dr. Toro, we were informed that the visit to our campus was the highlight of their multi-state trip. Dr. Toro subsequently received an invitation for Central to participate in a UNESCO-sponsored higher education conference held in Havana, Cuba from February 5th through the 9th. Dr. Toro accepted the invitation and appointed Dr. John Tully, Dr. Mary Ann Mahony, and Mr. Vargas to represent Central at this conference. They were able to meet a great number of individuals from universities throughout the world and to attend a series of panels and presentations on a variety of higher education themes.

7. **Programming for Students**

- Working closely with the Secretary of State's Office (her Community Relations staff member now serves on the O'Neill Advisory Board), CT Secretary of State Thomas kicked off **National Voter Registration Day** (Sept 17th) on college campuses here at Central. We arranged for the marching band to play, for the cheerleaders and Kizer to attend, and the Provost, Dr. Merenstein, Ed Vargas, and two student speakers all made brief remarks. Dr. Merenstein continues to participate in Civic Engagement bimonthly meetings with CT Secretary of State Thomas and representatives from CT schools.
- On 10/19/23 we hosted the Connecticut Supreme Court for two cases: a civil and criminal case

that were open to entire campus community. Prefaced visit by arranging two classroom visits from the CT Bar Association to discuss Supreme Court process. Hosted breakfast for the justices and various members of the campus community. This was a highly publicized and successful event.

- On 10/26/23 we hosted a Civic Engagement event plus voter registration: Don't (Just) Vote: Addressing Public Issues beyond Elections. The panel speakers included: Stephanie Thomas, Connecticut Secretary of State; Thomas Hicks, Election Assistant Commissioner; Jillian Gilchrest, Connecticut State Representative; Bilal Tajildeen, Equality CT Advisory Board Member. SGA president Haneen Alkabasi served as moderator. Additionally, we hosted a lunch in the President's Dining Room for faculty, administrators, students and the panel.
- On 2/14/24 we provided marketing and financial support to a student workshop, facilitated by Robbin Smith, Professor in Political Science, called "Influence in Action," which outlined the process of state legislation.
- On 1/19/24, for the Martin Luther King Breakfast and Day of Service, the Center collaborated with the Office of Equity and Inclusion to bring in a speaker and provide a program for the annual MLK Breakfast. The primary role of the Center was to provide two onsite service activities and two off-site service activities for approximately 200 students, faculty, and staff.

8. O'Neill Advisory Board

In addition to the revamped O'Neill Advisory Board, which met once a semester, we also created a Civic Engagement Task Force. The goal was to get more input from faculty, staff, and students regarding efforts for civic engagement on and off campus. This group meets regularly, about 3 times a semester and once over the summer.

A team from Central (Beth Merenstein, Christian Reyes, Ed Vargas, Robbin Smith, Susan Slaga-Metivier, Walton Brown-Foster) participated in the combined AASC&U/ADP/Campus Compact in person conference on Civic Learning and Democratic Engagement (Boston, May 31-June 2, 2023). Christian Reyes, Assistant Director of CCESR, and Dr. Merenstein presented at this year's conference in Detroit, June 4-7, on our civic and community engagement efforts.

CENTRAL CONNECTICUT STATE UNIVERSITY | 175 YEARS

ROBERT C. VANCE ENDOWED CHAIR IN JOURNALISM AND MASS COMMUNICATION

Annual Report
July 1, 2023 – June 30, 2024

2023-2024 Annual Report
CCSU Foundation, Inc.
Statement of Revenues and Expenditures
From 7/1/2023 through 6/30/2024

	Year To Date 06/30/2024 Actual
▼ Changes in Net Assets	
▼ Income	
▶ Donations Received	50,000
▶ Investment Income	261,786
▶ Realized and unrealized gains (losses)	316,497
Total Income	628,283
▼ Expense	
▶ Grants	5,000
▶ Custodial Fees	39,882
Total Expense	44,882
Total Changes in Net Assets	583,401
▶ Beginning Net Assets	6,134,737
▶ Ending Net Assets	6,718,139

2023-2024 ANNUAL REPORT
NARRATIVE

The 2023-2024 academic year was a transitional period for the Robert C. Vance Endowed Chair in Journalism and Mass Communication at Central Connecticut State University. While the chair remained vacant throughout the academic year, exciting developments occurred during the spring semester that set the stage for a new era of leadership in the field of journalism and mass communication at Central.

In Spring 2024, the university initiated an extensive search to fill the prestigious chair, culminating in the recruitment of highly accomplished journalist and college professor Aimee Crawford. With her extensive background in investigative reporting, feature writing, and multimedia storytelling, coupled with her teaching experience at Springfield College, Crawford quickly stood out as a leader who could elevate both the academic and practical elements of journalism education at Central. Her appointment as the Robert C. Vance Endowed Chair was approved by the Board of Regents for Higher Education in May 2024, and her term officially began at the start of the Fall 2024 semester.

About Aimee Crawford
Aimee Crawford is a seasoned journalist with over 20 years of experience in the field. Her career includes a wide range of roles, from investigative reporter to features editor, with her work appearing in numerous national publications. Crawford is known for her in-depth coverage of sports, social justice issues, and human interest stories. In recent years, she has been recognized for her work in long-form journalism, where her deep research and compelling storytelling have earned accolades and critical acclaim.

Prior to her appointment at Central, Crawford worked as a senior features writer at *ESPN The Magazine*, where she authored numerous cover stories and in-depth profiles on athletes, uncovering narratives that highlight the intersection of sports, culture, and society. In addition to her work in print journalism, Crawford has produced multimedia content and contributed to digital journalism projects, making her a versatile and forward-thinking professional in a rapidly evolving media landscape.

At Springfield College, Aimee Crawford taught sports journalism and feature writing beginning in 2021. In addition to her teaching responsibilities, she served as the faculty advisor to the student newspaper and an annual student-produced sports magazine, providing mentorship and guidance to aspiring journalists. Crawford's involvement extended beyond the classroom, as she also served as a judge for the City and Regional Magazine Association's annual awards contest, contributing her expertise to the broader journalism community. Her multifaceted role made a significant impact on the academic and professional development of her students.

Crawford is passionate about mentoring the next generation of journalists, particularly in areas such as ethics, multimedia storytelling, and investigative reporting. Her vision for the Robert C. Vance Chair includes expanding opportunities for students to engage in hands-on journalism, fostering critical thinking, and preparing graduates to excel in a competitive and dynamic media environment.

As the new chairholder, Crawford will lead initiatives that strengthen Central's journalism and mass communication programs, ensuring that students gain both the technical skills and ethical grounding needed to thrive in the industry. Her appointment signals a strong focus on innovation and excellence in journalism education at Central, and her impact is sure to be felt for years to come.

The Robert C. Vance Endowed Chair in Journalism and Mass Communication, established to honor the legacy of Robert C. Vance, continues to serve as a cornerstone of Central’s commitment to journalism education. With Aimee Crawford’s leadership, the chair is poised to shape the future of journalism and mass communication at Central in exciting and transformative ways.

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Modification of an Accredited Program

CT State Community College

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the modification of the Associate of Science in General Studies program at Connecticut State Community College, specifically significant modifications of courses, program outcomes and program descriptions.

A True Copy:

_____

Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Modification of the Associate of Science in General Studies program at Connecticut State Community College, specifically significant modifications of courses, program outcomes and program descriptions.

BACKGROUND AND OVERVIEW OF MODIFICATIONS

The proposed changes increase the flexibility of the General Studies degree, making it accessible to students seeking a terminal AS degree, differentiating the General Studies degree from the Liberal Arts and Science degrees, which is the main transfer degree at the college. This is also the rationale for the proposed modifications to the program description, which seek to clarify that while the General Studies degree can be used for transfer with proper advising, it is primarily intended to serve as a terminal AS degree.

The total number of courses and course credits to be modified by this modification is 24-27 credits. The proposed changes to the Program Courses are:

1. Delete the requirement that 2 program courses be at the 2000 level
2. Specify that the Arts and Humanities requirement of two courses worth 6-8 credits include any 2 courses from ART, ARTH, COMM, HUM, ENG, MUS, PHL, THR, ARAB, ASL, CHNS, FREN, GERM, ITAL, JAPN, LATN, POLH, RUSN, SPAN, ESOL 1402, ESOL 1502/1512, with the courses coming from different disciplines
3. Specify that the Social/Behavioral Science requirement of 2 courses worth 6-8 credits includes any course from ANTH, ECON, GEOG, POLS, PSY, SOC, or WGS
4. Change the Science Elective of 3-4 credits to a Science/Math Elective of 3-4 credits that includes any course from ASTR, BIO, CHEM, ENV, ERTH, GEOL, HORT, METR, OCEN, PHYS, SCI, or MAT
5. Delete the 3 credit PHL1101 Ethics or PHL1012 Bioethics requirement
6. Change the requirement that students take either CIS 1001 Introduction to Computers Credits, CSA 1110 Introduction to Software Applications, or CSA 2113 Advanced Applications for three credits to a Technological Literacy requirement, including any course from CIS, CSA, or GRA (except for GRA2201 and GRA2202), or other computer-skills based course approved by the program coordinator
7. Change the Open Electives from 15 credits to 18 credits using the additional three credits from the deletion of the PHL1101 Ethics or PHL1012 Bioethics requirement

The proposed program outcomes demonstrate:

- College-level literacy and communication skills across disciplines.
- College-level quantitative reasoning skills.
- Critical thinking and problem-solving skills across disciplines.
- Facility with current computer software applications used in college and the workforce.

Proposed changes to the program description mainly involve editing and reorganization of existing program description content.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this new program. CSCU Academic and Student Affairs concurs with this recommendation.

12/6/2024 – BOR - Academic and Student Affairs Committee
12/19/2024 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

APPLICATION FOR ***MODIFICATION OF AN ACCREDITED PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: CT State Community College	Please enter the following dates: Final approval by institution: Sept 20, 2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/24

Most Recent NECHE Institutional Accreditation Action and Date: July 1, 2023

Type of Program Modification Approval Being Sought (mark all that apply):

X Significant Modification of Courses/Course Substitutions*

Offering of Program at Off-Campus Location (specify new location)

Offering of Program Using an Alternate Modality (e.g., from on ground to online)

Change of Degree Title or Program Title

X Other (please specify) Changes are proposed to program outcomes and program description

Total Number of courses and course credits to be modified by this application: 24-27 credits

* **Significant** is defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program. For changes that fall below this threshold, use form 205 (*Program Modification – Below Threshold Report*)

For the singular changes noted below, alternate forms are available:

- If only adding auxiliary site, use form 206 *Application for Adding an Auxiliary Instructional Site*
- If only modifying modality, use form 202 *Application to Modify Instructional Modality*
- If only modifying program name, use form 203 *Application for Name Change*
- If only modifying CIP code, use form 204 *Application to Change CIP Code*

Original Program Characteristics

Name of Program: General Studies GNST-AS

OHE #: 21179

Modality of Program *(check all that apply)*: ☒On ground ☒ Online ☒ Hybrid, % of fully online courses The percent of fully online courses depends on the courses chosen, but 100% of degree requirements can be met with online courses

Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both

Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: AS, Associate of Science

Date Program was Initiated: 2/24/2022

Total # Credits in Program: 60-66

Credits in General Education: 21-24

CIP Code Number: 24.0102 Title of CIP Code: General Studies

Modified Program Characteristics

Name of Program: General Studies

Modality of Program *(check all that apply)*: ☒On ground ☒ Online ☒ Hybrid, % of fully online courses The percent of fully online courses depends on the courses chosen, but 100% of degree requirements can be met with online courses

Locality of Program: **X** On Campus ☐ Off Campus Both

Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: AS, Associate of Science

Initiation Date for Modified Program: Fall 2025

Anticipated Date of First Graduation: December 2025

Total # Credits in Program: 60-66

Credits in General Education: 21-24
CIP Code Number: 24.0102 Title of CIP Code: General Studies

Department where program is housed: School of Social and Behavioral Science
Location Offering the Program *(e.g., main campus)*: Asnuntuck, Captial, Gateway, Housatonic, Manchester, Middlesex, Naugatuck, Northwestern, Norwalk, Quinebaug, Three Rivers, Tunxis

If modification of the program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: n/a CIP: OHE#: BOR Accreditation Date:
Phase Out Period Date of Program Termination
Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Other Program Accreditation: n/a

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional licensure,
  - identify credential:
  - confirm NC-SARA requirements met: ☐ Yes ☐ No

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

Institutional Contact for this Proposal: Mike Stefanowicz
Title: Executive Dean, Academic Affairs
Tel.: 860.612.7039 e-mail: michael.stefanowicz@ctstate.edu

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Summary of Modifications

Provide a brief summary (narrative or bulleted list) of all proposed modifications to the program:

The proposed changes to the Program Courses are:

1. Delete the requirement that 2 program courses be at the 2000 level
2. Specify that the Arts and Humanities requirement of two courses worth 6-8 credits include any 2 courses from ART, ARTH, COMM, HUM, ENG, MUS, PHL, THR, ARAB, ASL, CHNS, FREN, GERM, ITAL, JAPN, LATN, POLH, RUSN, SPAN, ESOL 1402, ESOL 1502/1512, with the courses coming from different disciplines
3. Specify that the Social/Behavioral Science requirement of 2 courses worth 6-8 credits includes any course from ANTH, ECON, GEOG, POLS, PSY, SOC, or WGS
4. Change the Science Elective of 3-4 credits to a Science/Math Elective of 3-4 credits that includes any course from ASTR, BIO, CHEM, ENV, ERTH, GEOL, HORT, METR, OCEN, PHYS, SCI, or MAT
5. Delete the 3 credit PHL1101 Ethics or PHL1012 Bioethics requirement
6. Change the requirement that students take either CIS 1001 Introduction to Computers Credits, CSA 1110 Introduction to Software Applications, or CSA 2113 Advanced Applications for three credits to a Technological Literacy requirement including any course from CIS, CSA, or GRA (except for GRA2201 and GRA2202), or other computer-skills based course approved by the program coordinator
7. Change the Open Electives from 15 credits to 18 credits using the additional three credits from the deletion of the PHL1101 Ethics or PHL1012 Bioethics requirement

The proposed program outcomes are:

1. Demonstrate college-level literacy and communication skills across disciplines.
2. Demonstrate college-level quantitative reasoning skills.

3. Demonstrate critical thinking and problem-solving skills across disciplines.
4. Demonstrate facility with current computer software applications used in college and the workforce.

Proposed changes to the program description are included below and mainly involve editing and reorganization of existing program description content.

Background and Rationale

Provide the context and need for the proposed modification(s) and the relationship to the originally approved program:

The proposed changes increase the flexibility of the General Studies degree making it accessible to students seeking a terminal AS degree, and they differentiate the General Studies degree from the Liberal Arts and Science degrees, which is the main transfer degree at the college. This is the rationale for deleting the requirement that students take 6 credits of 2000-level courses; for broadening the Science Elective into a Science/Math Elective; for deleting the PHL1101 Ethics or PHL1012 Bioethics requirement and adding the three credits to the Open Electives requirement, and for changing the requirement that students take either CIS1001, CSA1110, or CSA2113 to a broader Technological Literacy requirement including any course from CIS, CSA, or any designated GRA course, as well as any other computer-skills based course approved by the program coordinator. This is also the rationale for the proposed modifications to the program description, which seek to clarify that while the General Studies degree can be used for transfer with proper advising, it is primarily intended to serve as a terminal AS degree, while the LAS degrees are intended to be the main transfer degrees.

The rationale for requiring that students take courses from two different disciplines for the Arts and Humanities is to help ensure that students take courses from multiple disciplines in order to meet program outcome one.

The rationale for the proposed changes to the program outcomes is to ensure all outcomes are measurable and incorporate the four highest levels of Bloom's taxonomy as opposed to the bottom two levels of Bloom's taxonomy.

The rationale for the proposed changes to the program description is to more clearly emphasize that while the General Studies degree can be used for transfer with proper advising, it is mainly intended to be a terminal associate's degree, as opposed to the Liberal Arts and Sciences degrees serving as the main transfer degrees at CT State. This is intended to help clarify the objectives of the degree for both students and advisors and help them make appropriate choices and advising decisions.

Addressing Identified Needs

- How does the modified program address CT workforce needs and/or the wellbeing of CT communities? In your response, include a description/analysis of employment prospects for graduates of this modified program. *(Succinctly present as much factual evidence and evaluation of stated needs as possible and identify data sources, e.g., JobsEQ, Dept of Labor statistics, etc.)*

The General Studies degree is designed for students who seek an associate degree for personal growth and/or career advancement. It can help students gain employment and advance in their careers in a variety of fields and industries. The modified program addresses CT workforce needs by facilitating the ability of CT State students to earn an AS degree to help them gain employment and advance in their careers. The modified program also provides greater flexibility for students, allowing them to choose courses they feel best reflect their interests and needs. The modified program also enhances the well-being of CT communities by increasing the skills and qualifications of the available workforce.

- How does the modified program make use of the strengths of the institution (*e.g., curriculum, faculty, resources)* and of its distinctive character and/or location?

The modified program uses existing strengths of the institution, including dedicated faculty committed to student success, on-line courses to meet student needs, as well as the fact that CT State campuses are community-based with reputations and networks in their local communities. Proposed modifications to the degree make it more flexible and accessible for students, helping them achieve their goals for personal growth and/or career goals.

- Equity (eliminating institutional performance disparities along dimensions of ability, ethnicity/race, economics, and gender) is one of the Board of Regents' Goals.
  - What specific metrics will be used to assess equity across these dimensions in terms of recruitment, enrollment, retention, and completion?

General Studies PCs and other faculty who oversee the General Studies degree on their campus will work with The Connecticut State Community College Department of Program Review and Assessment (DOPRA) 2024 and Institutional Research to disaggregate and analyze data regarding academic performance, enrollment, retention, and completion along the various dimensions of equity.

  - Describe specific aspects of the program (e.g., interventions to address college readiness, targeted recruitment strategies, comprehensive supports, etc.) intended to advance equitable student outcomes.

The program requires that students take CCS1001 College and Career Success, in which students learn to navigate college, value diversity, develop skills and strategies for success, and explore career options. All CT state campuses provide tutoring services, including tutoring in reading, writing, and math. The program is presented and promoted to all students at the college and also to area high schools through recruitment activities.

  - Where inequities are found, how will the data be used by program and institutional leaders to address the inequities?

If inequities are found in successful transfer rates, then additional research involving both qualitative and quantitative methods may be necessary. Course offering time slots and modalities will also be reviewed.

- Describe any pathways to, and/or from, this modified program to programs at your own institution and other institutions, both within and outside of CSCU, e.g., stackable credentials, transfer agreements, etc. (*Include additional details in the Quality Assessment portion of this application, as appropriate)*

N/A

- Indicate what similar programs exist in other CSCU institutions, and how unnecessary duplication is being avoided

Both CCSU and SCSU offer a bachelor's degree in General Studies, while WCSU has a Liberal Arts AS degree and ECSU has a L General Studies and Liberal Studies degree intended to prepare students for certification as elementary and early childhood teachers. CT State's AS in General Studies is one of only two within the CSCU system and it is the largest program by enrollment at CT State Community College.

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

APPLICATION FOR ***MODIFICATION OF AN ACCREDITED PROGRAM***

Original Program		Proposed Modified Program	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
General Studies students must complete 6 credits at the 2000 course level		Deleted	
Art & Humanities - Choose any 2 courses 1000 level or above	6-8	Art & Humanities - Choose any 2 courses 1000 level or above Any courses from ART, ARTH, COMM, HUM, ENG, MUS, PHL, THR, ARAB, ASL, CHNS, FREN, GERM, ITAL, JAPN, LATN, POLH, RUSN, SPAN, ESOL 1402, ESOL 1502/1512; courses must be from two different disciplines	6-8
Social / Behavioral Science - Choose any 2 courses 1000 level or above	6	Social / Behavioral Science - Choose any 2 courses 1000 level or above Any courses from ANTH, ECON, GEOG, POLS, PSY, SOC, or WGS	6
Elective SCI - Science Elective	3-4	Elective SCI/MAT – Science or Math Elective Any course from ASTR, BIO, CHEM, ENV, ERTH, GEOL, HORT, METR, OCEN, PHYS, SCI, or MAT	3-4
PHIL 1101 - Ethics OR PHIL 1012 - Bioethics	3	Deleted	
CIS 1001 - Introduction to Computers OR CSA 1110 - Introduction to Software Applications OR CSA 2113 - Advanced Applications	3	Elective Technological Literacy Any course from CIS, CSA, or GRA (except for GRA2201 and GRA2202), or other computer-skills based course approved by the program coordinator	3
Open Electives - Course 1000 or above	15	Open Electives - Course 1000 or above; no more than 15 credits from any one discipline	18
Total Credits Original Program	**39-42**	**Total Credits Modified Program**	**39-42**

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. With as much detail as possible, please map these learning outcomes to courses listed under the "Curriculum" section below.

1. Demonstrate college-level literacy and communication skills across disciplines. Modified.
2. Demonstrate college-level quantitative reasoning skills. Modified.
3. Demonstrate critical thinking and problem-solving skills across disciplines. Modified.
4. Demonstrate facility with current computer software applications used in college and the workforce. Modified.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

General Studies PCs and other faculty who oversee the General Studies degree on their campus will participate in the Connecticut State Community College Department of Program Review and Assessment (DOPRA) 2024 Operational Plan Program to develop appropriate assessment methodologies. Assessment methodologies are currently pending.

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	Learning Outcome # (from above)	Pre-Requisite(s)	Credit Hours
ENG1010 Composition	1	Successful completion of ENG 0930 OR ENG 0960 with a C or higher, or as determined by the placement process.	3
MATH1000 Mathematics of Finance or above	2	Multiple courses; N/A	3-4
Elective ARHX	1,3	Multiple courses; N/A	3-4
Elective SCRX or SCKX	1,3	Multiple courses; N/A	3-4
Elective HISX	1,3	Eligibility for ENG 1010 or ENG 0910	3
Elective ORAX	1	Multiple courses; N/A	3
CCS1001	1	Eligible to take ENG 0960, ENG 0930, or higher. ESOL1302 or higher or recommendation of ESOL coordinator.	3
Art & Humanities - Choose any 2 courses from different disciplines from ART, ARTH, COMM, HUM, MUS, PHL, THR, or Foreign Languages	1,3	Multiple courses; N/A	6-8
Social / Behavioral Science - Any courses from ANTH, ECON, GEOG, POLS, PSY, SOC, or WGS	1,3	Multiple courses; N/A	6
Elective SCI/MAT Any course from ASTR, BIO, CHEM, ENV, ERTH, GEOL, HORT, METR, OCEN, PHYS, SCI, or MAT	1,2,3	Multiple courses; N/A	3-4
Elective Technological Literacy Any course from CIS, CSA, or GRA (except for GRA2201 and GRA2202), or other computer-skills based course approved by the program coordinator	4	Multiple courses; N/A	3
Open Electives - Course 1000 or above	1,2,3,4	Multiple courses; N/A	18
Open Electives (*Indicate number of credits of open electives*)			18
Total Program Credits:			60-66

Description of Related Modification(s)

Provide a summary of other changes necessitated by curricular modification such as admissions or graduation requirements

None

Description of Resources Needed

As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in Section 3 (Resources and Financial Considerations), as appropriate.

None

Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	Fall Term, Year 2021		Fall Term, Year 2022		Fall Term, Year 2023	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Transfers In	264	626	268	697	207	388
New Students	1299	687	1307	1014	1318	1179
Returning Students	59	461	53	555	126	735
Actual Headcount Enrollment	2760	6194	2705	5824	2770	6423
Fall FTE accounted for by Program Majors	5029		4904		5320	
Size of Credentialed Group(s) for Given Year	811 (Su20-Sp21)		769 (Su21-Sp22)		816 (Su22-Sp23)	

Impact of Modification on Enrollment and Completion

Describe the anticipated impact of the modification(s) on future enrollment and completion

Modifications should enhance program completion by making program requirements easier to complete.

Other Considerations

If applicable, note any other considerations relevant to the proposed modification(s)

None

SECTION 3: RESOURCES AND FINANCIAL CONSIDERATIONS

Cost Effectiveness and Availability of Adequate Resources

Complete the PRO FORMA Budget below – Projected Resources and Expenditures over the three years beginning with the initiation date of the modified program. Provide a narrative below regarding the cost effectiveness, availability of adequate resources, and sustainability for the proposed program. Add any annotations for the budget form below, as well.

The proposed program is expected to generate significant revenue for the college, based on the data above regarding Fall FTE accounted for by program majors, and it is highly cost-effective because it utilizes existing courses and resources. The proposed program does not require any modifications to program expenditures, and the current level of resources is adequate to ensure the sustainability of the proposed program.

PRO FORMA Budget - Projected Revenues and Expenditures
(Whole Dollars Only)

PROJECTED Program Revenue	Fall	Fall	Fall
Tuition (do not include internal transfers)			
Program-Specific Fees			
Other Revenue (Annotate in narrative)			
Total Estimated Program Revenue			
PROJECTED Program Expenditures*	Fall	Fall	Fall
Administration (Chair or Coordinator)			
Faculty (Full-time, total for program)			
Faculty (Part-time, total for program)			
Support Staff			

Library Resources Program			
Equipment (List as needed)			
Other (e.g., student services)			
Estimated Indirect Costs (e.g., student services, operations, maintenance)			
Total Estimated Program Expenditures			
*Note: Capital outlay costs, institutional spending for research and services, etc. can be excluded.			
This PRO FORMA Budget provides reasonable assurance that the proposed program modification can be established and is sustainable. Some assumptions and/or formulaic methodology may be used and annotated in the narrative in section 2.			

SECTION 4: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: https://catalog.ctstate.edu/preview_program.php?catoid=2&poid=253

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: **2** years

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information: https://ctstate.edu/admissions-registration/investing-in-a-ct-state-education?highlight=WyJ0dWl0aW9uIl0=

Request for SAA Approval for Veterans Benefits? ☒ Yes ☐ No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable):

General Studies is a program designed for students who seek an associate degree for personal growth and/or career advancement. The General Studies Program provides students flexibility in degree completion and maximizes the number of credits that are transferred to Connecticut State Community College. While not intended for transfer, it can be used for the purpose of transfer with focused advising. However, students interested in transferring to a bachelor's degree-granting program should consider one of the Liberal Arts and Science associate degrees, which are designed to satisfy transfer requirements at four-year institutions.

This program is designed to ensure that students develop strong communication skills, increase literacy and math skills, develop critical thinking and problem-solving skills in the sciences, social sciences, and the arts and humanities. General Studies students gain foundational knowledge in a variety of academic disciplines. The General Studies degree program is designed to give students the opportunity to explore knowledge from multiple perspectives. Students are challenged to become intellectually curious, aesthetically aware, and critically perceptive. The program gives students the flexibility to adapt to the changing needs of the workplace and the foundation necessary for lifelong learning and personal growth.

The general education and career education curricula are dynamic and interactive components. They enrich each other by helping students to make career choices in keeping with their understanding of themselves and their world. Together, they provide the skills and perspectives that make possible the dignity of work and social contribution. They cultivate a framework of meaning, value, ethical purpose, and commitment that enriches every aspect of life. They foster an attitude of critical inquiry, curiosity, openness and wonder that enables a spirit of lifelong learning.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s):

According to Learn.org, graduates with an associate's degree in general studies can gain employment in a wide variety of entry-level jobs in fields like finance, hospitality and tourism, and retail, including:

- Teller (43-3071)
- Customer service representative (43-4051)
- Secretary or administrative assistant (43-6014)
- Financial clerk (43-4190)
- Property manager (11-9141)
- Insurance sales agent (41-3021)
- Retail sales worker (41-2031)
- Travel agent (41-3041)
- Wholesale and manufacturing sales representative (41-4011 and 41-4012)
- Human resources assistant (43-4161)

(see https://learn.org/articles/What_Jobs_Can_You_Get_with_an_Associates_Degree_in_General_Studies.html).

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)?

According to PayScale.com, an on-line site providing information on salaries, also reported that in October of 2019, those with an associate's degree in general studies made an average annual salary over $50,000 (see https://learn.org/articles/What_Jobs_Can_You_Get_with_an_Associates_Degree_in_General_Studies.html). Data from the College Board suggest that in 2018, median earnings for full-time, year round workers age 25 and older with an associate's degree was $50,100, compared to $40,500 for those with a high school degree (see https://research.collegeboard.org/media/pdf/education-pays-2019-full-report.pdf).

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): 611210

Career/Program Pathways

Does this program prepare students for another program? ☐ Yes, specify program: X No

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): Joshua Searcy, Joshua.searcy@ctstate.edu 860-612-7074

Asnuntuck - Mary Beth Rajczewski (mrajczewski@acc.commnet.edu)
Gateway – Catherine Babbitt (cbabbitt@gwcc.commnet.edu)
Housatonic – Tonya Rondinone (trondinone@hcc.commnet.edu)
Manchester – Kimberly Hamilton Bobrow khamiltonbobrow@mcc.commnet.edu)
Middlesexx – Terrence McNulty (tmcnulty@mxcc.commnet.edu)
Naugatuck Valley – Latisha Nielsen (lnielsen@nvcc.commnet.edu)
Norwalk – Renae Edge (redge@ncc.commnet.edu)
Three Rivers – Steve Neufeld (sneufeld@trcc.commnet.edu)
Quinnebaug Valley – John Lewis (jlewis@qvcc.commnet.edu)

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? 100

Numerous full-time faculty teach courses in the various disciplines in the program's core curriculum. The percentage of full-time/adjunct faculty will be approximately consistent with the institutional percentage of full-time/adjunct.

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? 100

Numerous adjunct faculty teach courses in the various disciplines in the program's core curriculum. The percentage of full-time/adjunct faculty will be approximately consistent with the institutional percentage of full-time/adjunct.

Admissions Requirements

What are the admissions requirements for the program? Open Enrollment

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☐ Yes ☒ No
If yes, describe:

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☐ Yes ☒ No
If yes, describe and attach copies of the contracts or other documents ensuring program support:

Prospective Students

Describe the prospective students for the program: General Studies is a program intended for a wide variety of students who are interested in exploring career and academic options or who seek a two-year degree for personal growth or career advancement. This includes traditional students, adult learners, veterans, and students who transfer to the Connecticut State Community College.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: CT State Community College	Please enter the following dates: Final approval by institution: **10/18/2024** Submission to CSCU Office of the Provost for Academic Council: **10/23/2024**

Most Recent NECHE Institutional Accreditation Action and Date: **July 1, 2023**

Use this form for modifications that fall below the threshold required for full BOR review, defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program". For changes not below this threshold, use form 201 (*Application for Modification of an Accredited Program*).

Total Number of courses and course credits to be modified by this application: **One 3-credit course to be removed.**

Original Program Characteristics

Name of Program: **Technology Studies: Industrial Technology (INTC-AS-COT)**
OHE #: 21690
Modality of Program *(check all that apply)*: ☒ On ground ☒ Online ☒ Hybrid, % of fully online courses **varies**
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **AS, Associate of Science**
Date Program was Initiated: 6/23/22
Total # Credits in Program: **63-64**
Credits in General Education: **23**
CIP Code Number: 15.0612 Title of CIP Code: Industrial Technology/Technician

Modified Program Characteristics

Name of Program: **Technology Studies: Industrial Technology (INTC-AS-COT)**
Modality of Program *(check all that apply)*: ☒ On ground ☒ Online ☒ Hybrid, % of fully online courses **varies**
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **AS, Associate of Science**
Initiation Date for Modified Program: **08/25/2025**
Anticipated Date of First Graduation: **Fall 2025**
Total # Credits in Program: **60-61**
Credits in General Education: **23**
CIP Code Number: 15.0612 Title of CIP Code: Industrial Technology/Technician

Department where program is housed**: School of Engineering & Technology**
Location Offering the Program *(e.g., main campus)*: **Manchester**

If modification of the program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: n/a CIP: OHE#: BOR Accreditation Date:
Phase Out Period Date of Program Termination
Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Institutional Contact for this Proposal: Mehrdad Faezi	Title: Professor and Advisor	Tel.: 860.512.2729 e-mail: mehrdad.faezi@ctstate.edu

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Rationale for Modification

Describe the context and need for the proposed modification(s) and the relationship to the originally approved program:

The degree's highest MATH requirement is MATH 1610 (Pre-Calculus).

The course EGR 2250 - Computational Methods for Engineering (4 credits) from the list of current required courses has a prerequisite of MATH 2600 - Calculus I. Since the pre-requisite math course for EGR 2250 is higher than the math required for the program, it presents an impediment to students completing the degree in a timely fashion and within the publicized number of credits. Removing this course will have no negative effect on the existing degree and should help students complete the degree more efficiently.

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

Original Program		Proposed Modified Program	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
Technology Studies General Education Core (23 credits)		***Technology Studies General Education Core (23 credits)***	
ENG 1010 - Composition	3	ENG 1010 - Composition	3
MATH 1610 - Precalculus	4	MATH 1610 - Precalculus	4
ART Elective Credits: 3 (course vetted for ARHX)	3	ART Elective Credits: 3 (course vetted for ARHX)	3
CHEM 1110 - Concepts of Chemistry or CHEM 1210 - General Chemistry I	4	CHEM 1110 - Concepts of Chemistry or CHEM 1210 - General Chemistry I	4
Elective HISX - Historical Knowledge or Elective SBSX course in ECON	3	Elective HISX - Historical Knowledge or Elective SBSX course in ECON	3
CCS 1001 - College & Career Success	3	CCS 1001 - College & Career Success	3
Technology Studies Program Core (10-11 credits)		***Technology Studies Program Core (10-11 credits)***	
PHYS 1201 - General Physics I or PHYS 2201 - Calculus-Based Physics I	4	PHYS 1201 - General Physics I or PHYS 2201 - Calculus-Based Physics I	4
Elective BHEL - Behavioral Science Elective choose an ANTH, PSY, or SOC course	3	Elective BHEL - Behavioral Science Elective choose an ANTH, PSY, or SOC course	3
MATH 1200 - Statistics I Credits: 3 or MATH 1201 - Statistics I with Computer Applications	3-4	MATH 1200 - Statistics I Credits: 3 or MATH 1201 - Statistics I with Computer Applications	3-4
Industrial Technology Courses (30-31 credits)		***Industrial Technology Courses (30-31 credits)***	
CAD Elective	3	CAD Elective	3
EGR 2250 - Computation Methods for Engineering	3	REMOVE	
EGR 1110 - Introduction to Engineering	3	EGR 1110 - Introduction to Engineering	3
ENV 1800 - Sustainable Energy and the Environment OR Any MFG course	3-4	ENV 1800 - Sustainable Energy and the Environment OR Any MFG course	3-4

Specialization Electives - Choose with guidance of advisor	**18**	**Specialization Electives - Choose with guidance of advisor**	**18**
Choose One Course from the list below:	**3-4**	***Choose One Course from the list below:***	**3-4**
•CSC 1201 - Introduction to Programming •CSC 1203 - Python Fundamentals •CSC 2214 - C++ Programming •CSC 1211 - Java I •CSC 2212 - Java II •EGR 1115 - Programming for Engineers •EGR 2201 - MATLAB for Engineers •EGR 2230 - C++ for Engineering		**•CSC 1201 - Introduction to Programming •CSC 1203 - Python Fundamentals •CSC 2214 - C++ Programming •CSC 1211 - Java I •CSC 2212 - Java II •EGR 1115 - Programming for Engineers •EGR 2201 - MATLAB for Engineers •EGR 2230 - C++ for Engineering**	
Total Credits Original Program	**63-66**	**Total Credits Modified Program**	**60-63**

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. Map these learning outcomes to courses listed under the "Curriculum" section below.

1. Apply mathematical, scientific, and technological principles and concepts to identify and formulate solutions to technical problems.
2. Apply critical thinking and problem-solving skills to solve technical problems.
3. Demonstrate the ability to function in teams.
4. Recognize the need to engage in life-long learning.

The Technology Studies: Industrial Technology associate degree program prepares students primarily to transfer to complete a B.S. degree in automotive, construction management, environmental safety, electrical engineering, manufacturing, and energy. Graduates will receive a background in mathematics, science, and general education courses for transfer into a four-year program. Careers in this field include jobs in industrial design, occupational health and safety, sustainable energy generation/transmission, lean manufacturing analysis, and laser technicians. A grade average of "B" with no grade less than 'C', and completion of the full program is required for continuation as a junior in CCSU's School of Technology or at Charter Oak.

In addition to meeting the Technical Studies outcomes students successfully completing this option will:

5. Transition seamlessly into a Bachelor of Science Degree Program in Industrial Technology with junior level status in the receiving institution as part of the Technology Studies Pathway Program.
6. Assist in research, development, design, production, testing and various other functions associated with engineering.
7. Apply appropriate mathematical and scientific principles to engineering and technology applications.
8. Identify and apply engineering principles/ concepts.
9. Analyze and resolve technology problems.
10. Apply knowledge and skills to develop, interpret, and select appropriate technological processes.
11. Demonstrate the ability to think through a problem in a logical manner.
12. Organize and carry through to conclusion the solution to a problem.
13. Apply good communication skills.
14. Work in teams.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

Exams, Quizzes, Special emphasis on projects and Project-Based Learning

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	Learning Outcome # (from above)	Pre-Requisite(s)	Credit Hours
Technology Studies General Education Core (23 credits)			
ENG 1010 - Composition	5, 13	Successful completion of ENG 0930 OR ENG 0960 with a C or higher, or as determined by the placement process.	0
MATH 1610 - Precalculus	1, 2, 5, 7, 11, 12	C or higher in MATH 1600 or placement using multiple measures	0-3
ART Elective Credits: 3 (course vetted for ARHX)	4, 5	none	0
CHEM 1110 - Concepts of Chemistry or CHEM 1210 - General Chemistry I	1, 5, 7, 11, 12, 14	For CHEM 1110: Eligibility for ENG 1010 AND completion of with a grade of C- or higher in either For CHEM 1210: MATH 1600 or higher with grade of C or higher or placement higher than MATH 1600 and eligibility for ENG 1010	3-4
Elective HISX - Historical Knowledge or Elective SBSX course in ECON	5, 13	Eligibility for ENG 0910 or ENG 1010	0
CCS 1001 - College & Career Success	5, 13	Must be eligible to take intensive/developmental-level English class (ENG 0960, or ENG 0930) or higher. ESOL 1302 or higher or recommendation of ESOL coordinator	0
Technology Studies Program Core (10-11 credits)			
PHYS 1201 - General Physics I or PHYS 2201 - Calculus-Based Physics I	1, 5, 7, 11, 12, 14	MATH 1610 with a grade of C or higher	curriculum
Elective BHEL - Behavioral Science Elective choose an ANTH, PSY, or SOC course	5, 13	From none to Eligibility for ENG 1010	0
MATH 1200 - Statistics I or MATH 1201 - Statistics I with Computer Applications	1, 2, 5, 7	Placement using multiple measures, OR a grade of D- or higher in MATH 1010/MATH 1011, OR a grade of C- or higher in MATH 0988/MATH 0989. A grade of D-, D, or D+ in MATH 0988/0989 requires corequisite registration in MATH 0902.	0
EGR 1110 - Introduction to Engineering	1, 2, 3, 5, 9, 11, 12, 13, 14	MATH 1610 (or "C" or higher if taken prior)	curriculum
ENV 1800 - Sustainable Energy and the Environment OR Any MFG course	1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	From none to Placement into MATH 1600	0
Specialization Electives - Choose with guidance of advisor.	1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	None to courses already taken in curriculum	0
Choose One Course from the list below:			

•CSC 1201 - Introduction to Programming **•CSC 1203 - Python Fundamentals** **•CSC 2214 - C++ Programming** **•CSC 1211 - Java I** **•CSC 2212 - Java II** **•EGR 1115 - Programming for Engineers** **•EGR 2201 - MATLAB for Engineers** **•EGR 2230 - C++ for Engineering**	1, 2, 5, 7, 11, 12	MATH 1600 or placement using multiple measures. Also depends on any advanced courses the students chooses to take.	currciculum

Description of Related Modification(s)

Provide a summary of other changes, if any, necessitated by curricular modification, such as admissions or graduation requirements

This one course removal provides a relief of one course from the degree.

Description of Resources Needed

As appropriate, summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.

None

SECTION 3: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: **https://catalog.ctstate.edu/preview_program.php?catoid=19&poid=7524**

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: **2**

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information:
https://ctstate.edu/admissions-registration/investing-in-a-ct-state-education

Request for SAA Approval for Veterans Benefits? ☒ Yes ☐ No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable): As part of the Connecticut College of Technology (COT), the Technology Studies A.S. degree provides the knowledge and skills within specific high-demand technology fields. The program consists of lecture and lab course work in engineering, technology, industrial technology, mathematics, sciences, and foundational requirements that provide a solid comprehensive background for continuation in a four-year technology degree program or entry into the workforce. Upon completion of a Technology Studies A.S. degree, students can transfer to Central CT State University or the University of Hartford to complete designated B.S. degrees. The Technology Studies: Industrial Technology associate degree program prepares students primarily to transfer to complete a B.S. degree in automotive, construction management, environmental safety, electrical engineering, manufacturing and energy. Graduates will receive a background in mathematics, science, and general education courses for transfer into a four-year program.

Careers in this field include jobs in industrial design, occupational health and safety, sustainable energy generation/transmission, lean manufacturing analysis, and laser technicians. A grade average of "B" with no grade less than 'C', and completion of the full program is required for continuation as a junior in CCSU's School of Technology or at Charter Oak.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): **17-3026 Industrial Engineering Technologists and Technicians**

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? **$37,500 to $43,500**

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): 541330 Industrial Engineering; 3332 Industrial Machinery Manufacturing; 334513 Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables.

Career/Program Pathways

Does this program prepare students for another program? ☒ Yes, specify program: CCSU's Technology Programs https://www.ccsu.edu/sest ☐ No

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): **Mehrdad Faezi, mehrdad.faezi@ctstate.edu, 860.512.2729**

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? **1-3**

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? **1-3**

Admissions Requirements

What are the admissions requirements for the program? **General acceptance into the CT State CC**

https://ctstate.edu/admissions-registration/become-a-student

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☐ Yes ☒ No

If yes, describe:

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☐ Yes ☒ No

If yes, describe and attach copies of the contracts or other documents ensuring program support:

Prospective Students

Describe the prospective students for the program: The ideal students for the program prefer hands application of math and sciences into a technical setting. These students would prefer project-based learning and problem-solving. They also prefer to work in teams.

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Approval of a New Program

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a Curriculum and Instruction Program (CIP Code: 13.0301, OHE# TBD) leading to a Master of Science degree at Charter Oak State College; and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020.

A True Copy:

_____

Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Establishment of a new Curriculum and Instruction Program leading to a Master of Science degree at Charter Oak State College.

Name of Institution	Charter Oak State College	
Name of Program	Curriculum and Instruction	
CIP Code	13.0301	
OHE# (Leave blank for new programs)		
Degree Level	Master of Science	
Number of Collegiate Credits	33	
Date of Action (Anticipated)	12/19/2024	
Nature of Request	X Licensure and Accreditation _ Program Change _ Phase-out Program _ Terminate Program	
If Name Change, New Name		
Delivery	Current (If not a new program) _ On Ground _ Hybrid _ Online	Future _ On Ground _ Hybrid X Online
Effective Term	Fall 2025	
If a Discontinuation, date of Termination	N/A	
If a Suspension, dates of Suspension	N/A	

PROPOSAL AND RATIONALE

The Master of Science (M.S.) in Curriculum and Instruction is designed for educators seeking to develop expertise in student-centered learning across a broad range of educational programs, including early childhood education, elementary education, middle school, high school, as well as special education and urban education settings. Students will learn to develop curriculum, differentiate instructional strategies for all learners in inclusive educational settings, and serve as teacher leaders or instructional coaches within a variety of educational programs.

A major trend in higher education today is adults returning to school. The National Center for Education Statistics (NCES) reports that in Fall 2021, 3.2 million students were enrolled in postbaccalaureate degrees within the United States. NCED also reports that by 2031, postbaccalaureate enrollment is projected to increase by 6 percent. While this number reflects

overall enrollment, 100,000 adults in the United States are reported to be pursuing graduate degrees in education each year. 50,000 of these adults are pursuing online learning programs. Adults often prefer to enroll in online degree programs since they are generally working full-time, raising families, or caring for elderly family members.

Trends in education overall are many and varied. They include developing 'Executive Functions' in younger students, Social and Emotional Learning (Birth-Grade 12), Technology, Artificial Intelligence (AI), and Student-Centered learning. In Connecticut, there is also a growing trend in diversity of its student population. The increasing diversity with CT populations necessitates students needing to learn and grow as capable and competent 21st century learners who are culturally competent, can collaborate, and have skills in critical thinking and reasoning and problem-solving. These trends are best addressed by advancing the educational qualifications of existing teachers.

This program aims to address CT's workforce needs and enhance the well-being of its communities. Currently, public school teachers in CT with a bachelor's degree face limited options within the CSCU system for pursuing an online master's degree. Charter Oak State College, with its unique asynchronous model designed for adult learners, offers a solution where students can balance other adult responsibilities while attending school. However, many teachers enroll in private programs with exorbitant tuition and fees, often resulting in significant debt due to student loans. Instead of using their increased salary from the advanced degree to improve their quality of life, teachers end up using that additional money to pay off student loans. This financial strain leads to career burnout, causing many educators to leave the field despite their professional excellence and dedication. This program will support CT public school teachers by providing more accessible and affordable options within public institutions.

PRO FORMA

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this new program. CSCU's Academic Affairs concurs with this recommendation.

12/6/2024 – BOR - Academic and Student Affairs Committee
12/19/2024 – Board of Regents

CSCU Academic & Student Affairs

Application for **New Program Approval**

SECTION 1: GENERAL INFORMATION

Date of Submission to CSCU Office of the Provost: 10/23/2024

Institution: Charter Oak State College

Most Recent NECHE Institutional Accreditation Action and Date: Fall 2016

Program Characteristics

Name of Program: Curriculum and Instruction

Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: Master of Science

Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses

Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both

Anticipated Program Initiation Date: Fall 2025

Anticipated Date of First Graduation: December 2026

Total # Credits in Program: 33

Credits in General Education: 0

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: 2 Years

CIP Code Number: 13.0301 Title of CIP Code: Curriculum and Instruction

Department where program is housed: Education

Location Offering the Program *(e.g., main campus)*: Online

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information: Affordable Tuition and Fees | Charter Oak State College

Request for SAA Approval for Veterans Benefits? ☒ **Yes** ☐ No

Program website: https://www.charteroak.edu/prospective/programs/#masters

Provide the intended catalog description for this program: The Master of Science (M.S.) in Curriculum and Instruction is designed for educators seeking to develop expertise in student-centered learning across a broad range of educational programs, including early childhood education, elementary education, middle school, high school, as well as special education and urban education settings. Students will learn to develop curriculum, differentiate instructional strategies for all learners in inclusive educational settings, and serve as teacher leaders or instructional coaches within a variety of educational programs.

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:

Program Discontinued: N/A CIP: OHE#: BOR Accreditation Date:

Phase Out Period Date of Program Termination

Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional licensure,
  - identify credential:
  - confirm NC-SARA requirements met: ☐ Yes ☐ No

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

Institutional Contact for this Proposal

Name: David Ferreira

CSCU Academic & Student Affairs

Application for **New Program Approval**

Title: Provost
Phone: (860) 515-3727
Email: dferreira@charteroak.edu

When was the program approved by (insert date in mm/dd/yyyy format):

- College/School: 10/23/2024
- Curriculum committee: 10/23/2024
- Faculty senate: 10/25/2024
- Institutional president: 10/25/2024

NOTES:

- Please rename your completed application to include your institution and the degree name and type in the file name (e.g., SCSU DataSci MS 101 New Program Application) and submit your completed application to CSCU-ACandASASub@ct.edu by the posted deadlines (https://www.ct.edu/academics/approval)
- All applications to establish a new program will be considered for both Licensure and Accreditation by the BOR
- New programs include: degrees, degrees with option(s), degrees with certificates(s), stand-alone credit bearing certificates
- Use Form 102 *New Academic Offering – Below Threshold Report* for new:
  - degree minors, concentrations, or specializations
  - undergraduate certificates or programs ≤ 30 credits within an approved program
  - undergraduate certificates ≤ 15 credits
  - graduate certificates ≤ 12 credits
  - non-credit bearing certificates
  - programs that do not qualify students to become eligible for federal financial aid

SECTION 2: PROGRAM OVERVIEW: PURPOSE AND GOALS

In this section, provide an overview of the purpose and goals of the proposed program. Your narrative should include the following:

- clear statement of the program's purpose
- statement describing how the program meets students' educational goals and career objectives
- description of relevant national or local educational trends and connection of these to the program
- discussion of relevant faculty expertise and commitment with respect to the program
- description of other relevant specific institutional strengths and/or distinctive attributes that contribute to program
- the relationship of the program to the mission of the institution and CSCU (specifically, the program's relationship to current strategic priorities)
- the impact of the program on the institution; and the extent to which the program complements existing programs at the institution.
- the potential quality of the proposed program in relation to comparable programs within and outside CSCU

Purpose: The purpose of the Master of Science (M.S.) in Curriculum and Instruction is to equip educators with advanced knowledge and skills to design curricula, differentiate instructional strategies for diverse learners in a variety of educational settings, and serve as teacher leaders or instructional coaches within a variety of educational settings. The program will also support existing educators in learning to evaluate and make improvements to their programs. The program will develop leaders who can enhance teaching and learning processes, address diverse student needs, and contribute as leaders in the educational sector.

Statement describing how the program meets students' educational goals and career objectives:

The program meets students' educational goals and career objectives by offering career advancement and leadership opportunities for current educators. Students earning the degree can apply for advanced roles such instructional program

coordinator, curriculum specialist, educational consultant, coach, or professional development facilitator. Educators with a master's degree are often eligible for increases in compensation above what they would earn with a bachelor's degree. Further, the degree will allow teachers with a provisional license to convert their license to professional.

National and Local Trends:

A major trend in higher education today is adults returning to school. The National Center for Education Statistics (NCES) reports that in Fall 2021, 3.2 million students were enrolled in postbaccalaureate degrees within the United States. NCED also reports that by 2031, postbaccalaureate enrollment is projected to increase by 6 percent. While this number reflects overall enrollment, 100,000 adults in the United States are reported to be pursuing graduate degrees in education each year. 50,000 of these adults are pursuing online learning programs. Adults often prefer to enroll in online degree programs since they are generally working full-time, raising families, or caring for elderly family members.

Trends in education overall are many and varied. They include developing 'Executive Functions' in younger students, Social and Emotional Learning (Birth-Grade 12), Technology, Artificial Intelligence (AI), and Student-Centered learning. In Connecticut, there is also a growing trend in diversity of its student population. The increasing diversity with CT populations necessitates students needing to learn and grow as capable and competent 21st century learners who are culturally competent, can collaborate, and have skills in critical thinking and reasoning and problem-solving. These trends are best addressed by advancing the educational qualifications of existing teachers.

Relevant Faculty Expertise and Commitment with Respect to the Program: Charter Oak State College has a longstanding history of offering early childhood education programs to CT based early childhood education centers, though public school paraeducators enroll in this program as well. The full-time staff currently includes a program director with a terminal degree, who has taught in the K-12 school system in the State of Virginia, an assistant director who is currently pursuing a terminal degree at University of Hartford, and an senior associate who is a certified special education teacher in CT, who is '*All but Dissertation*' (ABD) and expects to complete her terminal degree in spring 2025. Along with full-time staff expertise, the program leadership plans to interview and hire additional adjunct faculty with expertise in the trend areas listed above to develop courses within the program.

Description of other relevant specific institutional strengths and/or distinctive attributes that contribute to program: The Early Childhood Education program at Charter Oak State College is one of the highest enrolled (ECE) programs in the State of Connecticut. As a nontraditional, noncertification program, its graduates enroll in teacher certification programs and other online noncertification master's degree programs that can help them to advance in their careers. This unique strength of currently having an undergraduate enrollment of over 500 students will allow the college to market the new program directly to its students, instead of sending them to other institutions to earn their next degree.

An additional strength of Charter Oak State College is its commitment to offering online learning with fidelity. Courses are structured in a way that meets all accessibility guidelines. Course content is developed by expert faculty, but it is the instructional design team that ensures courses are standardized and accessible to all students. Course developers are able to make updates to courses at any time. However, changes to the online platform are made by the instructional design team only. The Charter Oak State College commitment to online learning reflects a strength in this program design.

The relationship of the program to the mission of the institution and CSCU (specifically, the program's relationship to current strategic priorities)

Charter Oak State College currently fulfills its mission of providing "diverse and alternative opportunities for *adults* to earn degrees" through undergraduate degrees as well as master's degrees in a variety of disciplines. As part of its long-range planning, the previous Board (BSAA) recognized the need to expand the range of its degree offerings to the graduate level to fully address its statutory mission for a workforce which continues to require more education. In response to this identified need, Charter Oak State College has continued to develop master's degree programs over the past 5-10 years. Charter Oak State College's current growth plan is to add targeted master's degree programs in education. The proposed program will

allow CT residents working in the education sector to increase their educational qualifications while also acquiring skills to support them in their work. Developing education programs at the master's degree level to meet the online learning needs of the adult learner who is already working full-time aligns with the Charter Oak State College mission.

The impact of the program on the institution; and the extent to which the program complements existing programs at the institution.

This program will complement existing programs since the college already offers multiple programs that can serve as feeders into this program:

- The Early Childhood Education and Child Studies programs currently have over 500 students enrolled. Graduates of this program are often looking to enroll in a master's degree program that does not lead to certification. These graduates often work in the over 3,000 Office of Early Childhood licensed Child Day Care Centers within Connecticut. While many are teachers, those desiring a master's degree are often promoted to positions as early childhood center directors, assistant directors, curriculum coordinators, etc. The advanced degree would help graduating undergraduates to earn promotions to leadership positions.
- The Alternative Route to Teacher Certification Program offers the CSDE 112 Teacher Certification for those seeking to work in the Birth-to-Three Early Intervention System, or to teach Pre-K or K in CT Public Schools. The ARC graduates do not have a master's degree, but this program would allow them to earn the degree so that they can advance in their positions within the public schools. The initial license earned upon graduation from the ARC program eventually needs to be converted to a professional license, which can only be done through completion of a master's degree program.

The potential quality of the proposed program in relation to comparable programs within and outside CSCU

GrayDI offers an innovative cloud-based program to examine the results of schools graduating students under the CIP code for this proposed program, which is 13.0301. In 2022, 63 students graduated from IHE's in CT with a Master of Science in Curriculum and Instruction, online only. Of the 63 graduates, there are only 9 reported graduates who live in CT who received the degree from an institution in CT. Nine students graduated from Sacred Heart University, and three received the degree from University of Hartford. Thirteen CT residents received the degree from Western Governor's University, and the remaining CT residents who received this degree did so from other schools located outside of Connecticut. There are no reported students who have earned this degree from a CSCU under this CIP code.

Nationally, Western Governor's University graduated 3,728 students in the Master of Science Curriculum and Instruction major in 2023. Their growth within this major is over 73% since the program first started in 2013. CT residents should not need to pay the high tuition rates at WGU to earn this degree but rather, deserve to earn it within the CSCU system.

Southern CT State University does off a similar program as a hybrid model, though CIP codes are not the same. SCSU focuses their degree on specific concentrations, such as computer science, digital teaching and learning, elementary education, equity and justice, science education, etc., to name a few. However, students still need to go to campus for some courses, which does not meet the needs of the adult learner who lives further away from the SCSU campus and needs a fully online option.

The Charter Oak State College program will be broader in scope than what is offered at SCSU, allowing students from multiple content areas to enroll. The program will be similar to what is offered at the University of Hartford. However, the benefit to CT residents will be that they can pay lower tuition rates offered through the college.

To summarize, the proposed program will allow all CT residents to earn this online degree at public, state institution, thereby increasing the potential quality since *CT's own system is best equipped to navigate the educational landscape within its own*

state, specifically in addressing the needs and initiatives from its Office of Early Childhood as well as State Department of Education.

Charter Oak State College plans to build upon this major over time, to include course electives related to early childhood education, educational technology, special education, bilingual education, adult education, urban education and educational psychology.

Fast Facts: Enrollment (98) (ed.gov)
Fewer U.S. college grads are getting education degrees | Pew Research Center
2024 Online Learning Statistics – Forbes Advisor
Gray Enhanced IPEDS Completions (2013 - 2023) - Overview | Sheet - Qlik Sense (grayassociates.com)

SECTION 3: NEED AND JUSTIFICATION

Addressing Identified Needs

How does the program address CT workforce needs and/or the wellbeing of CT communities? In your response, provide evidence of employment prospects, including specific job titles and estimated salary ranges, for graduates of the proposed program. For liberal arts and transfer-specific programs, demonstrate the need for the program in terms of student demand and/or program value, and, if applicable, describe specific transfer or employment opportunities for program graduates. *(Include and identify data sources, e.g., JobsEQ, Dept of Labor statistics, etc. Sample job postings, letters of support from employers and/or transfer/graduate/professional programs can be included as an appendix)*

This program aims to address CT's workforce needs and enhance the well-being of its communities. Currently, public school teachers in CT with a bachelor's degree face limited options within the CSCU system for pursuing an online master's degree. Charter Oak State College, with its unique asynchronous model designed for adult learners, offers a solution where students can balance other adult responsibilities while attending school.

However, as mentioned above, many teachers enroll in private programs with exorbitant tuition and fees, often resulting in significant debt due to student loans. Instead of using their increased salary from the advanced degree to improve their quality of life, teachers end up using that additional money to pay off student loans. This financial strain leads to career burnout, causing many educators to leave the field despite their professional excellence and dedication. This program will support CT public school teachers by providing more accessible and affordable options within public institutions.

In addition, the program addresses the workforce need by allowing teachers with a provisional license in CT to return to school to earn a professional license. Generally, these teachers are working under a 'Durational Shortage Area Permit' (DSAP) to help address shortages in specific subjects or districts. The following excerpt explains this policy.

'CT General Statutes (CGS) Section 10-145b(g) (as amended by PA 17-173) states that '... on or after July 1, 2018, to qualify for a professional educator certificate, a person who holds or has held a provisional educator certificate... shall hold a master's degree in an appropriate subject matter, as determined by the State Board of Education, related to such teacher's certification endorsement area'. Included in the list of acceptable degrees is a master's degree in Curriculum and Instruction. https://portal.ct.gov/-/media/sde/certification/masters_degree_policy_overview_nov_2017.pdf'

Finally, the CT State Department of Education has also approved Alternative Route to Teacher Certification Programs (ARC) through the Charter Oak State College, ACES (Area Cooperative Educational Services), CREC (Capitol Region Educational Council), and OHE (Office of Higher Education) to fulfill the need for teachers in shortage areas. Since ARC programs do not result in a degree, but rather, a provisional license, all graduates of ARC programs without a master's degree will return to school to earn the advanced degree to move the provisional license to professional. This program will also fulfill the need for ARC students, who are often career changes, to earn their professional license.

The following chart demonstrates the opportunity for position growth within various sectors of education to the position of instructional coordinator. It should be noted that these are entry-level wages and would be adjusted by district based on longevity of the teacher in working in the district, as well as prior experience if coming from outside the district. While this chart reflects the growth from teacher or childcare center director to instructional coordinator, additional positions are listed below.

	Median Annual Wage	Entry-Level Education	Master's Degree Curriculum and Instruction
Preschool/Kindergarten Teacher in Public Schools	$65,270.00	Bachelor's degree	$74,620.00
Elementary School Teacher	$63, 670.00	Bachelor's Degree	$74,620.00
Special Education Teacher	$65,910.00	Bachelor's Degree	$74,620.00
Child Day Care Center Director	$54,290.00	Bachelor's Degree or less	$74,620.00

Wage estimates for teachers can be found on this website: https://www.bls.gov/oes/current/oes_ct.htm#25-0000

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s) in the table below, along with the median estimated earnings (or salary range) for each. Add rows as needed.

SOC Code	SOC Title	Median Estimated Earnings
25.9031	Instructional Coordinator	$74,620.00
11.9032	Educational Administrators, K-Secondary	$103, 460.00
11.9031	Education and Childcare Administrators, Preschool and Day Care	$74, 620.00

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide the NAICS code(s) and title(s) in the table below. Add rows as needed.

NAICS Code	NAICS Title
611110	Elementary and Secondary Schools
624110	Child and Youth Services

624410	Child Care Services

Career/Program Pathways

Does this program prepare students for another program? ☐ Yes, specify program: ☒ **No**

Impact on related programming at the home institution

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at your institution:
  - AS in Early Childhood Education – CIP 13.1210
  - BS in Early Childhood Education – CIP 13.1210
  - Alternative Route to Teacher Certification (ARC) Program – CIP 13.1210
- ***Include enrollment and completion data for the past 5 years for each of these programs as an Appendix***
- How will the proposed program impact enrollment and completion in these existing programs? This program will *increase* enrollment since students will be recruited from the undergraduate degree programs as well as CT employers within the educational. The program is not expected to impact enrollment in its undergraduate programs.
- Are there plans to discontinue any of the existing similar programs? No
- What is the value added of the proposed program in relation to the existing programs? Existing students can remain with us once they complete their existing program and do not need to enroll in online only master's degree programs that either cost more to attend or are located outside of Connecticut.
- Briefly comment on the resources required for the proposed program in relation to the existing programs, e.g., does the proposed program make use of existing faculty and courses, how will the institution insure that reassignment of faculty or other resources from an existing program does not negatively impact that program, etc. (*specific details should be provided in the Budget section*): Charter Oak State College is restructuring its existing early childhood programs. The program director will manage the development of this program and will work with the other two FTE's in the department to hire faculty to develop courses. An effort will be made to recruit faculty from the CSCU system who may want to teach additional courses under the dual-employment guidelines.

Impact on related programming across CSCU

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at other institutions within CSCU:
  SCSU offers the M.S. in Curriculum and Instruction as a hybrid program. The Charter Oak State College program will be 100% online.
- ***Attach supplement 101a for each CSCU institution that has one or more similar programs***.
- How is the new program distinct from these existing programs? This program will be offered 100% online asynchronous.
- Explain why student or employer demand is not met through existing CSCU programs and provide an assessment of the sustainability/growth of the proposed and existing programs:
  - Degree programs offered at Charter Oak State College primarily enroll working professionals. These students require maximum flexibility in determining the pace of degree completion, the location of where to take courses, and when they can conduct their studies. Traditional on-ground or hybrid programs do not offer this degree of flexibility.

SECTION 4: STUDENT ENROLLMENT & RETENTION

Enrollment Projections

Complete Supplement B – Pro Forma Budget.

Summarize expected student enrollment and completion in the program over the first three years. Identify the sources for these projections, and describe any assumptions made. Note, in particular, any existing CSCU programs or stakeholder groups from which enrollment may be drawn.

The college will recruit new students from its ARC (Alternative Route to Teacher Certification) program and will also recruit from other

CSDE approved ARC programs in Connecticut. Graduates of these noncredit programs are required to complete a master's degree to move their initial certification to a professional license. In addition, the existing undergraduate non-certification programs at Charter Oak State College graduate many students each year who enroll in graduate programs outside of CT due to the need for a 100% online learning model. The college expects to enroll 30-40 students in its first year. The college will also recruit its alums.

The current advisors from the undergraduate and ARC programs receive feedback from existing and graduating students that they want to attend Charter Oak State College for their master's degree. This program will allow them to do so.

Prospective Students

Describe the prospective students for the program: This program is intended for adult learners who already have an undergraduate college degree. Applicants to this program may already have a teacher certification. However, certification is not required to enroll in this program. Graduates must have an undergraduate GPA of 3.0 to enroll.

(this information will be provided to OHE and become publicly available; your response can help market your program and recruit students):

Student Recruitment / Student Engagement

- Describe the marketing, advising, and other student recruitment activities to be undertaken to ensure the projected enrollments are achieved: Emails to existing students, and alums, postings on the ECE and other Educational Listservs, attendance at state conferences such as CT AEYC, Head Start, etc. mail and email to all school district HR office personnel, elementary school administrators, special education schools, charter schools, and early childhood programs in CT.
- What student engagement strategies will be employed to advance student retention and completion in program? Relationship-based academic advising model as well as synchronous virtual meetings with students.

Admission Requirements

Does this program have special admission requirements (i.e., beyond those required for the institution as a whole)?

☒ **Yes** ☐ No

If yes, describe the selection process, including all criteria:

Applicants must have an earned bachelor's degree from a regionally accredited institution, or international institution equivalent to a U.S. regionally accredited institution, with a grade point average of 3.0 or better. Applicants with GPAs between 2.7 and 3.0 will be considered. Their acceptance will be based upon their academic background, essay and experience. If accepted, they will need to earn grades of B or better in their first two courses to continue in the program.

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ **Yes** ☐ No

If yes, describe: Students will complete a capstone project related to curriculum and instruction within the educational setting of their choice.

Experiential Learning Requirements

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☐ Yes ☒ **No**

If yes, describe here and attach copies of the contracts or other documents ensuring program support in an appendix:

SECTION 5: CURRICULUM & ASSESSMENT

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. With as much detail as possible, map these learning outcomes to courses listed under the "Curriculum" section below.

1. Understand and apply theoretical foundations of education to curriculum in inclusive educational settings.
2. Design and evaluate standards-based curriculum and assessment in a variety of educational settings to meet the needs of diverse learners in inclusive educational settings.
3. Facilitate professional development and coaching with teachers in understanding and utilizing

differentiated teaching strategies with all learners.

4. Integrate technology in teaching and learning.
5. Understand and apply professional ethics in developing role as a leader in the education sector.
6. Understand the role of the family in supporting students in educational settings.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

At the course level, assessments will be on graded participation in discussions and assignments will be project-based and focus on having students apply what they learn to their current work settings. At the program level, a pre-assessment of student understanding will occur at the beginning of the program, with the final Capstone project being used to assess student learning to outcomes.

In accordance with NECHE Standard 4, Charter Oak's academic programs are consistent with and serve to fulfill its mission and purposes. Charter Oak works systematically and effectively to plan, provide, oversee, evaluate, improve, and assure the academic quality and integrity of its academic programs and the credits and degrees awarded. Charter Oak sets a standard of student achievement appropriate to the degree or certificate awarded and develops the systematic means to understand how and what students are learning and to use the evidence obtained to improve the academic program.

Overview of Charter Oak State College Program Review Process

- Program Reviewer/s will meet with Institutional Research Director to discuss data needed for analysis and incorporation into program internal review documentation.
- Program Reviewer/s conducts internal review and fills out the Charter Oak program review report. The program reviewer can be one or more teaching faculty and/or Program Director. Topics covered include: program enrollments, course enrollments, course success rates, program completions, faculty evaluations, program curriculum and course materials, Blackboard and ADA compliance, employment outcomes, equity gaps, equity plan, and enrollment and completion trend analysis.
- Program Reviewer/s presents internal review along with actions and recommendations to external reviewer/s (peers from another college, advisory board, etc.) and documents external reviewer's actions and recommendations.
- If the program falls under the definition of the BOR Low Completer Policy and the recommendation is to consolidate or continue the program, the justification as listed in the BOR Low Completer Policy must be included within the review.
- Program Reviewer/s will submit an electronic version of completed document to the Program Director and Provost for review and signatures of receipt. The Provost has authority to approve action plans outlined in the program review document.

After completion of the program review, an electronic copy is sent to Charter Oak's Academic Council (our governance) for review and feedback. An electronic copy is sent to Charter Oak's Cabinet and a 15-20-minute presentation by the lead program reviewer will take place at Cabinet to discuss findings, recommendations, and feedback from Cabinet.

Curriculum

*Please list all courses (core/major area of specialization, prerequisites, electives, required general education, etc.), by number and title, in the proposed program. Mark any new courses with an asterisk * and attach course descriptions. Note any core program courses that serve to fulfill general education requirements within the program. Insert/delete rows as needed; additional curriculum information (e.g., semester by semester sequences, course syllabi) to support this application can be attached in an appendix if desired.*

Course Number and Name	L.O. # (from Section 3)	Pre-Requisite(s)	Credit Hours
Program Core: Required & Elective Courses			
EDU 5XX- Foundations of Education	1		3
EDU 5XX- Curriculum Design Models in Pre-K-12 Education	1, 2		3
EDU 5XX- Differentiated Instruction	2		3
EDU 5XX- Digital Literacy in Teaching and Learning	4		3
EDU 5XX- Integrated Ed Program Models and Family Partnerships	6		3
EDU 5XX- Culturally Responsive Pedagogy	6		3
EDU 5XX- Standards-Based Instruction and Assessment	2		3
EDU 5XX- Foundations of Adult Learning	3, 5		3
EDU 5XX- Capstone	3, 5		3
Choice of 2 Electives			
EDU 5XX- Social and Emotional Learning for Children Birth-Age 8	2, 3, 4		3
EDU 5XX- Infant & Toddler Curriculum Development	2, 3, 4		3
EDU 5XX- Pre-K-K Curriculum Development	2, 3, 4		3
EDU 5XX- Early Elementary Curriculum Development	2, 3, 4		3
EDU 5XX- Early Childhood Evaluation, Assessment & Diagnosis	2, 3, 4		3
General Education Courses			
			0
Open Electives (*Indicate number of credits of open electives*)			0
Total Program Credits (must match number of credits reported on page 1)**:**			33

CSCU Transfer Pathways

CSCU four-year institutions and CT State Community College are required to collaborate on transfer pathways during new curriculum development.

CSU/COSC Bachelor's Degree Programs: Programs at four-year institutions should document how an existing Transfer Ticket, Liberal Arts and Science Degree, Pre-program, or other Transfer Track will articulate to the proposed program by completing the appropriate CSCU Pathway Articulation form. CSCU Pathway Articulation forms are available through the Academic and Student Affairs forms website. Completion of the form must be verified by the signature of the CSCU Director of Transfer and Articulation and the completed form should be submitted with this proposal.

- Identify the CT State Community College program that best articulates to the proposed program: N/A
  ☐ Liberal Arts & Science: ☐ A.A. only ☐ A.S. only ☐ A.A. or A.S.
  ☐ Transfer Ticket, specify:
  ☐ Other pre-program or transfer track, specify:

- With respect to this CT State degree program, which of the following is true?
  ☐ This associates degree will transfer and apply in whole (if students complete the degree) or in part (if students transfer before completing the degree) to the requirements for the proposed program
  ☐ Only the full completed associates degree will transfer and apply to the requirements for the proposed program (i.e., students must complete the degree to receive the full transfer benefit)
  ☐ Only a portion of the associates degree will transfer and apply to the requirements for the proposed program, even if students complete the full degree

- If students complete the above CT State degree, can the proposed program be completed in no more than 60 credits following transfer? ☐ Yes ☐ No, please explain:

Credit Summary	
CSU/COSC Proposed Program total credits:	credits
CT State program total credits:	credits
CT State program credits that can be applied to proposed degree:	credits
CSU/COSC general education credits remaining after transfer	credits
CSU/COSC program credits remaining after transfer	credits
Excess credit hours for CT State transfer students who have completed an associate degree	credits

CT State Community College Associate Degrees: As per Board policy, all new A.A. and A.S. degrees should consider transfer possibilities within the CSCU system (https://www.ct.edu/files/policies/1.13%20Policy_Statement_on_Associate_Degrees.pdf). With few exceptions, transfer associate degrees should be designed for transfer to any and all CSCU four-year institutions that offer the corresponding four-year degree. Associate degrees designed for transfer to CSU/COSC will follow Transfer and Articulation Policy (TAP) guidelines and processes (https://www.ct.edu/tap). CSCU Pathway Articulation forms are available through the Academic and Student Affairs forms website. Completion of the form(s) must be verified by the signature of the CSCU Director of Transfer and Articulation and the completed form(s) should be submitted with this proposal. Document below how the proposed degree program will articulate to CSCU and/or non-CSCU institutions.

- What is the primary purpose of the proposed degree? ☐ **Career** ☐ Transfer ☐ Both career and transfer
- Does the proposed degree include the Framework30? ☐ Yes ☐ **No,** please explain: **Does not apply**
- Following completion of a CT State transfer degree, students should be able to transfer to a CSU/COSC program that would require they complete no more than 60 credits following transfer. Identify all such four-year degree programs in the table below. Include the number of credits remaining to complete the four-year degree.

Institution	Program	# of credits remaining (if > 60, provide explanation)

- If the proposed degree also transfers to non-CSCU institutions, add the relevant information for those institutions to the table above and attach the corresponding articulation agreements to this proposal.

Internal Stackable Pathways

Describe any stackable pathways to, and/or from, this program to other programs at your own institution (e.g., certificate stackable to associates degree, accelerated pathways from bachelors to masters, etc.):

The undergraduate degree programs in Early Childhood Education and Child Studies at Charter Oak State College currently enroll many graduates from CT State who attended the community college knowing that their goal was public school teaching. Students tell advisors, during initial academic advising, that their goal is to become a public-school teacher. While the undergraduate degree programs do not offer the certification option, many students attend Charter Oak Stage College since the model of course delivery works for them, and they graduate and then move into a variety of graduate programs based on their area of specialization. Charter Oak State College offers the Alternative Route to Teacher Certification Program, from which graduates of the undergraduate programs can enroll, and then upon completion of ARC, they can enroll in this program.

Other Stackable Pathways

Use this section to describe any other pathways to/from the proposed program not captured above:

N/A

Program Evaluation

Describe how the quality and success of the program will be monitored during the first five years:

Direct and indirect assessment measures identified in Section 5 Assessment of Learning Outcomes will be utilized to assess degree program, course, and instructor quality. In addition, the program will monitor its recruitment efforts, applications, enrollment, retention, and graduation data. The program will also track data to the number of students who enroll within various content areas, such as early childhood education, elementary education, special education, etc. This data will help the college to assess its overall effectiveness for the purpose of continuing to develop the program and increase enrollment over time.

Assuring Equitable Outcomes

Equity (eliminating institutional performance disparities along dimensions of ability, ethnicity/race, economics, and gender) is one of the Board of Regents' Goals.

- What specific metrics will be used to assess equity across these dimensions in terms of recruitment, enrollment, retention, and completion? Charter Oak's program review template requires programs under review to assess recruitment, retention, enrollment and completion for both SES and race/ethnicity.
- Describe specific aspects of the program (e.g., interventions to address college readiness, targeted recruitment strategies, comprehensive supports, etc.) intended to advance equitable student outcomes. The undergraduate degree programs include a very diverse student population already. Since the college intends to begin its recruitment for this program from within its existing undergraduate programs, equity in enrollment should be addressed. Further, the program intends to recruit a diverse faculty for the program by advertising on Highered jobs as well as within the CSCU system.
- Where inequities are found, how will the data be used by program Equity gaps within the program via the program review process are required to develop an action plan for correction. Typically, this would require a redesign of targeted courses that contain any statistically significant equity gaps. Strategies include inclusive design principles and universal design of learning (UDL).

Additionally, the program will follow the guidelines of the NAEYC Advancing Equity Position Statement Recommendations for Educator Preparation Programs and Professional Development, which include:

- Preparing current and prospective early childhood educators to provide equitable learning opportunities for all children (can be adapted to all educational sectors).
- Work with students, community leaders, and public officials to address educational attainments in the specific communities served.
- Set and achieve measurable goals to recruit and retain a representative faculty across multiple dimensions.

Recommendations for those Facilitating Educator Preparation and Professional Development | NAEYC

SECTION 6: COST EFFECTIVENESS AND RESOURCES

- Institutions should demonstrate that they have the necessary resources and faculty expertise to maintain the proposed program and demonstrate reasonable evidence that the program is, or will be, fiscally sustainable.

Cost Effectiveness and Availability of Adequate Resources

Complete Supplement B: PRO FORMA Budget – Resources and Expenditure Projections.

Provide a narrative below regarding the cost effectiveness, availability of adequate resources, and sustainability for the proposed program. Add any annotations for the budget form below, as well.

Existing resource usage will be maximized in the development and administration of this degree program. The program will be managed by the existing Director of COSC's undergraduate education programs.

Special Resources

Provide a brief description of resources needed specifically for this program, including facilities (lab space, computer classrooms), instructional materials and equipment, specialized library collections, etc. Distinguish resources currently available and those requiring additional expenditures (*Include all costs in the Resources and Expenditures Projections spreadsheet*)

N/A. Current resources are sufficient.

Program Administration

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for

prospective hiring): Dr. Maureen Hogan | mhogan@charteroak.edu | (860) 515-3882

Describe the qualifications and assigned FTE load of the administrator/faculty member responsible for the day-to-day operations of the proposed academic program.

The existing undergraduate and Alternative Route to Teacher Certification Programs are managed by three FTE's. Two of the three existing FTE's are prior public-school teachers, two have experience in early childhood inclusive education programs, and one has experience specific to special education. The program director has over twelve years of experience teaching in higher education but also has over 20 years' experience working with children and staff directly and through the administration of early childhood education programs around the world. She currently serves as an Office of Early Childhood Approved Trainer in CT and is also trained to facilitate professional development experiences for teaching staff in New York.

While the undergraduate education programs at Charter Oak State College continue to grow in enrollment, the college is looking at ways to modify job descriptions for existing FTE's to allow the director to focus on developing this new program.

Program Faculty

How many new full-time faculty, if any, will need to be hired for this program? 0

If any new full-time hires, what percentage of program credits will they teach? 0

How many full-time faculty, if any, will teach in the program's core curriculum, including any proposed new hires? (*note: OHE requires a numerical response to this item*) 0

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? (*note: OHE requires a numerical response to this item*) 10

What percentage of program credits will be taught by adjunct faculty? 100%

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program: Preferred faculty qualifications will include applicants with a doctoral degree. However, the program will consider hiring faculty who are enrolled in a doctoral program through an accredited institution. Professional experience will also be a major factor considered during the hiring process since subject matter experts will be important for the programs success.

Complete the table below to include current full-time faculty who will be teaching in this program and their qualifications. If you anticipate hiring new faculty for this program, you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program. Add rows as needed.

Faculty Name and Title	Highest Degree & Institution of Highest Degree	Area of Specialization/ Pertinent Experience	Other Administrative or Teaching Responsibilities
To be hired (5-6)	Doctorate	Early Childhood Education, Special Education, Elementary Education, Curriculum and Instruction, Adult Education, Technology and Equity. Must have at least 5-10 years' experience in practice.	Develop courses, teach, and monitor new faculty who are hired to teach
To be hired (2-3)	Doctorate (ABD)		
To be hired (2-3)	Doctorate (Enrolled in program)		

***Reminder:** Be sure the document name includes the names (or abbreviations) of your institution and program when you submit this document.

Completed forms should be submitted to CSCU Academic and Student Affairs office by email (CSCU-ACandASASub@ct.edu)

APPENDIX

Enrollment & Completion Data for Related Programs at COSC:

☐

Registered Students by Program

Program	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Prelim Fall 2024
AS in Early Childhood Education	30	39	49	54	70
BS in Early Childhood Education	159	171	155	185	198
Alternate Route to Certification	33	24	20	26	26
Total	**222**	**234**	**224**	**265**	**294**

Completions by Program

Program	FY20	FY21	FY22	FY23	FY24
AS in Early Childhood Education	4	11	8	11	8
BS in Early Childhood Education	17	41	36	45	35
Alternate Route to Certification	14	5	13	15	20
Total	**35**	**57**	**57**	**71**	**63**

Course Descriptions-

EDU 5XX- Foundations of Education- In this course, students will explore the historical, philosophical, and sociological influences that shape education systems in the U.S. today. Through online discussions and project-based learning experiences, participants will examine key educational theories and their application in various contexts. Students will reflect on their teaching practices and the role of education in promoting social justice and equity to students. Students will also explore contemporary issues facing education today, such as curriculum development, assessment strategies, and the impact of technology on student learning. By the end of the course, participants will have a deeper understanding of the foundational principles of education and will be equipped to foster a more inclusive and effective learning environment.

EDU 5XX- Differentiated Instruction- This course will support educators in learning to design effective strategies to meet the diverse learning needs of all students. By embracing various teaching methods, assessments, and materials, educators will learn to tailor their instruction to students' by considering their readiness to learn, interests, learning profiles. Participants will explore practical techniques that they can use with students to promote a more inclusive classroom environment. Through online discussions and learning experiences tied to their work with a particular age group, students will enhance their skills in facilitating meaningful and engaging learning experiences that promote growth for every learner. This course will provide students with a deeper understanding of student-centered learning and will empower teachers to adapt their instruction and maximize student success.

EDU 5XX- Curriculum Design Models in Pre-K-12 Education- This course on Curriculum Design Models in Pre-k-12 Education provides educators with essential frameworks and strategies to create effective and engaging curricula tailored to diverse learning needs. Participants will explore various curricular models, including backward design, Universal Design for Learning, and inquiry-based learning, and learn how to align these models with educational standards and assessment practices. Through collaborative activities, case studies, and practical applications, educators will gain insights into integrating technology, fostering inclusivity, and promoting critical thinking skills. Participants will learn to develop, implement, and evaluate curricula that enhances student learning outcomes in Pre-k-12 settings.

EDU 5XX- Digital Literacy in Teaching and Learning- This Digital Literacy in Teaching and Learning course will support educators in developing essential skills to effectively integrate technology into their curriculum. Participants will explore methods for enhancing digital comprehension and fostering critical thinking among students. Topics include evaluating online resources, utilizing digital tools for collaboration, and implementing best practices for online safety. Through online activities and learning experiences, educators will learn to create engaging learning environments that empower students to navigate technology in ways that support their learning.

EDU 5XX- Integrated Ed Program Models and Family Partnerships-In this course, students will explore innovative strategies for working with families that foster family engagement in the learning process. Students will examine various models of family, school, and community partnerships that when implemented can empower families to become active participants in their children's education. Through online discussions and applied learning experiences, students will develop skills to involve families in the teaching and learning of students. This course ultimately aims to strengthen teacher understanding of the need to form effective partnerships with all families.

EDU 5XX- Culturally Responsive Pedagogy- This course on Culturally Responsive Pedagogy aims to equip educators with the knowledge and skills necessary to create inclusive and responsive learning environments. Participants will explore various cultural frameworks, examine their own biases, and learn effective strategies for integrating students' cultural backgrounds into the curriculum. The course emphasizes the importance of fostering strong relationships with students and their communities while promoting equity and engagement in the classroom. Through online discussions, collaborative learning experiences, and reflective practices, students will develop practical tools to meet the diverse needs of their students, ensuring equitable and inclusive learning opportunities for all.

EDU 5XX- Standards-Based Instruction and Assessment- In this course, students will learn essential strategies for designing and implementing effective curricula aligned with educational standards. Participants will explore the principles of standards-based education, understand the significance of alignment between curriculum, instruction, and assessment, and learn how to create assessments that accurately measure student learning. Through online discussions and practical applied learning experiences, educators will gain the skills necessary to develop curricula that ties standards to instruction and assessment. Emphasis will be placed on data-driven decision making and adjusting teaching practices to meet diverse student needs that are based on assessment results. This comprehensive course will prepare educators to enhance their instructional practices while ensuring accountability and promoting student success.

EDU 5XX- Foundations of Adult Learning - This Foundations of Adult Learning course provides essential insights into the principles and practices of adult education. Participants will explore various learning theories, including andragogy, and examine the unique characteristics of adult learners. Emphasis is placed on understanding motivation, experiential learning, and the importance of creating a supportive learning environment. Through online discussions and practice-based learning experiences, students will develop skills to design and facilitate professional development learning experiences tailored for adults, to include effective strategies for coaching.

EDU 5XX- Capstone – In this course, students will synthesize their knowledge and skills in curriculum development and instructional practices. Students will design and implement a comprehensive curriculum project that addresses real-world educational challenges. Students will demonstrate skills in researching online and collaborating with peers in the design of a project that they will share with faculty and peers.

EDU 5XX- Social and Emotional Learning- This course will prepare educators to attend to the social and emotional learning needs of all students by helping them to develop emotional intelligence, resilience, and social skills to live and work as productive citizens in this world. Participants engage with cutting-edge research, practical strategies, and interdisciplinary approaches to foster positive relationships and mental well-being. Through experiential learning experiences, students will develop competencies to design and implement effective SEL programs, addressing the emotional needs of diverse populations. Overall, this course will empower students to advocate for and implement transformative SEL initiatives that enhance personal and social development.

EDU 5XX- Infant and Toddler Curriculum Development- The course in Infant and Toddler Curriculum Development is designed to educators and caregivers with advanced skills and knowledge to create effective learning experiences for young children. This course emphasizes theoretical frameworks and practical applications related to early childhood development, focusing on topics such as developmental milestones, play-based learning, and inclusive practices. Participants will learn to design age-appropriate curricula for children ages birth-3 that foster physical, cognitive, and social and emotional growth. The course will also emphasize early learning and development standards for infants and toddlers and how to assess child development to ensure that the needs of children in this age group are met. Students will also understand the term 'developmental delay' and how to include families in development a care plan for early intervention for young children. Through online discussions and applied learning experiences, students will gain the expertise needed to support and enhance the developmental journey of infants and toddlers in diverse settings.

EDU 5XX- Pre-K-K Curriculum Development – This course in Pre-K/K Curriculum Development is designed for educators and administrators seeking to enhance their expertise in early childhood education. The course emphasizes the principles of developmentally appropriate practices, focusing on creating engaging and effective curricula for preschool and kindergarten settings. Participants will review foundational theories in child development, learn to design effective experience plans, and assess student learning outcomes. By the end of the course, students will develop a comprehensive curriculum project, showcasing their skills in creating enriching learning environments that foster creativity, critical thinking, and socio-emotional growth among young learners. This course is ideal for those committed to advancing their knowledge and making a positive impact in the field of early childhood education.

EDU 5XX- Early Elementary Curriculum Development – In this course, students will acquire skills to design, implement, and assess effective curriculum tailored for young learners in the early primary grades. Students will explore developmental theories, learning styles, and diverse educational practices to foster an engaging and inclusive classroom environment. Participants will learn how to integrate technology, promote critical thinking, and align curriculum with educational standards. Emphasis is placed on collaborative project work, allowing students to develop practical curriculum plans while considering the diverse needs of children in the early elementary grades. Students will develop an in-depth understanding of the need to consider child development when planning instruction for the early elementary school student.

EDU 5XX- Early Childhood Evaluation, Assessment & Diagnosis – This course is designed for professionals seeking to enhance their skills in evaluating and diagnosing the developmental and educational needs in young children ages birth-age 8. This course covers essential theories, methodologies, and practical applications of various assessment tools and techniques. Students will engage in critical analysis of developmental milestones, learn to

interpret assessment data accurately, and understand the importance of culturally responsive practices. Emphasis is placed on effective communication strategies with families and interdisciplinary collaboration while adhering to ethical standards. children's growth and development in diverse settings.

Reference:

OpenAI. (2023). AI Teaching Assistant Pro. https://www.aiteachingassistantpro.ca/course

CSCU Academic & Student Affairs

Application for **New Program Approval**

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

*APPLICATION FOR **NEW PROGRAM APPROVAL — SUPPLEMENT B***

PRO FORMA BUDGET

Institution: Charter Oak State College Program: MS Curriculum & Instruction

Resources and Expenditures Projections (whole dollars only)

PROJECTED Enrollment	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Internal Transfer (from other programs																		
New Students (first time matriculating)	1	14	0	10			4	26	0	14			5	45	0	20		
Continuing Students progressing to credential			1	14	0	10	1	20	4	38	0	15	2	38	4	70	0	20
Headcount Enrollment	1	14	1	24	0	10	5	46	4	52	0	15	7	83	4	90	0	20
Total Estimated FTE per Year[1]	26						65.5						107.5					

PROJECTED Program Revenue	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Tuition[2]	6,763	50,246	6,763	86,136	0	35,890	33,815	165,094	27,052	186,628	0	53,835	47,341	297,887	27,052	323,010	0	71,780
Tuition from Internal Transfer[2]																		
Program Specific Fees (lab fees, etc.)																		
Other Revenue (annotate in narrative)																		
Total Annual Program Revenue	185,798						466,424						767,070					

PROJECTED Program Expenditures[3]	First Year	Second Year	Third Year
Administration (Chair or Coordinator)[4]	26,667	28,000	29,400
Faculty (Full-time, total for program)[4]	26,667	28,000	29,400
Faculty (Part-time, total for program)[4]			
Support Staff (lab or grad assist, tutor)	175,000	0	0
Library Resources Program	25,000	26,250	27,563
Equipment (List in narrative)	5,000	5,250	5,513
Other[5]	10,000	10,500	11,025
Estimated Indirect Costs[6]	0	0	0
Total Expenditures per Year	308,145	202,617	283,113

NOTE: Existing regulations require that: "an application for a new program shall include a complete and realistic plan for implementing and financing the proposed program during the first cycle of operation, based on projected enrollment levels; the nature and extent of instructional services required; the availability of existing resources to support the program; additional resource requirements; and projected sources of funding. If resources to operate a program are to be provided totally or in part through reallocation of existing resources, the institution shall identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

[1] 1 FTE = 12 credit hours for both undergraduate and graduate programs; both for Fall & Spring, the formula for conversion of part-time enrollments to Full-Time Equivalent (FTE): Divide part-time enrollment by 3, and round to the nearest tenth - for example 20 part-time enrollees equals 20 divided by 3 equals 6.67 or 6.7 FTE.

[2] Revenues from all courses students will be taking.

[3] Capital outlay costs, instructional spending for research and services, etc. can be excluded.

[4] If full-time person is solely hired for this program, use rate time; otherwise, use a percentage. Indicate if new hires or existing faculty/staff. Record Salary and Fringe Benefits, accordingly.

[5] e.g. student services. Course development would be direct payment or release time; marketing is cost of marketing that program separately.

[6] Check with your Business Office – community colleges have one rate; the others each have their own. Indirect Costs might include such expenses as student services, operations, and maintenance.

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Approval of a New Program

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a Data Analytics program (CIP Code: 30.7101, OHE# TBD) leading to a Bachelor of Science degree at Charter Oak State College; and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020.

A True Copy:

_____

Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Establishment of a new Data Analytics program leading to a Bachelor of Science degree at Charter Oak State College.

Name of Institution	Charter Oak State College	
Name of Program	Data Analytics	
CIP Code	30.0701	
OHE# (Leave blank for new programs)		
Degree Level	Bachelor of Science	
Number of Collegiate Credits	48	
Date of Action (Anticipated)	12/19/2024	
Nature of Request	X Licensure and Accreditation _ Program Change _ Phase-out Program _ Terminate Program	
If Name Change, New Name		
Delivery	Current (If not a new program) _ On Ground _ Hybrid _ Online	Future _ On Ground _ Hybrid X Online
Effective Term	Fall 2025	
If a Discontinuation, date of Termination	N/A	
If a Suspension, dates of Suspension	N/A	

PROPOSAL AND RATIONALE

The proposed Bachelor of Science in Data Analytics program aims to equip students with the essential knowledge, skills, and competencies required to excel in the rapidly evolving field of data analysis. The program will foster a strong foundation in data science principles, statistical methods, and technological tools, enabling graduates to extract meaningful insights from complex datasets and make informed data-driven decisions.

Data obtained through Gray DI (Decision Intelligence) revealed a high Student Demand and strong Employment outcomes for baccalaureate level data analytics degree programs in CT. Gray DI's cutting-edge Program Evaluation System (PES) reported that national completions for the program stand at 3,277, ranking in the 93rd percentile, while the sum of onground and online completions in Connecticut is 37, also at the 93rd percentile. The program's greatest strength lies in its high Student Demand, with a Google Search Volume of 34,780 at the 98th percentile, and robust Employment

prospects indicated by an Entry Level Salary of $76,896 and a Post Entry Level Median Salary of $115,276 at the 97th percentile.

PRO FORMA

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this new program. CSCU's Academic Affairs concurs with this recommendation.

12/6/2024 – BOR - Academic and Student Affairs Committee
12/19/2024 – Board of Regents

CSCU Academic & Student Affairs

Application for **New Program Approval**

SECTION 1: GENERAL INFORMATION

Date of Submission to CSCU Office of the Provost: 10/23/2024

Institution: Charter Oak State College
Most Recent NECHE Institutional Accreditation Action and Date: **Fall 2016**

Program Characteristics

Name of Program: **Data Analytics**

Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science:* **Bachelor of Science (B.S.)**

Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses

Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both

Anticipated Program Initiation Date: **Fall 2025**

Anticipated Date of First Graduation: **Spring 2027**

Total # Credits in Program: 48

Credits in General Education: **40**

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years*: **4 years**

CIP Code Number: **30.7101** Title of CIP Code: **Data Analytics, General**

Department where program is housed: **Business & Technology**

Location Offering the Program *(e.g., main campus:* **Online, Asynchronous**

Provide estimated cost of program (tuition and fees): $ **OR** url for link to tuition/fee information:
https://www.charteroak.edu/catalog/current/fees_financial_aid_scholarships/undergraduate-current-fees.php

Request for SAA Approval for Veterans Benefits? ☒ **Yes** ☐ No

Program website: https://www.charteroak.edu/bachelors/

Provide the intended catalog description for this program:

Immerse yourself in the world of data with Charter Oak State College's Bachelor of Science (BS) in Data Analytics comprehensive degree program. Through a rigorous curriculum, you'll gain a solid foundation in programming languages like Python, data structures, and algorithms. Explore the intricacies of data science, machine learning, and artificial intelligence, while mastering essential tools like SQL and Power BI. Our program culminates in a capstone project where you'll apply your knowledge to real-world data challenges. Prepare to become a skilled data analyst capable of extracting valuable insights and driving informed decision-making. The program is designed to allow students the ability to earn career advancement certificates such as the Microsoft Power BI Data Analyst Professional Certificate, Google Data Analytics Certificate, Scrumaster-Agile Certificate, and COSC AI Practitioner Certificate (optional) while pursuing the degree.

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: CIP: OHE#: BOR Accreditation Date:
Phase Out Period Date of Program Termination
Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional licensure,
  - identify credential:
  - confirm NC-SARA requirements met: ☐ **Yes X** ☐ No

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

CSCU Academic & Student Affairs

Application for **New Program Approval**

Institutional Contact for this Proposal

Name: **Dr. David Ferreira**

Title: **Provost, COSC**

Phone: **(860) 515-3727**

Email: **dferreira@charteroak.edu**

When was the program approved by (insert date in mm/dd/yyyy format):

- College/School: 10/16/2024
- Curriculum committee: 10/16/2024
- Faculty senate: 10/25/2024
- Institutional president: 10/25/2024

NOTES:

- Please rename your completed application to include your institution and the degree name and type in the file name (e.g., SCSU DataSci MS 101 New Program Application) and submit your completed application to CSCU-ACandASASub@ct.edu by the posted deadlines (https://www.ct.edu/academics/approval)
- All applications to establish a new program will be considered for both Licensure and Accreditation by the BOR
- New programs include: degrees, degrees with option(s), degrees with certificates(s), stand-alone credit bearing certificates
- Use Form 102 *New Academic Offering – Below Threshold Report* for new:
  - degree minors, concentrations, or specializations
  - undergraduate certificates or programs ≤ 30 credits within an approved program
  - undergraduate certificates ≤ 15 credits
  - graduate certificates ≤ 12 credits
  - non-credit bearing certificates
  - programs that do not qualify students to become eligible for federal financial aid

SECTION 2: PROGRAM OVERVIEW: PURPOSE AND GOALS

In this section, provide an overview of the purpose and goals of the proposed program. Your narrative should include the following:

- clear statement of the program's purpose
- statement describing how the program meets students' educational goals and career objectives
- description of relevant national or local educational trends and connection of these to the program
- discussion of relevant faculty expertise and commitment with respect to the program
- description of other relevant specific institutional strengths and/or distinctive attributes that contribute to program
- the relationship of the program to the mission of the institution and CSCU (specifically, the program's relationship to current strategic priorities)
- the impact of the program on the institution; and the extent to which the program complements existing programs at the institution.
- the potential quality of the proposed program in relation to comparable programs within and outside CSCU

OBJ The proposed Bachelor of Science in Data Analytics program aims to equip students with the essential knowledge, skills, and competencies required to excel in the rapidly evolving field of data analysis. The program will foster a strong foundation in data science principles, statistical methods, and technological tools, enabling graduates to extract meaningful insights from complex datasets and make informed data-driven decisions.

The proposed program aligns with the growing demand for data analytics professionals in today's data-driven world. Program Learning Objectives were developed based on industry needs, KSAs - knowledge, skills, and abilities, collected by the Business Higher Education Forum (BHEF).

The proposed program will be supported by a dedicated team of faculty members with expertise in data analytics, statistics, computer science, and related fields. These faculty members will bring their knowledge and experience to the virtual classroom, providing students with a rigorous and engaging learning environment.

The proposed program will leverage the institution's existing strengths in online programmatic delivery and addressing Connecticut and National workforce demand. The program supports COSC's strategic priority of Growth and aligns with the institution's mission of fostering the potential of current and future working professionals by providing dynamic and industry-relevant online education to advance success in a global society through affordability, collaboration, and learning experiences that can occur inside and outside the virtual classroom. By offering this program, the institution will contribute to the development of skilled data analysts who can drive innovation and economic growth in the region. The program also supports CSCU's goal of Innovation & Economic Growth.

The proposed program will have a positive impact on the institution by attracting new students and expanding its academic offerings, The program will complement existing programs in CSCU by providing students with a broader range of educational options and career pathways related to data science and data analytics. The degree will also prepare students with a desire to focus on healthcare data to progress into a Master of Science in Health Informatics at Charter Oak State College. There will be a minimum residency requirement of 12 credits.

SECTION 3: NEED AND JUSTIFICATION

Addressing Identified Needs

How does the program address CT workforce needs and/or the wellbeing of CT communities? In your response, provide evidence of employment prospects, including specific job titles and estimated salary ranges, for graduates of the proposed program. For liberal arts and transfer-specific programs, demonstrate the need for the program in terms of student demand and/or program value, and, if applicable, describe specific transfer or employment opportunities for program graduates. *(Include and identify data sources, e.g., JobsEQ, Dept of Labor statistics, etc. Sample job postings, letters of support from employers and/or transfer/graduate/professional programs can be included as an appendix)*

Data obtained through Gray DI (Decision Intelligence) revealed a high Student Demand and strong Employment outcomes for baccalaureate level data analytics degree programs in CT. Gray DI's cutting-edge Program Evaluation System (PES) reported that national completions for the program stand at 3,277, ranking in the 93rd percentile, while the sum of on-ground and online completions in Connecticut is 37, also at the 93rd percentile. The program's greatest strength lies in its high Student Demand, with a Google Search Volume of 34,780 at the 98th percentile, and robust Employment prospects indicated by a Post Entry Level Median Salary of $115,276 at the 97th percentile. The program's Student Demand is notably strong, evidenced by a Google Search Volume of 34,780 that places it in the top echelon at the 98th percentile. Additionally, New Student Enrollment Volume is robust with a value of 84 and an impressive ranking at the 96th percentile. The Google Search YoY Unit Change shows an increase of 740 units, maintaining a high standing at the 93rd percentile. Employment prospects for graduates are excellent; an Entry Level Salary of $76,896 ranks in the top tier at the 94th percentile. The Post Entry Level Median Salary further underscores this strength with a value of $115,276 and an even higher rank at the 97th percentile. Job Postings per Graduate stand at a balanced ratio of 1.1, placing it squarely in the middle at the 51st percentile.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s) in the table below, along with the median estimated earnings (or salary range) for each. Add rows as needed.

SOC Code	SOC Title	Median Estimated Earnings
15.0251	Data Scientists	$54.21/hour
15.0251.01	Business Intelligence Analysts	$51.93/hour

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide the NAICS code(s) and title(s) in the table below. Add rows as needed.

NAICS Code	NAICS Title
518210	Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services
Click or tap here to enter text.	Click or tap here to enter text.

Career/Program Pathways

Does this program prepare students for another program? ☐ **Yes**, specify program: **Master of Science, Health Data Analytics (formerly Health Informatics)**

Impact on related programming at the home institution

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at your institution: N/A
- ***Include enrollment and completion data for the past 5 years for each of these programs as an Appendix: N/A***
- How will the proposed program impact enrollment and completion in these existing programs? N/A
- Are there plans to discontinue any of the existing similar programs? N/A
- What is the value added of the proposed program in relation to the existing programs? N/A
- Briefly comment on the resources required for the proposed program in relation to the existing programs, e.g., does the proposed program make use of existing faculty and courses, how will the institution insure that reassignment of faculty or other resources from an existing program does not negatively impact that program, etc. (*specific details should be provided in the Budget section*):
  - N/A

Impact on related programming across CSCU

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at other institutions within CSCU: None of the other CSCU institutions have a Data Analytics program. ECSU and SCSU have Data Science programs but they are not in a 100% online format.
- ***Attach supplement 101a for each CSCU institution that has one or more similar programs***.
- How is the new program distinct from these existing programs? This program will be offered 100% online asynchronous.
- Explain why student or employer demand is not met through existing CSCU programs and provide an assessment of the sustainability/growth of the proposed and existing programs:

SECTION 4: STUDENT ENROLLMENT & RETENTION

Enrollment Projections

Complete Supplement B – Pro Forma Budget.

Summarize expected student enrollment and completion in the program over the first three years. Identify the sources for these projections, and describe any assumptions made. Note, in particular, any existing CSCU programs or stakeholder groups from which enrollment may be drawn.

Data from Gray DI suggests that there is room for more graduates to fill the market need, particularly those in quantitatively inclined programs, like computer science majors. This program will draw some enrollment from CT State Community College through the Tuition Match program. The estimated enrollment target at the end of the first three years is about 60-75 students.

Prospective Students

Describe the prospective students for the program *(this information will be provided to OHE and become publicly available; your response can help market your program and recruit students)*: Prospective students include high school graduates who excelled in math and science courses, as well as those with an interest in computer science or economics. Transfer students from community colleges or other universities, and working professionals looking to formalize their skills or change careers, might also be drawn to the program. These students would share a fascination with data and its potential to solve real-world problems, along with a willingness to learn new technologies and programming languages.

Student Recruitment / Student Engagement

- Describe the marketing, advising, and other student recruitment activities to be undertaken to ensure the projected enrollments are achieved: Marketing efforts will focus on developing a strong online presence through a dedicated website, active social media accounts, and targeted digital marketing campaigns. These will be complemented by traditional marketing methods such as brochures and participation in college fairs. Content marketing will showcase the program's value proposition, curriculum, and career opportunities. The program will organize information sessions and outreach programs. The college admissions team will guide prospective students through the application process and provide insights into the program structure and career pathways. Regular follow-ups, personalized communication, and a streamlined application process will help convert inquiries into enrollments, ensuring the program meets its projected student numbers. **CT Community College Tuition Match Program:** The College currently offers graduating community college students with a minimum GPA of 2.0 the opportunity to enroll at Charter Oak at the current community college rate. The Marketing Department produces and direct mails a series of oversized postcards detailing the offer and all of the online programs we have that they can take advantage of. We will add the Data Analytics program to this direct mail effort. The Community College of Vermont (CCV) has also expressed interest in a 2+2 articulation agreement.

- What student engagement strategies will be employed to advance student retention and completion in program? Each student will be assigned a dedicated academic advisor who will provide ongoing guidance, help with course selection, and monitor academic progress. Regular check-ins will allow for early identification of struggling students and prompt intervention. Students will have free access to Brainfuse, an online tutoring service offering 24/7 support across various subjects. This service will allow students to receive personalized academic assistance whenever they need it, reinforcing classroom learning and helping them overcome academic challenges. Additionally, students will have access to TimelyMD, a telehealth service providing free, round-the-clock medical and mental health support.

Admission Requirements

Does this program have special admission requirements (i.e., beyond those required for the institution as a whole)?

No

If yes, describe the selection process, including all criteria: **n/a**

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ **Yes**

If yes, describe: **Data Analytics Capstone in the final semester**

Experiential Learning Requirements

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☒ **No**

If yes, describe here and attach copies of the contracts or other documents ensuring program support in an appendix: **n/a**

SECTION 5: CURRICULUM & ASSESSMENT

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. With as much detail as possible, map these learning outcomes to courses listed under the "Curriculum" section below.

1. Demonstrate foundational knowledge of data science concepts, including data types, statistical measures, database structures, and data analysis techniques for practical applications.
2. Apply programming languages and industry-standard tools to perform comprehensive data cleaning, manipulation, analysis, and visualization tasks.
3. Analyze large datasets to uncover patterns, trends, and relationships, evaluating data quality and integrity to ensure reliable insights.
4. Design and implement data analytics solutions from data collection through to visualization and reporting, integrating agile methodologies for iterative and collaborative project development.
5. Develop and train machine learning models, assessing their effectiveness and optimizing them for predictive accuracy in real-world applications.
6. Evaluate artificial intelligence techniques and generative models, applying them to create new data based on existing datasets and solve complex analytical problems.
7. Synthesize knowledge of data science, programming, and analytical methods to produce high-quality, actionable insights that inform decision-making in various contexts.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

In accordance with NECHE Standard 4, Charter Oak's academic programs are consistent with and serve to fulfill its mission and purposes. Charter Oak works systematically and effectively to plan, provide, oversee, evaluate, improve, and assure the academic quality and integrity of its academic programs and the credits and degrees awarded. Charter Oak sets a standard of student achievement appropriate to the degree or certificate awarded and develops the systematic means to understand how and what students are learning and to use the evidence obtained to improve the academic program.

Overview of Charter Oak State College Program Review Process

- Program Reviewer/s will meet with Institutional Research Director to discuss data needed for analysis and incorporation into program internal review documentation.
- Program Reviewer/s conducts internal review and fills out the Charter Oak program review report. The program reviewer can be one or more teaching faculty and/or Program Director. Topics covered include: program enrollments, course enrollments, course success rates, program completions, faculty evaluations, program curriculum and course materials, Blackboard and ADA compliance, employment outcomes, equity gaps, equity plan, and enrollment and completion trend analysis.
- Program Reviewer/s presents internal review along with actions and recommendations to external reviewer/s (peers from another college, advisory board, etc.) and documents external reviewer's actions and recommendations.
- If the program falls under the definition of the BOR Low Completer Policy and the recommendation is to consolidate or continue the program, the justification as listed in the BOR Low Completer Policy must be included within the review.
- Program Reviewer/s will submit an electronic version of completed document to the Program Director and Provost for review and signatures of receipt. The Provost has authority to approve action plans outlined in the program review document.

After completion of the program review, an electronic copy is sent to Charter Oak's Academic Council (our governance) for review and feedback. An electronic copy is sent to Charter Oak's Cabinet and a 15-20-minute presentation by the lead program reviewer will take place at Cabinet to discuss findings, recommendations, and feedback from Cabinet.

Curriculum

*Please list all courses (core/major area of specialization, prerequisites, electives, required general education, etc.), by number and title, in the proposed program. Mark any new courses with an asterisk * and attach course descriptions. Note any core program courses that serve to fulfill general education requirements within the program. Insert/delete rows as needed; additional curriculum information (e.g., semester by semester sequences, course syllabi) to support this application can be attached in an appendix if desired.*

Course Number and Name	L.O. # (from Section 3)	Pre-Requisite(s)	Credit Hours
Program Core: Required & Elective Courses			
ITE 115: Program Logic and Design with Python	1 & 2	CSS 101: Cybersecurity Fundamentals	3
ITE 2XX: Software Development Methodologies and Languages	2 & 4	ITE 115: Program Logic and Design with Python	3
ITE 2XX: Data Structures and Algorithms	1 & 3	ITE 115: Program Logic and Design with Python	3
DAT 2XX: Principles of Data Science*	1, 4, & 7		3
ITE 3XX: Introduction to Artificial Intelligence and Generative AI*	5 & 6	ITE 115: Program Logic and Design with Python	3
ITE 4XX: Introduction to Machine Learning*	5 & 6	ITE 3XX: Introduction to Artificial Intelligence and Generative AI	3
ITE 1XX: Introduction to Databases & SQL Programming*	1 & 2	ITE 115: Program Logic and Design with Python	3
ITE 2XX: Data Preparation & Processing*	2 & 3	DAT 2XX: Principles of Data Science*	3
ITE 2XX: Introduction to R Programming*	2 & 3	ITE 105: Computer Information Systems	3
ITE 3XX: Data Analysis with Python*	2, 3, & 6	ITE 115: Program Logic and Design with Python	3
DAT 3XX: Data Analysis Techniques*	1, 3, & 5	DAT 2XX: Principles of Data Science	3
DAT 3XX: Data Modeling with Power BI*	2, 4, & 7	DAT 3XX: Data Analysis Techniques	3
DAT 4XX: Data Visualization with Power BI*	2, 3, & 7	DAT 3XX: Data Analysis Techniques	3
MGT 4XX: Agile Development and Management	4	ITE 2XX: Software Development Methodologies and Languages	3
ITE 3XX: Cloud Foundations*	1 & 4	ITE 115: Program Logic and Design with Python	3

DAT 4XX: Capstone	4 & 7	Taken in last semester/term	3
General Education Courses			
Written Com I (ENG 101)			3
Written Com II			3
Oral Communication			3
Arts and Humanities (recommend Ethical AI course here)			3
Quantitative Reasoning (Statistics)			3
Scientific Reasoning			4
Scientific Knowledge and Reasoning			3
Historical Knowledge			3
Social and Behavioral Sciences			3
Continued Learning/Information Literacy (IDS 101)			3
Diversity, Equity, and Inclusion			3
Innovative Thinking (Recommend Six Sigma Yellow Belt)			3
Open Electives (*Indicate number of credits of open electives*)			32
Total Program Credits (must match number of credits reported on page 1)**:**			120

CSCU Transfer Pathways

CSCU four-year institutions and CT State Community College are required to collaborate on transfer pathways during new curriculum develop.

CSU/COSC Bachelor's Degree Programs: Programs at four-year institutions should document how an existing Transfer Ticket, Liberal Arts and Science Degree, Pre-program, or other Transfer Track will articulate to the proposed program by completing the appropriate CSCU Pathway Articulation form. CSCU Pathway Articulation forms are available through the Academic and Student Affairs forms website. Completion of the form must be verified by the signature of the CSCU Director of Transfer and Articulation and the completed form should be submitted with this proposal.

- Identify the CT State Community College program that best articulates to the proposed program: **CT State Computer Information Systems: Data Analytics (CISD-AS)**

  ☐ Liberal Arts & Science: ☐ A.A. only ☐ **A.S. only** ☐ A.A. or A.S.

  ☐ Transfer Ticket, specify:

  ☐ Other pre-program or transfer track, specify:

- With respect to this CT State degree program, which of the following is true?

  ☐ This associates degree will transfer and apply in whole (if students complete the degree) or in part (if students transfer before completing the degree) to the requirements for the proposed program

☐ Only the full completed associates degree will transfer and apply to the requirements for the proposed program (i.e., students must complete the degree to receive the full transfer benefit)

☐ Only a portion of the associates degree will transfer and apply to the requirements for the proposed program, even if students complete the full degree

- If students complete the above CT State degree, can the proposed program be completed in no more than 60 credits following transfer? ☐ Yes ☐ No, please explain:

Credit Summary	
CSU/COSC Proposed Program total credits:	credits
CT State program total credits:	credits
CT State program credits that can be applied to proposed degree:	credits
CSU/COSC general education credits remaining after transfer	credits
CSU/COSC program credits remaining after transfer	credits
Excess credit hours for CT State transfer students who have completed an associate degree	credits

CT State Community College Associate Degrees: As per Board policy, all new A.A. and A.S. degrees should consider transfer possibilities within the CSCU system (https://www.ct.edu/files/policies/1.13%20Policy_Statement_on_Associate_Degrees.pdf). With few exceptions, transfer associate degrees should be designed for transfer to any and all CSCU four-year institutions that offer the corresponding four-year degree. Associate degrees designed for transfer to CSU/COSC will follow Transfer and Articulation Policy (TAP) guidelines and processes (https://www.ct.edu/tap). CSCU Pathway Articulation forms are available through the Academic and Student Affairs forms website. Completion of the form(s) must be verified by the signature of the CSCU Director of Transfer and Articulation and the completed form(s) should be submitted with this proposal. Document below how the proposed degree program will articulate to CSCU and/or non-CSCU institutions.

- What is the primary purpose of the proposed degree? ☐ Career ☐ Transfer ☐ Both career and transfer
- Does the proposed degree include the Framework30? ☐ **Yes** ☐ No, please explain:
- Following completion of a CT State transfer degree, students should be able to transfer to a CSU/COSC program that would require they complete no more than 60 credits following transfer. Identify all such four-year degree programs in the table below. Include the number of credits remaining to complete the four-year degree.

Institution	**Program**	**# of credits remaining (if > 60, provide explanation)**

- If the proposed degree also transfers to non-CSCU institutions, add the relevant information for those institutions to the table above and attach the corresponding articulation agreements to this proposal.

Internal Stackable Pathways

Describe any stackable pathways to, and/or from, this program to other programs at your own institution (e.g., certificate stackable to associates degree, accelerated pathways from bachelors to masters, etc.):

The program is designed to infuse 4 stackable certificates. Three courses (Data Analysis Techniques, Data Modeling with Power BI, and Data Visualization with Power BI) = Microsoft Power BI Data Analyst Professional certificate. Three courses (Introduction to Databases & SQL Programming, and Data Preparation & Processing) = Google Data Analytics certificate. One course (Agile Development) = Scrumaster-Agile certificate. Five courses (Ethical AI, Intro AI and Generative AI, Intro to Machine Learning, Natural Language Processing, and Computer Vision) = COSC AI Practitioner certificate (optional)

Other Stackable Pathways

Use this section to describe any other pathways to/from the proposed program not captured above:

n/a

Program Evaluation

Describe how the quality and success of the program will be monitored during the first five years:

The program's quality and success will be monitored through the College's Program Review Process, outlined in Section 5:

- Program Reviewer/s will meet with Institutional Research Director to discuss data needed for analysis and incorporation into program internal review documentation.
- Program Reviewer/s conducts internal review and fills out the Charter Oak program review report. The program reviewer can be one or more teaching faculty and/or Program Director. Topics covered include: program enrollments, course enrollments, course success rates, program completions, faculty evaluations, program curriculum and course materials, Blackboard and ADA compliance, employment outcomes, equity gaps, equity plan, and enrollment and completion trend analysis.
- Program Reviewer/s presents internal review along with actions and recommendations to external reviewer/s (peers from another college, advisory board, etc.) and documents external reviewer's actions and recommendations.
- If the program falls under the definition of the BOR Low Completer Policy and the recommendation is to consolidate or continue the program, the justification as listed in the BOR Low Completer Policy must be included within the review.
- Program Reviewer/s will submit an electronic version of completed document to the Program Director and Provost for review and signatures of receipt. The Provost has authority to approve action plans outlined in the program review document.

After completion of the program review, an electronic copy is sent to Charter Oak's Academic Council (our governance) for review and feedback. An electronic copy is sent to Charter Oak's Cabinet and a 15-20-minute presentation by the lead program reviewer will take place at Cabinet to discuss findings, recommendations, and feedback from Cabinet.

Assuring Equitable Outcomes

Equity (eliminating institutional performance disparities along dimensions of ability, ethnicity/race, economics, and gender) is one of the Board of Regents' Goals.

- What specific metrics will be used to assess equity across these dimensions in terms of recruitment, enrollment, retention, and completion?

  As stated in our program review template, we assess recruitment, retention, enrollment and completion for both SES and race/ethnicity. Equity gaps within the program are required to develop an action plan for correction.
- Describe specific aspects of the program (e.g., interventions to address college readiness, targeted recruitment strategies, comprehensive supports, etc.) intended to advance equitable student outcomes.

  One of the main goals is to project promote social equity and learner empowerment by investing in priority populations. By having a focus on recruiting students from the community colleges and our community college tuition match program, Charter Oak is in a strong position to recruit students with low socio-economic status (SES) and other diverse backgrounds. We have also engaged with the Hartford non-profit Girls for Technology about developing a strategic partnership to serve their 18-24 year old diverse and underserved female cohort into this career field option. In fact, the CEO of Girls for Technology is a Charter Oak Alum.

- Where inequities are found, how will the data be used by program and institutional leaders to address the inequities?
  When equity gaps are found, program directors submit a correction plan. For example, if may include a redesign of certain courses where we have identified significant equity gaps.

SECTION 6: COST EFFECTIVENESS AND RESOURCES

Institutions should demonstrate that they have the necessary resources and faculty expertise to maintain the proposed program and demonstrate reasonable evidence that the program is, or will be, fiscally sustainable.

Cost Effectiveness and Availability of Adequate Resources

Complete Supplement B: PRO FORMA Budget – Resources and Expenditure Projections.

Provide a narrative below regarding the cost effectiveness, availability of adequate resources, and sustainability for the proposed program. Add any annotations for the budget form below, as well.

Cost to develop a new course is $3,000.00. Tuition will cover the cost of the development, usually break-even comes the second time the course is offered. Charter Oak will build on our current course offerings as much as possible but there will be a need to develop 10 new courses. Therefore, the total anticipated cost will be $30,000 to implement plus a lead faculty consultant to help with overall program design/outcomes.

Special Resources

Provide a brief description of resources needed specifically for this program, including facilities (lab space, computer classrooms), instructional materials and equipment, specialized library collections, etc. Distinguish resources currently available and those requiring additional expenditures (*Include all costs in the Resources and Expenditures Projections spreadsheet*)

None. Current resources are sufficient.

Program Administration

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring):

Joseph Gradecki, Technology Program Coordinator; Tel.: 860-515-3834; e-mail: jgradecki@charteroak.edu

Describe the qualifications and assigned FTE load of the administrator/faculty member responsible for the day-to-day operations of the proposed academic program. ***Master's degree in computer science, data science, or related field.***

Program Faculty

How many new full-time faculty, if any, will need to be hired for this program? 0

If any new full-time hires, what percentage of program credits will they teach? 0

How many full-time faculty, if any, will teach in the program's core curriculum, including any proposed new hires? (*note: OHE requires a numerical response to this item*) 0

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? (*note: OHE requires a numerical response to this item*) 5

What percentage of program credits will be taught by adjunct faculty? **100%**

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program: M**aster's degree in computer science, data science, or related field**

Complete the table below to include current full-time faculty who will be teaching in this program and their qualifications. If you anticipate hiring new faculty for this program, you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program. Add rows as needed.

Faculty Name and Title	Highest Degree & Institution of Highest Degree	Area of Specialization/ Pertinent Experience	Other Administrative or Teaching Responsibilities

***Reminder:** Be sure the document name includes the names (or abbreviations) of your institution and program when you submit this document.

Completed forms should be submitted to CSCU Academic and Student Affairs office by email (CSCU-ACandASASub@ct.edu)

NEW COURSE DESCRIPTIONS

DAT 2XX: Principles of Data Science

Principles of Data Science provides an introduction to the core concepts and methods used to analyze and interpret data in various domains. Students will explore the process of collecting, cleaning, and organizing data, as well as techniques for identifying patterns, trends, and relationships within datasets. The course covers key topics such as statistical analysis, data visualization, and basic machine learning concepts. By the end of the course, students will be equipped with the foundational knowledge to solve real-world problems using data-driven insights and effectively communicate their findings to diverse audiences.

ITE 1XX: Introduction to Databases & SQL Programming

Introduction to Databases & SQL Programming provides a comprehensive overview of database systems and their role in managing and storing data. The course covers the fundamental principles of database design, normalization, and data modeling, focusing on both relational databases (SQL) and non-relational databases (NoSQL). Students will explore key concepts such as querying, indexing, and transaction management in SQL databases, while also examining the scalability and flexibility of NoSQL systems like document stores and key-value databases. By the end of the course, students will be able to design, implement, and manage database solutions for a variety of real-world applications.

ITE 2XX: Data Preparation & Processing

Data Preparation & Processing focuses on the critical steps involved in preparing raw data for analysis and ensuring its quality and usability. The course covers techniques for cleaning, transforming, and organizing data, including handling missing values, outlier detection, normalization, and feature engineering. Students will explore methods for working with various data types and formats, such as structured, unstructured, and semi-structured data. Additionally, the course emphasizes the importance of data preprocessing for ensuring accurate and reliable results in data analysis and machine learning applications. By the end of the course, students will be able to effectively prepare datasets for analysis in real-world scenarios.

ITE 2XX: Introduction to R Programming

Introduction to R Programming provides students with a foundational understanding of R, a powerful language for statistical computing and data analysis. The course covers essential programming concepts in R, including data structures, control flow, and functions, while emphasizing its use for statistical analysis and data visualization. Students will learn how to manipulate datasets, perform basic statistical tests, and create compelling visualizations. By the end of the course, students will be able to use R to efficiently analyze and interpret data, making it an essential tool for data science and research applications.

ITE 3XX: Data Analysis with Python

Data Analysis with Python introduces students to the powerful tools and libraries available in Python for data analysis. The course covers key concepts such as data manipulation, cleaning, and exploration using libraries like Pandas and NumPy. Students will also learn to visualize data using Matplotlib and Seaborn, and perform statistical analysis to uncover patterns and trends. By the end of the course, students will have

the skills to handle real-world datasets, conduct meaningful analyses, and draw insights, making Python a valuable tool in their data science toolkit.

DAT 3XX: Data Analysis Techniques
Data Analysis Techniques provides an in-depth exploration of the methods used to analyze and interpret data across various fields. The course covers a range of techniques, including descriptive and inferential statistics, hypothesis testing, regression analysis, and clustering. Students will learn how to select the appropriate method based on the data and research questions, and apply these techniques to uncover patterns, trends, and relationships within datasets. By the end of the course, students will be able to apply a variety of data analysis techniques to real-world problems and effectively communicate their results.

DAT 3XX: Data Modeling with Power BI
Data Modeling with Power BI introduces students to the process of building robust data models using Power BI, a leading business intelligence tool. The course covers essential concepts such as data importation, transformation, and the creation of relational models to organize and connect disparate data sources. Students will learn to create calculated columns, measures, and use DAX (Data Analysis Expressions) to perform advanced data calculations. The course also emphasizes best practices for designing efficient data models that support insightful visualizations and interactive reports. By the end of the course, students will be able to develop comprehensive data models and use Power BI to deliver impactful business insights.

DAT 4XX: Data Visualization with Power BI
Data Visualization with Power BI focuses on creating compelling and interactive visualizations to communicate data insights effectively. The course covers the principles of data visualization, including best practices for designing clear and impactful charts, graphs, and dashboards. Students will learn how to use Power BI's wide range of visualization tools to transform raw data into meaningful reports, applying features such as slicers, drill-throughs, and dynamic filtering for user interaction. By the end of the course, students will be able to design professional-quality visualizations that help stakeholders interpret and act on data-driven insights.

ITE 3XX: Cloud Foundations
Cloud Foundations provides a comprehensive introduction to cloud computing concepts, technologies, and services. The course covers the essential principles of cloud architecture, deployment models (public, private, hybrid), and service models (IaaS, PaaS, SaaS). Students will explore key topics such as cloud security, scalability, and resource management, as well as the benefits and challenges associated with cloud adoption. Additionally, the course includes hands-on experience with popular cloud platforms, allowing students to understand how to deploy and manage cloud resources effectively. By the end of the course, students will have a solid understanding of cloud computing fundamentals and the skills to navigate cloud environments in various applications.

ITE4XX: Introduction to Machine Learning
Machine Learning (ML) is a branch of artificial intelligence (AI) that focuses on building systems that can learn from and make decisions based on data. Instead of being explicitly programmed to perform a task, a machine learning model improves

its performance on tasks by identifying patterns and insights from data through algorithms. In this course, students will explore using Python and associated ML modules for supervised and unsupervised learning. Neural networks and deep learning will be explored. ML projects will reinforce the learned concepts.

ITE3XX: Introduction to Artificial Intelligence and Generative AI

Artificial Intelligence (AI) is the field of computer science that focuses on creating machines capable of performing tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and understanding language. AI encompasses various techniques, including machine learning and deep learning, which allow systems to improve over time by learning from data. Generative AI is a subset of AI that involves creating new, original content—such as text, images, music, or code—by using models trained on vast amounts of data. These models, like GPT and DALL·E, learn patterns in data and can generate realistic, coherent outputs based on new inputs, driving innovations in creativity, automation, and personalization across industries. In this course, students will explore an introduction to AI with a focus on machine learning, natural language processing and computer vision. Generative AI will cover models used for text, image, video and audio generation.

CSCU Academic & Student Affairs

Application for **New Program Approval**

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

*APPLICATION FOR **NEW PROGRAM APPROVAL — SUPPLEMENT B***

PRO FORMA BUDGET

Institution: Charter Oak State College Program: BS Data Analytics

Resources and Expenditures Projections (whole dollars only)

PROJECTED Enrollment	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Internal Transfer (from other programs																		
New Students (first time matriculating)	4	13	1	8			6	16	2	11			8	22	4	18		
Continuing Students progressing to credential			3	11	0	9	4	14	7	22	0	13	11	28	14	41	0	20
Headcount Enrollment	4	13	4	19	0	9	10	30	9	33	0	13	19	50	18	59	0	20
Total Estimated FTE per Year[1]	28.5						57						101.5					

PROJECTED Program Revenue	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Tuition[2]	17,012	29,627	17,012	43,301	0	20,511	42,530	68,370	38,277	75,207	0	29,627	80,807	113,950	76,554	134,461	0	45,580
Tuition from Internal Transfer[2]																		
Program Specific Fees (lab fees, etc.)																		
Other Revenue (annotate in narrative)																		
Total Annual Program Revenue	127,463						254,011						451,352					

PROJECTED Program Expenditures[3]	First Year	Second Year	Third Year
Administration (Chair or Coordinator)[4]	26,667	28,000	29,400
Faculty (Full-time, total for program)[4]	26,667	28,000	29,400
Faculty (Part-time, total for program)[4]	30,848	64,706	115,223
Support Staff (lab or grad assist, tutor)	152,191	0	0
Library Resources Program	25,000	26,250	27,563
Equipment (List in narrative)	5,000	5,250	5,513
Other[5]	10,000	10,500	11,025
Estimated Indirect Costs[6]	0	0	0
Total Expenditures per Year	276,373	162,706	218,123

NOTE: Existing regulations require that: "an application for a new program shall include a complete and realistic plan for implementing and financing the proposed program during the first cycle of operation, based on projected enrollment levels; the nature and extent of instructional services required; the availability of existing resources to support the program; additional resource requirements; and projected sources of funding. If resources to operate a program are to be provided totally or in part through reallocation of existing resources, the institution shall identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

[1] 1 FTE = 12 credit hours for both undergraduate and graduate programs; both for Fall & Spring, the formula for conversion of part-time enrollments to Full-Time Equivalent (FTE): Divide part-time enrollment by 3, and round to the nearest tenth - for example 20 part-time enrollees equals 20 divided by 3 equals 6.67 or 6.7 FTE.

[2] Revenues from all courses students will be taking.

[3] Capital outlay costs, instructional spending for research and services, etc. can be excluded.

[4] If full-time person is solely hired for this program, use rate time; otherwise, use a percentage. Indicate if new hires or existing faculty/staff. Record Salary and Fringe Benefits, accordingly.

[5] e.g. student services. Course development would be direct payment or release time; marketing is cost of marketing that program separately.

[6] Check with your Business Office – community colleges have one rate; the others each have their own. Indirect Costs might include such expenses as student services, operations, and maintenance.

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Approval of a New Program

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a Marketing program (CIP Code: 52.1401, OHE# TBD) leading to a Bachelor of Science degree at Charter Oak State College; and grant its accreditation for a period of seven semesters beginning with its initiation, such initiation to be determined in compliance with BOR guidelines for new programs approved on or after April 3, 2020.

A True Copy:

_____

Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Establishment of a new Marketing program leading to a Bachelor of Science degree at Charter Oak State College.

Name of Institution	Charter Oak State College	
Name of Program	Marketing	
CIP Code	52.1401	
OHE# (Leave blank for new programs)		
Degree Level	Bachelor of Science	
Number of Collegiate Credits	60	
Date of Action (Anticipated)	12/19/2024	
Nature of Request	X Licensure and Accreditation _ Program Change _ Phase-out Program _ Terminate Program	
If Name Change, New Name		
Delivery	Current (If not a new program) _ On Ground _ Hybrid _ Online	Future _ On Ground _ Hybrid X Online
Effective Term	Fall 2025	
If a Discontinuation, date of Termination	N/A	
If a Suspension, dates of Suspension	N/A	

PROPOSAL AND RATIONALE

The Bachelor of Science in Marketing program equips students with a comprehensive understanding of strategic marketing principles and practices. Emphasizing critical areas such as marketing research, consumer behavior, and effective customer acquisition and retention strategies, the curriculum prepares graduates to excel in today's competitive landscape. Students will delve into public relations and the art of crafting compelling narratives while gaining hands-on experience in digital marketing techniques, including search engine optimization (SEO) and leveraging artificial intelligence for targeted marketing campaigns. With a robust focus on social media strategies, this degree fosters innovative thinking and equips future marketers with the tools to engage consumers effectively and drive brand loyalty in a rapidly evolving digital world.

This B.S. in Marketing is in high demand in Connecticut, regional and national markets. Students in this major will have the ability to earn multiple professional credentials while enrolled in the

program. Additionally, this program with its multiple credentials should draw greater numbers of potential applicants during their internet search process.

Data obtained through Gray DI (Decision Intelligence) revealed that baccalaureate-level Marketing programs in CT excel in both student demand and employment prospects. Gray DI's cutting-edge Program Evaluation System (PES) reported that National Completions for the program stand at 42,848, ranking at the 99th percentile, with a Sum of On ground and Online Completions in Connecticut at 653, also at the 99th percentile. The program's greatest strength lies in its high Student Demand, evidenced by a Google Search Volume of 21,150 at the 97th percentile, and robust Employment opportunities with an Entry Level Salary at $65,464 in the 74th percentile. The Post Entry Level Median Salary is also competitive at $98,224 in the market's 61st percentile. Job Postings per Graduate ratio suggests a balanced job availability for graduates.

PRO FORMA

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this new program. CSCU's Academic Affairs concurs with this recommendation.

12/6/2024 – BOR - Academic and Student Affairs Committee
12/19/2024 – Board of Regents

CSCU Academic & Student Affairs

Application for **New Program Approval**

SECTION 1: GENERAL INFORMATION

Date of Submission to CSCU Office of the Provost: 10/23/2024

Institution: Charter Oak State College

Most Recent NECHE Institutional Accreditation Action and Date: **Fall 2016**

Program Characteristics

Name of Program: **Marketing**

Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Bachelor of Science (B.S.)**

Modality of Program *(check all that apply)*: ☐ On ground **X Online** ☐ Hybrid, % of fully online courses

Locality of Program: ☒ **On Campus** Off Campus ☐ Both

Anticipated Program Initiation Date: **Fall 2025**

Anticipated Date of First Graduation: **Spring 2027**

Total # Credits in Program: **60**

Credits in General Education: **40**

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: **4**

CIP Code Number: **52.1401** Title of CIP Code: **Marketing/Marketing Management, General**

Department where program is housed: **Business & Technology**

Location Offering the Program *(e.g., main campus)*: **Online**

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information:
https://www.charteroak.edu/catalog/current/fees_financial_aid_scholarships/undergraduate-current-fees.php

Request for SAA Approval for Veterans Benefits? ☒ **Yes** ☐ No

Program website: https://www.charteroak.edu/bachelors/

Provide the intended catalog description for this program:

The Bachelor of Science in Marketing program equips students with a comprehensive understanding of strategic marketing principles and practices. Emphasizing critical areas such as marketing research, consumer behavior, and effective customer acquisition and retention strategies, the curriculum prepares graduates to excel in today's competitive landscape. Students will delve into public relations and the art of crafting compelling narratives while gaining hands-on experience in digital marketing techniques, including search engine optimization (SEO) and leveraging artificial intelligence for targeted marketing campaigns. With a robust focus on social media strategies, this degree fosters innovative thinking and equips future marketers with the tools to engage consumers effectively and drive brand loyalty in a rapidly evolving digital world.

This major requires a minimum of 24 Business Core credits and 45 Major Requirements credits. All major requirements must be completed with a grade of 'C' or higher. To earn a Bachelor's degree at Charter Oak, all Major, General Education, Liberal Arts , elective, and Upper Division credit must equal 120 or more credits.

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:

Program Discontinued: N/A CIP: OHE#: BOR Accreditation Date:

Phase Out Period Date of Program Termination

Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review: N/A
- If program prepares graduates eligibility to state/professional licensure,
  - identify credential:
  - confirm NC-SARA requirements met: ☒ **Yes** ☐ No

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

Institutional Contact for this Proposal

Name: **Dr. David Ferreira**

Title: **Provost, COSC**

Phone: **(860) 515-3727**

Email: dferreira@charteroak.edu

When was the program approved by (insert date in mm/dd/yyyy format):

- College/School: 10/16/2024
- Curriculum committee: 10/16/2024
- Faculty senate: 10/25/2024
- Institutional president: 10/25/2024

NOTES:

- Please rename your completed application to include your institution and the degree name and type in the file name (e.g., SCSU DataSci MS 101 New Program Application) and submit your completed application to CSCU-ACandASASub@ct.edu by the posted deadlines (https://www.ct.edu/academics/approval)
- All applications to establish a new program will be considered for both Licensure and Accreditation by the BOR
- New programs include: degrees, degrees with option(s), degrees with certificates(s), stand-alone credit bearing certificates
- Use Form 102 *New Academic Offering – Below Threshold Report* for new:
  - degree minors, concentrations, or specializations
  - undergraduate certificates or programs ≤ 30 credits within an approved program
  - undergraduate certificates ≤ 15 credits
  - graduate certificates ≤ 12 credits
  - non-credit bearing certificates
  - programs that do not qualify students to become eligible for federal financial aid

SECTION 2: PROGRAM OVERVIEW: PURPOSE AND GOALS

In this section, provide an overview of the purpose and goals of the proposed program. Your narrative should include the following:

- Program's Purpose:
- statement describing how the program meets students' educational goals and career objectives
- description of relevant national or local educational trends and connection of these to the program
- discussion of relevant faculty expertise and commitment with respect to the program
- description of other relevant specific institutional strengths and/or distinctive attributes that contribute to program
- the relationship of the program to the mission of the institution and CSCU (specifically, the program's relationship to current strategic priorities)
- the impact of the program on the institution; and the extent to which the program complements existing programs at the institution.
- the potential quality of the proposed program in relation to comparable programs within and outside CSCU

Program Purpose:

- The introduction of this degree program serves multiple goals. As a workforce-centered, degree granting institution, Charter Oak State College has committed itself to a 9% year over year annual revenue growth rate goal for the next several years. Mission-critical strategies that must be employed require a focus and investment in new, high-demand degree business programs, that include stackable credentials. An increase in critical mass in terms of types of business degree offerings at Charter Oak State College is required to draw a greater number of prospective students, who although may be initially interested in one business degree program, sees something of greater interest to which they apply, thus potentially increasing total institutional enrollment.
- This B.S. in Marketing meets all the above criteria. The degree program is a degree in high demand in both the Connecticut, regional and national markets. Students in this major will have the ability to earn multiple professional credentials while enrolled in the program. Additionally, the addition of this program with its multiple credentials should draw greater numbers of potential applicants during their internet search process.

Student Educational Goals and Career Objectives:

- This degree program will assist students in securing and advancing in professional level positions in a wide variety of marketing or sales-oriented careers of their choosing. The ability to secure such positions requires students to have developed the appropriate soft skills (innovative and critical thinking skills, oral and written communication skills, analytical and problem solving skills; and leadership and team building skills). Additionally, a well-developed understanding of business acquired through a rigorous common business core and discipline specific knowledge with a technology orientation is required by employers. Students may have a competitive advantage in the job market due to their ability to earn market-recognized professional credentials while earning their degrees. Students can pursue an advanced degree while a student at the College under the Fast Track Program, or at other institutions upon graduation.

Relevant National or Local Trends:

- A bachelor's degree in Marketing is one of the most popular local and national degree programs offered by higher education institutions in the country. See data provided under Section 3: Addressing Identified Needs.

Faculty Expertise:

- Charter Oak State College does not employ full-time faculty members. Adjunct faculty, consisting of career professionals who have advanced through career levels into management of executive rank, and who hold an appropriate graduate-level degree, or appropriate academically qualified adjunct instructors with terminal degrees will be hired to serve as both course designers and instructors for all courses. The degree program will fall under the umbrella of the Business and Technology Department, managed by a full-time Department Chair.

Institutional Strengths:

- Charter Oak State College is a 100%, fully online institution. We do not offer on-ground courses in any of our degree programs. We are experts in designing accessible, online courses with a real-world, applied focus, that satisfy a wide variety of student demographic populations and fulfill Quality Matters online best practices. The institution utilizes the services of its own internal Instructional Design Department, who work closely with the course designers and faculty, to ensure that all online degree courses meet the exemplary standards that have been established by the College.
- The degree program allows for maximization of credit transfer of students through CT State TAP, transfer of credit from other institutions, employment of Credit for Prior Learning, pathway exams, credential evaluation, portfolio program, and CT Credit Assessment Program (CCAP).

Institutional Mission and CSCU:

- The Governor, Connecticut Legislature, and the CSCU has established a mission critical priority, that its state public universities and colleges provide am education that supports workforce development (both now and in the future) and mitigates the "brain drain" of its residents to other states upon graduating from their in-state public higher education institutions. The numerous initiatives to date have focused on developing new industry sectors, growing existing

industry sectors, and developing a workforce to support those industry sectors. As a workforce-centered institution, Charter Oak State College focus is on supporting these state initiatives by developing students who will satisfy the needs of the workforce today, and in the future. This bachelor's degree program represents an investment in supporting these state mandates.

Institutional Impact:

- As stated under Program Purpose, this degree program is critical to the College to assist it in meeting its targeted revenue goals and to better support its mission as a work-force-centered institution. This program is a strong complement to the existing degree offerings at Charter Oak State College. This program will be able to utilize existing General Education and Technology course offerings. The program will utilize a Common Business Core of courses (both lower and upper level courses) that have already been developed. This degree program will only require the incremental development of required major courses and electives. Selected overhead expenses will be lowered when analyzed on a cost per student basis. This program should have a favorable impact on the College's bottom line.

Program Quality:

- This program's quality will at a minimum meet, and in many instances exceed the quality existing programs in the market. We are experts in offering online, asynchronous education. We will be utilizing a stackable credential philosophy that is still considered on the leading edge by many online institutions. Our courses don't just focus on theory, rather, on real-world application.
- Additionally, Charter Oak is known for its robust student support offerings including credit for prior learning, active student advising department, a financial aid department that helps students secure the funds they need while not borrowing excessively, mental health support, online library support, and a faculty dedicated to the success of the student, resulting in strong degree completion rates.

SECTION 3: NEED AND JUSTIFICATION

Addressing Identified Needs

How does the program address CT workforce needs and/or the wellbeing of CT communities? In your response, provide evidence of employment prospects, including specific job titles and estimated salary ranges, for graduates of the proposed program. For liberal arts and transfer-specific programs, demonstrate the need for the program in terms of student demand and/or program value, and, if applicable, describe specific transfer or employment opportunities for program graduates. *(Include and identify data sources, e.g., JobsEQ, Dept of Labor statistics, etc. Sample job postings, letters of support from employers and/or transfer/graduate/professional programs can be included as an appendix)*

1) The curriculum promotes soft skill sets demanded in the workforce including problem-solving, critical thinking, communications, working within and leadership of cross-functional and self-directed work teams, project management, and process change in addition to enhancing a well-rounded disciplinary knowledge set. Students may earn professional certifications while in the degree program or put themselves in a position to earn professional certifications upon graduation combined with appropriate time of workforce experience.
2) Fast Track: Upper managerial / leadership positions in many organizations require an advanced degree. The Fast Track program will allow COSC students to shorten the time of degree and lower total cost of completing a graduate degree by completing graduate-level courses as part of their undergraduate degree requirements.
    a. Fast-Track programs offer Charter Oak students the opportunity to earn a master's degree while at Charter Oak in as little as one year after receiving their bachelor's degree by completing four graduate courses at the undergraduate level.
    b. Undergraduate Charter Oak students can identify as part of the Fast-Track program by meeting with their respective academic advisor and following the Fast-Track academic advising path in select undergraduate programs. Fast-Track undergraduate students must have - and maintain - a minimum undergraduate Charter Oak GPA of 3.0 and completed at least 90 credits towards their bachelor's degree prior to taking their first graduate course.

c. Only one graduate course can be taken in each 8-week term. The graduate courses taken at the undergraduate level can only be internally transferred to the student's graduate record if the students earn a final grade of B- or higher. That grade will then be transcribed as 'P' on the graduate record and will not be calculated in the graduate GPA.

3) The traditional path of study for students who are not pursuing a Master's Degree at this time or who do not qualify for the Fast-Track option will remain in place.

Data obtained through Gray DI (Decision Intelligence) revealed that baccalaureate-level Marketing programs in CT excel in both student demand and employment prospects. Gray DI's cutting-edge Program Evaluation System (PES) reported that National Completions for the program stand at 42,848, ranking at the 99th percentile, with a Sum of On-ground and Online Completions in Connecticut at 653, also at the 99th percentile. The program's greatest strength lies in its high Student Demand, evidenced by a Google Search Volume of 21,150 at the 97th percentile, and robust Employment opportunities with an Entry Level Salary at $65,464 in the 74th percentile. New Student Enrollment Volume is impressive at 416, ranking in the top tier at the 99th percentile. Furthermore, New Student Enrollment Volume has grown by 27 units year over year, maintaining its strength with a high percentile of 99. Employment outcomes for graduates are favorable with an Entry Level Salary valued at $65,464 and positioned in the upper quartile at the 74th percentile. The Post Entry Level Median Salary is also competitive at $98,224 in the market's 61st percentile. Job Postings per Graduate ratio stands moderately well at 1.2 (55th percentile), suggesting balanced job availability for graduates.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s) in the table below, along with the median estimated earnings (or salary range) for each. Add rows as needed.

SOC Code	SOC Title	Median Estimated Earnings
11-2011	Advertising & Promotions Managers	$131,870
11-2021	Marketing Managers	$157,620
11-2022	Sales Managers	$135,160
11-2032	Public Relations Managers	$134,760
13-1161	Market Research Analysts & Marketing Specialists	$74,680
27-3031	Public Relations Specialists	$66,750
41-1011	First Line Supervisors of Sales Workers	$46,730
41-3011	Advertising Sales Agents	$61,270
41-3021	Insurance Sales Agents	$59,080
41-4011	Sales Representatives-Wholesales & Manufacturing	$99,710

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide the NAICS code(s) and title(s) in the table below. Add rows as needed.

NAICS Code	NAICS Title
31-33	Manufacturing
44-45	Retail Trade
51	Information
52	Finance & Insurance
53	Real Estate & Rental & Leasing
54	Professional, Scientific, & Technical Services
56	Administrative & Support
61	Educational Services
Please Note: This degree program is not limited to a single industry. Any industry or organization, be it for profit, nonprofit, or governmental that requires a marketing function can utilize this degree.	

Career/Program Pathways

Does this program prepare students for another program? **X** Yes, specify program: Entry into Organizational Leadership Master's degree program ☐

Impact on related programming at the home institution

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at your institution:
  - BS in Business Administration
  - BS in Organizational Leadership
  - MS in Organizational Leadership
  - BS in Human Resources Management
  - Project Management Undergraduate Certificate
- ***Include enrollment and completion data for the past 5 years for each of these programs as an Appendix***
- How will the proposed program impact enrollment and completion in these existing programs?
  - This program may positively impact other program enrollment as described in Section 2: Program Purpose above. This new program will not impact degree completion.
- Are there plans to discontinue any of the existing similar programs? No
- What is the value added of the proposed program in relation to the existing programs?
  - This will be a strong complement to existing programs. See Section 2: Institutional Impact.
- Briefly comment on the resources required for the proposed program in relation to the existing programs, e.g., does the proposed program make use of existing faculty and courses, how will the institution insure that reassignment of faculty or other resources from an existing program does not negatively impact that program, etc. (*specific details should be provided in the Budget section*):
  - This degree program uses existing resources as described in Section 2: Faculty Impact and Institutional Impact above.

Impact on related programming across CSCU

- Indicate what similar programs (e.g., programs with the same first 2-digit CIP) currently exist at other institutions within CSCU: CCSU has a hybrid program and WCSU has an on-ground program. ECSU has an on-ground concentration in Marketing within their Business program. This will be the only 100% online program.
- ***Attach supplement 101a for each CSCU institution that has one or more similar programs***.
- How is the new program distinct from these existing programs?
  - Charter Oak State College will offer the only 100% online degree in this discipline.
- Explain why student or employer demand is not met through existing CSCU programs and provide an assessment of the sustainability/growth of the proposed and existing programs:
  - Degree programs offered at Charter Oak State College primarily consist of adult learners who are already in the workplace, many with families. These students require maximum flexibility in determining the pace of degree completion, the location of being able to take courses, and when they can conduct their studies. A traditional on-ground program does not offer this degree of flexibility.

SECTION 4: STUDENT ENROLLMENT & RETENTION

Enrollment Projections

Complete Supplement B – Pro Forma Budget.

Summarize expected student enrollment and completion in the program over the first three years. Identify the sources for these projections, and describe any assumptions made. Note, in particular, any existing CSCU programs or stakeholder groups from which enrollment may be drawn.

Data from Gray DI suggests that there is room for more graduates to fill the market need. With a Google Search Volume at 2,220,560 and ranking in the 97th percentile, Marketing programs enjoy significant online interest. The Google Search YoY Unit Change shows an increase of 241,060 (97th percentile), suggesting growing curiosity or need for the program. New Student Enrollment Volume YoY Percentage Change is also positive at 5%. This program will draw some enrollment from CT State Community College through the Tuition Match program. The estimated enrollment target at the end of the first three years is about 60-75 students.

Prospective Students

Describe the prospective students for the program *(this information will be provided to OHE and become publicly available; your response can help market your program and recruit students)*:

- Prospective students for this program are working professionals who may be in entry level positions within varied marketing and sales related positions, those seeking to rise to higher levels within these positions, and those students who are not yet in these career fields. Students pursuing a bachelor's degree seek to secure entry level professional positions then advance up the ranks in these career fields.

Student Recruitment / Student Engagement

Describe the marketing, advising, and other student recruitment activities to be undertaken to ensure the projected enrollments are achieved:

- Charter Oak State College employs a diversified marketing and recruitment approach including advertising, digital marking and social media marketing employing the most current SEO processes, on-campus recruitment, employment fairs, conventions, varied print media, virtual open houses, and direct phone recruitment. A counselor selling strategy is employed by the Admission Department. Program Directors are involved in may of the above activities to assist in the recruitment efforts.

What student engagement strategies will be employed to advance student retention and completion in program?

- See immediately above.

Admission Requirements

Does this program have special admission requirements (i.e., beyond those required for the institution as a whole)?

☐ Yes **X No**

If yes, describe the selection process, including all criteria:

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? **X Yes** ☐ No

If yes, describe: Capstone Project

Experiential Learning Requirements

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☐ Yes **X No**

If yes, describe here and attach copies of the contracts or other documents ensuring program support in an appendix:

SECTION 5: CURRICULUM & ASSESSMENT

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. With as much detail as possible, map these learning outcomes to courses listed under the "Curriculum" section below.

1. Students will be able to apply the concepts, theories, and relationships among the functional areas of an organization, including the ability to explain the nature and construct of an organization.
2. Students will be able to design strategic marketing practices. This will include such areas as marketing research, consumer behavior, customer acquisition and retention strategies, and public relations. Additional areas include digital marketing including SEO techniques, social media strategies, leveraging artificial intelligence for targeted marketing campaigns, and driving brand loyalty.
3. Students will be able to explain the global environment of business including the political, social, and intercultural sensitivities that exist in society that are important to the development of meaningful relationships and success in business and in life.
4. Students will be able to demonstrate professional business behavior, social responsibility, and ethical decision making and conduct.
5. Students will be able to demonstrate effective critical thinking, decision-making, problem solving, organizational leadership, teamwork; oral and written communication skills utilizing tools such as AI, research databases, and other tools as required.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

In accordance with NECHE Standard 4, Charter Oak's academic programs are consistent with and serve to fulfill its mission and purposes. Charter Oak works systematically and effectively to plan, provide, oversee, evaluate, improve, and assure the academic quality and integrity of its academic programs and the credits and degrees awarded. Charter Oak sets a standard of student achievement appropriate to the degree or certificate awarded and develops the systematic means to understand how and what students are learning and to use the evidence obtained to improve the academic program.

Overview of Charter Oak State College Program Review Process

- Program Reviewer/s will meet with Institutional Research Director to discuss data needed for analysis and incorporation into program internal review documentation.
- Program Reviewer/s conducts internal review and fills out the Charter Oak program review report. The program reviewer can be one or more teaching faculty and/or Program Director. Topics covered include: program enrollments, course enrollments, course success rates, program completions, faculty evaluations, program curriculum and course materials, Blackboard and ADA compliance, employment outcomes, equity gaps, equity plan, and enrollment and completion trend analysis.
- Program Reviewer/s presents internal review along with actions and recommendations to external reviewer/s (peers from another college, advisory board, etc.) and documents external reviewer's actions and recommendations.

- If the program falls under the definition of the BOR Low Completer Policy and the recommendation is to consolidate or continue the program, the justification as listed in the BOR Low Completer Policy must be included within the review.
- Program Reviewer/s will submit an electronic version of completed document to the Program Director and Provost for review and signatures of receipt. The Provost has authority to approve action plans outlined in the program review document.

After completion of the program review, an electronic copy is sent to Charter Oak's Academic Council (our governance) for review and feedback. An electronic copy is sent to Charter Oak's Cabinet and a 15-20-minute presentation by the lead program reviewer will take place at Cabinet to discuss findings, recommendations, and feedback from Cabinet.

Curriculum

*Please list all courses (core/major area of specialization, prerequisites, electives, required general education, etc.), by number and title, in the proposed program. Mark any new courses with an asterisk * and attach course descriptions. Note any core program courses that serve to fulfill general education requirements within the program. Insert/delete rows as needed; additional curriculum information (e.g., semester by semester sequences, course syllabi) to support this application can be attached in an appendix if desired.*

Course Number and Name	L.O. # (from Section 3)	Pre-Requisite(s)	Credit Hours
Program Core: Required & Elective Courses			
Business Core (Common across all concentrations)			
ACC101 Principles of Accounting	1	None	3
ACC102 Managerial Accounting	1	ACC101	3
BUS120 Business Law	1	None	3
BUS250 International Business	1,3	None	3
FIN210 Managerial Finance	1	ACC101, ACC102, and either ECO103 or ECO104	3
MGT101 Principles of Management	1	None	3
MGT315 Organizational Behavior	1	ENG101, ENG102, MGT101	3
MGT 220 Principles of Marketing	1, 2	None	3
Major Requirements (Common across all business degree programs)			
BUS201 Managerial Statistics or MAT105 Statistics or *PSY216 Stats Behav Sci	5	*PSY101 or SOC101	3
ECO103 Macroeconomics or ECO104 Microeconomics	1, 3	None	3
MGT330 Diversity, Equity, & Inclusion in the Workplace	1-4	ENG101, ENG102	3
MGT 3XX Lean Management Green Belt or MGT3XX Agile Development or MGT460 Fundamentals of Project Management or MGT Change Management or OEL 530 Organizational Development (Fast-Track Option)	1,5	ENG101, ENG102	3

PHL485 Business Ethics & Individual Values	1,4	ENG101, ENG102	3
MGT4## Strategic Management	1-5	ACC101, ACC102, BUS120, BUS250, ECO103 or ECO104, ENG101, ENG102, FIN210, MGT101, MGT315, MKT220. This course must be taken at COSC.	3
Major-Specific Requirements			
MKT 3XX Public Relations *	2	ENG101, ENG102, MKT220	3
MKT 3XX Social Media Marketing *	2	ENG101, ENG102, MKT220	3
MKT 3XX Artificial Intelligence for Marketing *	2	ENG101, ENG102, MKT220	3
MKT 3XX Market Research and Consumer Behavior *	2	ENG101, ENG102, MKT220	3
MKT 3XX Digital Marketing *	2	ENG101, ENG102, MKT220	3
MKT 3XX Build, Launch, and Manage E-commerce Stores *	2	ENG101, ENG102, MKT220	3
MKT 4XX Marketing SEO strategy *	2	ENG101, ENG102, MKT220	3
MKT 4XX Customer Loyalty, Retention, and Activation *	2	ENG101, ENG102, MKT220	3
MKT495 Marketing Capstone *	2,5	Taken within the final two terms of the student's degree program, ENG101, ENG102, ACC 101, FIN 210, MGT 101, MGT 315, BUS 120, MKT 220	3
General Education Courses			
Written Com I (ENG 101)			3
Written Com II			3
Oral Communication			3
Arts and Humanities			3
Quantitative Reasoning (Satisfied by BUS201 Managerial Statistics or MAT105 Statistics or *PSY216 Stats Behav Sci Major Requirement above)			3
Scientific Reasoning			4
Scientific Knowledge and Understanding			3
Historical Knowledge			3
Social and Behavioral Sciences (Satisfied by Macroeconomics or Microeconomics Major Requirement above)			3
Continued Learning/Information Literacy (IDS 101)			3
Diversity, Equity, and Inclusion (Satisfied by MGT330 Diversity, Equity, & Inclusion in the Workplace Major Requirement above)			3

Digital/Technological Literacy (recommend ITE 101)			3
Innovative Thinking			3
Open Electives (*Indicate number of credits of open electives*)			20
Total Program Credits (must match number of credits reported on page 1)**:**			120

CSCU Transfer Pathways

CSCU four-year institutions and CT State Community College are required to collaborate on transfer pathways during new curriculum develop.

CSU/COSC Bachelor's Degree Programs: Programs at four-year institutions should document how an existing Transfer Ticket, Liberal Arts and Science Degree, Pre-program, or other Transfer Track will articulate to the proposed program by completing the appropriate CSCU Pathway Articulation form. CSCU Pathway Articulation forms are available through the Academic and Student Affairs forms website. Completion of the form must be verified by the signature of the CSCU Director of Transfer and Articulation and the completed form should be submitted with this proposal.

- Identify the CT State Community College program that best articulates to the proposed program:
  ☐ Liberal Arts & Science: ☐ A.A. only ☐ A.S. only ☐ A.A. or A.S.
  ☐ Transfer Ticket, specify:
  ☐ Other pre-program or transfer track, specify:

- With respect to this CT State degree program, which of the following is true?
  ☐ This associates degree will transfer and apply in whole (if students complete the degree) or in part (if students transfer before completing the degree) to the requirements for the proposed program
  ☐ Only the full completed associates degree will transfer and apply to the requirements for the proposed program (i.e., students must complete the degree to receive the full transfer benefit)
  ☐ Only a portion of the associates degree will transfer and apply to the requirements for the proposed program, even if students complete the full degree

- If students complete the above CT State degree, can the proposed program be completed in no more than 60 credits following transfer? ☐ Yes ☐ No, please explain:

Credit Summary	
CSU/COSC Proposed Program total credits:	credits
CT State program total credits:	credits
CT State program credits that can be applied to proposed degree:	credits
CSU/COSC general education credits remaining after transfer	credits
CSU/COSC program credits remaining after transfer	credits
Excess credit hours for CT State transfer students who have completed an associate degree	credits

CT State Community College Associate Degrees: As per Board policy, all new A.A. and A.S. degrees should consider transfer possibilities within the CSCU system (https://www.ct.edu/files/policies/1.13%20Policy_Statement_on_Associate_Degrees.pdf). With few exceptions, transfer associate degrees should be designed for transfer to any and all CSCU four-year institutions that offer the corresponding four-year degree. Associate degrees designed for transfer to CSU/COSC will follow Transfer and Articulation Policy (TAP) guidelines and processes (https://www.ct.edu/tap). CSCU Pathway Articulation forms are available through the Academic and Student Affairs forms website. Completion of the form(s) must be verified by the signature of the CSCU Director of Transfer and Articulation and the completed form(s) should be submitted with this proposal. Document below how the proposed degree program will articulate to CSCU and/or non-CSCU institutions.

- What is the primary purpose of the proposed degree? ☐ Career ☐ Transfer ☐ Both career and transfer
- Does the proposed degree include the Framework30? ☐ Yes ☐ No, please explain:
- Following completion of a CT State transfer degree, students should be able to transfer to a CSU/COSC program that would require they complete no more than 60 credits following transfer. Identify all such four-year degree programs in the table below. Include the number of credits remaining to complete the four-year degree.

Institution	Program	# of credits remaining (if > 60, provide explanation)

- If the proposed degree also transfers to non-CSCU institutions, add the relevant information for those institutions to the table above and attach the corresponding articulation agreements to this proposal.

Internal Stackable Pathways

Describe any stackable pathways to, and/or from, this program to other programs at your own institution (e.g., certificate stackable to associates degree, accelerated pathways from bachelors to masters, etc.):

- Fast Track: Upper managerial / leadership positions in many organizations require an advanced degree. The Fast Track program will allow COSC students to shorten the time of degree and lower total cost of completing a graduate degree by completing graduate-level courses as part of their undergraduate degree requirements.
- Fast-Track programs offer Charter Oak students the opportunity to earn a master's degree while at Charter Oak in as little as one year after receiving their bachelor's degree by completing four graduate courses at the undergraduate level.
- Undergraduate Charter Oak students can identify as part of the Fast-Track program by meeting with their respective academic advisor and following the Fast-Track academic advising path in select undergraduate programs. Fast-Track undergraduate students must have - and maintain - a minimum undergraduate Charter Oak GPA of 3.0 and completed at least 90 credits towards their bachelor's degree prior to taking their first graduate course.
- Only one graduate course can be taken in each 8-week term. The graduate courses taken at the undergraduate level can only be internally transferred to the student's graduate record if the students earn a final grade of B- or higher. That grade will then be transcribed as 'P' on the graduate record and will not be calculated in the graduate GPA.

Other Stackable Pathways

Use this section to describe any other pathways to/from the proposed program not captured above:

While enrolled in the program, students may potentially earn:

1. Meta Social Media Marketing Professional Certificate
2. Google Digital Marketing & E-Commerce Professional Certificate
3. Salesforce Sales Operations Professional Certificate
4. Six Sigma Green Belt

Program Evaluation

Describe how the quality and success of the program will be monitored during the first five years:

- Direct and indirect assessment measures identified in Section 5 Assessment of Learning Outcomes will be utilized to assess degree program, course, and instructor quality.

Assuring Equitable Outcomes

Equity (eliminating institutional performance disparities along dimensions of ability, ethnicity/race, economics, and gender) is one of the Board of Regents' Goals.

- What specific metrics will be used to assess equity across these dimensions in terms of recruitment, enrollment, retention, and completion?
    - Charter Oak's program review template requires programs under review to assess recruitment, retention, enrollment and completion for both SES and race/ethnicity.
- Describe specific aspects of the program (e.g., interventions to address college readiness, targeted recruitment strategies, comprehensive supports, etc.) intended to advance equitable student outcomes.
    - By having a focus on recruiting students from the community colleges and our community college tuition match program, Charter Oak is in a strong position to recruit students with low socio-economic status (SES). The community college tuition match program at Charter Oak State college affords any graduate of CT State that matriculates at Charter Oak within 12 months of graduation the ability to pay the same tuition rate as CT State of that given year. With the current Pell allotment, that means a fully Pell student has the opportunity for a debt-free bachelor's degree between PACT and the CC Tuition Match.
- Where inequities are found, how will the data be used by program and institutional leaders to address the inequities?
    - Equity gaps within the program via the program review process are required to develop an action plan for correction. Typically, this would require a redesign of targeted courses that contain any statistically significant equity gaps. Strategies include inclusive design principles and universal design of learning (UDL).

SECTION 6: COST EFFECTIVENESS AND RESOURCES

Institutions should demonstrate that they have the necessary resources and faculty expertise to maintain the proposed program and demonstrate reasonable evidence that the program is, or will be, fiscally sustainable.

Cost Effectiveness and Availability of Adequate Resources

Complete Supplement B: PRO FORMA Budget – Resources and Expenditure Projections.

Provide a narrative below regarding the cost effectiveness, availability of adequate resources, and sustainability for the proposed program. Add any annotations for the budget form below, as well.

- Existing resource usage will be maximized in the development and administration of this degree program. The program will be managed by the existing Chair of the Business and Technology Department. This program extensively uses existing General Education, Business Core and some upper level required courses common across all business degree programs at Charter Oak State College. Further this program will utilize subject matter available through Coursera under existing contract.

Special Resources

Provide a brief description of resources needed specifically for this program, including facilities (lab space, computer classrooms), instructional materials and equipment, specialized library collections, etc. Distinguish resources currently available and those requiring additional expenditures (*Include all costs in the Resources and Expenditures Projections spreadsheet*)

- This program will utilize subject matter content available in Coursera under a pre-existing contract. This will also help facilitate future upgrades to the course material as workforce standards change.

Program Administration

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): Dr. Thomas A. Barron, Jr. Email: tbarron@charteroak.edu Phone: (860) 515-3838

Describe the qualifications and assigned FTE load of the administrator/faculty member responsible for the day-to-day operations of the proposed academic program.

- Degrees:
  - Ed.D. Educational Leadership- Higher Education Administration, CAGS . Educational Leadership- Higher Education Administration, MBA, MS in Organizational Development, BSBA Accounting, ASBA Business Administration
  - 30 years corporate executive and management experience
  - 13 years' experience as a Program Director or Chair of Business & Technology Programs
  - 40 years undergraduate and graduate teaching experience
- FTE Load- Approximately 8%

Program Faculty

How many new full-time faculty, if any, will need to be hired for this program? 0

If any new full-time hires, what percentage of program credits will they teach? 0

How many full-time faculty, if any, will teach in the program's core curriculum, including any proposed new hires? (*note: OHE requires a numerical response to this item*) 0

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? (*note: OHE requires a numerical response to this item*) 9

What percentage of program credits will be taught by adjunct faculty? 100%

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program:

- Master's degree plus appropriate level of professional experience in the subject matter being taught.

Complete the table below to include current full-time faculty who will be teaching in this program and their qualifications. If you anticipate hiring new faculty for this program, you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program. Add rows as needed.

Faculty Name and Title	Highest Degree & Institution of Highest Degree	Area of Specialization/ Pertinent Experience	Other Administrative or Teaching Responsibilities
N/A			

Application for **New Program Approval**

***Reminder:** Be sure the document name includes the names (or abbreviations) of your institution and program when you submit this document.

Completed forms should be submitted to CSCU Academic and Student Affairs office by email (CSCU-ACandASASub@ct.edu)

New Course Descriptions:

MKT 3XX Public Relations

This course offers an in-depth exploration of public relations as a strategic communication discipline, focusing on the principles, theories, and practices that shape effective PR campaigns. Students will examine key topics such as media relations, crisis communication, brand management, and audience analysis, while gaining hands-on experience in developing press materials, crafting messaging strategies, and utilizing social media platforms. Emphasis will be placed on ethical considerations and the role of public relations in shaping public perception and maintaining organizational reputation. Through various projects and assignments, students will cultivate the skills necessary to navigate the dynamic landscape of public relations in today's digital age. (Prerequisites: ENG101, ENG102, MKT220).

MKT 3XX Social Media Marketing

This course provides an in-depth exploration of social media marketing strategies and practices, equipping students with the skills necessary to navigate the evolving digital landscape. Major topics include the foundations of social media marketing, content creation and curation, audience engagement strategies, analytics and performance measurement, and the development of targeted advertising campaigns. Students will also examine platform-specific tactics for major networks such as Meta. Through various projects and assignments students will learn to craft effective social media marketing strategies that enhance brand visibility and foster customer loyalty in a dynamic online environment. (Prerequisites: ENG101, ENG102, MKT220).

MKT 3XX Artificial Intelligence for Marketing

This course delves into the transformative impact of artificial intelligence on marketing strategies and practices. Students will explore key topics such as predictive analytics, customer segmentation, personalized marketing, and AI-driven content creation. The curriculum explores tools that will enhance customer engagement and optimize marketing campaigns. Additionally, ethical considerations surrounding AI usage in marketing, such as data privacy and bias, will be examined. Through various projects and assignments, students will develop the skills necessary to harness AI effectively in real-world marketing scenarios. (Prerequisites: ENG101, ENG102, MKT220).

MKT 3XX Market Research and Consumer Behavior

This course provides a comprehensive understanding of the methodologies and theories underpinning market research and consumer behavior. Students will learn how to design and implement effective research studies, utilizing qualitative and quantitative techniques to gather and analyze consumer data. Key topics include survey design, focus group facilitation, data analysis, and the psychological factors influencing consumer decision-making. The course also explores the impact of cultural, social, and economic trends on consumer behavior, as well as emerging technologies in market research. Through various projects and assignments, students will develop the analytical skills needed to interpret research findings and apply insights to inform marketing strategies. (Prerequisites: ENG101, ENG102, MKT220).

MKT 3XX Digital Marketing

This course provides an in-depth exploration of digital marketing strategies and tools, preparing students for the dynamic landscape of online business. Major topics include the foundations of digital marketing and e-commerce, focusing on the evolving digital ecosystem and its impact on consumer behavior. Students will learn techniques for attracting and engaging customers through various digital platforms, including social media, search engines, and email marketing. Additionally, the course covers lead generation strategies and online customer interaction, emphasizing data-driven decision-making and customer relationship management. (Prerequisites: ENG101, ENG102, MKT220).

MKT 3XX Build, Launch, and Manage E-commerce Stores

This course provides a comprehensive guide to building, launching, and managing successful e-commerce stores, equipping students with essential skills to thrive in the digital retail landscape. Key topics include e-commerce strategies, platform selection, store setup, and optimization for user experience and conversion. Students will learn to successfully manage client relationships online, measure customer satisfaction, and develop strategies for long-term customer loyalty. Through various assignments and projects, students will develop the needed skills to successfully develop the marketing skill s required to navigate the digital world of E-Commerce. (Prerequisites: ENG101, ENG102, MKT220).

MKT 4XX Marketing SEO strategy

This advanced course focuses on developing and executing effective SEO strategies to optimize digital marketing performance. Students will explore topics such as crafting targeted email marketing campaigns, media planning activities, and developing strategies that align with specific business goals. Emphasis will be placed on utilizing performance metrics to evaluate campaign success and adjusting marketing budgets or strategies accordingly to maximize ROI. Through various projects and assignments, students will learn to apply data-driven insights to continuously refine SEO and broader marketing initiatives. (Prerequisites: ENG101, ENG102, MKT220).

MKT 4XX Customer Loyalty, Retention, and Activation

This course delves into strategies for building and sustaining customer loyalty, driving retention, and activating customer engagement to fuel business growth. Students will explore the role of Customer Relationship Management (CRM) systems in sales, marketing, and customer service, focusing on how these functions collaborate throughout the lead process. Topics include the progression of sales opportunities through the sales pipeline, closing deals, and aligning efforts to maximize customer lifetime value. Additionally, students will learn to build reports, charts, and dashboards to effectively communicate sales performance insights to stakeholders and executives. (Prerequisites: ENG101, ENG102, MKT220).

MKT 495 Marketing Capstone

In this capstone course, students demonstrate fulfillment of the various outcomes of their major courses. Each student will complete the capstone project to demonstrate that the student understands clearly his or her major, has mastered the content of the selected field(s) of study, and can synthesize and apply what he or she has learned. The proposed project may be a research paper or a case study on a contemporary Marketing topic. This is the capstone course for the should be taken in the student's last semester. Prerequisite(s): ENG 101, ENG 102, ACC 101, ACC 102, BUS 120, FIN 210, MGT101, MKT 220, & MGT 315.

APPENDIX

Enrollment & Completion Data for Related Programs at COSC:

☐

Registered Students by Program

Program	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Prelim Fall 2024
BS in Business Administration	208	170	172	205	195
BS in Organizational Leadership	9	33	36	39	39
MS in Organizational Leadership	60	42	36	34	50
BS in Human Resources Management	5	16	31	39	50
Project Management Undergraduate Certificate	2	3	2	1	4
Total	**284**	**264**	**277**	**318**	**338**

Completions by Program

Program	FY20	FY21	FY22	FY23	FY24
BS in Business Administration	74	87	56	54	55
BS in Organizational Leadership	0	9	9	7	14
MS in Organizational Leadership	17	29	25	6	12
BS in Human Resources Management	0	0	1	8	5
Project Management Undergraduate Certificate	6	6	5	7	20
Total	**97**	**131**	**96**	**82**	**106**

CSCU Academic & Student Affairs

Application for **New Program Approval**

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

*APPLICATION FOR **NEW PROGRAM APPROVAL — SUPPLEMENT B***

PRO FORMA BUDGET

Institution: Charter Oak State College Program: BS Marketing

Resources and Expenditures Projections (whole dollars only)

PROJECTED Enrollment	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Internal Transfer (from other programs																		
New Students (first time matriculating)	6	14	2	9			7	17	4	13			9	25	5	20		
Continuing Students progressing to credential			5	12	0	10	5	15	10	25	0	15	12	30	17	46	0	22
Headcount Enrollment	6	14	7	21	0	10	12	32	14	38	0	15	21	55	22	66	0	22
Total Estimated FTE per Year[1]	35.5						68.5						114.5					

PROJECTED Program Revenue	First Year						Second Year						Third Year					
	Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer		Fall Semester		Spring Semester		Summer	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
Tuition[2]	25,218	31,906	29,771	47,859	0	22,790	51,036	72,928	59,542	86,602	0	34,185	89,313	125,345	93,566	150,414	0	50,138
Tuition from Internal Transfer[2]																		
Program Specific Fees (lab fees, etc.)																		
Other Revenue (annotate in narrative)																		
Total Annual Program Revenue	157,844						304,293						508,776					

PROJECTED Program Expenditures[3]	First Year	Second Year	Third Year
Administration (Chair or Coordinator)[4]	26,667	28,000	29,400
Faculty (Full-time, total for program)[4]	26,667	28,000	29,400
Faculty (Part-time, total for program)[4]	38,425	77,761	129,980
Support Staff (lab or grad assist, tutor)	152,191	0	0
Library Resources Program	25,000	26,250	27,563
Equipment (List in narrative)	5,000	5,250	5,513
Other[5]	10,000	10,500	11,025
Estimated Indirect Costs[6]	0	0	0
Total Expenditures per Year	283,950	175,761	232,880

NOTE: Existing regulations require that: "an application for a new program shall include a complete and realistic plan for implementing and financing the proposed program during the first cycle of operation, based on projected enrollment levels; the nature and extent of instructional services required; the availability of existing resources to support the program; additional resource requirements; and projected sources of funding. If resources to operate a program are to be provided totally or in part through reallocation of existing resources, the institution shall identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

[1] 1 FTE = 12 credit hours for both undergraduate and graduate programs; both for Fall & Spring, the formula for conversion of part-time enrollments to Full-Time Equivalent (FTE): Divide part-time enrollment by 3, and round to the nearest tenth - for example 20 part-time enrollees equals 20 divided by 3 equals 6.67 or 6.7 FTE.

[2] Revenues from all courses students will be taking.

[3] Capital outlay costs, instructional spending for research and services, etc. can be excluded.

[4] If full-time person is solely hired for this program, use rate time; otherwise, use a percentage. Indicate if new hires or existing faculty/staff. Record Salary and Fringe Benefits, accordingly.

[5] e.g. student services. Course development would be direct payment or release time; marketing is cost of marketing that program separately.

[6] Check with your Business Office – community colleges have one rate; the others each have their own. Indirect Costs might include such expenses as student services, operations, and maintenance.

From: Ed Klonoski
To: Diamond, Aynsley J (System Office)
Cc: Ferreira, David (COSC); Davis, Kaylah (System Office)
Subject: RE: Presidential Response

Aynsley,

I am confirming that the three new programs presented below are in alignment with not only the deficit mitigation plan but also included as part of the approved fiscal year 2024 budget as presented to the Finance Committee and adopted by the Board of Regents.

Have a wonderful holiday!

Ed

Ed Klonoski, President
Charter Oak State College

From: Diamond, Aynsley J (System Office)
To: Ed Klonoski
Cc: David Ferreira ; Davis, Kaylah (System Office)
Subject: Presidential Response

Dear President Klonoski,

I hope that you and your students, faculty, and staff have a wonderful and well-deserved break this week. As per instructions from BOR-ASA Committee Chair, I am requesting you to confirm that the following new program (to be presented to BOR-ASA on October 10th) is in alignment with CSCU's Deficit Mitigation Plan as presented to BOR on November 15, 2023.

1. New Programs – Charter Oak State College
   a. Curriculum and Instruction Management – MS
   b. Data Analytics – BS
   c. Marketing - BS

Your response to this email will be added to the BOR-ASA Minutes of the Meeting as evidence of alignment with the Deficit Mitigation Plan, only if someone asks this question during the meeting.

Aynsley Diamond, Ed.D. (she, her, hers)
Associate Vice President of Academic Affairs
Connecticut State Colleges and Universities
61 Woodland Street, Hartford, CT 06105
CSCU Academic & Student Affairs

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Modification of a Program

Master of Science in Health Informatics
Charter Oak State College

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the modification of a program – specifically a name change to the Master of Science in Health Informatics at Charter Oak State College.

A True Copy:

_____

Pamela A. Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Name change to the Master of Science in Health Informatics at Charter Oak State College.

BACKGROUND AND PROPOSAL

Old Name: Health Informatics
New Name: Health Data Analytics

Renaming the program from M.S. Health Informatics to M.S. Health Data Analytics better reflects current industry trends and the evolving skillset requirements in the healthcare sector. The demand for data analytics skills has skyrocketed in recent years due to the explosion of healthcare data generated by electronic health records (EHRs), wearable devices, and other digital health technologies. Employers increasingly seek professionals who can not only manage health information systems but also derive actionable insights from data to improve patient outcomes, optimize operations, and support decision-making.

Several academic institutions and industry organizations have made similar shifts. For instance, Harvard's M.S. in Health Data Science and Columbia University's M.S. in Health Analytics programs focus on data-driven decision-making, acknowledging that analytics represents a more accurate and forward-looking term compared to informatics, which traditionally emphasizes systems management rather than data interpretation.

Furthermore, data analytics better aligns with market needs in areas like predictive modeling, machine learning, and population health management, all critical for the future of healthcare. This name change will position the program as more relevant to prospective students and employers, including in search of such programs, enhancing its appeal and ensuring that graduates are equipped with the cutting-edge skills needed in today's healthcare environment.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this modification. CSCU Academic and Student Affairs concurs with this recommendation.

12/6/2024 – BOR - Academic and Student Affairs Committee
12/19/2024 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

*APPLICATION FOR **NAME CHANGE – MODIFICATION OF ACCREDITED PROGRAM***

NAME CHANGE REQUEST	
Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024
NOTE: Use this form if modifying only the name of the program.	

Current Program Characteristics

Name of Program: **Health Informatics**

OHE #: **19350**

Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses

Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both

Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **MS**

Date Program was Initiated: 2017 received approval by BOR. Program enrolled first students in Fall 2020. BOR accredited M.S. HI Program in March 2021.

Total # Credits in Program: 33

Credits in General Education: N/A

CIP Code Number: **51.2706** Title of CIP Code: **Medical Informatics**

Department where program is housed: Health Science & Technology Department

Location Offering the Program *(e.g., main campus)*: Online

Proposed New Name of Program: Health Data Analytics

Proposed Date Name Change Becomes Effective: Fall 2025

Explanation / Justification

Provide a concise rationale for the name change request, and discuss any anticipated impact upon the institution, its mission, and its students.

Renaming the program from **M.S. Health Informatics** to **M.S. Health Data Analytics** better reflects current industry trends and the evolving skillset requirements in the healthcare sector. The demand for **data analytics** skills has skyrocketed in recent years due to the explosion of healthcare data generated by electronic health records (EHRs), wearable devices, and other digital health technologies. Employers increasingly seek professionals who can not only manage health information systems but also derive actionable insights from data to improve patient outcomes, optimize operations, and support decision-making.

Several academic institutions and industry organizations have made similar shifts. For instance, **Harvard's M.S. in Health Data Science** and **Columbia University's M.S. in Health Analytics** programs focus on data-driven decision-making, acknowledging that **analytics** represents a more accurate and forward-looking term compared to **informatics**, which traditionally emphasizes systems management rather than data interpretation.

Furthermore, **data analytics** better aligns with market needs in areas like predictive modeling, machine learning, and population health management, all critical for the future of healthcare. This name change will position the program as more relevant to prospective students and employers, including in search of such programs, enhancing its appeal and ensuring that graduates are equipped with the cutting-edge skills needed in today's healthcare environment.

Programmatic Changes

If applicable, provide a concise discussion regarding any programmatic changes to be necessitated by the requested name change.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

APPLICATION FOR ***NAME CHANGE – MODIFICATION OF ACCREDITED PROGRAM***

A below-threshold proposal is being submitted in correlation with the Name Change Request. The program will remain at 33 credits and maintain the applied foundation (versus biomedical) of its objective to create and grow highly effective leaders in the field of Health Data needed to transform and improve healthcare delivery, administration, research, and outcomes within the health setting.

The majority of the courses will be maintained and enhanced. For example, HCA525 – Epidemiology and Pop Health will add the skill of Geographic Information Systems (GIS) with application of teaching students how to integrate GIS with population health data such as during a disease outbreak. Another example is HIF530 – the intro course to technology within health sciences. The concepts of Artificial Intelligence (AI) are already incorporated in the course, however, it will be enhanced such as expanding on explainable AI (EAI) in healthcare and the underlying artificial neural networks (ANN) inside machine learning (ML) systems. This would have needed to be updated regardless as the concept of AI in healthcare has been rapidly changing and growing. The program will also bring back Advanced Data Analytics which is a course that is already built. Three HI-specific courses are being recommended for discontinuance (HIF615- Info Technology Project Management, HIF540-Health Data Vocab., and HIF630- Health Info System). HIF630 will be replaced with the current Advanced Data Analytics course. The two new builds will include Research Methods & Data Visualization, and Big Data & Data Mining. These courses were identified through a gap analysis based on the M.S. level Data Analytics KSAs and reviewed by the M.S. HI Lead Faculty group who are in favor of broadening the program from M.S. HI to M.S. Health Data Analytics.

Cost and Availability of Adequate Resources

If applicable, provide a one paragraph narrative addressing additional cost and resources necessitated by the requested name change.

One partial rebuild and two new courses will need to be built. It is not anticipated that the College will need to onboard additional SMEs for the builds. The current group of adjunct faculty within the program have proven skill sets in the focus areas. Health Informatics is a sub-set of skills from the broader Data Analytics profession and the majority of faculty have training and experience at the Health Data Analytics level. Three current adjunct faculty have expressed interest in the builds. The SMEs and Instructional Design would be the costs for the three courses (one partial and two new builds), totaling approximately $7,000.

Institutional Contact for this Proposal: Brooke Palkie	Title: Chair HST Department and M.S. Program Director	Tel.: 860-515-3819 e-mail: bpalkie@charteroak.edu

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Modification of a Program

Bachelor of Science and Master of
Science in Health Care Administration

Charter Oak State College

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the modification of a program – specifically a name change to both the Bachelor of Science and Master of Science in Health Care Administration at Charter Oak State College.

A True Copy:

_____

Pamela A. Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Name change to the Bachelor of Science and Master of Science in Health Care Administration at Charter Oak State College.

BACKGROUND AND PROPOSAL

Old Name: Health Care Administration
New Name: Healthcare Administration

Changing the program name from "B.S. Health Care Administration" to "B.S. Healthcare Administration" and "M.S. Health Care Administration" to "M.S. Healthcare Administration" aligns the program with industry standards, current usage trends, and clarity in communication.

The term “healthcare” is increasingly used as a single, unified word across the healthcare industry, both in academia and professional settings. Benchmarking with similar programs reveals that leading institutions, such as Johns Hopkins University, SUNY – The State University of New York, SNHU – Southern NH University, Western Governors, and University of Scranton, use “Healthcare Administration” in their program names. This reflects the industry preference for a streamlined, modern term, making it more recognizable and relevant to prospective students and employers.

In addition, "Healthcare" is more often recognized as referring to the system, services, and management structures in place, while “health care” could be interpreted as more patient-facing or direct medical services. The shift from clarifies that the program focuses on managing and leading within the broader healthcare system.

As "Healthcare" becomes the preferred term in the field, this change ensures the program name remains competitive and contemporary, reflecting modern usage, industry trends, and practical considerations for marketing and recruitment.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve this modification. CSCU Academic and Student Affairs concurs with this recommendation.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

*APPLICATION FOR **NAME CHANGE – MODIFICATION OF ACCREDITED PROGRAM***

NAME CHANGE REQUEST	
Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

NOTE: Use this form if modifying only the name of the program.

Current Program Characteristics

Name of Program: Health Care Administration
OHE #: 17310
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Bachelor of Science, B.S.**
Date Program was Initiated: 2013
Total # Credits in Program: 42
Credits in General Education: 40
CIP Code Number: 51.0701 Title of CIP Code: Health/Health Care Administration/Management
Department where program is housed: Health Science & Technology (HST) Department
Location Offering the Program *(e.g., main campus)*: Online – Main Campus

Proposed New Name of Program: Healthcare Administration

Proposed Date Name Change Becomes Effective: August 2025

Explanation / Justification

Provide a concise rationale for the name change request, and discuss any anticipated impact upon the institution, its mission, and its students.

Changing the program name from "B.S. Health Care Administration" to "B.S. Healthcare Administration" can be justified by aligning with industry standards, current usage trends, and clarity in communication.

1. Alignment with Industry Standards:
The term “healthcare” is increasingly used as a single, unified word across the healthcare industry, both in academia and professional settings. Benchmarking with similar programs reveals that leading institutions, such as Johns Hopkins University, Suny – The State University of New York, SNHU – Southern NH University, Western Governors, and University of Scranton, use “Healthcare Administration” in their program names. This reflects the industry preference for a streamlined, modern term, making it more recognizable and relevant to prospective students and employers.

2. Clarity in Communication:
"Healthcare" is more often recognized as referring to the system, services, and management structures in place, while “health care” could be interpreted as more patient-facing or direct medical services. The shift from "Health Care Administration" to "Healthcare Administration" clarifies that the program focuses on managing and leading within the broader healthcare system.

As "Healthcare" becomes the preferred term in the field, this change ensures the program name remains competitive and contemporary, reflecting modern usage, industry trends, and practical considerations for marketing and recruitment.
Programmatic Changes *If applicable, provide a concise discussion regarding any programmatic changes to be necessitated by the requested name change.* N/A. The majority of course titles and descriptions already reflect the term “healthcare”.
Cost and Availability of Adequate Resources *If applicable, provide a one paragraph narrative addressing additional cost and resources necessitated by the requested name change.* Update website and programmatic marketing material as material runs low (replace with the updated name change).

Institutional Contact for this Proposal: Stacey Walraven	Title: Program Director, B.S. HCA Program	Tel.: 860-515-3723 e-mail: swalraven@charteroak.edu

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

APPLICATION FOR ***NAME CHANGE – MODIFICATION OF ACCREDITED PROGRAM***

NAME CHANGE REQUEST	
Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

NOTE: Use this form if modifying only the name of the program.

Current Program Characteristics

Name of Program: Health Care Administration
OHE #: 019349
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Master of Science, M.S.**
Date Program was Initiated: 06/20/2013
Total # Credits in Program: 30
Credits in General Education: N/A
CIP Code Number: 510701 Title of CIP Code: Health/ Health Care Administration/Management
Department where program is housed: Health Science & Technology (HST) Department
Location Offering the Program *(e.g., main campus)*: Online – Main Campus

Proposed New Name of Program: Healthcare Administration

Proposed Date Name Change Becomes Effective: August 2025

Explanation / Justification

Provide a concise rationale for the name change request, and discuss any anticipated impact upon the institution, its mission, and its students.

Changing the program name from "M.S. Health Care Administration" to "M.S. Healthcare Administration" can be justified by aligning with industry standards, current usage trends, and clarity in communication.

1. Alignment with Industry Standards:
The term "healthcare" is increasingly used as a single, unified word across the healthcare industry, both in academia and professional settings. Benchmarking with similar programs reveals that leading institutions, such as *Johns Hopkins University, Suny – The State University of New York, SNHU – Southern NH University, Western Governors, and University of Scranton*, use "Healthcare Administration" in their program names. This reflects the industry preference for a streamlined, modern term, making it more recognizable and relevant to prospective students and employers.

2. Clarity in Communication:
"Healthcare" is more often recognized as referring to the system, services, and management structures in place, while "health care" could be interpreted as more patient-facing or direct medical services. The shift from "Health Care Administration" to "Healthcare Administration" clarifies that the program focuses on managing and leading within the broader healthcare system.

As "Healthcare" becomes the preferred term in the field, this change ensures the program name

remains competitive and contemporary, reflecting modern usage, industry trends, and practical considerations for marketing and recruitment.
Programmatic Changes *If applicable, provide a concise discussion regarding any programmatic changes to be necessitated by the requested name change.* N/A. The majority of course titles and descriptions already reflect the term "healthcare".
Cost and Availability of Adequate Resources *If applicable, provide a one paragraph narrative addressing additional cost and resources necessitated by the requested name change.* Update website and programmatic marketing material as material runs low (replace with the updated name change).

Institutional Contact for this Proposal: Brooke Palkie	Title: Chair, HST Department Program Director, M.S. HCA Program	Tel.: 860-515-3819 e-mail: bpalkie@charteroak.edu

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Discontinuation of Undergraduate Certificate

Clinical Documentation Improvement at
Charter Oak State College

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the discontinuation of the following undergraduate certificate at Charter Oak State College effective May 2026.

Clinical Documentation Improvement CIP Code: 51.0707 OHE#: 20262

A True Copy:

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Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Discontinuations of an undergraduate certificate – Clinical Documentation Improvement (CDI) at Charter Oak State College.

BACKGROUND AND RATIONALE

Despite a 2-year effort and an accreditation from the Commission on Accreditation for Health Informatics and Information Management (CAHIIM), the program has not attracted prospective students. There currently are 3 students in the program and only 2 other students who have started but did not complete. With five courses that are specific to the program, it has become unsustainable. During the same time, the American Health Information Management Association (AHIMA) launched Clinical Documentation training modules at a much cheaper price that we cannot compete with. Although we believed it would be a popular offering and we do get a good level of interest, there is a lack of prospects who actually move forward with the program.

PHASE OUT/TEACH OUT STRATEGY

The CDI courses will continue to be offered until each student who wishes to complete the program does so. The Program Director will attempt to keep the remaining students on the same schedule, so the courses do not have to be offered more times than necessary to allow students to complete the certificate.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve these discontinuations. CSCU Academic and Student Affairs concurs with this recommendation.

12/6/2024 – BOR - Academic and Student Affairs Committee
12/19/2024 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

APPLICATION FOR ***DISCONTINUATION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Program Characteristics
Name of Program: Clinical Documentation Improvement
BOR Accreditation Date: 2021
OHE #: 20262
CIP Code Number: 51.0707 Title of CIP Code: Health Information/Medical Record Technology/Technician
Program Type *(include degree or certificate type, abbreviation, and name, e.g., Associates, AS, Associate of Science)*: Certificate
Modality of Program *(check all that apply)*: ☐ On ground ☒ Online ☐ Hybrid, % of fully online courses
Locality of Program: ☐ On Campus ☐ Off Campus ☐ Both

Phase Out / Teach Out Period: **2025**
Expected Dates of Program Termination

- Date for final enrollment of new students**: 1/15/2025**
- Date for final award of credential: **5/31/2026**

Department where program is housed: **Health Science and Technology**
Location Offering the Program *(e.g., main campus)*: **Online**

Institutional Contact for this Proposal: **Cindy Edgerton**	Title: **Program Director, HIM**	Tel.: **860-515-3833** e-mail: **cedgerton@charteroak.edu**

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Describe the rationale for discontinuing this program. Consider whether discontinuation: a) occurs in the context of a related academic improvement, e.g., the merging of programs with declining enrollment/completions into a new program that effectively addresses relevant state needs and students' interests; b) is in response to the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) is in response to other institutional considerations such as redirecting capacity, adoption of new mission, etc. Provide any quantitative information in support of the discontinuation, including any relevant financial information. *Program discontinuation should not impact state priorities for workforce preparation.*

Despite a 2-year effort and an accreditation from CAHIIM, the program has not attracted prospective students. There currently are 3 students in the program and only 2 other students who have started and did not complete. With five courses that are specific to the program, it has become unsustainable. During the same time, AHIMA launched Clinical Documentation training modules at a much cheaper price that we cannot compete with. Although we believed it would be a popular offering, and we do get a good level of interest, there is a lack of prospects who actually move forward with the program.

Phase Out/Teach Out Strategy

Describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g., enrollments, any special resources needed, etc.)

The CDI courses will continue to be offered until each student who wishes to complete the program does so. The Program Director will attempt to keep the remaining students on the same schedule so the courses do not have to be offered more times than necessary to allow students to complete the certificate.

SECTION 3: RESOURCES

Close Out Costs

What resources/costs would be employed and/or expended to discontinue program? What would be the total cost?

No close out costs.

SECTION 4: LESSONS LEARNED

A Debriefing Exercise

Lessons Learned include knowledge or understanding gained from experience(s) that can speak to the strengths and weaknesses of an undertaking's preparation, design, and/or implementation.

Describe lessons learned – experiences distilled from: (a) circumstances that precipitated this program discontinuation, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s) that can be **beneficially** shared with / taken into account by current and future programs.

The college was approached by two Clinical Documentation Improvement experts in the field looking for a college to start a program. Since it was an excellent pathway to the BS HIM, we decided that it was a good fit and proceeded to create the program. However, we did not do extensive market research and we did not have a tool such as Grey DI at the time, so we did not have hard data to guide us. The lesson learned is to focus on the most popular and searched for programs, rather than niche programs that we hope will be a funnel to a major.

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

Concerning

Discontinuation of Undergraduate Certificate

Health Insurance Customer Service at
Charter Oak State College

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the discontinuation of the following undergraduate certificate at Charter Oak State College effective May 2026.

Health Insurance Customer Service CIP Code: 51.0713 OHE#: 15447

A True Copy:

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Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Discontinuations of an undergraduate certificate – Health Insurance Customer Service at Charter Oak State College.

BACKGROUND AND RATIONALE

This certificate was initially established in response to a corporate partner relationship that is no longer active. Despite an ongoing effort and an accreditation from the Commission on Accreditation for Health Informatics and Information Management (CAHIIM), the program has not attracted prospective students over the years. There currently are no students in the program and the certificate does not lead directly to an industry-recognized credential.

PHASE OUT/TEACH OUT STRATEGY

There are no students enrolled in this certificate.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve these discontinuations. CSCU Academic and Student Affairs concurs with this recommendation.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

APPLICATION FOR ***DISCONTINUATION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Program Characteristics

Name of Program: Health Insurance Customer Service

BOR Accreditation Date: March 2017

OHE #: 15447

CIP Code Number: 51.0713 Title of CIP Code: Medical Billing and Coding

Program Type *(include degree or certificate type, abbreviation, and name, e.g., Associates, AS, Associate of Science)*: **Undergraduate Certificate**

Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses

Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both

Phase Out / Teach Out Period: 2025

Expected Dates of Program Termination

- Date for final enrollment of new students: 1/15/2025
- Date for final award of credential: 5/31/2026

Department where program is housed: Health Science & Technology

Location Offering the Program *(e.g., main campus)*: Online

Institutional Contact for this Proposal: Cindy Edgerton	Title: Program Director, HIM	Tel.: 860-515-3833 e-mail: cedgerton@charteroak.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Describe the rationale for discontinuing this program. Consider whether discontinuation: a) occurs in the context of a related academic improvement, e.g., the merging of programs with declining enrollment/completions into a new program that effectively addresses relevant state needs and students' interests; b) is in response to the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) is in response to other institutional considerations such as redirecting capacity, adoption of new mission, etc. Provide any quantitative information in support of the discontinuation, including any relevant financial information. *Program discontinuation should not impact state priorities for workforce preparation.*

This certificate was initially established in response to a corporate partner relationship that is no longer active. Despite an ongoing effort and an accreditation from CAHIIM, the program has not attracted prospective students over the years. There currently are 0 students in the program. The certificate does not lead directly to an industry-recognized credential.

Phase Out/Teach Out Strategy

Describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g., enrollments, any special resources needed, etc.)

There are no students enrolled in this certificate.

SECTION 3: RESOURCES

Close Out Costs

What resources/costs would be employed and/or expended to discontinue program? What would be the total cost?

No resources/costs are needed to discontinue this program as there is no enrollment or classes being offered specific to this certificate.

SECTION 4: LESSONS LEARNED

A Debriefing Exercise

Lessons Learned include knowledge or understanding gained from experience(s) that can speak to the strengths and weaknesses of an undertaking's preparation, design, and/or implementation.

Describe lessons learned – experiences distilled from: (a) circumstances that precipitated this program discontinuation, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s) that can be **beneficially** shared with / taken into account by current and future programs.

The college was approached by an outside organization to start a program as a continuation of the relationship between the college and the organization. Since it was an excellent pathway to the BS HCA, it was decided that it was a good fit and proceeded to create the program. However, the connection to the organization does not exist anymore and the certificate did not end up gaining any enrollment over the years. The college did not have a tool such as Grey DI at the time, so we did not have hard data to guide us. The lesson learned is to focus on the most popular and searched for programs, rather than niche programs that we hope will be a funnel to a major.

CSCU Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION
Concerning

Discontinuation of Undergraduate Certificate

Leadership in Health Care Administration at
Charter Oak State College

December 19, 2024

RESOLVED: That the Board of Regents for Higher Education approve the discontinuation of the following undergraduate certificate at Charter Oak State College effective May 2026.

Leadership in Health Care Administration CIP Code: 51.0701 OHE#: 16818

A True Copy:

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Pamela Heleen, Secretary of the
CT Board of Regents for Higher Education

ITEM

Discontinuations of an undergraduate certificate – Leadership in Health Care Administration at Charter Oak State College.

BACKGROUND AND RATIONALE

This certificate was established to be a pathway to the Health Care Administration degree program. Enrollment has been low despite the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) accreditation of the certificate. The certificate does not lead directly to an industry-recognized credential.

PHASE OUT/TEACH OUT STRATEGY

Four students are enrolled in this certificate secondary to their degree programs. All courses within the certificate exist as part of curriculum for other programs, as well. The courses will continue to be offered and each student who wishes to complete the program will be able to do so. The Program Director will attempt to keep the remaining students on the same schedule, so the courses do not have to be offered more times than necessary to allow students to complete the certificate.

RECOMMENDATION

Following its review and deliberative process, it is the recommendation of the Academic & Student Affairs Committee that the Board of Regents approve these discontinuations. CSCU Academic and Student Affairs concurs with this recommendation.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

APPLICATION FOR ***DISCONTINUATION OF EXISTING PROGRAM***

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Program Characteristics

Name of Program: Leadership in Health Care Administration

BOR Accreditation Date: 2011

OHE #: 16818

CIP Code Number: 51.0701 Title of CIP Code: Medical Office Mgmt/Admin.

Program Type *(include degree or certificate type, abbreviation, and name, e.g., Associates, AS, Associate of Science)*: **Undergraduate Certificate**

Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses

Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both

Phase Out / Teach Out Period: 2025

Expected Dates of Program Termination

- Date for final enrollment of new students: 1/15/2025
- Date for final award of credential: 5/31/2026

Department where program is housed: Health Science & Technology

Location Offering the Program *(e.g., main campus)*: Online

Institutional Contact for this Proposal: Stacey Walraven	Title: Program Director, HCA	Tel.: 830-515-3723 e-mail: swalraven@charteroak.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Describe the rationale for discontinuing this program. Consider whether discontinuation: a) occurs in the context of a related academic improvement, e.g., the merging of programs with declining enrollment/completions into a new program that effectively addresses relevant state needs and students' interests; b) is in response to the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) is in response to other institutional considerations such as redirecting capacity, adoption of new mission, etc. Provide any quantitative information in support of the discontinuation, including any relevant financial information. *Program discontinuation should not impact state priorities for workforce preparation.*

This certificate was established to be a pathway to the Health Care Administration degree program. Enrollment has been low despite CAHIIM accreditation of the certificate. The certificate does not lead directly to an industry-recognized credential.

Phase Out/Teach Out Strategy

Describe how the institution will ensure that students currently enrolled will be provided opportunities to complete the program. Provide quantitative information as needed (e.g., enrollments, any special resources needed, etc.)

Four students are enrolled in this certificate secondary to their degree programs. All courses within the certificate exist as part of curriculum for other programs as well. The courses will continue to be offered and each student who wishes to complete the program will be able to do so. The Program Director will attempt to keep the remaining students on the same schedule, so the courses do not have to be offered more times than necessary to allow students to complete the certificate.

SECTION 3: RESOURCES

Close Out Costs

What resources/costs would be employed and/or expended to discontinue program? What would be the total cost?

No resources/costs need to discontinue program as there is no enrollment or classes being offered specific to this certificate.

SECTION 4: LESSONS LEARNED

A Debriefing Exercise

Lessons Learned include knowledge or understanding gained from experience(s) that can speak to the strengths and weaknesses of an undertaking's preparation, design, and/or implementation.

Describe lessons learned – experiences distilled from: (a) circumstances that precipitated this program discontinuation, (b) institutional or programmatic action(s) in the face of the referenced circumstances, (c) institutional or programmatic inaction(s) in the face of the referenced circumstances, and/or (d) some other occurrence(s) that can be **beneficially** shared with / taken into account by current and future programs.

This certificate does not lead to an industry-recognized credential. Data sourced from Gray DI did not support increase in job openings related to the certificate level of this program. The college did not have a tool such as Grey DI at the time and not have hard data to guide us. The lesson learned is to focus on the most popular and searched for programs and potentially ones that can lead to industry-recognized credentials.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Most Recent NECHE Institutional Accreditation Action and Date: Fall 2016

Use this form for modifications that fall below the threshold required for full BOR review, defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program". For changes not below this threshold, use form 201 (*Application for Modification of an Accredited Program*).

Total Number of courses and course credits to be modified by this application: **4 required courses in the original program application are being replaced with 4 new AI (Artificial Intelligence) courses (12 credits); 1 additional new course added (3 credits); 1 course name change**

For the singular changes noted below, alternate forms are available:

- If only modifying modality, use form XXX *Application to Modify Instructional Modality*
- If only modifying program name, use form XXX *Application for Name Change*
- If only modifying CIP code, use form XXX *Application to Change CIP Code*
- If only adding auxiliary site, use form XXX *Application for Adding an Auxiliary Instructional Site*

Original Program Characteristics

Name of Program: Software Development
OHE #: **21941**
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Bachelor of Science, BS**
Date Program was Initiated: Fall 2023
Total # Credits in Program: 48
Credits in General Education: 40
CIP Code Number: 11.0501 Title of CIP Code: Computer Systems Analysis/Analyst

Modified Program Characteristics

Name of Program: Software Development
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Bachelor of Science, BS**
Initiation Date for Modified Program: Fall 2025
Anticipated Date of First Graduation: Spring 2026
Total # Credits in Program: 51
Credits in General Education: 40
CIP Code Number: 11.0501 Title of CIP Code: Computer Systems Analysis/Analyst

Department where program is housed: Business & Technology
Location Offering the Program *(e.g., main campus)*: Online

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

If modification of the program is concurrent with discontinuation of related program(s), please list for each program: Program Discontinued: CIP: OHE#: BOR Accreditation Date: Phase Out Period Date of Program Termination Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No		
Institutional Contact for this Proposal: Joseph Gradecki	Title: Technology Program Coordinator	Tel.: 860-515-3834 e-mail: jgradecki@charteroak.edu

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Rationale for Modification

Describe the context and need for the proposed modification(s) and the relationship to the originally approved program:

The integration of Artificial Intelligence (AI) technologies is revolutionizing business operations and enhancing productivity across various sectors. Practical AI applications, such as intelligent virtual assistants and predictive analytics, are pivotal in improving operational efficiency, customer experience, and data-informed decision-making.

Given the desire for AI in the business realm, it is imperative software developers have the necessary background to facilitate the development of this new technology. By including advanced courses, in AI we will be giving the software developers who graduate from Charter Oak State College and substantial opportunity compared to other programs.

The courses replaced by the new AI courses include project management topics covered in other areas of the program sufficiently.

ITE2XX *Software Development Methodologies and Languages* is a name change to better reflect the nature of the material in the course

The student learning outcomes are also being updated to reflect the new AI-focused curriculum.

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

Original Program		Proposed Modified Program	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
CSS 101: Cybersecurity Fundamentals	3	CSS 101: Cybersecurity Fundamentals	3
ITE 105: Computer Information Systems	3	ITE 105: Computer Information Systems	3
ITE 107: Integrated IT Systems and Emerging Technologies	3	ITE 107: Integrated IT Systems and Emerging Technologies	3
ITE 220: Networking & Data Communications	3	ITE 220: Networking & Data Communications	3
ITE 115: Program Logic and Design with Python	3	ITE 115: Program Logic and Design with Python	3
ITE 2XX: Data Structures and Algorithms	3	ITE 2XX: Data Structures and Algorithms	3

ITE 2XX: Software Development Process Overview	3	**ITE 2XX: Software Development Methodologies and Languages**	3
ITE 4XX: Database Design & Development	3	**ITE3XX: Introduction to Artificial Intelligence and Generative AI**	3
ITE 3XX: Web-based Development	3	ITE 3XX: Web-based Development	3
ITE 2XX: Object Oriented Programming and Architectures	3	ITE 2XX: Object Oriented Programming and Architectures	3
ITE 3XX: DevOps Methodology	3	ITE 3XX: DevOps Methodology	3
MGT 101 Principles of Management	3	**ITE4XX: Introduction to Machine Learning**	3
MGT 460 Fundamentals of Project Management	3	**ITE4XX: Introduction to Computer Vision**	3
MGT 4XX: Agile Development and Management	3	MGT 4XX: Agile Development and Management	3
Choose 1 of the following: ITE 330: Systems Analysis and Design ITE 345: Computer Ethics ITE 410: Software Engineering ITE 225: Computer Organization ITE 399: Information Systems Practicum	3	**ITE4XX: Introduction to Natural Language Processing**	3
ITE 495: Capstone	3	ITE 495: Capstone	3
		PHL2XX: Artificial Intelligence and Ethics	3
Total Credits Original Program	**48**	**Total Credits Modified Program**	**51**

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. Map these learning outcomes to courses listed under the "Curriculum" section below.

1. **Analyze complex problems and design, develop, and implement software solutions across a variety of architectures.**
2. **Utilize foundational and emerging programming languages to build adaptable software systems.**
3. **Design, build, and manage databases to support software applications.**
4. **Apply principles of networking, security, and ethical practices to ensure safe and responsible software development.**
5. **Develop AI systems, focusing on next-generation technologies and responsible deployment.**
6. **Implement and evaluate machine learning models to solve practical problems, including natural language processing and computer vision tasks.**
7. **Evaluate generative models and their applications in creating new data from existing datasets.**

8. **Demonstrate effective project management skills in software development, ensuring continuous improvement and adaptability.**

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

In accordance with NECHE Standard 4, Charter Oak's academic programs are consistent with and serve to fulfill its mission and purposes. Charter Oak works systematically and effectively to plan, provide, oversee, evaluate, improve, and assure the academic quality and integrity of its academic programs and the credits and degrees awarded. Charter Oak sets a standard of student achievement appropriate to the degree or certificate awarded and develops the systematic means to understand how and what students are learning and to use the evidence obtained to improve the academic program.

Overview of Charter Oak State College Program Review Process

- Program Reviewer/s will meet with Institutional Research Director to discuss data needed for analysis and incorporation into program internal review documentation.
- Program Reviewer/s conducts internal review and fills out the Charter Oak program review report. The program reviewer can be one or more teaching faculty and/or Program Director. Topics covered include: program enrollments, course enrollments, course success rates, program completions, faculty evaluations, program curriculum and course materials, Blackboard and ADA compliance, employment outcomes, equity gaps, equity plan, and enrollment and completion trend analysis.
- Program Reviewer/s presents internal review along with actions and recommendations to external reviewer/s (peers from another college, advisory board, etc.) and documents external reviewer's actions and recommendations.
- If the program falls under the definition of the BOR Low Completer Policy and the recommendation is to consolidate or continue the program, the justification as listed in the BOR Low Completer Policy must be included within the review.
- Program Reviewer/s will submit an electronic version of completed document to the Program Director and Provost for review and signatures of receipt. The Provost has authority to approve action plans outlined in the program review document.

After completion of the program review, an electronic copy is sent to Charter Oak's Academic Council (our governance) for review and feedback. An electronic copy is sent to Charter Oak's Cabinet and a 15-20-minute presentation by the lead program reviewer will take place at Cabinet to discuss findings, recommendations, and feedback from Cabinet.

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	Learning Outcome # (from above)	Pre-Requisite(s)	Credit Hours
CSS 101: Cybersecurity Fundamentals	4		3
ITE 105: Computer Information Systems	2 & 3		3
ITE 107: Integrated IT Systems and Emerging Technologies	4 & 2	ITE 105: Computer Information Systems	3
ITE 220: Networking & Data Communications	4	CSS 101: Cybersecurity Fundamentals	3

ITE 115: Program Logic and Design with Python	1 & 2	ITE 105: Computer Information Systems	3
ITE 2XX: Data Structures and Algorithms	1 & 2	ITE 115: Program logic and Design with Python	3
ITE 2XX: Software Development Methodologies and Languages	1 & 8	ITE 115: Program logic and Design with Python	3
ITE3XX: Introduction to Artificial Intelligence and Generative AI	5 & 7	ITE 115: Program logic and Design with Python	3
ITE 3XX: Web-based Development	1 & 2	ITE 115 Program logic and Design with Python, ITE 2XX Data Structures and Algorithms	3
PHL2XX: Artificial Intelligence and Ethics	5 & 4	ENG 101: English Composition 1 & ENG 102: English Composition 2, ITE 200-level course or equivalent (Recommended)	3
ITE 2XX: Object Oriented Programming and Architectures	1 & 2	ITE 2XX Data Structures and Algorithms	3
ITE 3XX: DevOps Methodology	8 & 1	ITE3XX Web-based Development	3
ITE4XX: Introduction to Machine Learning	6	ITE3XX Introduction to Artificial Intelligence and Generative AI	3
ITE4XX: Introduction to Computer Vision	6	ITE3XX: Introduction to Artificial Intelligence and Generative AI	3
MGT 4XX: Agile Development and Management	8	ITE 2XX: Software Development Methodologies and Languages	3
ITE4XX: Introduction to Natural Language Processing	6	ITE3XX: Introduction to Artificial Intelligence and Generative AI	3
ITE 495: Capstone	1-8	Taken in last Term	3
Written Com I (ENG 101)			3
Written Com II			3
Oral Communication			3
Arts and Humanities			3
Quantitative Reasoning			3
Scientific Reasoning			4

Scientific Knowledge and Understanding			3
Historical Knowledge			3
Social and Behavioral Sciences			3
Continued Learning/Information Literacy			3
Diversity, Equity, and Inclusion			3
Digital/Technological Literacy			3
Innovative Thinking			3
Open Electives (*Indicate number of credits of open electives*)			29
Total Program Credits:			120

Description of Related Modification(s)

Provide a summary of other changes, if any, necessitated by curricular modification, such as admissions or graduation requirements

N/A

Description of Resources Needed

As appropriate, summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.

Course development costs for the new AI courses are covered under the original budget for replaced courses.

All 5 new courses will also be included in the new AI Practitioner certificate. The cost to develop a new course is $3,000.00 so the total cost will be approximately $15,000. Tuition will cover the cost of the development. Usually break even comes the second time the course is offered.

SECTION 3: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: https://www.charteroak.edu/software-development/

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: 4 years

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information: https://www.charteroak.edu/prospective/tuition/

Request for SAA Approval for Veterans Benefits? ☐ **Yes** ☐ No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable): **Gain a comprehensive understanding of the various aspects of software development with our new Software Development major. Students in this program learn to work with a diverse range of programming languages, mobile and web technologies, web application frameworks, project management, and databases. This project-driven program enables students to learn from experienced faculty who are actively involved in the industry. The Bureau of Labor anticipates a 22% job growth rate with a median wage of over $110,000 nationally through 2030.**

Students can earn a Charter Oak State College IT Support Professional Certificate with the successful completion of CSS 101, ITE 105, ITE 107, and ITE 220. These courses will also prepare them for the CompTIA A+ industry certification (optional choice for students to complete on their own).

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): 15-1253.00 Software Developers, Quality Assurance Analysts and Testers

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? $101,800

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): 541511 Custom Computer Programming Services

Career/Program Pathways

Does this program prepare students for another program? ☐ Yes, specify program: ☒ **No X**

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): Joseph Gradecki, Technology Program Coordinator, jgradecki@charteroak.edu, 860-515-3834

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? 0

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? 5

Admissions Requirements

What are the admissions requirements for the program? COSC is an open access institution. There are no special admissions requirements for this program.

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ **Yes X** ☐ No

If yes, describe: **Program requires ITE495 Capstone to be completed**

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☐ Yes ☒ **No X**

If yes, describe and attach copies of the contracts or other documents ensuring program support:

Prospective Students

Describe the prospective students for the program: Any student currently in an entry-level IT job or an interest in the computer technology field. From CT State, currently there are 565 students in the Computer Science TAP pathway and several hundred more in non-TAP computer associate programs.

NEW COURSE DESCRIPTIONS:

ITE3XX: Introduction to Artificial Intelligence and Generative AI

Artificial Intelligence (AI) is the field of computer science that focuses on creating machines capable of performing tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and understanding language. AI encompasses various techniques, including machine learning and deep learning, which allow systems to improve over time by learning from data. Generative AI is a subset of AI that involves creating new, original content—such as text, images, music, or code—by using models trained on vast amounts of data. These models, like GPT and DALL·E, learn patterns in data and can generate realistic, coherent outputs based on new inputs, driving innovations in creativity, automation, and personalization across industries. In this course, students will explore an introduction to AI with a focus on machine learning, natural language processing and computer vision. Generative AI will cover models used for text, image, video and audio generation.

PHL2XX: Artificial Intelligence and Ethics

AI ethics refers to the moral principles and societal implications involved in the development and deployment of artificial intelligence technologies. It addresses critical issues such as fairness, accountability, transparency, privacy, and the potential for bias in AI systems. Ethical concerns arise when AI decisions impact human lives, such as in hiring, healthcare, or law enforcement, where biased data can lead to unfair outcomes. AI ethics also focuses on ensuring that AI technologies respect human rights, minimize harm, and remain accountable to humans, while considering the long-term effects of AI on jobs, security, and societal structures. Responsible AI development involves balancing innovation with ethical considerations to avoid misuse and ensure trustworthiness.

ITE4XX: Introduction to Machine Learning

Machine Learning (ML) is a branch of artificial intelligence (AI) that focuses on building systems that can learn from and make decisions based on data. Instead of being explicitly programmed to perform a task, a machine learning model improves its performance on tasks by identifying patterns and insights from data through algorithms. In this course, students will explore using Python and associated ML modules for supervised and unsupervised learning. Neural networks and deep learning will be explored. ML projects will reinforce the learned concepts.

ITE4XX: Introduction to Natural Language Processing

Natural Language Processing (NLP) is a field of artificial intelligence (AI) that focuses on the interaction between computers and human language. It involves developing algorithms and models that enable computers to understand, interpret, and generate human language in a way that is both meaningful and useful. NLP combines linguistics, computer science, and machine learning to process and analyze large amounts of natural language data. In this course, students will learn data curation, preprocessing and visualization, language models and build a Chatbot using NLP models.

ITE4XX: Introduction to Computer Vision

Computer Vision is one of the most exciting fields in Machine Learning and AI. It has applications in many industries, such as self-driving cars, robotics, augmented reality, and much more. In this beginner-friendly course, you will understand computer vision and learn about its various applications across many industries. This is a hands-on course and involves several labs and exercises. Topics will include Data acquisition and exploration, Convolutional Neural Networks (CNN), Tensorflow and Keras as well as Edge AI and the future of Computer Vision.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

NEW CERTIFICATE – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: **Charter Oak State College**	Please enter the following dates: Submission of Initial Intent Form to Provosts Council: **9/24/2024** Review by Provosts Council: **10/22/2024** Final approval by institution: **10/25/2024** Submission of this form to the CSCU Office of the Provost for Academic Council: **10/23/2024**

Most Recent NECHE Institutional Accreditation Action and Date: **Fall 2016**

Program Characteristics

Name of Program: **AI Practitioner**

Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses

Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both

Program website: https://www.charteroak.edu/prospective/programs/#certificates

Program Type *(degree type, abbreviation, name, e.g., Certificate 16-30 credits, C2, Certificate)*: **C2**

Anticipated Program Initiation Date: **Fall 2025**

Anticipated Date of First Completion: **Summer 2026**

Total # Credits in Program: **21**

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: **1 Year**

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information:
https://www.charteroak.edu/catalog/current/fees_financial_aid_scholarships/undergraduate-current-fees.php

CIP Code Number: **11.0102** Title of CIP Code: **Artificial Intelligence**

Department where program is housed: **Business & Technology**

Location Offering the Program *(e.g., main campus)*: **Online**

Request for SAA Approval for Veterans Benefits? ☒ **Yes** ☐ No

Provide the intended catalog description for this program: The AI Practitioner Certificate program is designed to equip students with the essential knowledge and skills to navigate the rapidly evolving field of artificial intelligence. Students will explore foundational concepts, practical applications, and ethical considerations surrounding AI. Topics will include Python, Generative AI, Machine Learning, Computer Vision and Natural Language Processing which is the backbone technology to systems like ChatGPT. Upon completion, graduates will have the foundational knowledge and skills to pursue careers in AI-related fields or enhance their existing professional expertise.

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:

Program Discontinued: CIP: OHE#: BOR Accreditation Date:

Phase Out Period Date of Program Termination

Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Other Program Accreditation:

- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
- If program prepares graduates eligibility to state/professional licensure,
  - identify credential:
  - confirm NC-SARA requirements met: ☒ **Yes** ☐ No

(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)

Institutional Contact for this Proposal: **Dr. David Ferreira**	Title: **Provost**	Tel.: **(860) 515-3727** e-mail: **dferreira@charteroak.edu**

NEW CERTIFICATE – BELOW THRESHOLD REPORT

NOTES:

- This informational report pertains to academic programs not reaching the threshold requiring Board of Regents action. Information is shared with the BOR-Academic Council, included in the BOR-Academic and Student Affairs Committee meetings, and forwarded to the Office of Higher Education for inclusion in the CT Credential Registry.
- This form should be used for the following new academic programs, which are considered Below Threshold and do not require a BOR resolution:
  - Undergraduate certificates ≤ 30 credits within an approved program (if changes are required to the parent program, submit the relevant program modification form)
  - Undergraduate certificates ≤ 15 credits
  - Graduate certificates ≤ 12 credits
  - Non-credit bearing certificates

SECTION 2: PROGRAM PLANNING ASSESSMENT

Alignment of Program with Institutional Mission, Role, and Scope

How does the program align with the institutional mission? *(Provide a concise statement)*

- The certificate is designed for working professionals who want a specialized certificate to increase their opportunities for employment as well as those that want to upskill or reskill due to changes to their job function as a result of AI.
- The certificate can be completed 100% online using faculty who are experts in the field.
- The certificate can be a pathway to the Bachelor of Science in Software Development, Data Analytics, and possibly others.

Addressing Identified Needs

- How does the program address CT workforce needs and/or the wellbeing of CT communities – and include a description/analysis of employment prospects for graduates of this proposed program. *(Succinctly present as much factual evidence and evaluation of stated needs as possible and identify data sources, e.g., JobsEQ, Dept of Labor statistics, etc.)*

  McKinsey Data

  Use of Generative AI has doubled in just 10 months from 2023-2024 (33-65%)

  Areas of highest use: Marketing & Sales, Product Development, IT, HR, Manufacturing, and Supply Chain

  Microsoft May 2024 Report

  78% of AI Users are bringing their own AI to work

  75% of knowledge workers use AI at work

  55% of leaders are concerned about having enough talent to fill roles

  66% of leaders say they would not hire someone without AI skills

  71% say they would rather hire someone with less experience with AI skills than a person with more experience but without AI skills

  PWC Report

  Jobs that require AI Specialist Skills carry up to a 25% wage premium in some markets

  Jobs that require AI Specialist skills are growing 3.5 faster than other jobs

  According to the 2024 State of Business Communication report, most workers (52%) say they don't know how to use gen AI effectively. The learning curve to achieve enterprise-wide AI adoption might seem steep, but it is achievable.

- How does the program make use of the strengths of the institution (*e.g., curriculum, faculty, resources)* and of its distinctive character and/or location?

This will be the only online AI Practitioner certificate program in the CSCU system. It aims to give students foundational skills beneficial for career growth, potentially moving from entry-level IT roles to advanced positions in software development or related fields. Charter Oak State College plans to integrate this certificate with its Software Development bachelor's degree program, among others, allowing students to stack credentials and pave a career pathway from entry-level IT to well-paying careers.

- Equity (eliminating institutional performance disparities along dimensions of ability, ethnicity/race, economics, and gender) is one of the Board of Regents' Goals.
    - What specific metrics will be used to assess equity across these dimensions in terms of recruitment, enrollment, retention, and completion?

      As stated in our program review template, we assess recruitment, retention, enrollment and completion for both SES and race/ethnicity. Equity gaps within the program are required to develop an action plan for correction.
    - Describe specific aspects of the program (e.g., interventions to address college readiness, targeted recruitment strategies, comprehensive supports, etc.) intended to advance equitable student outcomes.

      One of the main goals is to promote social equity and learner empowerment by investing in priority populations. By having a focus on recruiting students from the community colleges and our community college tuition match program, Charter Oak is in a strong position to recruit students with low socio-economic status (SES) and other diverse backgrounds. We have also engaged with the Hartford non-profit Girls for Technology about developing a strategic partnership to serve their 18-24 year old diverse and underserved female cohort into this career field option. In fact, the CEO of Girls for Technology is a Charter Oak Alum.
    - Where inequities are found, how will the data be used by program and institutional leaders to address the inequities?

      When equity gaps are found, program directors submit a correction plan. For example, if may include a redesign of certain courses where we have identified significant equity gaps.
- Describe any pathways to, and/or from, this program to programs at your own institution and other institutions, both within and outside of CSCU, e.g., stackable credentials, transfer agreements, etc. (*Include additional details in the Quality Assessment portion of this application, as appropriate)*

  This program will be infused within COSC's Software Development bachelor's degree. The six courses required for the AI Practitioner certificate will also count toward the software development degree.
- Indicate what similar programs exist in other CSCU institutions, and how unnecessary duplication is being avoided:

  This will be the only online asynchronous AI Practitioner certificate program in the CSCU system.

Cost Effectiveness and Availability of Adequate Resources

Provide a brief narrative below regarding the budget for the proposed program, as well as the cost effectiveness, sustainability, and availability of adequate resources.

This is a very cost-effective certificate program for COSC to add to its portfolio of programs because all 5 new courses will also be incorporated into the Software Development bachelor's degree and the college will not need to hire a new lead faculty consultant to help with overall program design/outcomes. The cost to develop a new course is $3,000.00 so the total cost will be approximately $15,000. Tuition will cover the cost of the development. Usually break even comes the second time the course is offered.

Special Resources

Provide a brief description of resources that would be needed specifically for this program and how they will be used, e.g., laboratory equipment, specialized library collections, etc.

None. Current resources are sufficient.

Student Recruitment / Student Engagement

What are the sources for the program's projected enrollments? Describe the marketing, advising, and other student recruitment activities to be undertaken to ensure the projected enrollments are achieved.

All new programs begin with the development of a variety of foundational elements including but not limited to a Program specific brochure that is sent to prospects and also used by Admissions staff; a Digital Flyer that is given to Admissions Staff, the Assistant Director of Corporate Admissions and the Program Director for distribution and also the development of a Program page on CharterOak.edu designed to promote the program and encourage conversion via an on page Inquiry Form button.

Marketing Efforts include but will not be limited to:

Google Campaigns:

The Search campaign will be expanded to include all related search terms for this program. The related search terms will be targeted to adults 25-54 yrs of age with some college, no degree searching for a career in computers. Searchers on Google that click our ads will be sent to an appropriate landing page where details of the program and the College are shared with the push for conversion – a completed Inquiry Form.

The Display/Remarketing campaigns will begin to pick up those who have landed on our dedicated AI Practitioner Certificate landing page(s) and begin to serve them remarketing ads that are focused on College brand awareness. The ads "follow" the consumer on the Internet and serve as a reminder that they were interested in the program and on our site at one time. The goal is to encourage the consumer to revisit CharterOak.edu.

Targeted Out-of-State Markets

The College currently runs a Marketing campaign in targeted out-of-state markets. The AI Practitioner certificare will be integrated into this campaign in the following ways:

- AI-related search terms will be added to the out-of--state Google Search campaigns
- AI Practitioner call outs will be added to the out-of-state LinkedIn campaigns
- The AI Practitioner certificate will be added to our website landing pages

CT Community College Tuition Match Program:

The College currently offers graduating community college students with a minimum GPA of 2.0 the opportunity to enroll at Charter Oak at the current community college rate. The Marketing Department produces and direct mails a series of oversized postcards detailing the offer and all of the online programs we have that they can take advantage of. We will add the AI Practitioner program to this direct mail effort.

First Responder Umbrella:

For efficiency purposes, and to reach the working adult target market in their industry we employ an "umbrella" approach – ganging programs together under the workforce umbrella that makes the most sense and the including those programs in advertising efforts within those industries. For the AI Practitioner program that means they will join our First Responder umbrella and receive visibility within the digital ad campaign that is run in this specific vertical industry.

Social Media:

We will create awareness of the program by featuring posts about the program, the date the application opens, our expert faculty, program director, students, program strengths, program credentials, etc over the course of time. Eventually we will have Alum testimonials to add to the mix to highlight the strength of the program. Social channels include FB, LinkedIN, Twitter, Instagram, YouTube.

Email Communications:

A communications plan will be built for prospects of the program to send them news, open house invitations, program director messages, etc., and to emphasize key features of the program.

Equity:
We have already started to engage the employer and non-profit communities about this program. This certificate is especially attractive to Charter Oak because current students in the Software Development bachelor's degree programs are the perfect demographic that would be interested in this program. There would be an internal group of prospects for this program with easy marketing opportunities. For these students, this add-on to their degree could help them to qualify for certain positions.

For external marketing, in addition to marketing initiatives mentioned above, the program will be marketed with other IT related programs as part of our vertical marketing strategic initiative, through our website, virtual open houses, to students in and expressing interest in the buiness and technology fields, and as part of our corporate outreach initiative.

If applicable, what student engagement strategies will be employed to advance student retention and completion in program?
There will be two areas of focus to recruit students. First are the CSCC students in their first year of the Computer Science TAP degree and other computer AS programs. We will conduct proactive outreach with the emphasis on the online accessibility along with the community college tuition match scholarship. We will also work with CSCC academic advisors on connecting students to Charter Oak when they display an interest in computer technology.

The second are our corporate, regional workforce, and non-profit partners. For example, this career aligns with one of the pillars in the Governor's Workforce Council and Office of Workforce Strategies.

Careers/Professions & Estimated Earnings
Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): 15-1253.00 Software Developers, Quality Assurance Analysts and Testers

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? $101,800

Applicable Industries
Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): 541511 Custom Computer Programming Services

Career/Program Pathways
Does this program prepare students for another program? ☒ **Yes**, specify program: **BS in Software Development and BS in Data Analytics** ☐ No

SECTION 3: PROGRAM QUALITY ASSESSMENT

Learning Outcomes - L.O.
List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. With as much detail as possible, please map these learning outcomes to courses listed under the "Curriculum" section of this application.

1. **Analyze complex problems and design, develop, and implement software solutions across a variety of architectures.**

2. **Utilize foundational and emerging programming languages to build adaptable software systems.**
3. **Apply principles of networking, security, and ethical practices to ensure safe and responsible software development.**
4. **Develop AI systems, focusing on next-generation technologies and responsible deployment.**
5. **Implement and evaluate machine learning models to solve practical problems, including natural language processing and computer vision tasks.**
6. **Evaluate generative models and their applications in creating new data from existing datasets.**

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

In accordance with NECHE Standard 4, Charter Oak's academic programs are consistent with and serve to fulfill its mission and purposes. Charter Oak works systematically and effectively to plan, provide, oversee, evaluate, improve, and assure the academic quality and integrity of its academic programs and the credits and degrees awarded. Charter Oak sets a standard of student achievement appropriate to the degree or certificate awarded and develops the systematic means to understand how and what students are learning and to use the evidence obtained to improve the academic program.

Overview of Charter Oak State College Program Review Process

- Program Reviewer/s will meet with Institutional Research Director to discuss data needed for analysis and incorporation into program internal review documentation.
- Program Reviewer/s conducts internal review and fills out the Charter Oak program review report. The program reviewer can be one or more teaching faculty and/or Program Director. Topics covered include: program enrollments, course enrollments, course success rates, program completions, faculty evaluations, program curriculum and course materials, Blackboard and ADA compliance, employment outcomes, equity gaps, equity plan, and enrollment and completion trend analysis.
- Program Reviewer/s presents internal review along with actions and recommendations to external reviewer/s (peers from another college, advisory board, etc.) and documents external reviewer's actions and recommendations.
- If the program falls under the definition of the BOR Low Completer Policy and the recommendation is to consolidate or continue the program, the justification as listed in the BOR Low Completer Policy must be included within the review.
- Program Reviewer/s will submit an electronic version of completed document to the Program Director and Provost for review and signatures of receipt. The Provost has authority to approve action plans outlined in the program review document.
- After completion of the program review, an electronic copy is sent to Charter Oak's Academic Council (our governance) for review and feedback. An electronic copy is sent to Charter Oak's Cabinet and a 15-20-minute presentation by the lead program reviewer will take place at Cabinet to discuss findings, recommendations, and feedback from Cabinet.

Program Administration

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring):

- Name: Joseph Gradecki, Technology Program Coordinator
- Email: jgradecki@charteroak.edu Phone: 860-515-3834

Describe the qualifications and assigned FTE load of the administrator/faculty member responsible for the day-to-day operations of the proposed academic program: Coordinator holds BS/MS in Computer Science and currently manages the technology-based programs offered by the school

Program Faculty

How many new full-time faculty, if any, will need to be hired for this program? 0

If any new full-time hires, what percentage of program credits will they teach? N/A

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? 0

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? 4

What percentage of program credits will be taught by adjunct faculty? 100%

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program: Master's degree plus appropriate level of professional experience in the subject matter being taught.

Complete the table below to include current full-time faculty who will be teaching in this program and their qualifications. If you anticipate hiring new faculty for this program, you may list "to be hired" under name and title. Provide required credentials, experience, and other responsibilities for each new position anticipated over the first three years of implementation of the program. Add rows as needed.

Faculty Name and Title	Highest Degree & Institution of Highest Degree	Area of Specialization/ Pertinent Experience	Other Administrative or Teaching Responsibilities

Curriculum

*Please list all courses in the proposed program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed in the Section 3 to relevant program courses in this table. Mark any new courses with an asterisk * and attach course descriptions. Note any core program courses that serve to fulfill general education requirements within the program. Insert/delete rows as needed.*

Course Number and Name	L.O. # (from Section 3)	Pre-Requisite(s)	Credit Hours
Program Required & Elective Courses			
BUS201 Business Statistics or MAT105 Statistics	5	**MAT 100: Elementary Algebra (Recommended)**	3
ITE3XX: Introduction to Artificial Intelligence and Generative AI*	4 & 6	**ITE 115: Program logic and Design with Python**	3
ITE 115: Program Logic and Design with Python	1 & 2	**CSS 101: Cybersecurity Fundamentals**	3
PHL2XX: Artificial Intelligence and Ethics*	4 & 3	**ENG 101: English Composition 1 & ENG 102: English Composition 2,** **ITE 200-level course or equivalent (Recommended)**	3

ITE4XX: Introduction to Machine Learning*	5	**ITE3XX: Introduction to Artificial Intelligence and Generative AI**	3
ITE4XX: Introduction to Natural Language Processing*	5	**ITE3XX: Introduction to Artificial Intelligence and Generative AI**	3
ITE4XX: Introduction to Computer Vision*	5	**ITE3XX: Introduction to Artificial Intelligence and Generative AI**	3
Open Electives (*Indicate number of credits of open electives*)			
Total Program Credits:			21

What are the admissions requirements for the program? **N/A. COSC is an open access institution.**

Does this program have special graduation requirements (e.g., capstone or special project)? ☐ Yes ☒ **No X**
If yes, describe:

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☐ Yes ☒ **No X**
If yes, describe and attach copies of the contracts or other documents ensuring program support:

Describe the prospective students for the program:
The certificate is designed for students in COSC's Software Development bachelors' degree program and for working professionals who want a specialized certificate to increase their opportunities for employment as well as those that want to upskill or reskill due to changes to their job function.

NEW COURSE DESCRIPTIONS:

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CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Most Recent NECHE Institutional Accreditation Action and Date: Fall 2016

Use this form for modifications that fall below the threshold required for full BOR review, defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program". For changes not below this threshold, use form 201 (*Application for Modification of an Accredited Program*).

Total Number of courses and course credits to be modified by this application: 1 course (**3 Credits)**

For the singular changes noted below, alternate forms are available:

- If only modifying modality, use form XXX *Application to Modify Instructional Modality*
- If only modifying program name, use form XXX *Application for Name Change*
- If only modifying CIP code, use form XXX *Application to Change CIP Code*
- If only adding auxiliary site, use form XXX *Application for Adding an Auxiliary Instructional Site*

Original Program Characteristics

Name of Program: **Early Childhood Education**
OHE #: **19324**
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Associate of Science (AS)**
Date Program was Initiated: **Fall 2018**
Total # Credits in Program: 33
Credits in General Education: 21
CIP Code Number: **13.1210** Title of CIP Code: **Early Childhood Education/ Teaching**

Modified Program Characteristics

Name of Program: Early Childhood Education
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Associate of Science (AS)**
Initiation Date for Modified Program: **Fall 2025**
Anticipated Date of First Graduation: **Spring 2027**
Total # Credits in Program: 36
Credits in General Education: 21
CIP Code Number: **13.1210** Title of CIP Code: **Early Childhood Education/ Teaching**

Department where program is housed: Early Childhood Education
Location Offering the Program *(e.g., main campus)*: **Online**

If modification of the program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: N/A CIP: OHE#: BOR Accreditation Date:
Phase Out Period Date of Program Termination
Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Institutional Contact for this Proposal: Dr. Maureen Hogan	Title: Director, Early Childhood Education/Child Studies Programs	Tel.: (860) 515-3882 mhogan@charteroak.edu

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Rationale for Modification

Describe the context and need for the proposed modification(s) and the relationship to the originally approved program:

Accredidation requirements for this program have changed and students will now have to take both of the following courses:

- ECE 222 Curriculum for Young Children: Methods and Techniques
- ECE 261 Infants and Toddlers: Methods and Techniques

This is a change from the current program curriculum, which requires students to choose only one of the courses noted above.

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

Original Program		**Proposed Modified Program**	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
ECE 101- Intro to ECE	3	ECE 101- Intro to ECE	**3**
ECE 176- Health, Safety and Nutrition	3	ECE 176- Health, Safety and Nutrition	**3**
ECE 205- Diversity and Ethics in ECE	3	ECE 205- Diversity and Ethics in ECE	**3**
ECE 231- Early Language and Literacy Development	3	ECE 231- Early Language and Literacy Development	**3**
ECE 217- The Exceptional Learner	3	ECE 217- The Exceptional Learner	**3**
ECE 210- Observation and Assessment in ECE	3	ECE 210- Observation and Assessment in ECE	**3**
ECE 247- Child Development	3	ECE 247- Child Development	**3**
ECE 222- Curriculum for Young Children: Methods and Techniques or ECE 261- Infant and Toddler Methods and Techniques	3	ECE 222- Curriculum for Young Children: Methods and Techniques	**3**
ECE 299- ECE Practicum I	6	ECE 261- Infant and Toddler Methods and Techniques	**3**
		ECE 299- ECE Practicum I	**6**
PSY 101- Intro to Psychology	3	PSY 101- Intro to Psychology	**3**
Total Credits Original Program	**33**	**Total Credits Modified Program**	**36**

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. Map these learning outcomes to courses listed under the "Curriculum" section below.

Students who complete an Associates of Science in Early Childhood Education will:

1. understand child development and how children learn, and use this knowledge to design developmentally appropriate experiences for young children (Standard 1);

2. know and understand the value and diversity of families, collaborate with families as partners, and use community resources to support young children's learning and development (Standard 2);

3. understand the purposes and uses of assessment, how to observe & document children's development, and how to use this information to inform work with young children (Standard 3);

4. demonstrate dispositions for working with young children and their families and understand how to use teaching strategies that meet the needs of individual learners and are inclusive, linguistically relevant and supportive of anti-bias teaching practices as well as principles of universal design for learning (Standard 4);

5. understand content knowledge related to the academic disciplines and how to use child development to support children's learning in each content area. (Standard 5);

6. identify as reflective practitioners in the early childhood field, follow ethical principles, communicate effectively as a professional, and engage in continuous, collaborative learning (Standard 6).

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

In accordance with NECHE Standard 4, Charter Oak's academic programs are consistent with and serve to fulfill its mission and purposes. Charter Oak works systematically and effectively to plan, provide, oversee, evaluate, improve, and assure the academic quality and integrity of its academic programs and the credits and degrees awarded. Charter Oak sets a standard of student achievement appropriate to the degree or certificate awarded and develops the systematic means to understand how and what students are learning and to use the evidence obtained to improve the academic program.

Overview of Charter Oak State College Program Review Process

- Program Reviewer/s will meet with Institutional Research Director to discuss data needed for analysis and incorporation into program internal review documentation.
- Program Reviewer/s conducts internal review and fills out the Charter Oak program review report. The program reviewer can be one or more teaching faculty and/or Program Director. Topics covered include: program enrollments, course enrollments, course success rates, program completions, faculty evaluations, program curriculum and course materials, Blackboard and ADA compliance, employment outcomes, equity gaps, equity plan, and enrollment and completion trend analysis.
- Program Reviewer/s presents internal review along with actions and recommendations to external reviewer/s (peers from another college, advisory board, etc.) and documents external reviewer's actions and recommendations.

- If the program falls under the definition of the BOR Low Completer Policy and the recommendation is to consolidate or continue the program, the justification as listed in the BOR Low Completer Policy must be included within the review.
- Program Reviewer/s will submit an electronic version of completed document to the Program Director and Provost for review and signatures of receipt. The Provost has authority to approve action plans outlined in the program review document.

After completion of the program review, an electronic copy is sent to Charter Oak's Academic Council (our governance) for review and feedback. An electronic copy is sent to Charter Oak's Cabinet and a 15-20-minute presentation by the lead program reviewer will take place at Cabinet to discuss findings, recommendations, and feedback from Cabinet.

IN addition to the above, the Early Childhood Program uses Key Assessments in its courses that are driven by the Professional Standards and Competencies for Early Childhood Educators. Students are required to pass key assessments to graduate from the program.

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	**Learning Outcome #** (from above)	**Pre-Requisite(s)**	**Credit Hours**
ECE 101: Intro to Early Childhood Education	1, 2, 3, 4, 5, 6		3
ECE 176: Health, Safety & Nutrition: Birth to Eight	1, 2, 4, 5		3
ECE 205: Diversity & Ethics in Early Childhood	1, 2, 4, 5, 6		3
ECE 210: Observation & Assessment in Early Childhood Programs	1,2, 3, 4,6		3
ECE 217: The Exceptional Learner	1,2,3, 4, 6		3
ECE 222: Curriculum for Young Children: Methods & Techniques	1,2, 3, 5,6		3
ECE 261: Infant/Toddler Care: Methods and Techniques	1,2, 3, 5,6		3
ECE 231: Early Language & Literacy Development	1, 2, 5, 6		3
ECE 247: Child Development: Birth to Eight	1, 6		3
ECE 299: Early Childhood Education Practicum	1, 2, 3, 4, 5, 6		6
PSY 101: Intro to Psychology		(co-requisite)	3
Open Electives (*Indicate number of credits of open electives*)			0
Total Program Credits:			36

Description of Related Modification(s)

Provide a summary of other changes, if any, necessitated by curricular modification, such as admissions or graduation requirements

N/A

Description of Resources Needed

As appropriate, summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.

No additional resources are needed for this modification. All courses already exist. This will just involve updating the curriculum in the COSC catalog and on the program website.

SECTION 3: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: https://www.charteroak.edu/early-childhood-education-associate/

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: 2 Years

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information: https://www.charteroak.edu/prospective/tuition/

Request for SAA Approval for Veterans Benefits? ☒ **Yes** ☐ No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable):

The associate in science major in Early Childhood Education is for students who desire to work in early childhood education programs primarily serving children birth-age 5. Students in this program acquire the knowledge and skills required to work with infants, toddlers, and preschoolers in community-based early childhood settings. Students may also work as paraeducators in the public school system or as licensed family childcare providers. Each early childhood course requires field experience hours so that the student can gain practice in working directly with children. Students complete a total of 100 pre-practicum field experience hours and also complete a 200-hour practicum experience in an NAEYC accredited center or other approved classroom.

This degree requires a minimum of 60 credits. All major courses must be completed with a grade of C or above and students must successfully complete six key assessments to graduate with this major. Key Assessments are included as course assignments and demonstrate that the student has met the required competencies. Charter Oak State College uses the 'Professional Standards and Competencies for Early Childhood Educators' to prepare teachers to work in the field.

Students' early childhood credits transferred to this major from another college are required to have all Charter Oak State College Key Assessments on file prior to graduation from the college.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): 25-9040 Teaching Assistants

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? $35,550 annual

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s):

624410 Child Care Services

Career/Program Pathways

Does this program prepare students for another program? ☒ **Yes,** specify program: B**.S. in Early Childhood Education** ☐ No

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): Dr. Maureen Hogan - Director, Early Childhood Education/Child Studies Programs | Tel.: (860) 515-3882 | e-mail: mhogan@charteroak.edu

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? 0

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? 20

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

Admissions Requirements

What are the admissions requirements for the program? **N/A. COSC is an open access institution.**

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ **Yes** ☐ No

If yes, describe: Students will complete a 200-hour practicum.

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☒ **Yes** ☐ No

If yes, describe and attach copies of the contracts or other documents ensuring program support:
https://docs.google.com/document/d/15RIvctjuZPuCdVVFdP8ffuHIWJpbhyvE_CVpjPIpmW8/edit?usp=sharing

Prospective Students

Describe the prospective students for the program: : Teachers or assistant teachers working in Office of Early Childhood funded child daycare centers or license exempt public schools.

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Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Most Recent NECHE Institutional Accreditation Action and Date: NECHE Program Evaluation 2021

Use this form for modifications that fall below the threshold required for full BOR review, defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program". For changes not below this threshold, use form 201 (*Application for Modification of an Accredited Program*).

Total Number of courses and course credits to be modified by this application: **3 Courses / 9 Credits**

For the singular changes noted below, alternate forms are available:

- If only modifying modality, use form XXX *Application to Modify Instructional Modality*
- If only modifying program name, use form XXX *Application for Name Change*
- If only modifying CIP code, use form XXX *Application to Change CIP Code*
- If only adding auxiliary site, use form XXX *Application for Adding an Auxiliary Instructional Site*

Original Program Characteristics

Name of Program: M.S. Health Informatics
OHE #: 19350
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Mater of Science (M.S.)**
Date Program was Initiated: 2017 received approval by BOR. Program enrolled first students in Fall 2020. BOR accredited M.S. HI Program in March 2021.
Total # Credits in Program: 33
Credits in General Education: N/A
CIP Code Number: 51.2706 Title of CIP Code: Medical Informatics

Modified Program Characteristics

Name of Program: M.S. Health Data Analytics
Modality of Program *(check all that apply)*: ☐ On ground ☒ **Online** ☐ Hybrid, % of fully online courses
Locality of Program: ☒ **On Campus** ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Master of Science (M.S.)**
Initiation Date for Modified Program: Fall 2025
Anticipated Date of First Graduation: Fall 2026 – Fall 2027 (Accelerated / Traditional Schedules)
Total # Credits in Program: 33
Credits in General Education: N/A
CIP Code Number: 51.2706 Title of CIP Code: Medical Informatics

Department where program is housed: Health Science and Technology (HST) Department
Location Offering the Program *(e.g., main campus)*: Online

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

If modification of the program is concurrent with discontinuation of related program(s), please list for each program: Program Discontinued: CIP: OHE#: BOR Accreditation Date: Phase Out Period Date of Program Termination Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No		
Institutional Contact for this Proposal: Brooke Palkie	Title: Chair, HST Department. Program Director M.S. HI & HCA	Tel.: 218-515-3819 e-mail: bpalkie@charteroak.edu

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Rationale for Modification

Describe the context and need for the proposed modification(s) and the relationship to the originally approved program:

*The modifications described below are being submitted as part of COSC's plan to transition its existing M.S. Health Informatics program to M.S. Health Data Analytics. (We have also submitted the Form 203 *Application for Name Change* to go along with these changes to the program's curriculum).

Transitioning the current program from **M.S. Health Informatics** to **M.S. Health Data Analytics** better reflects current industry trends and the evolving skillset requirements in the healthcare sector. The demand for **data analytics** skills has skyrocketed in recent years due to the explosion of healthcare data generated by electronic health records (EHRs), wearable devices, and other digital health technologies. Employers increasingly seek professionals who can not only manage health information systems (HI field) but also derive actionable insights from data to improve patient outcomes, optimize operations, and support decision-making (broader Health Data Analytics field).

Within the curriculum, HIF635 Advanced Data Analytics will be updated and reimplemented to replace HIF630 Health Information Systems. Health Information Systems has a Health Informatics (HI) focus. The change is being made as HI revolves around technology to improve healthcare infrastructure, while Health Data Analytics centers on analyzing data to make informed, data-driven decisions. The shift in the curriculum, while maintaining the use of health technology, is to focus on data analysis and informed decision making within the health field.

While a lot of overlap exists naturally as HI is a major component of the overall health data analytics umbrella, Health Informatics (HI) and Health Data Analytics (HDA) differ primarily in their focus and applications. Health Informatics emphasizes the use of technology to manage and organize health information, facilitating the storage, retrieval, and secure sharing of patient data across healthcare systems. HI professionals focus on implementing and optimizing electronic health records (EHRs), ensuring data interoperability, and enhancing system usability.

Health Data Analytics, on the other hand, is focused on data analysis, examining large datasets to extract insights that can improve healthcare outcomes. HDA involves statistical analysis, predictive modeling, and machine learning to identify trends, optimize treatments, and support decision-making. Health data analysts apply analytical techniques to drive evidence-based insights and improve patient care.

This is also the justification for replacing the following two HI-centric courses, HIF615 Information Technology Project Management and HIF540 Health Data Vocab & Standards. HIF615 will be replaced with Big Data & Data Mining. HIF540 will be replaced with Research Methods & Data Visualization. This change allows the new courses to align with the competencies of Health Data Analytics.

Several academic institutions and industry organizations have made similar shifts. For instance, **Harvard's M.S. in Health Data Science** and **Columbia University's M.S. in Health Analytics** programs focus on data-driven decision-making, acknowledging that **analytics** represents a more accurate and forward-looking concept compared to **informatics**, which traditionally emphasizes systems management rather than data interpretation.

Furthermore, **data analytics** better aligns with market needs in areas like predictive modeling, machine learning, AI, and population health management, all critical for the future of healthcare. This transition will position the program as more relevant to prospective students and employers, including those in search of such programs, enhance its appeal, and ensure that graduates are equipped with the cutting-edge skills needed in today's digital healthcare environment.

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

Original Program		Proposed Modified Program	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
HCA525 Epidemiology & Population Health Informatics	3	No Change	3
HIF530 Intro to HI&T Hot Topics	3	No Change	3
HIF535 Health Information Analytics	3	No Change	3
HIF550 Clinical Database Management	3	No Change	3
HIF610 Information Systems Analysis & Design	3	No Change	3
HCA640 Applied Statistical Research in Health Sciences	3	No Change	3
HIF645 Health Information Security and Application	3	No Change	3
HIF695 Health Informatics Master's Capstone	3	No Change	3
HIF630 Health Information Systems	3	HIF635 Advanced Data Analytics	3
HIF615 Information Technology Project Management	3	HIFXXX Big Data & Data Mining (new course)	3
HIF540 Health Data Vocab & Standards	3	HIFXXX Research Methods & Data Visualization (new course)	3
Total Credits Original Program	**33**	**Total Credits Modified Program**	**33**

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. Map these learning outcomes to courses listed under the "Curriculum" section below.

1. Apply health informatics and technology concepts and skills to case studies and real-world situations *Modify HI term to health data analytics.
2. Calculate and assess health data and statistical data for decision-making in the healthcare environment *Modify and incorporate skills in collecting, cleaning, and transforming health data from data sets for…
3. Apply health policies and practices in areas such as legal, ethical, privacy, security, and information governance
4. Improve the various healthcare functions associated with the integration of information technology by implementing technology initiatives *Modify to: Create and present complex healthcare data analyses through visualization and reporting tools (PowerBI, Excel, etc.).

5. Develop systems design and software initiatives for healthcare organizations
6. Compile, conduct and create new information based on the use of technology and datasets through data analytics *Modify by adding: for healthcare data interpretation.
7. Determine best practices for implementation of technology initiatives through effective project management *Modify to: Create machine learning algorithms and predictive models to forecast health trends, patient outcomes, and operational efficiencies in healthcare.
8. Apply technology tools, methods, and standards for collecting, organizing, representing, sharing, integrating and learning from health data and knowledge across the health informatics domains *Modify to Apply advanced programming languages to automate data processing workflows and create algorithms for predictive analytics in healthcare.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

The courses are organized in terms of the major skills and competencies needed for the field. Two of the courses meet the Board of Regent's requirement that all graduate-level programs include a culminating experience. One course focuses on understanding research through the provision of basic research techniques for both quantitative and qualitative research methodologies and the other is the Capstone Seminar during which students complete their research-based projects for review and evaluation by faculty and by other students. The applied research project provides the opportunity for students to integrate theory and practice through designing and implementing a real-world project. In the Capstone Seminar final artifacts, students will demonstrate their understanding of theory, be able to address various perspectives on their projects, and exhibit health data analytical skills.

In building the curriculum, the faculty follow Bloom's Taxonomy for higher-level cognitive skills. For assessment purposes, Bloom's Taxonomy is mapped throughout the individual course assignments. The faculty recognizes that graduate-level work requires more independent research and creativity and requires knowledge and understanding at a level of analysis, evaluation, and synthesis.

The M.S. HI Program Competency Model has been modified from health informatics-specific competencies to the broader health data analytics competencies as provided by the Health Information Management Systems Society (HIMSS) Association. In addition to Data Analytic KSA's, the Health Data Analytics Program will prepare students to sit for multiple professional credentials such as the Certified Professional in Healthcare Information and Management Systems (CPHIMS), Certified Professional in Digital Health Transformation Strategy (CPDHTS) and the Commission on Certification for Health Informatics and Information Management's (CCHIIM) Certified Health Data Analyst (CHDA). The course Student Learning Outcomes within the courses are mapped to the greater Program Learning Outcomes. The SLOs are representative of the competency requirements needed to successfully pursue the Health Data Analytics professional credentials.

Here is a snapshot of the Program Competency Map:

	HCA525	HIF530	HIF540	HIF550	H
Healthcare and Technology Environments 25%					
A. Healthcare Environment					
A.1 Articulate characteristics and services of different types of healthcare organizations (e.g., hospitals, clinics, ambulatory centers, community health organizations, healthcare payers, regulators, research and academic)	X – Week 4 Healthcare Delivery Settings Assignment			Week 1 – Reviewing Healthcare Infrastructures	
A.2. Articulate characteristics of interrelationships within and across healthcare organizations (e.g., health information exchange, public,				Week 5 - Health Information Exchange (HIE)Discussion board. The students discussed the importance of HIE, the challenges faced by the HIE	

The Program has specific Program Learning Outcomes (PLOs) as identified above. In addition to the PLOs, each course within the programs has identified Student Learning Outcomes (SLOs). A standardized course syllabus is developed for each course identifying the course description, course-specific PLOs and SLOs, required texts, required supplemental readings or resources, course activities and grading, course schedule and program policy reminders, and the COSC student disabilities statement. This provides the student and faculty transparency of expected outcomes based on the curriculum and learning competencies for specific course content. Faculty also incorporate grading rubrics so particular competency areas can be pinpointed.

Finally, graduate students must maintain an overall 3.0 / B Grade Point Average to remain in the program. A course must be passed with a minimum of a B- to show adequate learning of the course competencies and objectives.

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	Learning Outcome # (from above)	Pre-Requisite(s)	Credit Hours
HCA525 Epidemiology & Population Health Informatics	1,2,3,6		3
HIF530 Intro to HI&T Hot Topics	1,4,8		3
HIF535 Health Information Analytics	1,4,5,7		3
HIF550 Clinical Database Management	2,6		3
HIF610 Information Systems Analysis & Design	4,5		3
HCA640 Applied Statistical Research in Health Sciences	1,2		3
HIF645 Health Information Security and Application	1,3,4		3
HIF635 Advanced Data Analytics	2,6, 7		3
HIFXXX Big Data & Data Mining	2, 6		3
HIFXXX Research Methods & Data Visualization	2, 4		3
HIF695 M.S. Capstone	1-8	HCA640	3
Open Electives (*Indicate number of credits of open electives*)			0
Total Program Credits:			33

Description of Related Modification(s)

Provide a summary of other changes, if any, necessitated by curricular modification, such as admissions or graduation requirements

N/A

Description of Resources Needed

As appropriate, summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.

The Credit Hours remain the same. Changes include one partial rebuild and two new courses will need to be built. It is not anticipated that the College will need to onboard additional SMEs for the builds. The current group of adjunct faculty within the program have proven skill sets in the focus areas. Health Informatics is a sub-set of skills from the broader Data Analytics profession and the majority of faculty have training and experience at the Health Data Analytics level. Three current adjunct faculty have expressed interest in the builds. The SMEs and Instructional Design would be the costs for the three courses (one partial and two new builds).

SECTION 3: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: https://www.charteroak.edu/masters/health-informatics/

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: 1

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information:
https://www.charteroak.edu/catalog/current/fees_financial_aid_scholarships/graduate-current-fees.php

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

Request for SAA Approval for Veterans Benefits? ☐ **Yes** ☐ No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable):

The Master of Science in Health Data Analytics program is designed to equip students with the skills to analyze complex health data, harness advanced statistical and machine learning techniques, and translate findings into actionable insights. Graduates will be prepared to address critical challenges in healthcare, such as optimizing patient outcomes, improving operational efficiency, and supporting evidence-based decision-making through the use of data.

Program Mission: The mission of the M.S. in Health Data Analytics program is to develop professionals who are adept at leveraging data analytics to improve healthcare delivery and outcomes. Through an interdisciplinary curriculum combining data science, healthcare management, and informatics, the program seeks to cultivate leaders capable of transforming health data into meaningful insights that drive innovation and evidence-based practices in the healthcare industry.

Vision: By advancing the use of health data analytics, we aim to be a leader in health data education, empowering graduates to become changemakers in the rapidly evolving healthcare landscape.

The Master of Science in Health Data Analytics is 33 credits. There is no room in the degree for elective credits.

A minimum 'B-' grade is required in all graduate courses except for the Capstone Course, which requires a minimum grade of "B". Students must obtain an overall GPA of 3.0 (B) in order to graduate. All students refer to the Academic Probation policy regarding grades lower than a 'B-' in the graduate program.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): 15-2051 Data Scientists, 15-1211.01 Health Informatics Specialist

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? BLS: Median Entry Level Salary: Data Scientist $108,020 per year $51.93 per hour, Health Informatics Specialist 99,270 per year.

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): 621999 All Other Miscellaneous Ambulatory Health Care Services

Career/Program Pathways

Does this program prepare students for another program? ☐ Yes, specify program: ☒ **No**

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): Brooke Palkie bpalkie@charteroak.edu 860-515-3819

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? 1-2

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? 7

Admissions Requirements

What are the admissions requirements for the program? Bachelor's Degree from an Accredited College with a 3.0 GPA. A 2.7 GPA will be reviewed with a further interview with the Program Director. Current resume and an essay are required to get a foundation of student goals and writing ability.

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ **Yes** ☐ No

If yes, describe: Capstone project and presentation required. Project is applied and focused on data of current Health topics or issues in the field. For example, Telehealth, Social Determinants of Health, Health Information Exchange, etc.

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☐ Yes ☒ **No**

If yes, describe and attach copies of the contracts or other documents ensuring program support:

Prospective Students

Describe the prospective students for the program: Those new and not new to the health field, those changing career focus, and anyone interested in the intersection of technology and data to improve knowledge management in health care. Particularly those interested in data analytics in general and those who want to specialize within the health field.

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Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: 10/25/2024 Submission to CSCU Office of the Provost for Academic Council: 10/23/2024

Most Recent NECHE Institutional Accreditation Action and Date: Fall 2016

Use this form for modifications that fall below the threshold required for full BOR review, defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program". For changes not below this threshold, use form 201 (*Application for Modification of an Accredited Program*).

Total Number of courses and course credits to be modified by this application: **6 credits deleted, 4 course name revisions**

For the singular changes noted below, alternate forms are available:

- If only modifying modality, use form XXX *Application to Modify Instructional Modality*
- If only modifying program name, use form XXX *Application for Name Change*
- If only modifying CIP code, use form XXX *Application to Change CIP Code*
- If only adding auxiliary site, use form XXX *Application for Adding an Auxiliary Instructional Site*

Original Program Characteristics

Name of Program: **Health Information Management**
OHE #: **18202**
Modality of Program *(check all that apply)*: On ground Online Hybrid, % of fully online courses
Locality of Program: **X On Campus** Off Campus Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Certificate**
Date Program was Initiated: **2016**
Total # Credits in Program: 54
Credits in General Education: 0
CIP Code Number: **51.0706** Title of CIP Code: Health Information/Medical Records Administration/Administrator

Modified Program Characteristics

Name of Program: **Health Information Management**
Modality of Program *(check all that apply)*: On ground Online Hybrid, % of fully online courses
Locality of Program: **X On Campus** Off Campus Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Certificate**
Initiation Date for Modified Program: **8/25/2025**
Anticipated Date of First Graduation: **12/31/2027**
Total # Credits in Program: 48
Credits in General Education: 0
CIP Code Number: 5**1.0706** Title of CIP Code: Health Information/Medical Records Administration/Administrator

Department where program is housed: **Health Science and Technology**
Location Offering the Program *(e.g., main campus)*: **Online**

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
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MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

If modification of the program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: CIP: OHE#: BOR Accreditation Date:
Phase Out Period Date of Program Termination
Discontinuation of a program requires submission of form 301. Discontinuation form submitted? Yes No

Institutional Contact for this Proposal: **Cindy Edgerton**	Title: **HIM Program Director**	Tel.: **860-515-3833** e-mail: **cedgerton@charteroak.edu**

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Rationale for Modification

Describe the context and need for the proposed modification(s) and the relationship to the originally approved program:

This program holds a programmatic accreditation by CAHIIM (Council on Accreditation of Health Informatics and Information Management Programs) and CAHIIM revises curriculum standards every 5-10 years based on industry needs and trends. The new curriculum standards are a significant change and the curriculum must be tailored to comply with the standards and to meet the educational needs of students who will sit for the RHIA (Registered Health Information Administration) certification upon graduation. This is also an opportunity to make some minor updates to the Program Learning Outcomes.

In addition, while these changes are being made it is the ideal opportunity to add the Fast Track option to this certificate, which was an oversight during the original Fast Track application.

This certificate is a post-baccalaureate certificate, known as the "Certificate of the Degree" by CAHIIM. It requires an individual to have already earned a bachelor's degree in any field other than HIM and allows them to take the core HIM courses as a path to eligibility for the RHIA exam. Therefore, the program is a subset of the BS HIM and will have the same core course revisions as the BS HIM program modification.

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

Original Program		**Proposed Modified Program**	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
BIO 212 Anatomy and Physiology	**3**	BIO 212 Anatomy and Physiology	**3**
BIO 215 Pathophysiology	**3**	BIO 215 Pathophysiology	**3**
HCA 101 Healthcare Admin/Systems	**3**	HCA 101 Healthcare Admin/Systems	**3**
HCA 105 Medical Terminology	**3**	HCA 105 Medical Terminology	**3**
HIM 115 Principles of HIM	**3**	HIM 115 Principles of HIM	**3**
HIM 200 Health Information Systems	3	HIM 3XX Healthcare Data Management Or *HIF530 Introduction to Health Informatics and Hot Topics	**3**
HIM 205 Reimbursement Methodologies	3	HIM 3XX Revenue Cycle Management	**3**
HIM 210 Clinical Classification Systems 1	**3**	HIM 210 Clinical Classification Systems 1	**3**

HIM 211 Clinical Classification Systems 2	**3**	HIM 211 Clinical Classification Systems 2	**3**
HIM 300 Medical Vocabularies and Classification Systems	**3**		
HIM 305 Healthcare Management and Leadership	**3**	HIM 305 Healthcare Management and Leadership	**3**
HIM 315 Health Statistics	**3**	HIM 315 Population Health, Statistics, and Research OR *HIF525 Epidemiology & Population Health Informatics	**3**
HIM 320 Electronic Health Records and Health Information Exchange	**3**	HIM 2XX Electronic Health Records and Interoperability	**3**
HIM 405 Health Infor Law, Privacy and Security	**3**	HIM 405 Health Infor Law, Privacy and Security OR *HIF645 Health Information Security and Application	**3**
HIM 420 Healthcare Research and Quality	**3**	HIM 420 Healthcare Quality Management	**3**
HIM 435 Healthcare Data Analytics and Information Governance	**3**	HIM 435 Healthcare Data Analytics and Informatics OR *HIF535 Healthcare Data Analytics	**3**
HIM 498 Health Information Management Practicum			
HIM 499 HIM Capstone	**3**	HIM 499 HIM Capstone	**3**
Total Credits Original Program	**54**	**Total Credits Modified Program**	**48**

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. Map these learning outcomes to courses listed under the "Curriculum" section below.

1. apply knowledge of the different fields of medical science, information technology and business management applicable in health information management;
2. utilize the fundamental facts, terms and concepts important to the processing of health information;
3. apply information acquisition skills to the processing, maintenance and security of health information;
4. analyze coding and billing data important in the processing of health information;

5. utilize database information technology and apply it to modern electronic medical records management;
6. evaluate quantitative and qualitative research methodologies in health information management;
7. Apply data analytics and informatics processes to the management of patient health information
8. apply quality management techniques to health information management decisions;
9. apply leadership skills and discuss the importance of maintaining staff development in health information management; and
10. apply project management techniques to modern business management.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

CAHIIM is moving to a hybrid competency model and is requiring more authentic assessment and experiential learning opportunities. Although the program already employes a high number of what is considered authentic assessment (real-world types of activities), some will need revision, some will be deleted, and some will be added to meet the new competencies. In addition, most HIM courses include weekly quizzes and all HIM courses include weekly discussions. Program learning outcomes will be assessed through all of these assessment methods, but will be able to be mapped specifically to some of the major course assessments that may be a final exam, final project, or major authentic learning assessment.

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	Learning Outcome # (from above)	Pre-Requisite(s)	Credit Hours
BIO 212 Anatomy and Physiology	1		3
BIO 215 Pathophysiology	1		3
HCA 101 Healthcare Admin/Systems	2	IDS 101	3
HCA 105 Medical Terminology	2	IDS 101	3
HIM 115 Principles of HIM	2		3
HIM 200 Healthcare Data Management	2, 3, 5	ENG 101: English Composition 1	3
HIM 2XX Revenue Cycle Management	2, 3, 4	ENG 101: English Composition 1	3
HIM 210 Clinical Classification Systems 1	2, 4	BIO 212: Anatomy and Physiology BIO 215: Pathophysiology HCA 105: Medical Terminology	3
HIM 211 Clinical Classification Systems 2	2, 4	BIO 212: Anatomy and Physiology BIO 215: Pathophysiology HCA 105: Medical Terminology	3
HIM 305 Healthcare Management and Leadership	2, 8	ENG 101: English Composition 1 ENG 102: English Composition 2	3

HIM 315 Population Health, Statistics, and Research	2, 6	MAT 105: Statistics ENG 101: English Composition 1 ENG 102: English Composition 2	3
HIM 320 Electronic Health Records and Interoperability	2. 3, 5	ENG 101: English Composition 1 ENG 102: English Composition 2	3
HIM 405 Health Infor Law, Privacy and Security	2. 3	ENG 101: English Composition 1 ENG 102: English Composition 2	3
HIM 420 Healthcare Quality Management	2, 7	ENG 101: English Composition 1 ENG 102: English Composition 2 HCA 115: Principles of Health Information Management HIM 315: Population Health, Statistics, and Research	3
HIM 435 Healthcare Data Analytics and Informatics	2, 5	ENG 101: English Composition 1 ENG 102: English Composition 2 HCA 115: Principles of Health Information Management HIM 315: Population Health, Statistics, and Research HIM 3XX Health Data Management	3
HIM 499 HIM Capstone	All	Must be taken in the final term.	3
Open Electives (*Indicate number of credits of open electives*)			0
Total Program Credits:			**48**

Description of Related Modification(s)

Provide a summary of other changes, if any, necessitated by curricular modification, such as admissions or graduation requirements

NA

Description of Resources Needed

As appropriate, summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.

The required resources will be the Instruction Design team and faculty hired to redevelop some existing courses and develop one new one. The courses that will need to be developed or redeveloped for this certificate program modification are the same as the proposed BS Health Information Management program modification, so there is no additional cost.

SECTION 3: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: **https://www.charteroak.edu/health-information-management/**

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*: 2 Years

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information:
https://www.charteroak.edu/prospective/tuition/

Request for SAA Approval for Veterans Benefits? **Yes** No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable): Our HIM post-baccalaureate certificate program is guided by the principle of quality healthcare through quality information. The program provides students with an understanding of medical science, patient information management, information technology and business management that make up this allied healthcare profession. Graduates of the certificate program will have the skills and

knowledge needed to manage, analyze and protect the privacy of patient data, work with electronic health records and other emerging technologies, and work in related revenue cycle management roles in today's healthcare environments. Successful graduates are eligible to sit for the RHIA exam.

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): 29-9021 Health Information Technologists and Medical Registrars

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? $62,990 for a graduate with none to little experience

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): 622 Hospitals; 62 Health Care and Social Assistance; 621 Ambulatory Health Care Services; 6211 Office of Physicians;

Career/Program Pathways

Does this program prepare students for another program? ☒ Yes, specify program**: Master of Science in Health Informatics or Master of Science in Healthcare Administration**

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): **Cindy Edgerton, 860-515-3833**

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? **1**

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? **10**

Admissions Requirements

What are the admissions requirements for the program? **A Bachelor of Science degree of any major.**

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ Yes No

If yes, describe: **The program requires a capstone project where a final portfolio of experiential learning assignments from throughout the program will be presented. In addition, students must complete a final project with supervision or assessment by an external healthcare professional.**

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? Yes ☒ No

If yes, describe and attach copies of the contracts or other documents ensuring program support: **The new program requirements should not require formal affiliations or contracts since the students will be doing a project where they already work OR will be assigned a project that will only have to be instructed and/or evaluated through a virtual meeting between student and project supervisor/evaluator.**

Prospective Students

Describe the prospective students for the program: **Any individual with a bachelor's degree working in healthcare in an office setting who is especially interested in managing patient information and healthcare data in an electronic format, along with data analytics, quality management, and health informatics. Especially excellent prospects would be those who have earned the AS in Health Information Management from Middlesex Community College or other AS HIM program across the country.**

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

SECTION 1: GENERAL INFORMATION

Institution: Charter Oak State College	Please enter the following dates: Final approval by institution: **10/25/2024** Submission to CSCU Office of the Provost for Academic Council: **10/23/2024**

Most Recent NECHE Institutional Accreditation Action and Date: **Fall 2016**

Use this form for modifications that fall below the threshold required for full BOR review, defined as "more than 15 credits in a previously approved undergraduate degree program or more than 12 credits in a previously approved graduate degree program". For changes not below this threshold, use form 201 (*Application for Modification of an Accredited Program*).

Total Number of courses and course credits to be modified by this application: **10 (6 credits deleted; 4 Gen Ed credits no longer specified)**

For the singular changes noted below, alternate forms are available:

- If only modifying modality, use form XXX *Application to Modify Instructional Modality*
- If only modifying program name, use form XXX *Application for Name Change*
- If only modifying CIP code, use form XXX *Application to Change CIP Code*
- If only adding auxiliary site, use form XXX *Application for Adding an Auxiliary Instructional Site*

Original Program Characteristics

Name of Program: **Health Information Management**
OHE #: **16963**
Modality of Program *(check all that apply)*: ☐ On ground ☒ Online ☐ Hybrid, % of fully online courses
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Bachelor of Science (B.S.)**
Date Program was Initiated: **8/2012**
Total # Credits in Program: **51**
Credits in General Education: **40**
CIP Code Number: **51.0706** Title of CIP Code: **Health Information Administrator**

Modified Program Characteristics

Name of Program: **Health Information Management**
Modality of Program *(check all that apply)*: ☐ On ground ☒ Online ☐ Hybrid, % of fully online courses
Locality of Program: ☒ On Campus ☐ Off Campus ☐ Both
Program Type *(degree type, abbreviation, name, e.g., Associates, AS, Associate of Science)*: **Bachelor of Science (B.S.)**
Initiation Date for Modified Program: **8/2025**
Anticipated Date of First Graduation: **12/2027**
Total # Credits in Program: **45**
Credits in General Education: **40**
CIP Code Number: **51.0706** Title of CIP Code: **Health Information Administrator**

Department where program is housed: **Health Science & Technology (HST) Department**
Location Offering the Program *(e.g., main campus)*: **Online**

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
Connecticut State Colleges & Universities

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

If modification of the program is concurrent with discontinuation of related program(s), please list for each program: Program Discontinued: CIP: OHE#: BOR Accreditation Date: Phase Out Period Date of Program Termination Discontinuation of a program requires submission of form 301. Discontinuation form submitted? ☐ Yes ☐ No

Institutional Contact for this Proposal:	Title:	Tel.: e-mail:

SECTION 2: BACKGROUND, RATIONALE, AND NATURE OF MODIFICATION

Rationale for Modification

Describe the context and need for the proposed modification(s) and the relationship to the originally approved program:

This program holds a programmatic accreditation by CAHIIM (Council on Accreditation of Health Informatics and Information Management Programs) and CAHIIM revises curriculum standards every 5-10 years based on industry needs and trends. The new curriculum standards are a significant change and the curriculum must be tailored to comply with the standards and to meet the educational needs of students who will sit for the RHIA (Registered Health Information Administration) certification upon graduation. This is also an opportunity to make some minor updates to some of the course titles and Program Learning Outcomes to meet the new CAHIIM competencies.

Here is a summary of modifications:

- **No longer requiring BIO 130 Human Biology for the Scientific Knowledge with Lab General Education course. Students can choose their Scientific Knowledge with Lab General Education course instead, which will allow for more transfers of science lab courses from other schools.**
- **Discontinuation of HIM 300.**
- **Discontinuation of HIM 498.**
- **Change of course number level and name of HIM 200 Health Information Systems to HIM 3XX Healthcare Data Management with approximately 50% curriculum revisions that include the infusion of AI concepts and competencies.**
- **Change the name of HIM 205 from Reimbursement Methodologies to Revenue Cycle Management**
- **Change of course number level and name of HIM 320 Electronic Health Records and Health Information Exchange to HIM 2XX Electronic Health Records and Interoperability (minor name change) with minor curriculum revisions.**
- **Minor name changes to HIM 315, HIM 420, and HIM 435**
- **Two changes in Fastrack courses due to the discontinuation of HIM 300 in the undergraduate program and the discontinuation of HIF 540 and HIF 615 in the Health Informatics graduate program.**
- **One new learning outcome is being added and one existing learning outcome is being modified.**

***The existing program and course competencies will remain the same, with the exception of integrating AI into the curriculum.**

Curriculum

Present side-by-side listing of curricular modifications (insert/delete rows as needed)

Original Program		Proposed Modified Program	
Course Name & Number	**Credits**	**Course Name & Number**	**Credits**
IDS 101 Cornerstone Seminar	**3**	IDS 101 Cornerstone Seminar	**3**
ENG 101 Written Comm	**3**	ENG 101 Written Comm	**3**
ENG 102 Written Comm 2	**3**	ENG 102 Written Comm 2	**3**

COM 101 Oral Comm	**3**	COM 101 Oral Comm	**3**
GE Arts and Humanities	**3**	GE Arts and Humanities	**3**
GE Historical Knowledge	**3**	GE Historical Knowledge	**3**
MAT 105 Statistics	**3**	MAT 105 Statistics	**3**
BIO 130 Human Biology	**4**	GE Scientific Knowledge (Lab)	**4**
BIO 212 Anatomy and Physiology	**3**	BIO 212 Anatomy and Physiology	**3**
BIO 215 Pathophysiology	**3**	BIO 215 Pathophysiology	**3**
GE Social/Behavioral Science	**3**	GE Social/Behavioral Science	**3**
GE Digital Literacy	**3**	GE Digital Literacy	**3**
GE Diversity, Equity, Inclusion	**3**	GE Diversity, Equity, Inclusion	**3**
GE Innovative Thinking	**3**	GE Innovative Thinking	**3**
HCA 101 Healthcare Admin/Systems	**3**	HCA 101 Healthcare Admin/Systems	**3**
HCA 105 Medical Terminology	**3**	HCA 105 Medical Terminology	**3**
HIM 115 Principles of HIM	**3**	HIM 115 Principles of HIM	**3**
HIM 205 Reimbursement Methodologies	**3**	HIM 205 Revenue Cycle Management	**3**
HIM 210 Clinical Classification Systems 1	**3**	HIM 210 Clinical Classification Systems 1	**3**
HIM 211 Clinical Classification Systems 2	**3**	HIM 211 Clinical Classification Systems 2	**3**
HIM 320 Electronic Health Records and Information Exchange	**3**	HIM 2XX Electronic Health Records and Interoperability	**3**
HIM 305 Healthcare Management and Leadership	**3**	HIM 305 Healthcare Management and Leadership	**3**
HIM 200 Health Information Systems OR *HIF530 Introduction to Health Informatics and Hot Topics	**3**	HIM 3XX Healthcare Data Mgmt Or *HIF530 Introduction to Health Informatics and Hot Topics	**3**
HIM 315 Healthcare Statistics	**3**	HIM 315 Population Health, Statistics, and Research OR *HIF525 Epidemiology & Population Health Informatics	**3**
HIM 405 Health Infor Law, Privacy and Security	**3**	HIM 405 Health Infor Law, Privacy and Security OR *HIF645 Health Information Security and Application	**3**
HIM 420 Healthcare Research and Quality	**3**	HIM 420 Healthcare Quality Management	**3**
HIM 435 Healthcare Data Analytics and Information Governance OR *HIF535 Healthcare Data Analytics	**3**	HIM 435 Healthcare Data Analytics and Informatics OR *HIF535 Healthcare Data Analytics	**3**
MGT 460 Project Management OR *HIF615 Information Technology Project Management	**3**	MGT 460 Project Management (HIF 615 Discontinued)	**3**

HIM 498 Health Information Management Practicum	**3**	(HIM 498 Discontinued)	**0**
HIM 300 Medical Vocabularies and Classification Systems OR *HIF540 Health Data Vocabularies and Standards	**3**	(HIM 300 & HIF 540 Discontinued)	**0**
HIM 499 HIM Capstone	**3**	HIM 499 HIM Capstone	**3**
Electives	**29**	**Electives**	**35**
Total Credits Original Program	**120**	**Total Credits Modified Program**	**120**

Learning Outcomes - L.O.

List the student learning outcomes for the program – add lines as necessary. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes with attention to such requirements. Note new or modified learning outcomes. Map these learning outcomes to courses listed under the "Curriculum" section below.

1. apply knowledge of the different fields of medical science, information technology and business management applicable in health information management;
2. utilize the fundamental facts, terms and concepts important to the processing of health information;
3. apply information acquisition skills to the processing, maintenance and security of health information;
4. analyze coding and billing data important in the processing of health information;
5. utilize database information technology and apply it to modern electronic medical records management;
6. evaluate quantitative and qualitative research methodologies in health information management;
7. apply data analytics and informatics processes to the management of patient health information
8. apply quality management techniques to health information management decisions;
9. apply leadership skills and discuss the importance of maintaining staff development in health information management; and
10. apply project management techniques to modern business management.

Assessment of Learning Outcomes

Briefly describe assessment methodologies to be used in measuring the program learning outcomes:

CAHIIM is moving to a hybrid competency model and is requiring more authentic assessment and experiential learning experiences. Although the program already employes a high number of what is considered authentic assessment (real-world types of activities), some will need revision, some will be deleted, and some will be added to meet the new competencies. In addition, most HIM courses include weekly quizzes and all HIM courses include weekly discussions. Program learning outcomes will be assessed through all of these assessment methods, but will be able to be mapped specifically to some of the major course assessments that may be a final exam, final project, or major authentic learning assessment.

The Capstone course will further assess overall learning to include all the learning outcomes through a major final project that will be assessed internally as well as externally by a healthcare professional.

Detailed Curriculum for Modified Program

Please list all courses in the modified program, including the core/major area of specialization, prerequisites, electives, required general education courses, etc. Using numerals, map the Learning Outcomes listed above to relevant program courses. Note any new courses or significantly modified courses and include/attach course descriptions. Insert/delete rows as needed.

Course Number and Name	Learning Outcome # (from above)	Pre-Requisite(s)	Credit Hours
IDS 101 Cornerstone Seminar			3

ENG 101 Written Comm			3
ENG 102 Written Comm 2			3
COM 101 Oral Comm			3
GE Arts and Humanities			3
GE Historical Knowledge			3
MAT 105 Statistics	1		3
GE Scientific Knowledge (Lab)	1		4
BIO 212 Anatomy and Physiology	1		3
BIO 215 Pathophysiology	1		3
GE Social/Behavioral Science			3
GE Digital Literacy	1		3
GE Diversity, Equity, Inclusion			3
GE Innovative Thinking			3
HCA 101 Healthcare Admin/Systems	2	IDS 101	3
HCA 105 Medical Terminology	2	IDS 101	3
HIM 115 Principles of HIM	2	IDS 101 & ENG 101	3
HIM 205 **Revenue Cycle Management**	4	IDS 101 & ENG 101	3
HIM 2XX Electronic Health Records and Interoperability	2, 3, 5	ENG 101 English Composition	3
HIM 210 Clinical Classification Systems 1	2, 4	BIO 212: Anatomy and Physiology BIO 215: Pathophysiology HCA 105: Medical Terminology	3
HIM 211 Clinical Classification Systems 2	2, 4	BIO 212: Anatomy and Physiology BIO 215: Pathophysiology HCA 105: Medical Terminology	3
HIM 305 Healthcare Management and Leadership	2, 8	ENG 101: English Composition 1 ENG 102: English Composition 2	3
HIM 315 **Population Health, Statistics, and Research OR *HIF525 Epidemiology & Population Health Informatics**	2, 6	MAT 105: Statistics ENG 101: English Composition 1 ENG 102: English Composition 2	3
HIM 3XX Healthcare Data Mgmt OR *HIF530 Introduction to Health Informatics and Hot Topics	2, 3, 5, 7	ENG 101 English Composition 1 ENG 102 English Composition 2	3
HIM 405 Health Infor Law, Privacy and Security **OR *HIF645 Health Information Security and Application**	2. 3	ENG 101: English Composition 1 ENG 102: English Composition 2	3
HIM 420 **Healthcare Quality Management**	2, 7	ENG 101: English Composition 1 ENG 102: English Composition 2 HCA 115: Principles of Health Information Management	3

		HIM 315: Population Health, Statistics, and Research	
HIM 435 **Healthcare Data Analytics and Informatics** OR *HIF535 Healthcare Data Analytics	2, 5	ENG 101: English Composition 1 ENG 102: English Composition 2 HCA 115: Principles of Health Information Management HIM 315: Population Health, Statistics, and Research HIM 3XX Health Data Management	3
MGT 460 Project Management	1, 9	ENG 101: English Composition 1 ENG 102: English Composition 2	3
HIM 499 HIM Capstone	1-10	Must be taken in the final term.	3
Open Electives (*Indicate number of credits of open electives*)			**35**
Total Program Credits:			**120**

Description of Related Modification(s)

Provide a summary of other changes, if any, necessitated by curricular modification, such as admissions or graduation requirements

N/A

Description of Resources Needed

As appropriate, summarize faculty and administrative resources, library holdings, specialized equipment, etc. required to implement the proposed modification and estimate the total cost.

There are no special resources needed for these program modifications.

SECTION 3: ADDITIONAL PROGRAM CHARACTERISTICS

Program website: **https://www.charteroak.edu/health-information-management/**

IPEDS defined program duration *(if no IPEDS data, provide standard duration of program for full-time student in years)*:

Provide estimated cost of program (tuition and fees): $ OR url for link to tuition/fee information:
https://www.charteroak.edu/prospective/tuition/

Request for SAA Approval for Veterans Benefits? ☒ Yes ☐ No

Catalog Description

Provide the catalog description for this program (with proposed modifications if applicable): **Our HIM program is guided by the principle of quality healthcare through quality information. The program provides students with an understanding of medical science, patient information management, information technology and business management that make up this allied healthcare profession. Graduates of the HIM program will have the skills and knowledge needed to manage, analyze and protect the privacy of patient data, work with electronic health records and other emerging technologies, and work in related revenue cycle management roles in today's healthcare environments.**

Careers/Professions and Earnings

Identify the careers and professions available to graduates of the program using the Standard Occupational Classification (SOC) system. Provide SOC code number(s) and name(s): **29-9021 Health Information Technologists and Medical Registrars**

What would be the median estimated earnings for a graduate in this profession (*if more than one SOC code listed, include earnings for each*)? **$70,260.00**

Applicable Industries

Identify the industry applicable to this program using the North American Industry Classification System (NAICS). Provide NAICS code(s) and title(s): **622 Hospitals; 62 Health Care and Social Assistance; 621 Ambulatory Health Care Services; 6211 Office of Physicians**

Career/Program Pathways

MODIFICATION OF AN ACCREDITED PROGRAM – BELOW THRESHOLD REPORT

Does this program prepare students for another program? ☒ Yes, specify program: **Master of Science in Health Data Analytics or Master of Science in Healthcare Administration** ☐ No

Program Administration and Faculty

Provide the name, email, and phone number for the individual who will serve as the program administrator (or provide timeframe for prospective hiring): **Cindy Edgerton, cedgerton@charteroak.edu, 860-515-3833**

How many full-time faculty, if any, will teach in the program's core curriculum (include proposed new hires)? **1**

How many adjunct and/or part-time faculty, if any, will teach in the program's core curriculum? **10**

Admissions Requirements

What are the admissions requirements for the program? **No admission requirements.**

Graduation Requirements

Does this program have special graduation requirements (e.g., capstone or special project)? ☒ Yes ☐ No

If yes, describe: **The program requires a capstone project where a final portfolio of experiential learning experiences from throughout the program will be presented. In addition, students must complete a final project with supervision or assessment by an external healthcare professional.**

Program Work Experiences

Does this program require fieldwork (e.g., clinical affiliations, internships, externships, etc.)? ☒ Yes ☐ No

If yes, describe and attach copies of the contracts or other documents ensuring program support: **The new program requirements should not require formal affiliations or contracts since the students will be doing a project where they already work OR will be assigned a project that will only have to be instructed and/or evaluated through a virtual meeting between student and project supervisor/evaluator. No on-site field work will be required.**

Prospective Students

Describe the prospective students for the program: **Any individual working in healthcare in an office setting who is especially interested in managing patient information and healthcare data in an electronic format, along with data analytics, quality management, and health informatics. Especially excellent prospects would be those who have earned the AS in Health Information Management from Middlesex Community College or other AS HIM program across the country. Other prospective students are those who work in direct patient care and are looking for a non-patient care change of career while remaining in the healthcare industry.**