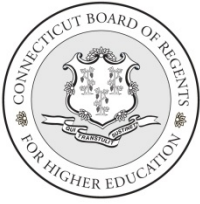**BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE**
AGENDA, revised
Friday, April 29, 2016 – 9:30 a.m.
61 Woodland Street, Htfd., CT - BOR Conference Room [ground floor]

1. Approval of Minutes
   a. March 24, 2016
   b. March 29, 2016

2. CONSENT ITEMS
   a. Terminations
      i. Electrical – Cert – Middlesex CC
      ii. Multimedia Studies – AA – Manchester CC
      iii. Physical Therapist Assistant – AS – Manchester CC
      iv. Taxation – Cert – Manchester CC
      v. Sustainable Energy – Cert – Manchester CC
      vi. Supply Chain Management – Cert – Manchester CC
      vii. Polysomnography – Cert – Manchester CC

3. TAP Update Presentation

4. ACTION ITEMS
   a. Accreditation – Veterinary Technology AS – Norwalk CC

   b. Modifications
      i. Data Security Specialist – AS – Gateway CC
      ii. General Automotive Tech – Cert – Gateway CC
      iii. General Automotive Tech – AAS – Gateway CC
      iv. Mobile Application Development – AS – Gateway CC

   c. New Programs
      i. Remove from Table - Liberal Arts/Interdisciplinary Studies – BA – Western CSU
      ii. Automotive Technology – Honda PACT – AAS and Certificate – Gateway CC
      iii. Biotechnology – BS – Southern CSU
      iv. Construction Management - Certificate – Capital CC

   d. Promotions and Tenures
      i. CCSU
      ii. ECSU
      iii. SCSU
      iv. WCSU

   e. Appointment to Wm.A. O'Neill Endowed Chair – Central CSU

   f. New Center of Excellence for Social & Emotional Learning – CCSU

5. INFORMATION ITEMS
   a. Below Threshold - Minor in Insurance – Eastern CSU
   b. NEASC Letter – Charter Oak SC

6. OTHER BUSINESS

CT BOARD OF REGENTS FOR HIGHER EDUCATION

ACADEMIC & STUDENT AFFAIRS COMMITTEE

Meeting March 24, 2016
9:30 a.m.– 61 Woodland Street, Hartford

<u>MINUTES</u>

Regents Present:	Merle Harris, Stephen Adair, Naomi Cohen, Lawrence DeNardis (by conf.)
Regents Absent:	Catherine Smith
Staff Present:	Jason Ebbeling, Bill Gammell, Ken Klucznik, Maureen McClay, Nancy Melnicsak, Stacey Musulin, Arthur Poole, Karen Stone
Other Attendees:	Shirley Adams (COSC), Missy Alexander (WCSU), Ann Branchini (TRCC), Ilene Crawford (SCS&), Greg DeSantis (HO), Jane Gates (WCSU), Samantha Gonzales (MCC), Colleen Kearney (ACC), Allison MacKenzie (MCC), Demitrios Pachis (ECSU), Debbie Thomas (CCC), Ed Muenzner (TRCC), Irene Rios-Knauf (NVCC), Joe Young (CCC)

The meeting was called to order by Chair Harris at 9:39 a.m.

1. Approval of Minutes – January 8, 2016. There was **a motion to approve by L. DeNardis, seconded by N.Cohen.** Chair Harris offered an amendment to add the following sentence to Item 3.c. TAP Pathways Approvals:
   3rd paragraph, insert a second sentence to read: *It was mentioned that although it has worked very diligently, the Business Pathway Workgroup has been unable to resolve several issues related to TAP compliance. The pathway will now be considered by the TAP Coordinating Council which is responsible for addressing and heling to resolve such issues.*
   N. Cohen moved to approve the amendment, L. DeNardis seconded it – the amendment was approved. The vote was then taken on the amended minutes and unanimously approved.

2. Consent Items
   a. Terminations. T**here was a motion to approve by N. Cohen, seconded by L. DeNardis.** There was a general question regarding terminations. Dr. Lopez noted most of these terminations were a result of the program review. Two things determine need for terminations – low enrollments and, in the case of the community colleges especially, a response to the economic situation. Dr. Lopez also mentioned the Normalization Policy and addressing the curriculum. She commended the academic vice presidents and deans who are focusing on this. There was further discussion on terminations' teach-outs. **The vote was taken and unanimously**

approved.

3. Action Items
   a. Modifications
      i. Business Administration – AS – Three Rivers CC. **A motion to approve was made by L. DeNardis, seconded by N. Cohen.** Dr. Lopez introduced Dean Branchini and Ed Muenzner from Three Rivers. She noted that Dean Branchini will be leaving for a new opportunity and the hard work she has done on program review and revising. She also mentioned the similarity to the other recently approved umbrella-type degree. Dean Branchini introduced her colleague and noted this was modified as a result of program review. The design was embraced by their Business Department. Prof. Muenzner provided details noting they expected graduation rates will go up. In response to a question it was mentioned these are career programs and mostly terminal degrees rather than transfer. **The vote was taken and unanimously approved.**
      ii. Computer Game Design – AS – Manchester CC. **A motion to approve was made by N. Cohen, seconded by L. DeNardis.** Provost Lopez introduced Samantha Gonzales, the Division Director, from Manchester CC and noted the unique transfer to UConn. Ms. Gonzales provided details and answered questions. **The vote was taken and unanimously approved.**
      iii. Graphic Design – AS – Manchester CC. **A motion to approve made by L. DeNardis, seconded by N. Cohen.** Dr. Lopez provided an introduction noting the same type of approach. Ms. Gonzales provided details, mentioning the need for updating the program. **The vote was taken and unanimously approved.**
      iv. Health and Exercise Science – AS – Manchester CC. **The motion to approve made by N. Cohen, seconded by L. DeNardis**. Dr Lopez noted the guided approach and introduced Alison McKenzie the program coordinator. She provided background for the modification and responded to questions, noting the easy availability of jobs. It was mentioned that they were working on TAP compliance. **The vote was unanimous approval.**
   b. Accreditation
      i. Sport &I Entertainment Management – MS – Southern CSU. **A motion to approve made by L. DeNardis, seconded by N. Cohen**. Provost Lopez explained the fully online program, noting it was licensed by the BOR in 2014, has experienced growth, and was now coming for accreditation for the first cohort of students graduating. Dr. Crawford provided further details mentioning its sustainability. There was discussion on out-of-state enrollment and jobs. **The vote was taken and unanimously approved**.
   c. New Program
      i. Liberal Arts – BA – Western CSU. **A motion to approve made by N. Cohen, seconded by L. DeNardis**. Provost Lopez introduced Dr. Gates and Dean Alexander. It was stated the program was geared to returning adults and the broad approach to completing the degree. Dr. Gates also noted the interdisciplinary nature, adult learners, similarity to other CSUs, the students

own pathways, and potential improvement in retention and graduation rates. There were questions and discussion on the title of the degree. Further discussion addressed liberal arts, general education, types of students, rigorousness, types of programs at other CSUs and other institutions. Dr. Lopez suggested bringing it back and doing further research on the title. **On a motion by N. Cohen, seconded by L. DeNardis, the item was tabled.**

    d. Satisfactory Academic Progress (SAP) Policy. **A motion to approve made by L. DeNardis, seconded by N. Cohen.** Dr. Lopez introduced Jason Ebbeling of the System Office and Greg DeSantis from Housatonic, also mentioning the System Office Financial Aid Director, S. McDowell's absence due to the birth of their new baby. Dr. Lopez spoke about the research and reasons for bringing this policy revision noting the benefits for students. She also spoke about the process, the meetings with many of the councils, including presidents, academic officers, student affairs officers, and financial aid directors. They also talked with the National Association of Financial Aid. Mr. DeSantis and Mr. Ebbeling spoke about the reasons and need for the change, noting the differences. There were some questions with explanations provided. There was more discussion on student success and early intervention in conjunction with financial aid. There was a proposal to revise language slightly in the resolution and address another concern in the wording in the Staff Report. The revision would be prepared for the full Board meeting. **A motion to accept the resolution with the noted amendments was moved by L. DeNardis, seconded by N. Cohen and unanimously approved. The vote was taken on the amended resolution and unanimously approved.**

    e. CSU Faculty Research Grants. **A motion to approve was made by N. Cohen, seconded by L. DeNardis.** Dr. Lopez gave a brief explanation. **The vote was taken and unanimously approved.**

    f. Honorary Degree –QVCC. **A motion to approve made by L. DeNardis, seconded by M. Harris.** Dr. Lopez noted the additional Honorary Degree request and the circumstances. **The vote was taken and unanimously approved.**

    g. Shared Governance Award. A **motion to approve moved by L. DeNardis seconded by N. Cohen.** Dr. Lopez explained the idea and rationale for this award proposal, describing this was a combined award to be offered from the Board of Regents and the Faculty Advisory Committee. S. Adair added comments on the history. It was also mentioned that it was reviewed with the presidents. **The vote was taken and unanimously approved.**

4. Information Items. The three information items were indicated.

There was no other business. **A motion to adjourn was made by N. Cohen, seconded by L. DeNardis and unanimously approved.** The meeting adjourned at 11:10 a.m.
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CT BOARD OF REGENTS FOR HIGHER EDUCATION

ACADEMIC & STUDENT AFFAIRS COMMITTEE
Special Meeting March 29, 2016

Manchester Community College

<u>MINUTES</u>

Regents Present: Merle Harris, Naomi Cohen, Lawrence DeNardis

Staff Present: Estela Lopez

Chair Merle Harris called the meeting to order at 2:00 p.m. Members of the Committee were introduced.

1. Conversation with Manchester Community College Faculty. Discussion and dialogue with faculty present proceeded.

There was no other business. A motion to adjourn was unanimously approved. The meeting adjourned at 3:16 p.m.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Program Termination

March 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the termination of a program in Electrical leading to a Certificate (C2) at Middlesex Community College effective July 1, 2016

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Termination of a program in Electrical leading to an undergraduate certificate (C2) at Middlesex Community College, effective July 1, 2016.

BACKGROUND
<u>Summary</u>
The decision to terminate the Electrical Certificate came after an assessment of graduation and enrollment rates over the past five years. This program was developed originally in the late 1990s under a partnership with Connecticut Light & Power (now known as Eversource). After employment needs were met, the partnership dissolved and the program should have been discontinued at that time. This application will allow the college to "catch up" on eliminating inactive programs from its inventory.

<u>Rationale</u>
The faculty at Middlesex Community College recommends the college discontinue the Electrical Certificate due to the fact that the program has been inactive for more than five years and was removed from its published Catalog in 2013.

<u>Phase Out/Teach Out Strategy</u>
No students are enrolled. There is no phase-out/teach-out strategy.

<u>Resources</u>
None.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION	
Institution: Middlesex Community College	Date of Submission to BOR Office: 04/13/2016
Discontinued Program: CIP: **150303** DHE# (if available): **06069** Accreditation Date: **03/01/1999** Phase Out /Teach Out Period **N/A** Expected Date of Program Termination: **Immediate**	
Program Characteristics Name of Program: **Electrical** Degree: Title of Award *(e.g. Master of Arts)* Certificate: *(specify type and level)* **Certificate (C2)** Modality of Program: **X** On ground Online Combined	
Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:	

Institutional Contact for this Proposal: Dr. Steven Minkler	Title: **Dean of Academic Affairs**	Tel.: **860-343-5706** e-mail: **sminkler@mxcc.edu**

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Please 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) emerge as a result of the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) 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.

The decision to terminate the Electrical certificate came after an assessment of graduation and enrollment rates over the past 5 years. This program was developed originally in the late 1990s under a partnership with Connecticut Light & Power (now known as Eversource). After employment needs were met, the partnership dissolved and the program should have been discontinued at that time. This application will allow the college to "catch up" on eliminating inactive programs from its inventory.

Phase Out/Teach Out Strategy

Please 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 currently enrolled in the Electrical certificate. Therefore, a teach-out strategy is not required and termination will be effective immediately.

1. Reason(s) for recommendation to discontinue program option:
The faculty at Middlesex Community College recommends the college discontinue the Electrical Certificate due to the fact that the program has been inactive for more than five years and was removed from its published Catalog in 2013.

2. Dates of last program evaluation:
N/A

3. Current enrollment (Spring 2016):
First Year	Second Year	Total
Full time: 0	Full time: 0	0
Part time: 0	Part time: 0	0

4. Degrees granted with this option: (list past five years):
Spring 2015: 0
Spring 2014: 0
Spring 2013: 0
Spring 2012: 0
Spring 2011: 0

5. Proposed duration of phase-out period:
Termination would be effective immediately.

6. Specific provisions to enable currently enrolled students to complete program:
There are no students currently enrolled in this program.

7. What similar degree/certificate programs are offered by other Community Colleges and by other institutions in college's region?
Insofar as career training programs with specific employers are concerned, Middlesex participates in the community college system MOU with CL&P/Eversource and Bismarck State College (South Dakota) to offer the Electric Power Pathway for the Technology Studies degree program. Although this program seems to be inactive at this time, it does not impact current resources at the college since pathway-specific courses are offered through Bismarck State College and only upon the request of a participating student.

8. Feasibility of transferring this program to another Community College or consolidating this program with a similar program at this or at another system institution.
Not applicable. This program was a unique partnership with a specific company and the partnership was dissolved. It was replaced largely by a pathway attached to the Technology Studies degree program.

<u>CT BOARD OF REGENTS FOR HIGHER EDUCATION</u>

RESOLUTION

concerning

Program Termination

March 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the termination of a program in Multimedia Studies leading to an Associate of Arts degree at Manchester Community College with a phase-out period until May 30, 2017

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Termination of a program in Multimedia Studies leading to an Associate of Arts degree (AA) at Manchester Community College, with a phase out period until May 30, 2017.

BACKGROUND
Summary
The discontinuation of the program occurs in conjunction with the program revisions for Graphic Design and Computer Game design. The Multimedia program was more of a generalist program, whereas the new programs are better aligned with industry employment needs.

Rationale
With the reorganization of the programs, students in Computer Game Design can now choose a more specific pathway which will provide students with a unique and up-to-date skill set for entry into employment in the games, animation, film and previsualization industry. Students in Graphic Design will be better prepared to work in the areas of digital arts and design.

Phase Out/Teach Out Strategy
The phase out strategy for this program is twofold; the first strategy is to phase out certain courses as over the course of the next academic year and the other strategy is to have students change their majors to align with either the Graphic Design or Computer Game Design programs.

Resources
No resources are needed for program termination.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION	
Institution: Manchester Community College	Date of Submission to BOR Office: 4/13/16
Discontinued Program: CIP: 090702 DHE# (if available): 04092 Accreditation Date: 6/17/1998 Phase Out /Teach Out Period 2016-2017 Expected Date of Program Termination: May 2017	

Program Characteristics

Name of Program: **Multimedia Studies**

Degree: Title of Award *(e.g. Master of Arts)* **Associate in Arts**

Certificate: *(specify type and level)*

Modality of Program: X On ground   Online   Combined

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:

Liberal Arts Division, Main Campus

Institutional Contact for this Proposal: Marcia Jehnings	**Title:** Interim Academic Dean	**Tel**.: 860-512-2603 **e-mail**: mjehnings@mcc.commnet.edu

BOR REVIEW STATUS *(For Office Use Only - please leave blank)*
BOR Sequence Number (to be assigned):   Log of BOR Steps Towards Discontinuation Approval:
Resolution number for BOR Approval: Date of Approval: Conditions for Discontinuation Approval (if any)

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Please 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) emerge as a result of the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) 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.

The discontinuation of the program occurs in conjunction with the Program revisions for Graphic Design and Computer Game design. With the reorganization of the programs, students in Computer Game Design can now choose a more specific pathway which will provide students with a unique and up-to-date skill set for entry into employment in the games, animation, film and previsualization industry. Students in Graphic Design will be better prepared to work in the areas of digital arts and design. The Multimedia program was more of a generalist program, whereas the new programs are better aligned with industry employment needs.

Phase Out/Teach Out Strategy

Please 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.)

Program Completion Data:

Multimedia Studies, A.A.	2010-11	2011-12	2012-13	2013-14	2015
Enrolment	54	60	47	35	36
Graduates	13	2	5	9	5

The phase out strategy for this program is twofold. The first strategy is to phase out certain courses as described below and the other strategy is to have students change their majors to align with the Graphic Design or Computer Game Design programs.

The discontinued Multimedia program is being subsumed by the two recent program modifications in Graphic Design and Computer Game Design. The two modified programs contain seven of the 10 specialized courses in the Multimedia program.

Of the three remaining courses, DGA* 212: Advanced Computer Graphics will be offered in the Fall 2016 and Spring 2017 semesters. DGA* 240: Web Page Design and DGA* 244: Advanced Web Design will be substituted with CST* 150: Web Design and Development I and CST* 250: Web Design Development II (courses in our Web Design Certificate program) for those students who wish to focus in this area.

<u>CT BOARD OF REGENTS FOR HIGHER EDUCATION</u>

RESOLUTION

concerning

Program Terminations

March 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the terminations of the five programs listed below at Manchester Community College effective May 30, 2016:
- Physical Therapist Assistant – Associate of Science degree
- Taxation – Certificate (C2)
- Sustainable Energy – Certificate (C2)
- Supply Chain Management – Certificate (C1)
- Polysomnography – Certificate (C2)

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

Termination of a program in Physical Therapist Assistant leading to an Associate of Science degree (AS) at Manchester Community College.

BACKGROUND

Summary

The Physical Therapist Assistant, A.S. program had been a consortium program with the lead institution at Naugatuck Valley Community College. The program was changed to a single institution program and the consortium dissolved in Fall 2014 with the last program graduates at MCC in Spring 2014.

Rationale

In Fall 2014, the consortium was discontinued and MCC offered only the sophomore level classes. In the Spring of 2015, students had already applied to the program through MCC, but were then matriculated into the NVCC program. The sophomores in the program were all transferred to NVCC, and completed their degree in Spring 2015 at NVCC.

Phase Out/Teach Out Strategy

The phase out plan occurred with the Spring 2015 semester, when new students were admitted only at NVCC and the second year students were all transferred to NVCC where they completed their final semester.

Resources

No resources are needed for program termination.

STAFF REPORT   **ACADEMIC AND STUDENT AFFAIRS COMMITTEE**

ITEM
Termination of a program in Taxation leading to a Certificate (C2) at Manchester Community College, with no phase out period needed.

BACKGROUND
Summary
The Taxation Certificate is being phased out due to low enrollment and lack of demand for the program.

Rationale
There have been two graduates of the program in the last 5 years.

Phase Out/Teach Out Strategy
There are no students currently in the program so that a phase plan is not necessary.

Resources
No resources are needed for program termination.

ITEM
Termination of a program in Sustainable Energy leading to a Certificate (C2) at Manchester Community College, with not phase out period needed.

BACKGROUND
Summary
The Sustainable Energy Certificate is being phased out due to low enrollment and lack of demand for the program.

Rationale
There have been few recent graduates of the program.

Phase Out/Teach Out Strategy
There are no students currently in the program so that a phase plan is not necessary.

Resources
No resources are needed for program termination.

ITEM
Termination of a program in Supply Chain Management leading to a Certificate (C1) at Manchester Community College, with a phase out period until May 30, 2016.

BACKGROUND
Summary
The Supply Chain Management Certificate is being phased out due to low enrollment and lack of demand for the program.

Rationale
There have been no recent graduates of the program.

Phase Out/Teach Out Strategy
The current student in the program will be enrolling in the Lean Manufacturing certificate program or one of our Technology Associate degree programs.

Resources
No resources are needed for program termination.

ITEM
Termination of a program in Polysomnography leading to a Certificate (C2) at Manchester Community College, with no phase out period needed.

BACKGROUND
<u>Summary</u>
The program was developed and ran for one cycle in 2011-2012. In 2012, the American Association of Sleep technologists, in their revision of the strategic plan wrote,

> *The shifting sands of health care reform have had a disruptive effect on the field of sleep medicine, as the Centers for Medicare & Medicaid Services (CMS) has repeatedly reduced physician reimbursement rates for sleep medicine codes, particularly those for services related to in-lab overnight polysomnography. At the same time, third-party administrators have begun requiring out of center sleep testing (OCST) in some regions, and there has been a rapid emergence of national OCST companies.*

<u>Rationale</u>
In Connecticut, we saw these changes as sleep labs closed at a rapid rate and the delivery of care changed to "out of center" sleep testing which did not require a sleep technologist in the same way. Additionally, the accreditation that we planned to seek will no longer be accepted as the profession is moving to a new accreditation strategy beginning in 2017. In order to continue the program, the college would need to adhere to these new standards which would require hiring of additional personnel at a time when the employment opportunities for graduates is uncertain at best.

<u>Phase Out/Teach Out Strategy</u>
The program was offered for just one year. No new students have been accepted since that time, so there is no need for a phase out/teach out strategy.

<u>Resources</u>
No resources are needed for program termination.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION	
Institution: Manchester Community College	Date of Submission to BOR Office: 4/13/16
Discontinued Program: CIP: 510806 DHE# (if available): 03023 Accreditation Date: 6/17/1998 Phase Out /Teach Out Period: Students Transferred to NVCC Expected Date of Program Termination: Spring 2015	
Program Characteristics Name of Program: **Physical Therapist Assistant** Degree: Title of Award *(e.g. Master of Arts)* **Associate in Science** Certificate: *(specify type and level)* Modality of Program: X On ground Online Combined	
Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Math, Science and Health Careers Division, Main Campus	

Institutional Contact for this Proposal: Marcia Jehnings	**Title:** Interim Academic Dean	**Tel**.: 860-512-2603 **e-mail:** mjehnings@mcc.commnet.edu

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Please 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) emerge as a result of the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) 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.

The Physical Therapist Assistant, A.S. program had been a consortium program with the lead institution at Naugatuck Valley Community College. The program was changed to a single institution program and the consortium dissolved in Fall 2014 with the last program graduates at MCC in Spring 2014.

In Fall 2014, the consortium was discontinued and MCC offered only the sophomore level classes. In the Spring of 2015, students had already applied to the program through MCC, but were then matriculated into the NVCC program. The sophomores in the program were all transferred to NVCC, and completed their degree in Spring 2015 at NVCC.

PHYSICAL THERAPIST ASSISTANT, AS Degree (MCC)	2010-11	2011-12	2012-13	2013-14	2015
Enrolment	5	3	6	7	0
Graduates	3	1	2	4	0

Phase Out/Teach Out Strategy

Please 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 phase out plan occurred with the Spring 2015 semester, when new students were admitted only at NVCC and the second year students were all transferred to NVCC where they completed their final semester.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION

Institution: Manchester Community College	Date of Submission to BOR Office: 4/13/16

Discontinued Program: CIP: 521601   DHE# (if available): 02490   Accreditation Date: 11/09/1987

Phase Out /Teach Out Period n/a   Expected Date of Program Termination: May 2016

Program Characteristics

Name of Program: **Taxation**

Degree: Title of Award *(e.g. Master of Arts)*

Certificate: *(specify type and level)* **Certificate**

Modality of Program: X On ground   Online   Combined

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:

Business, Engineering and Technology Division, Main Campus

Institutional Contact for this Proposal Marcia Jehnings	Title Interim Academic Dean	Tel.: 860-512-2603 e-mail: mjehnings@mcc.commnet.edu

BOR REVIEW STATUS *(For Office Use Only - please leave blank)*

BOR Sequence Number (to be assigned):

Log of BOR Steps Towards Discontinuation Approval:

Resolution number for BOR Approval: Date of Approval:

Conditions for Discontinuation Approval (if any)

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Please 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) emerge as a result of the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) 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.

The Taxation Certificate is being phased out due to low enrollment and lack of demand for the program. There have been two graduates of the program in the last 5 years.

Phase Out/Teach Out Strategy

Please 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 currently in the program so that a phase plan is not necessary.

Taxation, Certificate	2010-11	2011-12	2012-13	2013-14	2015
Enrolment	3	2	1	0	0
Graduates	0	0	0	2	0

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION

Institution: Manchester Community College	Date of Submission to BOR Office: 4/13/16

Discontinued Program: CIP: 150503   DHE# (if available): 15606   Accreditation Date: 12/21/2009
Phase Out /Teach Out Period 2015-2016   Expected Date of Program Termination: May 2016

Program Characteristics
Name of Program: **Sustainable Energy**
Degree: Title of Award *(e.g. Master of Arts)*
Certificate: *(specify type and level)* **Certificate**
Modality of Program: X   On ground   Online   Combined

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:
Business, Engineering and Technology Division, Main Campus

Institutional Contact for this Proposal: Marcia Jehnings	Title: Interim Academic Dean	Tel.: 860-512-2603 e-mail: mjehnings@mcc.commnet.edu

BOR REVIEW STATUS *(For Office Use Only - please leave blank)*

BOR Sequence Number (to be assigned):
Log of BOR Steps Towards Discontinuation Approval:

Resolution number for BOR Approval: Date of Approval:
Conditions for Discontinuation Approval (if any)

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Please 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) emerge as a result of the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) 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.

The Sustainable Energy Certificate is being phased out due to low enrollment and lack of demand for the program. There have been few recent graduates of the program.

Phase Out/Teach Out Strategy

Please 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 currently in the program so that a phase plan is not necessary.

Sustainable Energy, Certificate	2010-11	2011-12	2012-13	2013-14	2015
Enrolment	6	6	6	2	0
Graduates	1	3	2	2	0

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **DISCONTINUATION OF EXISTING PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION

Institution: Manchester Community College	Date of Submission to BOR Office: 4/13/16

Discontinued Program: CIP: 520203   DHE# (if available): 15358   Accreditation Date: 02/25/2008
Phase Out /Teach Out Period 2015-2016   Expected Date of Program Termination: Spring 2016

Program Characteristics
Name of Program: **Supply Chain Management**
Degree: Title of Award *(e.g. Master of Arts)*
Certificate: *(specify type and level)* **Certificate**
Modality of Program: X   On ground   Online   Combined

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:
Business, Engineering and Technology Division, Main Campus

Institutional Contact for this Proposal: Marcia Jehnings	Title: Interim Academic Dean	Tel.: 860-512-2603 e-mail: mjehnings@mcc.commnet.edu

BOR REVIEW STATUS *(For Office Use Only - please leave blank)*

BOR Sequence Number (to be assigned):
Log of BOR Steps Towards Discontinuation Approval:

Resolution number for BOR Approval: Date of Approval:
Conditions for Discontinuation Approval (if any)

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Please 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) emerge as a result of the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) 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.

The Supply Chain Management Certificate is being phased out due to low enrollment and lack of demand for the program. There have been no recent graduates of the program.

Phase Out/Teach Out Strategy

Please 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 current student in the program will be enrolling in the Lean Manufacturing certificate program or one of our Technology Associate degree programs.

SUPPLY CHAIN MANAGEMENT, Certificate	2010-11	2011-12	2012-13	2013-14	2015
Enrolment	0	0	1	0	1
Graduates	0	0	0	0	0

SECTION 1: GENERAL INFORMATION

Institution: **Manchester Community College**	Date of Submission to BOR Office: 4/13/16

| Discontinued Program: CIP: 510917   DHE# (if available): 16796 Accreditation Date: 11/04/2011
Phase Out /Teach Out Period n/a   Expected Date of Program Termination: May 2013 ||

Program Characteristics

Name of Program: **Polysomnography**

Degree: Title of Award *(e.g. Master of Arts)*

Certificate: *(specify type and level)* **Certificate**

Modality of Program: X On ground   Online   Combined

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Math, Science and Health Careers Division, Main Campus		
Institutional Contact for this Proposal: Marcia Jehnings	Title: Interim Academic Dean	Tel.: 860-512-2603 e-mail: mjehnings@mcc.commnet.edu

BOR REVIEW STATUS *(For Office Use Only - please leave blank)*

BOR Sequence Number (to be assigned): Log of BOR Steps Towards Discontinuation Approval:
Resolution number for BOR Approval: Date of Approval: Conditions for Discontinuation Approval (if any)

SECTION 2: RATIONALE AND JUSTIFICATION FOR PROGRAM DISCONTINUATION

Narrative

Please 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) emerge as a result of the periodic Academic Program Review for all programs at each institution, under the guidance of existing BOR policy; c) 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.

The program was developed and ran for one cycle in 2011-2012. In 2012, the American Association of Sleep technologists, in their revision of the strategic plan wrote,

> *Important changes in the U.S. health care system have had a significant impact on the field of sleep medicine and the profession of sleep technology. The controversial Patient Protection and Affordable Care Act, which was signed into law in March 2010, fueled a national health care debate that continues today. Central to this debate has been the need for cost-containment in the health care sector, a problem that was underscored by a prolonged economic recession.*

> *The shifting sands of health care reform have had a disruptive effect on the field of sleep medicine, as the Centers for Medicare & Medicaid Services (CMS) has repeatedly reduced physician reimbursement rates for sleep medicine codes, particularly those for services related to in-lab overnight polysomnography. At the same time, third-party administrators have begun requiring out of center sleep testing (OCST) in some regions, and there has been a rapid emergence of national OCST companies.*

In Connecticut, we saw these changes as sleep labs closed at a rapid rate and the delivery of care changed to "out of center" sleep testing which did not require a sleep technologist in the same way. Additionally, the accreditation that we planned to seek will no longer be accepted as the profession is moving to a new accreditation strategy beginning in 2017. In order to continue the program, the college would need to adhere to these new standards which would require hiring of additional personnel at a time when the employment opportunities for graduates is uncertain at best.

Phase Out/Teach Out Strategy

Please 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 program was offered for just one year. No new students have been accepted since that time, so there is no need for a phase out/teach out strategy.

POLYSOMNOGRAPHY, Certificate	2010-11	2011-12	2012-13	2013-14	2015
Enrolment	0	0	12	0	0
Graduates	0	0	11	0	0

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Accreditation of a Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve accreditation of a program in Veterinary Technology leading to an Associate of Science degree at Norwalk Community College for a period of time concurrent with institutional accreditation noting that the college will modify the program to correspond to the normalization policy.

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Accreditation of a program in Veterinary Technology leading to an Associate of Science (A.S) degree at Norwalk Community College.

BACKGROUND
<u>Summary</u>

Norwalk Community College is seeking accreditation of a Program of Veterinary Technology leading to an Associate of Science (A.S.) degree. The program was licensed by the Board of Regents on June 24th, 2013 for a period expiring June 30th, 2016.

The Associate Degree program in Veterinary Technology prepares students for immediate employment in veterinary offices, biological research facilities, stables, dairies, drug and feed manufacturing companies and in the animal production industry. The program has been developed in collaboration with community partners who serve as off-site clinical instructional facilities.

<u>Need for the Program</u>
The U.S. Department of Labor predicts a 19% growth in the Veterinary Technology profession between 2014 and 2024. The 2015 Bureau of Labor Statistics reported 1,600 veterinary technicians employed in CT at an annual mean wage of $37,850, which is $4,570 over the national average, and an annual growth of 190 positions. Norwalk Community College's program was developed in response to overwhelming demand within Fairfield County for credentialed veterinary technicians. Over half of students currently enrolled in the program are working as techs-in-training and recruitment is active and ongoing. The program serves the needs of Fairfield County and the surrounding greater metropolitan area.

<u>Curriculum</u>
The Veterinary Technology program has been designed in accordance with the American Veterinary Medical Association's Committee on Veterinary Technician Education and Activities' (AVMA-CVTEA) requirements for Accredited Veterinary Technology programs. Students are instructed in didactic and psychomotor skills that meet the necessary learning outcomes in preparation for the Veterinary National Technician Examinations:

1. **Office and hospital procedures, client relations, and communication:** the human-animal bond, personality and communication styles, stress management, client relations, team building and communication and staff management (including working with members of the public from diverse cultural, ethnic, religious, and socioeconomic backgrounds), record keeping and compliance.
2. **Pharmacy and pharmacology:** applied mathematics, drug calculations, major classes of drugs used and mechanisms of action, major physiological effects, toxicity and drug interactions, clinical applications, and client communication regarding dosing and expectations.
3. **Animal care and nursing:** physical examinations and safe handling procedures, common medical nursing techniques and emergency care, vaccination protocols, nutritional support, specimen collection, record keeping, drug administration, team and client communication, and principles of husbandry.

4. **Anesthesia, Analgesia, and Surgical Nursin**g: general anesthetic technique, standard surgical procedure and operating room conduct, equipment and supply nomenclature, patient monitoring, aseptic, sterile technique, preoperative and postoperative care of the patient, and emergency medicine.
5. **Veterinary laboratory procedures:** specimen collection, hematology, cytology, blood chemistry, urinalysis, necropsy technique, serology, manual performance of basic laboratory diagnostic procedures, discussion of the relevance of laboratory findings to the veterinary practitioner and the client.
6. **Diagnostic imaging:** radiologic and imaging principles, radiation safety, animal restraint and positioning, special diagnostic techniques and imaging including ultrasonography, Computerized Axial Tomography, Magnetic Resonance Imaging and Positron Emission Tomography.
7. **Dentistry:** oral anatomy, terminology periodontology oral radiography endodontics, orthodontics and restorative dentistry, dental oral radiography.

The Veterinary Technology program meets the core requirements for an Associate's Degree from Norwalk Community College, and also allows students to pursue further studies in B.S. programs including preVeterinary studies. Students may also train in advanced Veterinary Technology specialties although they are not required to do so. The Veterinary Technology Associates Degree curriculum prepares students for immediate employment.

Students
The Program enrolled students in the current first cohort during the fall of 2014, spring of 2015 and fall of 2015 for a total first cohort of 18 students planning to graduate in May of 2017 (contingent upon AVMA-CVTEA accreditation). In addition, during this time 6 students enrolled in preVET studies planning to enter the second cohort. Additional selective admissions for the second cohort are currently being reviewed. The program can accept up to 24 students per cohort, which is the maximum laboratory size at Norwalk Community College. Full-time enrollment is projected after the program secures AVMA-CVTEA accreditation. The Program's AVMA-CVTEA accreditation site visit will take place September 14-16th, 2016.

Faculty
The program has two full-time faculty members, a licensed veterinarian and credentialed veterinary technician, as is required by the AVMA-CVTEA for accredited Veterinary Technology programs. The DVM is an Assistant Professor and the CVT is an Instructor. Courses may be also be taught by either adjunct faculty who possess appropriate credentials and teaching experience to teach in the Program.

Learning Resources
Capital equipment for the program has been implemented by a US-DOL grant. Students will also have access to additional equipment and resources for primary instruction at off-site clinical partners. A new budget line-item for consumable supplies and accreditation fees will be created. In addition, the Library collection will be augmented by the procurement of print and digital resources in this field, through the existing Library acquisitions budget.

Facilities

Existing facilities are sufficient to operate the program. Student and faculty will have access to specialized facilities, such as a veterinary surgical suite, diagnostic imaging equipment, hematology and parasitology analysis devices, etc., through contractual arrangements with off-site clinical partners located throughout Fairfield County.

Fiscal Note

The Program receives substantial support from Norwalk Community College's Foundation, which is underwriting both faculty positions and off-site clinical contracts during the Program's initial start-up phase. The Program also receives significant industry support in the form of facilities use, materials and equipment. Once the program receives AVMA-CVTEA accreditation, and is fully resourced to serve a full enrollment, it has the potential to be cost-effective. It should be noted that since fall of 2014 student retention has been 100%.

Review of Documents:
- a) Campus Review
- b) Campus Budget and Finance
- c) Campus President
- d) Academic Council
- e) System Office

4/13/2016 – Academic Council
4/29/2016 – BOR Academic & Student Affairs Committee
May 10, 2016 – Board of Regents

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **ACCREDITATION OF A LICENSED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION

Institution: Norwalk Community College	Date of Submission to BOR Office:

Most Recent NEASC Institutional Accreditation Action and Date: March 6th, 2015 - continued accreditation

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Program Characteristics

Name of Program: Veterinary Technology

Degree: Title of Award *(e.g. Master of Arts)* **Associate in Science**

Certificate: *(specify type and level)*

Date of Program Initiation: fall 2014

Anticipated Date of First Graduation: May 2017

Modality of Program: x On ground   Online   Combined

      If "Combined", % of fully online courses?

Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 70

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Program Credit Distribution

Cr in Program Core Courses: 50

Cr of Electives in the Field: 0

Cr of Free Electives: 9

Cr Special Requirements *(include internship, etc.):* **11**

<u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **70**

From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **24**

Please note: A modification is simultaneously being submitted that brings this program to 60-63 credits for the fall 2017 cohort. Recruitment of this cohort commences in fall 2016.

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CIP Code No. **510808**   Title of CIP Code **Veterinary Technology**

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Didactic and some laboratory courses are held on Norwalk Community College Main Campus. Program-specific laboratory courses for psychomotor skills requiring live animals are conducted at various off-site clinical partners located in Fairfield County and surrounding areas under special contract.

Program Accreditation:
- If seeking specialized/professional/other accreditation, name of agency and intended year of review:
  The College is seeking accreditation from the American Veterinary Medical Association's Committee on Veterinary Technician Education and Activities. A site team visit and formal review are confirmed for September 14-16, 2016. The Program's Self Study is under preparation for final review June of 2016.
- If program prepares graduates eligibility to state/professional license, please identify:
  The Program will prepare graduates to sit for the Veterinary Technician National Examination (VTNE), an independent assessment of knowledge in seven core competencies: pharmacy and pharmacology; surgical prep and assisting; dentistry; laboratory procedures; animal care and nursing; diagnostic imaging; and, anesthesia and analgesia. The VTNE is recognized in all of the United States and Canada and will qualify graduates for immediate employment as Credentialed Veterinary Technicians (CVTs). Presently, Veterinary Technician is not a licensed occupation in the State of Connecticut, but this program will prepare graduates for licensure in other states and in Connecticut if and when licensure for Veterinary Technicians is included in the Veterinary Practice Act as it is for all other New England and Mid-Atlantic states. *(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)*

Institutional Contact for this Proposal: Vanessa Morest, Ph.D.	Title: Acting Dean of Academic Affairs	Tel.: 203-857-3368 e-mail: VMorest@ncc.commnet.edu

SECTION 2: UPDATE OF PROGRAM CHANGES AND ENROLLMENTS

Program Outline *(Please provide a narrative summary of program requirements as licensed, including total number of credits for the degree, special admission requirements, capstone or special project requirements, etc. Indicate any requirements and arrangements for clinical affiliations, internships, and practical or work experience.) :* "*The Finance Major entails 18 credits of Related Course requirements from a range of disciplines (6 credits of which apply to the Liberal Arts Core (LAC), or institution's GenEd program), 24 credits of courses in Business (3 credits of which apply to the LAC/GenEd), 18 credits of coursework in Finance (including a 6-credit internship), and 9 elective credits from a list that includes courses in Economics, Finance, and Business. Students must take a minimum of 24 credits of coursework for the major at the institution and must maintain a GPA of 2.5.*")

NCC's Veterinary Technology A.S. degree program as licensed by the Board of Regents June 24th, 2013 is a 70 credit full-time course of study that requires the following prerequisites completed with a grade of C or better. These currently posted program requirements apply to currently enrolled students and students now applying in the spring of 2016 for entry in fall of 2016. However, in response to the legislative mandate to reduce the number of credits in the program to 60, we are simultaneously requesting a program modification to take effect for the cohort starting in fall 2017. This is the soonest that these modifications can be implemented as they involve significant changes to the admissions requirements of the program.

Program revisions reducing the number of credits from 70 to 60-63 were approved in March of 2016 by NCC's Curriculum and Senate Committees and Administration. We are simultaneously submitting this program modification to be enacted for students applying to the program during 2016-2017 for entry into the program in fall 2017. *(please see attached Current Program of Study Appendix A, Revised Program of Study Appendix B, and separately submitted Program Modification Application)*:

Norwalk Community College has no on-site animal facilities; all animal handling and instruction is taking place at off-site clinical partners who are under contract with the State of Connecticut. Off-site clinical partners currently include municipal shelters, small and large animal clinics and research institutions. As the program develops, clinical partners are continuing to be identified by contract for primary clinical instruction as well as externships required for CVTEA-AVMA accreditation (240 contact hours minimum).

Curricular and Other Program Changes *(Please described any changes in curriculum, admission and/or completion requirements, program administration, faculty, and resources, or any other significant changes since the time of its licensure approval). If needed, to provide details on curricular changes, please complete the table on the next page)*

In spring of 2015, two new courses were unanimously approved by NCC's Curriculum Committee and NCC's Senate: VET 125 (Veterinary Medical Terminology, 1 credit) and VET 103 (Communication and Office Management for Veterinary Technicians, 2 credits). These courses were necessary to satisfy CVTEA-AVMA accreditation requirements. Senate approval was secured on September 30, 2015 for removal of MED 125 (Medical Terminology) from the program in order to maintain the 70 credit maximum as specified in the Program license granted by the BOR on June 24, 2013. *(please see attached Current Program of Study Appendix A)*

In spring of 2016, two new courses were unanimously approved by NCC's Curriculum Committee and NCC's Senate: VET 221 (Diseases of Animals, 2 credits) and VET 241 (Dentistry for Vet Techs with Lab, 1 credit/2 contact hrs). These courses replace VET 220 (3 credits) and VET 240 (2 credits) reducing the overall number of credits in the Program. *(please see attached Revised Program of Study Appendix B, and separately submitted Program Modification Application)*.

Program modifications further reducing the number of Program credits from 70 as initially licensed to 60-63 effective fall of 2016 (for students entering fall of 2017) are being submitted to the BOR as a separate Program Modification Application. *(please see attached revised Program of Study, Appendix B)*

Compliance with Special Requirements Given at the time of Program Licensure (As applicable, please summarize how the program responded to requirements issued by the BOR, or BOGHE, at the time it was licensed. Include any attachments as necessary.)
The Veterinary Technology Program was licensed by the BOR as a 70 credit program in June of 2013. Program modifications have been made by NCC in response to the BOR's requirements prior to Program accreditation and have

been submitted under separate cover as a Program Modification reducing the number of credits to 60-63, inclusive of all prerequisites and College Core courses. The program as currently licensed requires accreditation so that currently enrolled and applying students may be granted A.S. degrees. Accreditation is also sought for the updated program as will be posted in fall of 2016 for students applying for entry in fall of 2017.

Other Narrative Background to be Considered Since Licensure Approval (As needed, consider other changes such as program need and demand, transfer agreements developed, etc.)

This program is designed as a work-force program for immediate employment upon graduation. Transfer students are accommodated on a case–by-case basis, including undergraduates from other CT colleges, post-graduate students seeking an A.S. in Veterinary Technology, and students from other Veterinary Technology programs. All transfers are evaluated according to existing NCC policy. Veterinary Technology transfer students are also evaluated in accordance with CVTEA-AVMA accreditation policy.

Enrollment and Credentialing Information *(From Resources and Cost Estimates MSExcel spreadsheet, please copy and paste these information below)*

In 2015-2016 there were 34 NCC students enrolled in the Veterinary Technology courses: 18 class of 2017, 6 planning to apply for class of 2018 (to date), and 10 students with undeclared majors.

ACTUAL Enrollment	First Term Year 1 (fall 2014-spring 2015)		First Term Year 2 (fall 2015)		First Term Year 3 (not applicable, program started fall 2014)	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers	1	9	3		N/A	N/A
New Students		2	3			
Returning Students				13		
ACTUAL Headcount Enrollment	1	11	6	13	0	0
ACTUAL FTE per Year	4.67		10.33		N/A	
PROJECTED FTE *(at Licensing)*	0		8		N/A	
ACTUAL-PROJECTED	4.67		2.33		N/A	
Size of First Credentialed Group	18		Date of Award of First Credential		May 2017 (pending CVTEA-AVMA accreditation)	

Details of Curriculum Changes for a Licensed Program *(to be used as needed)*						
Course Number and Name [1]	L.O. # [2]	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				Other Related/Special Requirements		
VET 125, Veterinary Medical Terminology	3	Eligibility for ENG 101	1	Replaced former ~~MED 125 requirement~~	3	3
VET 103, Communication and Office Management for Veterinary Technicians	1,3	Admission to the Vet Tech Program	2	Required for CVTEA-AVMA accreditation		
VET 221, Diseases of Animals	3	VET* 205 with a grade of "C" or better.	2	Replacing former ~~VET 220~~	3	3
VET 241, Dentistry for Vet Techs with Lab	3	VET* 205 and VET* 212, each with a grade of "C" or better.	1	Replacing former ~~VET 240~~	3	2

Details of PROPOSED Curriculum Changes for a Licensed Program *(to be use as needed)*						
Course Number and Name [3]	L.O. # [4]	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				Other Related/Special Requirements		

Total Other Credits Required to Issue Credential *(e.g. GenEd/Liberal Arts Core/Liberal Ed Program)*		

Other Narrative Background Since Licensure Approval (As needed, consider other changes such as program need and demand, transfer agreements developed, etc.)

The program is responding to a continuing well-demonstrated need in the community for credentialed veterinary technicians. More than half of our currently enrolled students are already working in the field and being actively recruited for employment as student technicians.

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. **Students will develop an understanding of office and hospital procedures, client relations, and communication:** the human-animal bond, personality and communication styles, stress management including burnout and compassion fatigue, client relations, team building and communication and staff management (including working with members of the public from diverse cultural, ethnic, religious, and socioeconomic backgrounds), record keeping and compliance.

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[1] Modify format as needed. Please use ~~Strikeout~~ text to indicate elimination and **Bold** text to mark the substitution.

[2] Learning Outcome

[3] Modify format as needed. Please use ~~Strikeout~~ text to indicate elimination and **Bold** text to mark the substitution.

[4] Learning Outcome

2. **Students will develop an understanding of pharmacy and pharmacology skills needed for veterinary care:** applied mathematics, drug calculations, major classes of drugs used and mechanisms of action, major physiological effects, toxicity and drug interactions, clinical applications, and client communication regarding dosing and expectations.

3. **Students will learn the procedures and techniques of animal care and nursing:** physical examinations and safe handling procedures, common medical nursing techniques and emergency care, vaccination protocols, nutritional support, specimen collection, record keeping, drug administration, team and client communication, and principles of husbandry.

4. **Students will learn the procedures and techniques required for anesthesia, analgesia, and surgical nursing in animal care**: general anesthetic technique, standard surgical procedure and operating room conduct, equipment and supply nomenclature, patient monitoring, aseptic, sterile technique, preoperative and postoperative care of the patient, and emergency medicine.

5. **Students will learn veterinary laboratory procedures:** specimen collection, hematology, cytology, blood chemistry, urinalysis, necropsy technique, serology, manual performance of basic laboratory diagnostic procedures, discussion of the relevance of laboratory findings to the veterinary practitioner and the client.

6. **Students will learn the principles and procedures of diagnostic imaging:** radiologic and imaging principles, radiation safety, animal restraint and positioning, special diagnostic techniques and imaging including ultrasonography, Computerized Axial Tomography, Magnetic Resonance Imaging and Positron Emission Tomography.

7. **Students will learn the fundamentals of animal dentistry:** oral anatomy, terminology periodontology oral radiography endodontics, orthodontics and restorative dentistry, dental oral radiography.

Program Goals

1. Prepare Norwalk Community College Veterinary Technology students to care knowledgeably for animals with respect and compassion.

2. Prepare Norwalk Community College Veterinary Technology students to enter the workforce with entry-level clinical expertise that satisfies the accreditation requirements of the American Veterinary Medical Association (AVMA).

3. Prepare Norwalk Community College Veterinary Technology students to enter the workforce as team players, with a professional demeanor and skill set.

4. Prepare Norwalk Community College Veterinary Technology students to pass the Veterinary Technician National Examination (VTNE) and become recognized by the Connecticut Veterinary Medical Association (CVMA).

5. Foster awareness and recognition of our program and its mission in the veterinary and public community.

Mission Statement

Motivated students will become knowledgeable and compassionate animal caregivers through active participation in NCC's Veterinary Technology Program. They will develop a skill set leading to diverse opportunities and demand for their services as valued members of the veterinary profession. Our program aims to integrate the needs of the student, veterinary, public and global communities.

SECTION 3: ENROLLMENT, CREDENTIALLING AND FINANCIAL CONSIDERATIONS

Program Resources and Cost Estimates

(Please complete the enclosed Resources and Cost Estimates spreadsheet and provide a one-paragraph narrative below regarding the financial sustainability of the program)

The first cohort of the Veterinary Technology Program projected to graduate in May of 2017 includes students that enrolled in entry-level Veterinary Technology courses in the fall of 2014, spring of 2015, and fall of 2015. This first cohort currently consists of 18 students out of a maximum class size of 24. There has been no attrition of any students who enrolled with the stated goal of planned of obtaining an A.S. in Veterinary Technology since the start of the program.   There are also currently 6 students enrolled in prerequisites and Veterinary Technology

courses planning to graduate in spring of 2018. A selective admissions policy is in place to accommodate the strong interest in the program from students already seeking admission in fall of 2016. This cohort is projected to be 10-15 students since the program may not be accredited during annual recruitment. During its three start-up years, and prior to CVTEA-AVMA accreditation, the program will be operating in a deficit while capital expenditures are required as well as the development of infrastructure. However once the resources are established to accommodate two cohorts (48 students total capacity) it is anticipated that the program has the potential to operate at a sustainable level or at a deficit that compares favorably to other Community College professional programs.

As the resources become available to duplicate cohorts (potentially 96 students total), the program will become more financially viable with increased enrollment and maximal use of the resources currently under development. The students served by the program include internal transfer students (excluded from the Tuition worksheet), students transferring in to NCC, first-time college students, students with B.S. and B.A. degrees, full-time students and part-time students. The Pro-Forma budget assumes a full cohort each year, minimal attrition, the retention of a full-time Program Coordinator (Year One) and full-time Clinical Coordinator (Year Two) as required for CVTEA-AVMA accreditation, reasonable expenses for consumable supplies, and off-site facility usage.

CT Board of Regents for Higher Education
ACCREDITATION OF A LICENSED PROGRAM - **RESOURCES AND COST ESTIMATES** 1/20/12 Form

Institution Norwalk Community College

Date 9.30.15

> Program started fall 2014. BOR license expires 6/30/16, state accreditation is needed before year 3 Data available.

Licensed Program A.S. Veterinary Technology

ACTUAL Enrollment	First Term Year Fall 2014		First Term Year Fall 2015		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers	1	9	3			
New Students		2	3			
Returning Students				13		
ACTUAL Headcount Enrollment	1	11	6	13		0
ACTUAL FTE per Year	4.67		10.33			
PROJECTED FTE *(at Licensing)*	0		8			
ACTUAL-PROJECTED	4.67		2.33			
Size of First Credentialed Group	18		Date of Award of First Credential		May 2017	

Estimated Program Revenue	2014-2015 (Fall and Spring)		Fall 2015 only		Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition *(Do not include internal transfers)*		$5,504	$12,156	$20,484		
Program Specific Fees						
below)						
ACTUAL Program Revenue	$5,504		$32,640		N/A	
PROJECTED Rev. *(at Licensing)*			$5,504			
Dif. ACTUAL-PROJECTED	$5,504		$27,136		N/A	

Estimated Expenditures*	Year 1 (2014-2015)		Year 2 (2015-2016)		Year 3 (2016-2017)	
	Number *(as applicable)*	ACTUAL Expenditure	Number	Estimated Expenditure	Number	Expenditure
Administration *(Chair or Coordinator)*	1	$79,574	1	$88,060	1	$88,060
Faculty *(full-time, total for program)*	0	$0	1	$69,828	1	$69,828
Faculty *(Part-time for program)*	0	$0	3 = 16 contact hrs	$31,271	6=29 contact hrs	$56,679
Support Staff	1	$5,000	2 (EA)	$2,000	4 (EA)	$4,000
Library Resources Program		$2,700		$3,000		$3,000
Equipment *(List if needed)*	Consumable Expenses	$476	Consumable Expenses	$5,000	Consumable Expenses	$10,000
Other (e.g. student services)		$175		$175		$175
Estimated Indirect Cost (e.g. student services, operations, maintanance)	Office supplies, professional development	$1,947	Off-site facilities use, Office supplies, professional development	$20,000	Off-site facilities use, Office supplies, professional development	$20,000
Total Annual Expenditures		$89,872		$219,334		$251,742

* Note: Capital outlay costs, institutional spending for research and service, etc. can be excluded.

Please provide any necessary annotations:
Coordinator Expenditure includes 19% fringe for all reports based on actual 2014-2015 fringe

Coordinator Expenditure includes 19% fringe for all reports based on actual 2014-2015 fringe.
Full time and part-time faculty includes projected 38% fringe starting 2015.
Year 3 projects offering courses to both first and second cohorts.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Modification of a Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the modification of a program in Data Security Specialist leading to an Associate of Science degree at Gateway Community College changing the name to Computer Science: Data Security Specialist

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

STAFF REPORT   ACADEMIC AND STUDENT AFFAIRS COMMITTEE

ITEM
Name change of an Associate Degree (A.S.) program from Data Security Specialist to **Computer Science: Data Security Specialist.**

BACKGROUND
Summary
This program was approved by the BOR in December 2014. The requested name change is to clearly identify Data Security Specialist as a Computer Science Degree.

Need for the Program
N/A

Curriculum
N/A

Students
N/A

Faculty
N/A

Learning Resources
N/A

Facilities
N/A

Fiscal Note
N/A

Review of Documents:
    a)   Campus Review
    b)   Campus Budget and Finance
    c)   Campus President
    d)   Academic Council
    e)   System Office

Accreditation:

SECTION 1: GENERAL INFORMATION	
Institution: Gateway Community College	Date of Submission to BOR Office:

Most Recent NEASC Institutional Accreditation Action and Date: 2016

Original Program Characteristics	Original Program Credit Distribution
CIP Code No. OHE#: 17956 Title of CIP Code CIP Year: 2000 or 2010 Name of Program: Data Security Specialist Degree: Title of Award *(e.g. Master of Arts)* **A.S.** Certificate: *(specify type and level)* Date Program was Initiated: 2016 Modality of Program: x On ground **x** Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 60	# Cr in Program Core Courses: 38 # Cr of Electives in the Field: 9 # Cr of Free Electives: 13 # Cr Special Requirements *(include internship, etc.)*: <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **19**

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

    Licensure and Accreditation (specify whether New Certificate, Minor, Option, Concentration, or Other)

    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)

x Change of Degree Title or Program Title

Modified Program Characteristics	Modified Program Credit Distribution
Name of Program: **Computer Science: Data Security Specialist** Degree: Title of Award *(e.g. Master of Arts)* **A.S.** Certificate [1]: *(specify type and level)* Program Initiation Date: 2016 Modality of Program: x On ground **x** Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 60 Other:	# Cr in Program Core Courses: 38 # Cr of Electives in the Field: 9 # Cr of Free Electives: 13 # Cr Special Requirements *(include internship, etc.)*: <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **19**

If program modification is concurrent with discontinuation of related program(s), please list for such program(s):

Program Discontinued: CIP: DHE# (if available):   Accreditation Date:

Phase Out Period   Date of Program Termination

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:

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 license, please identify:

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

Institutional Contact for this Proposal: Mark Kosinski	Title: Academic Dean	Tel.: 203-285-2077 e-mail: mkosinski@gatewayct.edu

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[1] If creating a Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information such that program in the "Original Program" section.

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[2] Final CIP assignment will be done by BOR staff in consideration of suggested number (if provided) and in consultation with administrative offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION
(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

Name Change Only:

From: Data Security Specialist

To: Computer Science: Data Security Specialist

As applicable, please describe:

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

   There are multiple requirements in the new healthcare, science, and drug research fields. Data security is a career that is in demand. The HIPPA (Health Insurance Portability and Accountability Act) Security Rule establishes national standards to protect individuals' electronic protected health information (e-PHI). The Security Rule requires appropriate administrative, physical and technical safeguards to ensure the confidentiality, writing applications for mobile devices, and security of ePHI. Student success is front and center in the creation and revision of our programs. Data security employees develop, manage, protect ePHI (protected health information), and allow employers to focus on compliance and providing patient care.

   A data security employee plans and monitors security of computer networks, data transmission, and hardware. The research of several IT on-line career portals help provide information about future growth of occupations.
- **Best Technology Job** - rates Information Security Analyst as the fourth highest growth for an occupation at 36.5 percent occupation growth by the year 2022.
- **IT Career Finder -** assembled a comparison of the decade's hottest technology careers. These careers will experience the fastest growth through 2020, pay salaries well above the national average, boost top employment, and offer a range of advancement opportunities. Security Specialist is one of the top ten careers.
- **IT Career Paths** - states computer support jobs are accepting Associates and Bachelor degrees.
- 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?

- The Data Security Specialist Program will:
  - be taught in new, state-of-the-art labs. The new campus located in downtown New Haven is conducive to student congregation and learning.
  - use labs that have new computers, Smart boards with projectors, and network racks that are limited to individual classrooms.
  - add six new courses that can be utilized by this certificate and as restrictive electives for the Computer Science Network Option degree program, and it also utilizes three current courses.
  - have three courses are taught in the Computer Science Associate Program.
  - have two full time faculty members with the skills to teach courses. Professor Rosado can teach six of the courses and Professor Walker can teach three courses. Adjuncts will teach the remainder of the courses.
  - use computer networking lab (S309) that has been updated to support all the courses in this program.
  - increase students' marketability, skills, employment opportunities, and salary.

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

As a result of the approval of the Data Security Specialist Program we will establish transfer agreements with:
- Eastern Connecticut State University, B.S. Degree in Computer Science
- Central State University, B.S. Degree in Computer Science
- Western Connecticut State University, B.S. Degree in Computer Science
- Charter Oak College, B.S. Degree in Data Security

- Please indicate what similar programs exist in other institutions within your constituent unit [3], and how unnecessary duplication is being avoided
- Norwalk Community College has a Computer Security Associate's Degree. Norwalk's program is designed for individuals who seek employment as networking professionals with a minor emphasis in security management. The Data Security Specialist at Gateway offers a defense and forensics strategy, which includes cryptography, attack and counter measures, malware intervention and basic network security. Gateway's program will be aligned directly to skills and knowledge requested by employers on our planning team. Students can begin work as help desk technicians specializing in data security.
- Charter Oak College offers a non-credit Data Security Education Program for people with computer science degrees. Training is in specific areas for employed IT people. Gateway's Data Security Specialist degree trains people with little or no experience.
- Charter Oak offers a B.S. major in Data Security. Upon approval of Gateway's A.S. Degree Data Security Specialist, we will work to provide a transfer agreement with Charter Oak College.
- Please provide a description/analysis of employment prospects for graduates of this proposed program

The purpose of initiating a program in data security aims to fill the existing and future gaps in the job market for this area. Research into data security as a career helps to substantiate employment for students in a growing vocation and sustainable career. CyberArk is a cybersecurity firm that in September 14, 2014 raised over $80 million in an initial public offering of stock. A recent report, from the research group Center for Strategic and International Studies and antivirus firm McAfee, estimates the cost of global cybercrime at $445 billion last year. This research emphasizes the importance of health data, insurance information, drug and disease research, and secure communications between physicians, clinics, and hospitals. In an online article by the New York Times titled Pentagon to Beef Up Cyber Security Force to Counter Attacks (Bumiller, E. Pentagon Expanding Cybersecurity Force to Protect Networks Against Attacks [Internet]. New York City: New York Times. Elisabeth Bumiller: 2013 Jan 27.) Bumiller states that "the expansion would increase the Defense Department's Cyber Command by more than 4,000 people, up from the current 900." This underscores the commitment to include this program as part of HL-SCI Initiative.

The employment growth projections for data security positions from the online job source Indeed from 2010 – 2020 are:
1. 10-year growth: 22%
2. 10-year growth volume of jobs in the US: 67,000 new jobs
3. Average salary with 4 years of experience: $87,000
4. Starting salary for Help Desk technician is $25,000, average salary after four years is $46,000
5. There are 23 Help Desk jobs listed currently in Connecticut, 10 in Massachusetts, and 49 in New York
6. There are 2,532 data/cyber/IT security jobs listed currently in Connecticut.

Description of Modification *(Please provide a summary of the modifications to curriculum, admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.*

Name Change:

From: Data Security Specialist

To: Computer Science: Data Security Specialist

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*

None

Other Considerations

Previous Three Years Enrollment and Completion for the Program being Modified

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[3] Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

N/A – This program was just approved by the BOR in March 2016.

ACTUAL Enrollment	First Term, Year ____		First Term, Year ____		First Term, Year ____	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers						
New Students						
Returning Students						
ACTUAL Headcount Enrollment						
ACTUAL FTE per Year						
Size of Credentialed Group for Given Year						

Course Number and Name	L.O. #3	Pre/Co Requisite	Cr Hrs.	Course Number and Name	L.O. #	Cr Hrs.
General Education Courses				**Other Related/Special Requirements**		
ENG101 Composition			3			
COM171 Fundamentals of Human Communications			3			
MAT175 College Algebra and Trigonometry		MAT137	3			
Elective, Humanities			3			
Elective, Social Science			3			
Elective, Fine Arts			3			
Elective, Natural Science			4			
CSC101 Introduction to Computers			3			
Total:			25			
Core Discipline Courses						
CSC215 Programming with Object Oriented C++		CSC101	4			
CST133 Network Fundamentals 1		CSC101	4			
CST196 Protocol Analysis		CSC101	3			
CSTxx1 Network Security			3			
CSTxx2 Malware Intervention			3			
CSTxx3 Attacks and Counter Measures			3			
CSTxx4 Cryptography Fundamentals			3			
CSTxx5 Cyber Forensics			3			
Elective, Restricted 1 (WD#)			3			
Elective, Restricted 2 (DB#)			3			
Elective, Restricted 3 (PL#, NW#, CSA296)			3			
Total:			35	Total:		0
Total Degree Credits:			60	Total Related Credits:		0

Restricted Electives: CSA*296, CSC*124, 150, 196, 207, 223, 257, 259, CST*127, 149, 152

Core Course Prerequisites				Elective Courses in the Field		
*Hybrid and/or traditional; **Fully online, and hybrid or traditional sections offered ***Fully online; # (WD) Web Design, (DB) Database, (PL) Programming Language, (NW) Networking Red indicates I still have not yet chosen course numbers from the common course list for these new courses.						

Total Other Credits Required to Issue Credential *(e.g. GenEd/Liberal Arts Core/Liberal Ed Program)*		

Program Outline *(Please provide a summary of program requirements including total number of credits for the degree, special admission requirements, capstone or special project requirements, etc. Indicate any requirements and arrangements for clinical affiliations, internships, and practical or work experience. Example: "The Finance Major entails 18 credits of Related Course requirements from a range of disciplines (6 credits of which apply to the Liberal Arts Core (LAC), or institution's GenEd program), 24 credits of courses in Business (3 credits of which apply to the LAC/GenEd), 18 credits of coursework in Finance (including a 6-credit internship), and 9 elective credits from a list that includes courses in Economics, Finance, and Business. Students must take a minimum of 24 credits of coursework for the major at the institution and must maintain a GPA of 2.5.")*

The Data Security Specialist Major entails 60 credits of Related Course requirements from a range of disciplines (22 credits of which apply to the Liberal Arts Core (LAC), or institution's GenEd program), 3 credits for an Introduction to Computers, 9 credits of coursework in computer sciences as a restrictive elective, and 26 credits of courses in programming, networking, and security.

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

Two-Year Cost Effectiveness and Availability of Adequate Resources
(Please provide attach a Pro-Forma Budget for the modification of program in the format provided)

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Modification of a Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the modification of a program in General Automotive Technology leading to a Certificate at Gateway Community College changing the name to Comprehensive Automotive Repair and Service (CARS)

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Name change of a Certificate program from General Automotive Technology to **Comprehensive Automotive Repair and Service (CARS).**

BACKGROUND
<u>Summary</u>
Frequently, the "GENERAL" Automotive program has been confused with our corporate sponsored "GENERAL MOTORS" program. The confusion created by the word "General" has resulted in additional work for our Counseling and Registration departments, our Automotive Faculty and often delays and confusion for our students. Over the years, we have had occasions where a student who wanted to be in the General Motors program was mistakenly registered for the General Program and vise-versa. Sometimes, students' entire schedules have had to be re-worked and on occasion incorrect classes have been taken. Finally, students have applied for graduation from the incorrect program and have had their graduation delayed.

<u>Need for the Program</u>
N/A

<u>Curriculum</u>
N/A

<u>Students</u>
N/A

<u>Faculty</u>
N/A

<u>Learning Resources</u>
N/A

<u>Facilities</u>
N/A

<u>Fiscal Note</u>
N/A

<u>Review of Documents:</u>
   a)   Campus Review
   b)   Campus Budget and Finance
   c)   Campus President
   d)   Academic Council
   e)   System Office

<u>Accreditation:</u>

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION

Institution: Gateway Community College	Date of Submission to BOR Office: 01/03/16

Most Recent NEASC Institutional Accreditation Action and Date: 2016 – Pending 10 Year Reaccreditation

Original **Program Characteristics** CIP Code No. 470604 Title of CIP Code CIP Year: 2000 or 2010 Name of Program: General Automotive Tech Cert. Degree: Title of Award *(AAS)* Certificate: *(specify type and level)* Date Program was Initiated: 2012 Modality of Program: X On ground Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 38-39	**Original** **Program Credit Distribution** # Cr in Program Core Courses: 29 # Cr of Electives in the Field: 3-4 # Cr of Free Electives: 0 # Cr Special Requirements *(include internship, etc.):* 6 <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **38-39** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 38-39

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

    Licensure and Accreditation (specify whether New Certificate, Minor, Option, Concentration, or Other)

    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)

X Change of Degree Title or Program Title

Modified **Program Characteristics** Name of Program: Comprehensive Automotive Repair & Service Degree: Title of Award *(e.g. Master of Arts)* Certificate [1]: *(specify type and level)* C3 Program Initiation Date: 2008 Modality of Program: X On ground Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 36-37 Other:	**Modified** **Program Credit Distribution** # Cr in Program Core Courses: 30 # Cr of Electives in the Field: 0 # Cr of Free Electives: 0 # Cr Special Requirements *(include internship, etc.):* 6 <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **36** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 38-39

If program modification is concurrent with discontinuation of related program(s), please list for such program(s):

Program Discontinued: N/A   CIP: DHE# (if available):   Accreditation Date:

Phase Out Period   Date of Program Termination

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Automotive Department, North Haven

Other Program Accreditation:
- If seeking specialized/professional/other accreditation, name of agency and intended year of review: NATEF 2016
- If program prepares graduates eligibility to state/professional license, please identify: ASE

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

Institutional Contact for this Proposal: Mark Kosinski	Title: Academic Dean	Tel.: 203.285.2077 e-mail: mkosinski@gatewayct.edu

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[1] If creating a Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information such that program in the "Original Program" section.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

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[2] Final CIP assignment will be done by BOR staff in consideration of suggested number (if provided) and in consultation with administrative offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION
(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

Name Change Only:

From: General Automotive Tech Cert.

To: Comprehensive Automotive Repair & Service (can be abbreviated CARS)

How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

All of our student are required to fulfill a practicum requirement. These work experiences usually lead to full-time employment. We receive calls weekly requesting our students for employment by repair facilities through the state. We often do not have enough students for these placements.

Ever since Henry Ford revolutionized automobile production and "Put America on Wheels" (The Economist, Millennium issue 1914) most of workers in our country have depended on a working automobile to get to work every day! Presently, there is tremendous need throughout the State of Connecticut for qualified Automotive Technicians. Opportunities range from maintenance technicians in "Quick Lube" shops making a little more than minimum wage, all the way up to Advanced Diagnostic Technicians in franchised dealerships grossing in excess of $100,000 per year. The Connecticut Department of Labor, "Labor Market Info" from the Office of Research currently projects a significant 4.3% growth in the number of positions available for Automotive Technicians between 2012 and 2022.

2012: 9,236 Automotive Technician Positions

2022: 9,631 Automotive Technician positions

This "growth" in total number of jobs comes at the same time that current technicians are retiring or exiting the industry at a roughly 10% attrition rate! (General Motors, ASEP Meeting, Detroit Oct 2015)

Furthermore, a quick search of "Indeed" (an online job search provider) shows current, active "Automotive Technician" job postings totaling 188 as of January 5, 2016. In short the economy of the State of Connecticut depends upon the automobile to fully function and the people who maintain and repair those automobiles are in short supply.

- 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?

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)* As a terminal program we do not have any formal agreements. Students have gone onto Central CT State U and enrolled in the Industrial Technology Program.

- Please indicate what similar programs exist in other institutions within your constituent unit [3], and how unnecessary duplication is being avoided There one other program in the state, but it does not have the corporate support that Gateway's programs have.

- Please provide a description/analysis of employment prospects for graduates of this proposed program We do not have enough students to fulfill the requests that we have for candidates for employment.

Description of Modification *(Please provide a summary of the modifications to curriculum, admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.*

Nature of Modification 1: Program Name Change

Current name: General Automotive Technology

Proposed name: Comprehensive Automotive Repair and Service (can be abbreviated as CARS)

Frequently, the "GENERAL" Automotive program has been confused with our corporate sponsored "GENERAL MOTORS"

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[3] Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

program. The confusion created by the word "General" has resulted in additional work for our Counseling and Registration departments, our Automotive Faculty and often delays and confusion for our students. Over the years, we have had occasions where a student who wanted to be in the General Motors program was mistakenly registered for the General Program and vise-versa. Sometimes, students' entire schedules have had to be re-worked and on occasion incorrect classes have been taken. Finally, students have applied for graduation from the incorrect program and have had their graduation delayed.

Nature of Modification 2: Restructure of credits to comply with mandated "Credit Normalization" requirement.

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*

No additional resources needed.

Other Considerations

Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	First Term, Year 2013		First Term, Year 2014		First Term, Year 2015	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers		2				
New Students	3	6	1	4	4	2
Returning Students	3	10	2	15	2	5
ACTUAL Headcount Enrollment	6	18	3	19	6	7
ACTUAL FTE per Year	14.23		10.3		7.93	
Size of Credentialed Group for Given Year	8		13		TO BE DETERMINED	

Curriculum Details for a Program Modification *(to be use as appropriate for specific modification request)[4]*						
Course Number and Name [5]	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
AUT130 Power Plant			3	AUT170 Practicum 1		4
AUT132 Automotive Systems & Shop Practices			3	AUT270 Practicum 2 or AUT272 Practicum 3		2-3
AUT134 Electrical Systems			3			
AUT136 Steering and Suspension Systems			3			
AUT138 Braking Systems			3			
AUT231 Engine Management Systems			3			
AUT233 Manual Drivetrain Systems			3			
AUT235 Automatic Drivetrain Systems			3			
AUT237 Climate Control & Restraint Systems			3			
AUT248 Advanced Electrical Diagnosis and PerformanceTuning			3			
Core Course Prerequisites				**Elective Courses in the Field**		
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Students will successfully meet the industry NATEF training requirements for Steering and Suspension systems as assessed by existing instruments in current course.
2. Students will successfully meet the industry NATEF training requirements for Braking systems as assessed by existing instruments in current course.
3. Students will successfully meet the industry NATEF training requirements for Specifications as assessed by existing instruments in current course.
4. Students will successfully meet the industry NATEF training requirements for Electrical systems as assessed by existing instruments in current course.
5. Students will successfully meet the industry NATEF training requirements for Power Plant systems as assessed by existing instruments in current course.
6. Students will successfully meet the industry NATEF training requirements for Drive Train systems as assessed by existing instruments in current course.
7. Students will successfully meet the industry NATEF training requirements for Climate Control systems as assessed by existing instruments in current course.
8. Students will successfully meet the industry NATEF training requirements for Restraint systems as assessed by existing instruments in current course.

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[4] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**
[5] Make any detail annotations for individual courses as needed to understand the curricular modifications taking place

9. Students will demonstrate practical application of all above outcomes by successful completion of an in-dealership internship as assessed by existing instruments in current course.

10. Students will be eligible to sit for industry ASE certification exam in the program content areas upon demonstration of appropriate work experience.

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS
Two-Year Cost Effectiveness and Availability of Adequate Resources *(Please provide attach a Pro-Forma Budget for the modification of program in the format provided)*

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Modification of a Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the modification of a program in General Automotive Technology leading to an Associate of Applied Science degree at Gateway Community College changing the name to Comprehensive Automotive Repair and Service (CARS)

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Name change of an Associate in Applied Science Degree (A.A.S.) program from General Automotive Technology to **Comprehensive Automotive Repair and Service (CARS).**

BACKGROUND
<u>Summary</u>
Frequently, the "GENERAL" Automotive program has been confused with our corporate sponsored "GENERAL MOTORS" program. The confusion created by the word "General" has resulted in additional work for our Counseling and Registration departments, our Automotive Faculty and often delays and confusion for our students. Over the years, we have had occasions where a student who wanted to be in the General Motors program was mistakenly registered for the General Program and vise-versa. Sometimes, students' entire schedules have had to be re-worked and on occasion incorrect classes have been taken. Finally, students have applied for graduation from the incorrect program and have had their graduation delayed.

<u>Need for the Program</u>
N/A

<u>Curriculum</u>
N/A

<u>Students</u>
N/A

<u>Faculty</u>
N/A

<u>Learning Resources</u>
N/A

<u>Facilities</u>
N/A

<u>Fiscal Note</u>
N/A

<u>Review of Documents:</u>
   a)   Campus Review
   b)   Campus Budget and Finance
   c)   Campus President
   d)   Academic Council
   e)   System Office

<u>Accreditation:</u>

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION

Institution: Gateway Community College	Date of Submission to BOR Office: 01/03/16

Most Recent NEASC Institutional Accreditation Action and Date: 2016 – Pending 10 Year Reaccreditation

Original Program Characteristics CIP Code No. 470604 Title of CIP Code CIP Year: 2000 or 2010 Name of Program: General Automotive Degree: Title of Award *(AAS)* Certificate: *(specify type and level)* Date Program was Initiated: 2008 Modality of Program: X On ground Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 59-60	**Original Program Credit Distribution** # Cr in Program Core Courses: 29 # Cr of Electives in the Field: 3-4 # Cr of Free Electives: 0 # Cr Special Requirements *(include internship, etc.):* 6 <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **38-39** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 38-39

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

    Licensure and Accreditation (specify whether New Certificate, Minor, Option, Concentration, or Other)

    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)

X Change of Degree Title or Program Title

Modified Program Characteristics Name of Program: Comprehensive Automotive Repair & Service Degree: Title of Award *(e.g. Master of Arts)* AAS Certificate [1]: *(specify type and level)* Program Initiation Date: 2008 Modality of Program: X On ground Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 60-61 Other:	**Modified Program Credit Distribution** # Cr in Program Core Courses: 30 # Cr of Electives in the Field: 0 # Cr of Free Electives: 0 # Cr Special Requirements *(include internship, etc.):* 6 <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **36** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 36-37

If program modification is concurrent with discontinuation of related program(s), please list for such program(s):

Program Discontinued: N/A   CIP: DHE# (if available):   Accreditation Date:

Phase Out Period   Date of Program Termination

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Automotive Department, North Haven

Other Program Accreditation:
- If seeking specialized/professional/other accreditation, name of agency and intended year of review: NATEF 2016
- If program prepares graduates eligibility to state/professional license, please identify: ASE

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

Institutional Contact for this Proposal: Mark Kosinski	Title: Academic Dean	Tel.: 203.285.2077 e-mail: mkosinski@gatewayct.edu

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[1] If creating a Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information such that program in the "Original Program" section.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

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[2] Final CIP assignment will be done by BOR staff in consideration of suggested number (if provided) and in consultation with administrative offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION
(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

Name Change Only:

From: General Automotive Tech Cert.

To: Comprehensive Automotive Repair and Service (can be abbreviated CARS)

How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

All of our student are required to fulfill a practicum requirement. These work experiences usually lead to full-time employment. We receive calls weekly requesting our students for employment by repair facilities through the state. We often do not have enough students for these placements.

Ever since Henry Ford revolutionized automobile production and "Put America on Wheels" (The Economist, Millennium issue 1914) most of workers in our country have depended on a working automobile to get to work every day! Presently, there is tremendous need throughout the State of Connecticut for qualified Automotive Technicians. Opportunities range from maintenance technicians in "Quick Lube" shops making a little more than minimum wage, all the way up to Advanced Diagnostic Technicians in franchised dealerships grossing in excess of $100,000 per year. The Connecticut Department of Labor, "Labor Market Info" from the Office of Research currently projects a significant 4.3% growth in the number of positions available for Automotive Technicians between 2012 and 2022.

2012: 9,236 Automotive Technician Positions

2022: 9,631 Automotive Technician positions

This "growth" in total number of jobs comes at the same time that current technicians are retiring or exiting the industry at a roughly 10% attrition rate! (General Motors, ASEP Meeting, Detroit Oct 2015)

Furthermore, a quick search of "Indeed" (an online job search provider) shows current, active "Automotive Technician" job postings totaling 188 as of January 5, 2016. In short the economy of the State of Connecticut depends upon the automobile to fully function and the people who maintain and repair those automobiles are in short supply.

- 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?

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)* As a terminal program we do not have any formal agreements. Students have gone onto Central CT State U and enrolled in the Industrial Technology Program.

- Please indicate what similar programs exist in other institutions within your constituent unit [3], and how unnecessary duplication is being avoided There one other program in the state, but it does not have the corporate support that Gateway's programs have.

- Please provide a description/analysis of employment prospects for graduates of this proposed program We do not have enough students to fulfill the requests that we have for candidates for employment.

Description of Modification *(Please provide a summary of the modifications to curriculum, admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.*

Nature of Modification 1: Program Name Change

Current name: General Automotive Technology

Proposed name: Comprehensive Automotive Repair and Service (can be abbreviated as CARS)

Frequently, the "GENERAL" Automotive program has been confused with our corporate sponsored "GENERAL MOTORS"

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[3] Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

program. The confusion created by the word "General" has resulted in additional work for our Counseling and Registration departments, our Automotive Faculty and often delays and confusion for our students. Over the years, we have had occasions where a student who wanted to be in the General Motors program was mistakenly registered for the General Program and vise-versa. Sometimes, students' entire schedules have had to be re-worked and on occasion incorrect classes have been taken. Finally, students have applied for graduation from the incorrect program and have had their graduation delayed.

Nature of Modification 2: Restructure of credits to comply with mandated "Credit Normalization" requirement.

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*

No additional resources needed.

Other Considerations

Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	First Term, Year 2013		First Term, Year 2014		First Term, Year 2015	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers	2		3	1	2	2
New Students	12	10	10	6	20	14
Returning Students	2	3	7	5	13	9
ACTUAL Headcount Enrollment	16	13	20	12	35	25
ACTUAL FTE per Year	18.997		26.72		46.32	
Size of Credentialed Group for Given Year	10		7		TO BE DETERMINED	

Curriculum Details for a Program Modification *(to be use as appropriate for specific modification request)[4]*						
Course Number and Name [5]	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
AUT130 Power Plant			3	AUT170 Practicum 1		4
AUT132 Automotive Systems & Shop Practices			3	AUT270 Practicum 2 or AUT272 Practicum 3		2-3
AUT134 Electrical Systems			3			
AUT136 Steering and Suspension Systems			3			
AUT138 Braking Systems			3			
AUT231 Engine Management Systems			3			
AUT233 Manual Drivetrain Systems			3			
AUT235 Automatic Drivetrain Systems			3			
AUT237 Climate Control & Restraint Systems			3			
AUT248 Advanced Electrical Diagnosis and PerformanceTuning			3			
Core Course Prerequisites				**Elective Courses in the Field**		
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Students will successfully meet the industry NATEF training requirements for Steering and Suspension systems as assessed by existing instruments in current course.
2. Students will successfully meet the industry NATEF training requirements for Braking systems as assessed by existing instruments in current course.
3. Students will successfully meet the industry NATEF training requirements for Specifications as assessed by existing instruments in current course.
4. Students will successfully meet the industry NATEF training requirements for Electrical systems as assessed by existing instruments in current course.
5. Students will successfully meet the industry NATEF training requirements for Power Plant systems as assessed by existing instruments in current course.
6. Students will successfully meet the industry NATEF training requirements for Drive Train systems as assessed by existing instruments in current course.
7. Students will successfully meet the industry NATEF training requirements for Climate Control systems as assessed by existing instruments in current course.
8. Students will successfully meet the industry NATEF training requirements for Restraint systems as assessed by existing instruments in current course.

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[4] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**
[5] Make any detail annotations for individual courses as needed to understand the curricular modifications taking place

9. Students will demonstrate practical application of all above outcomes by successful completion of an in-dealership internship as assessed by existing instruments in current course.

10. Students will be eligible to sit for industry ASE certification exam in the program content areas upon demonstration of appropriate work experience.

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

Two-Year Cost Effectiveness and Availability of Adequate Resources

(Please provide attach a Pro-Forma Budget for the modification of program in the format provided)

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

Modification of a Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the modification of a program in Mobile Application Development leading to an Associate of Science degree at Gateway Community College changing the name to Computer Science: Mobile Application Development

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Name change of an Associate Degree (A.S.) program from Mobile Application Development
to **Computer Science: Mobile Application Development.**

BACKGROUND
Summary
This program was approved by the BOR in December 2014. The requested name change is to clearly
identify Mobile Application Development as a Computer Science Degree.

Need for the Program
N/A

Curriculum
N/A

Students
N/A

Faculty
N/A

Learning Resources
N/A

Facilities
N/A

Fiscal Note
N/A

Review of Documents:
    a)   Campus Review
    b)   Campus Budget and Finance
    c)   Campus President
    d)   Academic Council
    e)   System Office

Accreditation:

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION	
Institution: Gateway Community College	Date of Submission to BOR Office:
Most Recent NEASC Institutional Accreditation Action and Date: 2016	

Original Program Characteristics CIP Code No. OHE#: 17957 Title of CIP Code CIP Year: 2000 or 2010 Name of Program: Mobile Application Development Degree: Title of Award *(e.g. Master of Arts)* **A.S.** Certificate: *(specify type and level)* Date Program was Initiated: 2016 Modality of Program: x On ground **x** Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*:	**Original** Program Credit Distribution # Cr in Program Core Courses: 59-61 # Cr of Electives in the Field: # Cr of Free Electives: # Cr Special Requirements *(include internship, etc.):* <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **59-61** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **37-39**

Type of Program Modification Approval Being Sought *(mark all that apply)*:
    Licensure and Accreditation *(specify whether New Certificate, Minor, Option, Concentration, or Other)*
    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)*
x Change of Degree Title or Program Title

Modified Program Characteristics Name of Program: **Computer Science: Mobile Application Development** Degree: Title of Award *(e.g. Master of Arts)* **A.S.** Certificate [1]: *(specify type and level)* Program Initiation Date: 2016 Modality of Program: x On ground **x** Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 59-61 Other:	**Modified** Program Credit Distribution # Cr in Program Core Courses: 59-61 # Cr of Electives in the Field: # Cr of Free Electives: # Cr Special Requirements *(include internship, etc.):* <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **59-61**

If program modification is concurrent with discontinuation of related program(s), please list for such program(s): Program Discontinued: CIP: DHE# (if available):   Accreditation Date: Phase Out Period   Date of Program Termination
Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:

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

Institutional Contact for this Proposal: Mark Kosinski	Title: Academic Dean	Tel.:203-285-2077 e-mail: mkosinski@gatewayct.edu

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[1] If creating a Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information such that program in the "Original Program" section.

BOR REVIEW STATUS *(For Office Use Only - please leave blank)*	
BOR Sequence Number (to be assigned):	
Approved 2010 CIP Code No. [2] (if applicable)	Title of CIP Code
Log of BOR Steps Towards Program Approval:	
Nature and Resolution number for BOR Approval:	Date of Approval:
Conditions for Approval (if any)	

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[2] Final CIP assignment will be done by BOR staff in consideration of suggested number (if provided) and in consultation with administrative offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION
(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

Name Change Only –

From: Mobile Application Development

To: Computer Science: Mobile Application Development

As applicable, please describe:

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

    ITCareerFinder, an on-line portal for helping IT professionals advance their careers, assembled a comparison of the decade's hottest technology careers. These careers will experience the fastest growth through 2020, pay salaries well above the national average, boost top employment, and offer a range of advancement opportunities. The Mobile Application Developer position was highlighted as the best computer career for the future. The Bureau of Labor Statistics predicts that the number of Computer Software Programmer jobs will grow by 28% (much faster than average) from 2010 to 2020 and mobile app developers will have approximately 82,000 jobs for associate degree holders during that period.

- 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?
    - Provides advancement and evolution of knowledge.
    - Expands educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education, thus impacting and supporting our community.
    - Strengthens and delivers a high quality and unique educational programs.
    - Furthers education in mobile computing and game programming. According to the Entertainment Software Association (http://www.theesa.com/facts/index.asp), the area of portable computing devices is growing at an exponential rate in America.

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

    As a result of the approval of the Mobile Application Development Program we will establish transfer agreements with:
    - Eastern Connecticut State University, B.S. Degree in Computer Science
    - Central State University, B.S. Degree in Computer Science
    - Western Connecticut State University, B.S. Degree in Computer Science
    - University of Bridgeport, B.S. Degree in Computer Science

    We will have articulation agreements for a Bachelor's Degree in Computer Science at the University of Bridgeport and Central State University. In addition, there is a possibility of articulating with University of Hartford and University of New Haven.

- Please indicate what similar programs exist in other institutions within your constituent unit [3], and how unnecessary duplication is being avoided

    - Norwalk Community College has a Smartphone APP Developer Certificate. Gateway's Mobile Application Development Program offers a broader approach to mobile development. We are not restricting the platforms to only phones. In

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[3] Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

addition, our planning team emphasized that they wanted students with a minimum of an Associate's Degree in order to be considered for employment.

This list of three online education sites and colleges offer courses. Our planning team stressed that there is important interaction in person that is required for this program.
- FullSail.edu provides online courses in APP Development
- IBM at MAAS360.com provides online APP development courses
- UAB Collat, School of Business (uab.edu) provides an online degree in APP Development

- Please provide a description/analysis of employment prospects for graduates of this proposed program

In order for Gateway to provide an affordable, sustainable, essential community-based program, we began program planning by gathering a team composed of area experts, Gateway faculty, and staff. The planning team met to establish essential job skills and determine how to model the new Mobile application Development Program. Our planning team included:

Business Owners:

Russell, Chris	Goecart	Head up development and recruiting at, an ecommerce platform; and author of blog on CS careers
Garrety , Bill	Hillhouse High School	Assistant Principal, Career & Tech program
Nobile, Tanya	Knights of Columbus	Director of Application Support
Schoen-Rene, Karl	Knights of Columbus	Director of IT Security
Lancor, Lisa	SCSU	Program Coordinator for IT
Banet , Brian	Square 9 Softworks	Owner of in New Haven
Knowles, David	Stonington Police	(Det. Sgt.) , Fraud Division
Thassim, Lafir	Ureach	Founder of software development company
Palinko, Rick	Veterans Affairs	Associate
Jasek , Bob	Yale	Security employee
Sharp, Russell	Yale	IT Director
Roer, Mike	Yale / Gateway	Consultant/Instructor
Cooney, Timothy	Yale Hospital	Director of Web Solutions (APP developer),
Nizami, Nassar	Yale Hospital	Chief Security Officer,
Aden, Marcus	Yale University	IT Compliance Officer,
Morrow Long, H.	Yale University	Associate Director, Information Security Office
Woods, Chris	Yale University	Serial entrepreneur, instructor

Gateway Business Department Faculty:

Rosado, Wilfredo	Assistant Professor	Computer Science/Networking
Walker, Stacy	Assistant Professor	Computer Science/Networking
Kinney, Allyson	Program Coordinator	Computer Science

Other Gateway Personnel:

Kosinski, Mark	Dean	Academic Affairs
Salay, Larry	Director	Information Technology
Carvalho, Celia	HLS	Grant Assistant
Hayes, Janet	HLS	Grant Coordinator
Roberts, Leigh	Recruitment and Placement	Coordinator
Byrd-Danso, Kellie	Director	Career Services & VA Affairs
Pratt, Fred	Recruitment and Placement Coordinator	CT Works

The planning team stressed that liberal arts courses available in an Associate's Degree are important because students gain vital capabilities such as critical thinking, creativity, adaptability, problem solving, and communication. The very

nature of employment is changing. An Associate's Degree provides competence that can develop an adaptable, creative thinker.

Description of Modification *(Please provide a summary of the modifications to curriculum, admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.*

Name Change Only –

From: Mobile Application Development

To: Computer Science: Mobile Application Development

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*

None

Other Considerations

Previous Three Years Enrollment and Completion for the Program being Modified

N/A – This program was just approved by BOR in March 2016

ACTUAL Enrollment	First Term, Year ____		First Term, Year ____		First Term, Year ____	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers						
New Students						
Returning Students						
ACTUAL Headcount Enrollment						
ACTUAL FTE per Year						
Size of Credentialed Group for Given Year						

Course Number and Name	L.O. # [4]	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
CSC101, Introduction to Computers		None	3			
CSC150, Database Applications and Design-Using SQL		None	4			
CSC250, System Analysis & Design		CSC101 or CSA 105	3			
CSC215, Programming with Object Oriented C++		CSC 101 or CSA 105	4			
CSC223, Introduction to JAVA Programming		CSC 101 or CSA 105	4			
CST 133 Network Fundamentals 1 or CST 180 Networking I			4			
CSC262 Programming Mobile Devices I			3			
CSC263 Programming Mobile Devices II		CSC 262	3			
Restricted Elective		CSC 101	3-4			
Restricted Elective		CSC 101	3-4			
CSA 296 CWE – Computer Applications (Internship) or Restricted Elective		24 Earned Credits in the Computer Science Program for CSA 296	3			
Total Program Core Credits			37-39			
General Ed Courses						
Eng101 Composition			3			
Com 171 Communications			3			
MAT 115 or MAT 137			3			
Humanities			3			
Social Science			3			
Fine Arts			3			
Natural Science			4			
Total General Ed Courses			22	**Total Related Credits**		0
				Total Credits		59-61
Core Course Prerequisites				**Elective Courses in the Field**		
+Hybrid and/or traditional; ++Fully online, and hybrid or traditional sections offered +++Fully online;						
Total Other Credits Required to Issue Credential *(e.g. GenEd/Liberal Arts Core/Liberal Ed Program)*						

Program Outline *(Please provide a summary of program requirements including total number of credits for the degree, special*

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[4] From the Learning Outcomes enumerated list provided at the beginning of Section 3 of this application

admission requirements, capstone or special project requirements, etc. Indicate any requirements and arrangements for clinical affiliations, internships, and practical or work experience. Example: "The Finance Major entails 18 credits of Related Course requirements from a range of disciplines (6 credits of which apply to the Liberal Arts Core (LAC), or institution's GenEd program), 24 credits of courses in Business (3 credits of which apply to the LAC/GenEd), 18 credits of coursework in Finance (including a 6-credit internship), and 9 elective credits from a list that includes courses in Economics, Finance, and Business. Students must take a minimum of 24 credits of coursework for the major at the institution and must maintain a GPA of 2.5.")

Mobile application development is a specialized field where concepts of web development, interface design and computer programming merge. Using current and emerging technologies, students will develop skills in website and native app design, learn relevant programming languages for application development on a variety of smart-devices and learn the policies and procedures for submitting apps for distribution. The program works to develop skills through practical application of current and emerging standards and technologies across multiple mobile devices.

Due to the inability to predict platform dominance, our program will offer a cross-platform development environment that allows for the creation of device specific software applications for a broad range of mobile devices. We will also teach students the need for responsive design that allows for optimal viewing across a wide range of devices.

To that end, the Computer Science team has worked diligently to make the program well-balanced and technically strong. It is designed with 59-61 total credits of which 37-39 are technical credits, 22 are General Ed Courses. Courses cover multiple aspects of Internet and mobile-related technologies, including programming languages and web markup, server-side technologies and tools, mobile web development, responsive design and application optimization for mobile devices. Although the degree is designed and intended as a career focused, terminal degree, opportunities for transfer into baccalaureate programs are possible.

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

Two-Year Cost Effectiveness and Availability of Adequate Resources
(Please provide attach a Pro-Forma Budget for the modification of program in the format provided)

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

A New Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the licensure and accreditation of a new program in Interdisciplinary Studies leading to a Bachelor of Arts degree (BA) at Western Connecticut State University for a period of time concurrent with institutional accreditation

A True Copy:

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Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

STAFF REPORT   ACADEMIC AND STUDENT AFFAIRS COMMITTEE

ITEM
New Program: BA in Interdisciplinary Studies at Western Connecticut State University

BACKGROUND
Summary
The BA Interdisciplinary Studies provides a much needed option for students from all backgrounds to find a pathway to degree completion that uniquely fits their needs. It supports returning adults, innovative traditional-aged students, and transfer students from many different 2 year programs. This ideally serves the mission of changing lives for students of all backgrounds.

Need for the Program

The BA in Interdisciplinary Studies supports increased degree completion for Connecticut residents. The Planning Commission for Higher Education (Draft document February 2015) sets a post-secondary credential target of 70%, with 40% being the BA/BS degree. One target of that plan, given the declining high school population, is adult learners. This degree is perfect for that population. For many adults who have acquired some post-secondary education credits, traditional degree structures are too limiting. The BA Liberal Arts allows them to focus on specific domains of knowledge they need to enhance their career opportunities.

This degree also supports the CSCU commitment to improved transfer processes and decreased credit overloads. It will allow students with certification focused associate's degrees to have a degree option that does not require numerous pre-requisites inflating the time to degree completion. At WCSU we have many transfer students and students who stop out for various life reasons. This option allows them to find a new way to success without have to start again.

Finally, In addition, this degree allows for unique combinations of disciplines as workforce demands emerge, in ways that are more flexible and adaptable than traditional curriculum structures.

Curriculum
The BA in Interdisciplinary Studies is primarily built with existing courses at WCSU. To declare this major students will be required to provide a brief rationale for the combination of disciplines, referencing career, graduate school or research goals. This rationale will be more fully developed in the first course.

All students will take two courses focused drawing together their liberal arts education.

HUM1XX Introduction to Interdisciplinary Studies (3 credits)
Discipline 1: 18 credits at least 6 of which are at the 300 or 400 level.
Discipline 2: 18 credits at least 6 of which are at the 300 or 400 level.
HUM4XX Advanced Interdisciplinary Studies (3 credits)

Total Major Requirements: 42 credits
Total General Education Requirements: 40 credits
Total Electives: 38 credits
Total Credits for degree completion: 120 credits

Students
We conservatively estimate 10 internal and 15 external students will join this degree annually. The internal transfers are most likely to come from undeclared students or students who wish to change their major after sophomore year. The new students will largely be transfer students or returning students who have been out

of school for several years. We anticipate that this will grow faster as we work with local groups seeking degree completion options for their staff. It will also serve our honors program, allowing an easy path to invention and innovation from our most talented students.

Faculty
This degree will be housed in the Department of Philosophy and Humanistic Studies, where there is currently a chair and 1 additional full-time faculty member. We do not offer a degree in this department (only a minor and contributions to our general education curriculum). Faculty there are ideally suited to teaching the Integrating courses and advising the students. All other courses are drawn from existing programs, and will be a mix of full- and part-time faculty.

Learning Resources
We anticipate no new library or technological resources for this degree as it is developed from existing majors and courses.

Facilities
No new facilities are required.

Fiscal Note
This is degree has the potential to be revenue generating because we hope to attract more returning adults through partnerships with other programs and organizations. It also makes better use of the reassigned time already granted to this department chair.

Review of Documents
   a) Campus Review: The original BA Liberal Arts proposal was reviewed by all levels of campus governance during the spring and fall 2015 semesters. Final approval at Senate was in November 2015. The revised title was approved April 21, 2016.
   b) Campus Budget and Finance: Approved by University Planning and Budgeting Committee in May 2015.
   c) Campus President:
   d) Academic Council:
   e) System Office:

Accreditation
We are not seeking any specialized accreditation of this degree. It conforms to NEASC standards. We anticipate the first group to graduate could be within a year of establishing the degree so we are asking for BOR accreditation and licensure.

March 9, 2016 – Academic Council
March 24, 2016 – BOR-Academic and Student Affairs Committee
April 29, 2016 – BOR-Academic and Student Affairs Committee
May 10, 2016 – Board of Regents

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

a New Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a program in Automotive Technology – Honda PACT leading to an Associate of Applied Science degree at Gateway Community College for a period of three years until May 30, 2019

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Licensure of a program in Automotive Technology – Honda PACT to an Associate of Applied Science degree at Gateway Community College.

BACKGROUND
<u>Summary</u>

This degree will be parallel to the two other Automotive Degree programs. It aligns directly with the Gateway mission of offering degree programs and courses leading to transfer, employment, and lifelong learning. Graduates of this program will have a direct opportunity to gain employment in our corporate sponsor's Honda and Acura Dealerships.

This degree supports economic development through a partnership with local auto dealers and our industry partners Honda and Acura by providing workforce development, business development, and technology transfer.

<u>Need for the Program</u>
American Honda Motors has requested this program be offered in order to fill a need for entry level automotive technicians for their dealerships in the region. Gateway currently offers a GM and a General Automotive Programs and we are over-whelmed with requests for entry level technicians coming out of our programs.

<u>Curriculum</u>

Semester One:	AUT144	Honda Electrical Systems	4.0 credits
	AUT148	Honda Brake Systems	4.0 credits
	AUT181	Honda Practicum 1	1.0 credits
	ENG101	Composition	3.0 credits
	MAT109 or Higher		3.0 credits
Semester Two:	AUT146	Honda Steering & Suspension Systems	4.0 credits
	AUT140	Honda Engines	4.0 credits
	AUT281	Honda Practicum 2	1.0 credits
		Critical Thinking Elective	3.0 credits
		Aesth Dim, Hist Know, Oral Comm,	
		Sci Reason Elective	3.0 credits
Summer:	AUT283	Honda Practicum 3	2.0 credits
	AUT159	ASE Prep & Shop Practices	2.0 credits
Semester Three:	AUT247	Honda AC & Restraints	4.0 credits
	AUT 243	Honda Transmission & Drivetrain	4.0 credits
	AUT284	Honda Practicum 4	1.0 credits
	ENG102 or 200		3.0 credits
		Social Phenomena Elective	3.0 credits
Semester Four:	AUT244	Honda Advanced Electrical Systems	4.0 credits
	AUT241	Honda Fuel & Emissions Systems	4.0 credits
	AUT285	Honda Practicum 5	1.0 credits
		BIO, CHE, EAS, EVS, or PHY	3.0-4.0 credits

61-62 credits total

Students

Presently, there is tremendous need throughout the State of Connecticut for qualified Automotive Technicians. Opportunities range from maintenance technicians in "Quick Lube" shops making a little more than minimum wage, all the way up to Advanced Diagnostic Technicians in franchised dealerships grossing in excess of $100,000 per year. The Connecticut Department of Labor, "Labor Market Info" from the Office of Research currently projects a significant 4.3% growth in the number of positions available for Automotive Technicians between 2012 and 2022.

- 2012: 9,236 Automotive Technician Positions
- 2022: 9,631 Automotive Technician positions

This "growth" in total number of jobs comes at the same time that current technicians are retiring or exiting the industry at a roughly 10% attrition rate! (General Motors, ASEP Meeting, Detroit Oct 2015)

Furthermore, a quick search of "Indeed" (an online job search provider) shows current, active "Automotive Technician" job postings totaling 188 as of January 5, 2016. In short the economy of the State of Connecticut depends upon the automobile to fully function and the people who maintain and repair those automobiles are in short supply.

Faculty

Scott R. McFarland, Assoc. Professor, University of Mass., Automotive Technology – Honda/Acura
        Program Coordinator – General Auto/Honda PACT
Second Instructor to be hired.

Learning Resources

The additional resources required for the Honda / ACURA Professional Automotive Career Training program includes the following:

Gateway Community College is required to hire one additional Full-Time Certified Honda Instructor at a cost of $52,128 annually

The purchase of an additional $115,000 dollars in Honda special tools. (Recently, Gateway Automotive Technology has purchased $60,000 of Honda special tools)

Facilities

This program will be housed at the North Haven Campus utilizing the existing facilities per Honda's contract with the State of Connecticut there will be one dedicated Honda PACT classroom and one dedicated Honda PACT lab. This will have no impact on existing automotive programs.

Fiscal Note

GCC has taken into consideration the tools/equipment purchase and the addition of one faculty member as specified in the contract between Honda and the State of CT in the budgeting process.

Accreditation:

GCC will seek NATEF accreditation for this program once it has been running for two years.

SECTION 1: GENERAL INFORMATION	
Institution: Gateway Community College	Date of Submission to BOR Office:

Most Recent NEASC Institutional Accreditation Action and Date: March 2016	

| **Program Characteristics**
Name of Program: Automotive Technology-Honda PACT
Degree: Title of Award *(e.g. Master of Arts)* **AAS**
Certificate: *(specify type and level)*
Anticipated Program Initiation Date: 9/2016
Anticipated Date of First Graduation: 5/2018
Modality of Program: X On ground   Online   Combined
      If "Combined", % of fully online courses?
Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 61-62 | **Program Credit Distribution**
Cr in Program Core Courses: 34
Cr of Electives in the Field: 0
Cr of Free Electives: 0
Cr Special Requirements *(include internship, etc.):* 6
<u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **40**
From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: |

Type of Approval Action Being Sought: Licensure OR x Licensure and Accreditation Suggested CIP Code No. *(optional)* Title of CIP Code CIP Year: 2000 or 2010	

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program: Program Discontinued: CIP: DHE# (if available): Accreditation Date: Phase Out Period Date of Program Termination	

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program:	

Program Accreditation: • If seeking specialized/professional/other accreditation, name of agency and intended year of review: This program will seek NATEF accreditation. • If program prepares graduates eligibility to state/professional license, please identify: ASE Certification *(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)*		

Institutional Contact for this Proposal: Mark Kosinski	Academic Dean	Tel.: 285-2077 e-mail: mkosinski@gwcc.commnet.edu

BOR REVIEW STATUS *(For Office Use Only - please leave blank)*	
BOR Sequence Number (to be assigned): Approved 2010 CIP Code No. [1] Title of CIP Code Log of BOR Steps Towards Program Approval:	
Nature and Resolution number for BOR Approval: Date of Approval: Conditions for Approval (if any)	

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[1] Final CIP assignment will be done by BOR staff in consideration of suggested number (if provided) and in consultation with administrative offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

SECTION 2: PROGRAM PLANNING ASSESSMENT *(To be Used for BOR Review Only)*

Alignment of Program with Institutional Mission, Role and Scope
(Please provide objective and concise statements)

This degree will be parallel to the two other Automotive Degree programs. It aligns directly with the Gateway mission of offering degree programs and courses leading to transfer, employment, and lifelong learning. Graduates of this program will have a direct opportunity to gain employment in our corporate sponsor's Honda and Acura Dealerships.

This degree supports economic development through a partnership with local auto dealers and our industry partners Honda and Acura by providing workforce development, business development, and technology transfer.

Addressing Identified Needs

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)* American Honda Motors has requested this program be offered in order to fill a need for entry level automotive technicians for their dealerships in the region. Gateway currently offers a GM and a General Automotive Programs and we are over-whelmed with requests for entry level technicians coming out of our programs.

  Ever since Henry Ford revolutionized automobile production and "Put America on Wheels" (The Economist, Millennium issue 1914) most of workers in our country have depended on a working automobile to get to work every day! Presently, there is tremendous need throughout the State of Connecticut for qualified Automotive Technicians. Opportunities range from maintenance technicians in "Quick Lube" shops making a little more than minimum wage, all the way up to Advanced Diagnostic Technicians in franchised dealerships grossing in excess of $100,000 per year. The Connecticut Department of Labor, "Labor Market Info" from the Office of Research currently projects a significant 4.3% growth in the number of positions available for Automotive Technicians between 2012 and 2022.

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  This "growth" in total number of jobs comes at the same time that current technicians are retiring or exiting the industry at a roughly 10% attrition rate! (General Motors, ASEP Meeting, Detroit Oct 2015)

  Furthermore, a quick search of "Indeed" (an online job search provider) shows current, active "Automotive Technician" job postings totaling 188 as of January 5, 2016. In short the economy of the State of Connecticut depends upon the automobile to fully function and the people who maintain and repair those automobiles are in short supply

- 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? Gateway currently has a strong GM ASEP degree and certificate programs that are not offered anywhere else in CT. Also, we offer a degree or certificate through our General Automotive program. The new program will utilize existing curriculum, faculty and resources. Creating a new corporate relationship and program at Gateway it will enhance our offerings while filling an industry need for employees. AHM has already donated in excess of six hundred thousand dollars in tools and equipment to the school. The access to current training material is priceless.

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)* n/a

- Please indicate what similar programs exist in other institutions within your constituent unit [2], and how unnecessary duplication is being avoided There are no similar corporate sponsored programs offered at any BOR institutions in the state.

- Please provide a description/analysis of employment prospects for graduates of this proposed program Employment prospects are very high for graduates of this program as the program is being developed at the request of industry in order to meet a current need for entry level automotive technicians.

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[2] Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

Cost Effectiveness and Availability of Adequate Resources

This proposal is cost effective for the following reasons:

It is anticipated that completion rates for the Honda PACT automotive programs will double that of our General Automotive program within the first few years.

The additional resources required for the Honda / ACURA Professional Automotive Career Training program includes the Following:

Gateway Community College is required to hire one additional Full-Time Certified Honda Instructor at a cost of $52,128 annually

The purchase of an additional $115,000 dollars in Honda special tools. (Recently, Gateway Automotive Technology has purchased $60,000 of Honda special tools)

(Please provide a one-paragraph narrative on the attached MSExcel Resource and Cost Projection Analysis)

SECTION 3: PROGRAM QUALITY ASSESSMENT

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program and concisely describe assessment methodologies to be used in measuring the outcomes. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes in 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. Students will successfully meet the industry NATEF training requirements for Honda/Acura Steering and Suspension systems as assessed by existing instruments in current course.
2. Students will successfully meet the industry NATEF training requirements for Honda/Acura Braking systems as assessed by existing instruments in current course.
3. Students will successfully meet the industry NATEF training requirements for Honda/Acura Fuel and Emissions systems as assessed by existing instruments in current course.
4. Students will successfully meet the industry NATEF training requirements for Honda/Acura Electrical systems as assessed by existing instruments in current course.
5. Students will successfully meet the industry NATEF training requirements for Honda/Acura Engine systems as assessed by existing instruments in current course.
6. Students will successfully meet the industry NATEF training requirements for Honda/Acura Transmission & Drivetrain systems as assessed by existing instruments in current course.
7. Students will successfully meet the industry NATEF training requirements for Honda/Acura AC & Restraint systems as assessed by existing instruments in current course.
8. Students will demonstrate practical application of all above outcomes by successful completion of an in-dealership internship as assessed by existing instruments in current course.
9. Students will be eligible to sit for industry ASE certification exam in the program content areas upon demonstration of appropriate work experience.

Program Administration *(Describe qualifications and assigned FTE load of administrator/faculty member responsible for the day-to-day operations of the proposed academic program. Identify individual for this role by name or provide time frame for prospective hiring)*

 Program to be administered by current Honda PACT Program Coordinator – Scott R. McFarland

Faculty *(Please complete the faculty template provided below to include current full-time members of the faculty who will be teaching in this program and, as applicable, any anticipated new positions/hires during the first three years of the program and their qualifications)*

How many new full-time faculty members, if any, will need to be hired for this program? 1

What percentage of the credits in the program will they teach? 50

What percent of credits in the program will be taught by adjunct faculty? 0

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program n/a

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. Please include these resources in the Resources and Cost Analysis Projection sheet for BOR review)*

 Laboratory vehicles are donated to the Honda PACT automotive program by our corporate sponsor AHM. There are no other new resources required for this program.

Curriculum

(Please list courses for the proposed program, including the core/major area of specialization, prerequisites, electives, required general education courses (undergraduate programs), etc. Using numerals, map the Learning Outcomes listed in the previous section to relevant program courses in this table. Mark any new courses with an asterisk * and attach course descriptions. Mark any courses that are delivered fully online with a double asterisk ** Please modify this format as needed)

Course Number and Name	L.O. # [3]	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
AUT144 Honda Electrical Systems			4.0	AUT181 Honda Practicum 1		1.0
AUT148 Honda Brake Systems			4.0	AUT281 Honda Practicum 2		1.0
AUT146 Honda Steering& Suspension Systems			4.0	AUT283 Honda Practicum 3		2.0
AUT140 Honda Engines			4.0	AUT284 Honda Practicum 4		1.0
AUT159 ASE Prep & Shop Practices			2.0	AUT285 Honda Practicum 5		1.0
AUT247 Honda AC & Restraints			4.0			
AUT243 Honda Transmissions & Drivetrains			4.0			
AUT244 Honda Advanced Electrical Systems			4.0			
AUT241 Honda Fuel & Emissions Systems			4.0			
Core Course Prerequisites				**Elective Courses in the Field**		
n/a						
Total Other Credits Required to Issue Credential *(e.g. GenEd/Liberal Arts Core/Liberal Ed Program)*						21-22

Full-Time Faculty Teaching in this Program *(Note: If you anticipate hiring new faculty members 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)*

Faculty Name and Title	Institution of Highest Degree	Area of Specialization/Pertinent Experience	Other Administrative or Teaching Responsibilities
Scott R. McFarland, Assoc. Professor	University of Mass.	Automotive Technology/Honda/Acura	Program Coordinator – General Automotive/Honda PACT

Connecticut Board of Regents for Higher Education

APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA [1] BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

Institution	Gateway Community College	Date: 01.26.16
Proposed Program	Honda PACT Degree	

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfer *(from other programs)*	3	1	0	0	0	0
New Students *(first time matriculating)*	4	2	7	3	10	3
Continuing *(students progressing to credential)*	0	0	6	3	7	5
Headcount Enrollment	7	3	13	6	17	8
Total Estimated FTE per Year						

PROJECTED Program Review	Year 1 (2013-14)		Year 2 (2014-2015)		Year 3 (2015-16)	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition* *(Do not include internal transfer)*	$14,252	$5,004	$26,468	$10,008	$34,612	$13,344
Program-Specific Fees	$1,232	$528	$2,288	$1,056	$2,992	$1,408
Other Rev. *(Annotated in text box below)*						
Total Annual Program Revenue	$21,016		$39,820		$52,356	

* Tuition is calculated using 2015-16 rates as follows. Full time: in-state, $2036 /semester ($1800 fee + $20 student activity fee + $216 college service fee) for two semesters; Part time: in-state, 9 credits, $1668/semester ($1458+ $10 student activity fee + 200 est Service Fee) for two semesters

PROJECTED Expenditures**	Year 1		Year 2		Year 3	
	Number *(as applicable)*	Expenditure	Number	Expenditure	Number	Expenditure
Administration *(Chair or Coordinator)*	0		0		0	
Faculty *(Full-time, total for program)*	1	$52,128	1	$52,128	1	$52,128
Faculty *(Part-time, total for program)* WLU*** Part-time faculty ****						
Support Staff	0		0		0	
Library Resources Program						
Equipment *(List as needed)*		$57,500		$57,500		$0
Other *(e.g. student services)*						
Estimated Indirect Cost *(e.g student services, operators, maintenance*	0		0		0	
Total ESTIMATED Expenditures		$109,628		$109,628		$52,128

Required purchase of Honda Tools, spread out over year 1 & year 2

[1] This PRO FORMA budget provides reasonable assurance that the program can be established and is sustainable. Some assumption and/or formulaic methodolgy may be used and annotated in the text box.

ITEM
Licensure of a program in Automotive Technology – Honda PACT to a Certificate at Gateway Community College.

BACKGROUND
Summary

This Certificate aligns directly with the Gateway mission of offering degree programs and courses leading to transfer, employment, and lifelong learning. Graduates of this program will have a direct opportunity to gain employment in our corporate sponsor's Honda and Acura Dealerships. Courses in this certificate are all transferable to the Honda PACT degree program.

This degree supports economic development through a partnership with local auto dealers and our industry partners Honda and Acura by providing workforce development, business development, and technology transfer.

Need for the Program
American Honda Motors has requested this program be offered in order to fill a need for entry level automotive technicians for their dealerships in the region. Gateway currently offers a GM and a General Automotive Programs and we are over-whelmed with requests for entry level technicians coming out of our programs.

Curriculum

Semester One:	AUT144	Honda Electrical Systems	4.0 credits
	AUT148	Honda Brake Systems	4.0 credits
	AUT181	Honda Practicum 1	1.0 credits
	AUT 243	Honda Transmission & Drivetrain	4.0 credits
	AUT247	Honda AC & Restraints	4.0 credits
Semester Two:	AUT146	Honda Steering & Suspension Systems	4.0 credits
	AUT140	Honda Engines	4.0 credits
	AUT244	Honda Advanced Electrical Systems	4.0 credits
	AUT241	Honda Fuel & Emissions Systems	4.0 credits
	AUT281	Honda Practicum 2	1.0 credits
Summer:	AUT282	Honda Practicum 3	2.0 credits
	AUT159	ASE Prep & Shop Practices	2.0 credits
Semester Three:	AUT284	Honda Practicum 4	1.0 credits
	AUT285	Honda Practicum 5	1.0 credits

40 credits total

Students
Presently, there is tremendous need throughout the State of Connecticut for qualified Automotive Technicians. Opportunities range from maintenance technicians in "Quick Lube" shops making a little more than minimum wage, all the way up to Advanced Diagnostic Technicians in franchised dealerships grossing in excess of $100,000 per year. The Connecticut Department of Labor, "Labor Market Info" from the Office of Research currently projects a significant 4.3% growth in the number of positions available for Automotive Technicians between 2012 and 2022.
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Furthermore, a quick search of "Indeed" (an online job search provider) shows current, active "Automotive Technician" job postings totaling 188 as of January 5, 2016. In short the economy of the State of Connecticut depends upon the automobile to fully function and the people who maintain and repair those automobiles are in short supply.

Faculty

Scott R. McFarland, Assoc. Professor, University of Mass., Automotive Technology – Honda/Acura
        Program Coordinator – General Auto/Honda PACT
Second Instructor to be hired.

Learning Resources

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The purchase of an additional $115,000 dollars in Honda special tools. (Recently, Gateway Automotive Technology has purchased $60,000 of Honda special tools)

Facilities

This program will be housed at the North Haven Campus utilizing the existing facilities per Honda's contract with the State of Connecticut there will be one dedicated Honda PACT classroom and one dedicated Honda PACT lab. This will have no impact on existing automotive programs.

Fiscal Note

GCC has taken into consideration the tools/equipment purchase and the addition of one faculty member as specified in the contract between Honda and the State of CT in the budgeting process.

Accreditation:

 GCC will seek NATEF accreditation for this program once it has been running for two years.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

APPLICATION FOR NEW PROGRAM APPROVAL (Public Higher Education Institutions) - gb, CAOs 12/30/11

SECTION 1: GENERAL INFORMATION [1] [2]

Institution: Gateway Community College	Date of Submission to BOR Office: 12/2015

Most Recent NEASC Institutional Accreditation Action and Date: 3/2016

Program Characteristics Name of Program: Automotive Technology – Honda PACT Degree: Title of Award *(e.g. Master of Arts)* Certificate Certificate: *(specify type and level)* Automotive Anticipated Program Initiation Date: 09/16 Anticipated Date of First Graduation: 05/18 Modality of Program: X On ground Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 40	**Program Credit Distribution** # Cr in Program Core Courses: 34 # Cr of Electives in the Field: 0 # Cr of Free Electives: 0 # Cr Special Requirements *(include internship, etc.):* 6 <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: 40 From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 0

Type of Approval Action Being Sought: Licensure OR X Licensure and Accreditation
Suggested CIP Code No. *(optional)*   Title of CIP Code

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: CIP: DHE# (if available):
Phase Out Period   Date of Program Termination

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Automotive Program– North Haven

Program Accreditation:
- If seeking specialized/professional/other accreditation, name of agency and intended year of review: This program will seek NATEF accreditation.
- If program prepares graduates eligibility to state/professional license, please identify: ASE Certification

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

Institutional Contact for this Proposal: Scott R. McFarland	Title: Program Coordinator	Tel.: 203-508-6065 e-mail: smcfarland@gatewayct.edu

BOR-AC REVIEW and Follow Up *(For BOR Office Use Only - please leave blank)*

BOR Concept Paper Sequence Number (to be assigned):
Summary of BOR-AC Comments and Recommendations:
Log of Follow Up Steps:
Expected Date of Full Proposal:

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[1] This Concept Paper can be considered the first draft of your new program proposal. Providing accurate and concrete information will facilitate further steps. Please neglect cells that have been shaded with a pattern or text that has been crossed out. These items can be completed in the full proposal document.

[2] Further details and information may be required at the institution level (e.g., Academic Dean, Provost) or system level (e.g., officer in charge of a centralized programmatic database). As appropriate, this additional information should be included in this Concept Paper.

SECTION 2: PROGRAM PLANNING ASSESSMENT *(To be used in BOR Review Only)*

Alignment of Program with Institutional Mission, Role and Scope

(Please provide objective and concise statements)

This degree will be parallel to the two other Automotive Certificate programs. It aligns directly with the Gateway mission of offering certificate programs and courses leading to transfer, employment, and lifelong learning. Graduates of this program will have a direct opportunity to gain employment in our corporate sponsor's Honda and Acura Dealerships. This certificate supports economic development through a partnership with local auto dealers and our industry partners Honda and Acura by providing workforce development, business development, and technology transfer.

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- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)* n/a

- Please indicate what similar programs exist in other institutions within your constituent unit [3], and how unnecessary duplication is being avoided. There are no similar corporate sponsored programs offered at any BOR institutions in the state.

- Please provide a description/analysis of employment prospects for graduates of this proposed program.   Employment prospects are very high for graduates of this program as the program is being developed at the request of industry in order to meet a current need for entry level automotive technicians.

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[3] Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

Cost Effectiveness and Availability of Adequate Resources

(Please provide a short narrative that generally considers projections of program enrollment and graduation, revenues and expenses, existing and needed resources, including faculty and administrative cost, and any major cost implications)

This proposal is cost effective for the following reasons:

There are no incremental administrative costs related to this certificate program. The program is intended to provide entry level graduates by utilizing empty seats in existing courses.

Revenue will increase with no increase in expenses. Current enrollment in the core courses of this certificate proposal averages 12-14 students per semester. This certificate is projected to greatly increase graduation rates as the target students will include those who currently do not complete the AAS degree program due to difficulty with the core academic requirement of the degree. It is anticipated that completion rates for the Honda PACT automotive programs will double in the first year. Laboratory vehicles are donated to the Honda PACT automotive program by our corporate sponsor AHM. This Certificate program requires no additional resources aside from funding the Honda Degree program.

SECTION 3: PROGRAM QUALITY ASSESSMENT

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program and concisely describe assessment methodologies to be used in measuring the outcomes. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes in 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. Students will successfully meet the industry NATEF training requirements for Honda/Acura Steering and Suspension systems as assessed by existing instruments in current course.

2. Students will successfully meet the industry NATEF training requirements for Honda/Acura Braking systems as assessed by existing instruments in current course.

3. Students will successfully meet the industry NATEF training requirements for Honda/Acura Fuel and Emissions systems as assessed by existing instruments in current course.

4. Students will successfully meet the industry NATEF training requirements for Honda/Acura Electrical systems as assessed by existing instruments in current course.

5. Students will successfully meet the industry NATEF training requirements for Honda/Acura Engine systems as assessed by existing instruments in current course.

6. Students will successfully meet the industry NATEF training requirements for Honda/Acura Transmission & Drivetrain systems as assessed by existing instruments in current course.

7. Students will successfully meet the industry NATEF training requirements for Honda/Acura AC & Restraint systems as assessed by existing instruments in current course.

8. Students will demonstrate practical application of all above outcomes by successful completion of an in-dealership internship as assessed by existing instruments in current course.

9. Students will be eligible to sit for industry ASE certification exam in the program content areas upon demonstration of appropriate work experience.

Program Administration *(Describe qualifications and assigned FTE load of administrator/faculty member responsible for the day-to-day operations of the proposed academic program. Identify individual for this role by name or provide time frame for prospective hiring)*

 Program to be administered by current Honda PACT Program Coordinator – Scott R. McFarland

Faculty *(Please complete the faculty template provided below to include current full-time members of the faculty who will be teaching in this program and, as applicable, any anticipated new positions/hires during the first three years of the program and their qualifications)*

How many new full-time faculty members, if any, will need to be hired for this program? 1

What percentage of the credits in the program will they teach? 50

What percent of credits in the program will be taught by adjunct faculty? 0

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program n/a

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. Please include these resources in the Resources and Cost Analysis Projection sheet for BOR review)*

 Laboratory vehicles are donated to the Honda PACT automotive program by our corporate sponsor AHM. There are no other new resources required for this program.

Curriculum

(Please provide details as available and keep in mind the summary of Program Credit Distribution completed in Section 1. Modify this format as needed)
*~~(Please list courses for the proposed program, including the core/major area of specialization, prerequisites, electives, required general education courses (undergraduate programs), etc. Using numerals, map the Learning Outcomes listed in the previous section to relevant program courses in this table. Mark any new courses with an asterisk * and attach course descriptions. Mark any courses that are delivered fully online with a double asterisk ** ~~Please modify this format as needed)*

Course Number and Name	L.O. # [4]	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
AUT144 Honda Electrical Systems			4.0	AUT181 Honda Practicum 1		1.0
AUT148 Honda Brake Systems			4.0	AUT281 Honda Practicum 2		1.0
AUT146 Honda Steering& Suspension Systems			4.0	AUT283 Honda Practicum 3		2.0
AUT140 Honda Engines			4.0	AUT284 Honda Practicum 4		1.0
AUT159 ASE Prep & Shop Practices			2.0	AUT285 Honda Practicum 5		1.0
AUT247 Honda AC & Restraints			4.0			
AUT243 Honda Transmissions & Drivetrains			4.0			
AUT244 Honda Advanced Electrical Systems			4.0			
AUT241 Honda Fuel & Emissions Systems			4.0			
Core Course Prerequisites				**Elective Courses in the Field**		
n/a						
Total Other Credits Required to Issue Credential *(e.g. GenEd/Liberal Arts Core/Liberal Ed Program)*						0

Full-Time Faculty Teaching in this Program *(Note: If you anticipate hiring new faculty members 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)*

Faculty Name and Title	Institution of Highest Degree	Area of Specialization/Pertinent Experience	Other Administrative or Teaching Responsibilities
Scott R. McFarland, Assoc. Professor	University of Mass.	Automotive Technology – Honda/Acura	Program Coordinator – General Auto/Honda PACT
Second Instructor to be hired.			

Connecticut Board of Regents for Higher Education

APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA [1] BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

Institution	Gateway Community College	Date: 01.26.16
Proposed Program	Honda PACT Certificate	

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfer *(from other programs)*	0	0	0	0		
New Students *(first time matriculating)*	0	0	0	1	2	1
Continuing *(students progressing to credential)*	0	0	1	0	0	1
Headcount Enrollment	0	0	1	1	2	2
Total Estimated FTE per Year						

PROJECTED Program Review	Year 1 (2016-17)		Year 2 (2017-2018)		Year 3 (2018-19)	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition* *(Do not include internal transfer)*	$0	$0	$4,072	$1,034	$4,072	$3,336
Program-Specific Fees	$0	$0	$352	$176	$704	$352
Other Rev. *(Annotated in text box below)*						
Total Annual Program Revenue	$0		$5,634		$8,464	

* Tuition is calculated using 2015-16 rates as follows. Full time: in-state, $2036 /semester ($1800+ $20 student activity fee + $216 College Service Fee) for two semesters; Part time: in-state, 9 credits, $1668/semester ($1458 + $10 student act. fee + 200 est Service fee) for two semesters

PROJECTED Expenditures**	Year 1		Year 2		Year 3	
	Number *(as applicable)*	Expenditure	Number	Expenditure	Number	Expenditure
Administration *(Chair or Coordinator)*	0		0		0	
Faculty *(Full-time, total for program)*	0		0		0	
Faculty *(Part-time, total for program)* WLU*** Part-time faculty ****						
Support Staff	0		0		0	
Library Resources Program	0		0		0	
Equipment *(List as needed)*	0		0		0	
Other *(e.g. student services)*						
Estimated Indirect Cost *(e.g student services, operators, maintenance*	0		0		0	
Total ESTIMATED Expenditures	0		0		0	

This is the Honda PACT Certificate which is linked to the Honda Pact Degree program. All costs for the Certificate are covered under the degree program.

[1] This PRO FORMA budget provides reasonable assurance that the program can be established and is sustainable. Some assumption and/or formulaic methodolgy may be used and annotated in the text box.

CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

a New Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a program in Biotechnology leading to a Bachelor of Science degree at Southern Connecticut State University for a period of three years until May 30, 2019

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM

New Program (B.S.) in Biotechnology at Southern Connecticut State University

BACKGROUND
<u>Summary</u>

Southern Connecticut State University has developed a program with input from the City of New Haven and industry representatives leading to a Bachelor of Science degree in Biotechnology. The Biology Department at SCSU proposes a 120 credit undergraduate degree. This program aligns closely with the institutional, school, and departmental mission and scope, which seek to provide exemplary education in the STEM disciplines. The new B.S in Biotechnology aligns with Southern Connecticut State University's commitment to academic excellence and access by prioritizing both technical and soft-skills training. The program will equip students with the skills to think critically, solve complex problems, and effectively communicate with their colleagues in the workplace. Additionally, this program serves several key components of the Connecticut State Colleges and University's Strategic Initiatives: to support student success; to maintain affordability and sustainability; and to provide for innovation and economic growth.

The new B.S. in Biotechnology allows Southern to take a leadership role in providing baccalaureate-level education in biotechnology through a curriculum that provides an accessible, affordable, and workforce-relevant educational experience. This program has a unique niche in the region, as it is directly linked to regional companies for internships and future employment, and the faculty already present at Southern have the expertise to administer this program. The university's highly credentialed and industry-experienced faculty represents the greatest strength of the program, which has been developed in close collaboration with industry partners. The learning objectives outlined in this paper represent the very best of modern pedagogical practices. Furthermore, the CSCU Transfer and Articulation Agreement (TAP) facilitates the transfer of community college students to SCSU for bachelor's degree completion. Additionally, SCSU's most recent transfer agreement with Gateway Community College helps to ensure a pipeline of local students and Southern's commitment to the New Haven Promise helps to provide the critical accessibility for local high school students. The university is conveniently located close to downtown New Haven and combined with the strong demonstration of support from regional industry and educational partners, the program is well positioned for success.

<u>Need for the Program</u>

The new B.S. in Biotechnology will help sustain the greater New Haven region and the state as a leader in bioscience by delivering specialized education, applied research, and student internships in order to generate a pipeline of highly-skilled, well-educated citizens and workers. Conversations about creating this new academic program began in 2012 when the New Haven Board of Aldermen approved a landmark Development and Land Disposition Agreement (DLDA) with Winstanley Enterprises. That agreement formed the basis for the construction of the first infill building at 100 College Street in New Haven, a 495,000 square foot building, which opened this year as the home of Alexion Pharmaceuticals. The DLDA included a *Bioscience Career Ladder* provision to establish an

academic pipeline to support employment in this field. Southern Connecticut State University was chosen as the lead institution to develop this academic pipeline as a result of its strong commitment to STEM education and long-term investment in the sciences, which includes the recent opening of a new 98,332 square foot Academic & Laboratory Science building on its campus in New Haven.

The bioscience industry continues to serve as an engine of growth along the southern corridor of Connecticut with 39 of the state's 52 bioscience companies located in the Greater New Haven metropolitan region. In 2012, the Connecticut Economic Resource Center (CERC) reported that the bioscience industry was supporting more than 18,000 total jobs in Connecticut.[1] A recent September 2015 Job Report from Clinical OMICS stated that new hiring initiatives at biotechnology companies are fueled by the need for scientists with data management abilities and business acumen. The rapid expansion of Big Data in the 21st century emphasizes the need for skilled employees in bioinformatics, biostatistics, and computer programming in the bioscience sector.[2] The benefits that come from academic-based research and a strong pipeline of talent will help sustain these needs in the New Haven bioscience community.

Curriculum

Biotechnology is applied molecular and cellular biology. Our students will master a broad range of lab skills applicable to biology and biotechnology. Students will know and understand a broad range of basic biological concepts, and will master applied research skills at an advanced level to prepare them for a career in molecular biology and biotechnology. Our students will be able to generate hypotheses, design approaches to test them, and interpret the data from those tests to reach valid conclusions. Additionally, students will develop oral and written communication skills relevant to professional positions in the biotechnology workforce.

Our curriculum has 18 learning outcomes grouped under the following four areas of knowledge:
1) Energy is required by and transformed in Biological Systems
2) Macromolecular Structure Determines Function and Regulation
3) Information Storage and Flow are Dynamic and Interactive
4) Discovery Requires Objective Measurement, Quantitative Analysis, & Clear Communication.

These outcomes are reinforced in the required 32 credits of foundational coursework in biology (including courses in biotechnology, genetics, microbial and molecular biology). Additionally, students will complete required 23-24 credits in cognate courses from Chemistry, Math and Physics and complete their biotechnology training with a credited internship with one of our industry partners. This requirement assures that students will have an experience that bridges their academic studies with the outside world. Students will also be required to complete SCSU's LEP program of 52 credits and 12 free electives.

Assessment methodologies include examination, performance assessments, oral presentations, written projects, team-building projects, and portfolio assessments.

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[1] Connecticut Economic Resource Center (2012)
[2] Alex Philippidis. "Data, Business, and Regulatory Savvy Driving New Hiring", Clinical OMICS, September 16th, 2015.

Students

SCSU plans to enroll 18 students in the first year of the program with program growth continuing thereafter. As part of the MOU with the City of New Haven, potential students will be identified through the New Haven Promise Program and provided free tuition if they meet the eligibility requirements. Additionally, the TAP agreement and the most recent Transfer Agreement between Southern Connecticut State University and Gateway Community College ensure a seamless transfer experience for incoming students. While the university plans to work closely with all regional community colleges, Southern has developed particularly strong connections with both Gateway Community College (GCC) and Middlesex Community College (MCC).

Faculty

Several current faculty who have the proper educational and research experience are prepared to teach the program. Southern Connecticut State University will offer this program with current faculty. However, the university anticipates program growth and plans to add or reallocate resources as necessary to meet student needs.

Learning Resources

Library collections are present are adequate to begin the program though we do anticipate new journals in this field being available in the future.

Facilities

SCSU already has several laboratories devoted to biotechnology, and with the recent opening of a new 98,332 square foot Academic & Laboratory Science building on its campus in New Haven is ideally situated to begin the B.S. in Biotechnology. SCSU has benefited from relationships with our Industry Partners and most recently with Perkin-Elmer who have donated equipment for the new science building and this endeavor directly. Additionally, SCSU has begun its first capital campaign to help raise monies for laboratory equipment purchases that will make SCSU's biotechnology labs well suited for program growth.

Fiscal Note

Please see Appendix C.

Review of Documents:
   a)   Campus Review
   b)   Campus Budget and Finance
   c)   Campus President
   d)   Academic Council
   e)   System Office

Accreditation:

SCSU will be seeking accreditation for this program through the American Society of Biochemistry and Molecular Biology, (anticipated 2017). The goals of the ASBMB degree accreditation program are to provide: a national, outcomes-based mechanism by which students receiving a B.S. or B.A. in Biochemistry & Molecular Biology or closely related major (B.S. Biotechnology) are given an opportunity to have their degree **certified** by The American Society for Biochemistry and Molecular Biology (ASBMB). This is a vehicle for **recognizing** undergraduate BMB programs whose features and infrastructure fulfill the basic expectations of the ASBMB. It also provides access to an independently constructed and scored instrument for assessing student achievement and program effectiveness.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
*APPLICATION FOR **NEW PROGRAM APPROVAL** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION

Institution: Southern CT State University	Date of Submission to BOR Office: April 6, 2016

Most Recent NEASC Institutional Accreditation Action and Date: June 2012-reaffirmation until 2021

Program Characteristics	**Program Credit Distribution**
Name of Program: B.S. in Biotechnology Degree: Title of Award *(e.g. Master of Arts)* **Bachelor of Science in Biotechnology** Certificate: *(specify type and level)* Anticipated Program Initiation Date: fall 2017 Anticipated Date of First Graduation: spring 2019 Modality of Program: On ground Online X Combined If "Combined", % of fully online courses? 20% Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 120	# Cr in Program Core Courses: 32 # Cr of Electives in the Field: 23-24 # Cr of Free Electives: 12 # Cr Special Requirements *(include internship, etc.):* 52 LEP <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: 120 From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **120**

Type of Approval Action Being Sought: Licensure OR X Licensure and Accreditation
Suggested CIP Code No. *(optional)*   Title of CIP Code

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: CIP: DHE# (if available):
Phase Out Period   Date of Program Termination

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: School of Arts and Sciences; Department of Biology, Main SCSU Campus

Other Program Accreditation:
If seeking specialized/professional/other accreditation, name of agency and intended year of review:
The American Society of Biochemistry and Molecular Biology, 2017. The goals of the ASBMB degree accreditation program are to provide: a national, outcomes-based mechanism by which students receiving a B.S. or B.A. in Biochemistry & Molecular Biology or closely related major (B.S. Biotechnology) are given an opportunity to have their degree **certified** by The American Society for Biochemistry and Molecular Biology (ASBMB). This is a vehicle for **recognizing** undergraduate BMB programs whose features and infrastructure fulfill the basic expectations of the ASBMB. It also provides access to an independently constructed and scored instrument for assessing student achievement and program effectiveness.
American Society for Biochemistry and Molecular Biology - Accreditation Program (hyperlinked)
- If program prepares graduates eligibility to state/professional license, please identify:

(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. Ellen Durnin	Title: University Provost	Tel.: 203-392-5350 e-mail: durnin@southernct.edu

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[1] Final CIP assignment will be done by BOR staff in consideration of suggested number (if provided) and in consultation with administrative offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

Alignment of Program with Institutional Mission, Role and Scope

(Please provide objective and concise statements)

The following proposal for a new Bachelor of Science (B.S.) in Biotechnology , as submitted by Southern Connecticut State University (SCSU), was developed in direct response to currently unmet educational and employment needs within the State of Connecticut. This new degree is intended to strengthen interest and participation in bioscience education. Formal academic credentials with experiential learning components in the B.S in Biotechnology will help to position our graduates for the 21st century workforce. The university has intentionally focused its curriculum development and regional partnerships around industry needs and the pace of knowledge necessary to maintain currency in this rapidly changing field.

The initial concept for this new degree emerged from a collaborative partnership with the City of New Haven to create and strengthen educational pathways for students planning a career in the expanding field of bioscience. This partnership was formalized on May 4th, 2015 when President Mary Papazian (SCSU) and Mayor Toni Harp (New Haven) signed a Memorandum of Understanding on SCSU's campus in New Haven. The agreement focuses on the development of a new undergraduate Biotechnology degree, the creation of a four-to-five (4-5) course concentration in biotechnology for all STEM majors, and future development of professionally-oriented certificate programs to attend to the needs of regional bioscience employees. Southern Connecticut State University was selected by the City of New Haven as the lead institution on this project due to its longstanding commitment and investment in STEM education, strong connections with regional high schools and community colleges, and easily accessible geographic location close to downtown New Haven.

This program aligns closely with the institutional, school, and departmental mission and scope, which seek to provide exemplary education in the STEM disciplines. The mission of Southern Connecticut State University is to serve as "an intentionally diverse and comprehensive university committed to academic excellence, access, social justice, and service for the public good. The university regards student success as its highest priority and seeks to instill in all students the value of the liberal arts and sciences as a foundation for professional development and life-long learning. Through tradition and innovation, Southern strives to empower every undergraduate and graduate student with the knowledge, skills, and perspectives essential for active participation and impassioned, ethical leadership in our rapidly changing, global society." The new B.S in Biotechnology aligns with Southern Connecticut State University's strong mission statement by prioritizing both technical and soft-skills training. The program will equip students with the skills to think critically, solve complex problems, and effectively communicate with their colleagues in the workplace. Additionally, this program serves several key components of the Connecticut State Colleges and University's Strategic Initiatives: to support student success; maintain affordability and sustainability; and, provide for innovation and economic growth.

Southern Connecticut State University collaborated with the City of New Haven's Office of Economic Development to assemble an Industry & Educational Advisory Board of regional representatives. The university hosted its inaugural group meeting on Friday, September 18th, 2015. Since then, Industry & Educational Advisory Board members have provided the Southern Connecticut State University Internal Working Group with critical feedback on issues related to long-term strategic planning, academic program alignment, curricular updates in order to maintain industry currency, employee professional development needs, future employment gaps, and a unified approach to external advocacy. The university has also completed a formal industry needs assessment survey and is currently working with its regional partners to assess the results. Please see **Appendix A** for a list of Industry & Educational Advisory Board members.

This important collaborative project will serve the needs of current Southern students, individuals transferring to the university from regional high schools and community colleges, and current bioscience employees who require additional training or formal credentials to advance their careers. The B.S. in Biotechnology will include internships and research efforts that will position Southern Connecticut State University as a resource for all Connecticut bioscience-related organizations. These efforts will culminate in a strong pool of qualified, workforce-ready candidates that will solidly position Connecticut as a bioscience leader in New England. This

program is designed to serve as a gateway to entry-level employment and will also provide a solid foundation for additional education at the master's or doctoral level for career advancement.

Addressing Identified Needs

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities?
  (Succinctly present as much factual evidence and evaluation of stated needs as possible)

The new B.S. in Biotechnology will help sustain the greater New Haven region and the state as a leader in bioscience by delivering specialized education, applied research, and student internships in order to generate a pipeline of highly-skilled, well-educated citizens and workers. Conversations about creating this new academic program began in 2012 when the New Haven Board of Aldermen approved a landmark Development and Land Disposition Agreement (DLDA) with Winstanley Enterprises. That agreement formed the basis for the construction of the first infill building at 100 College Street, a 495,000 square foot building, which opens this year as the home of Alexion Pharmaceuticals. The DLDA included a *Bioscience Career Ladder* provision to establish an academic pipeline to support employment in this field. Southern Connecticut State University was chosen as the lead institution to develop this academic pipeline as a result of its strong commitment to STEM education and long-term investment in the sciences, which includes the recent opening of a new 98,332 square foot Academic & Laboratory Science building on its campus in New Haven.

The bioscience industry continues to serve as an engine of growth along the southern corridor of Connecticut with 39 of the state's 52 bioscience companies located in the Greater New Haven metropolitan region. In 2012, the Connecticut Economic Resource Center (CERC) reported that the bioscience industry was supporting more than 18,000 total jobs in Connecticut.[2] A recent September 2015 Job Report from Clinical OMICS stated that new hiring initiatives at biotechnology companies are fueled by the need for scientists with data management abilities and business acumen. The rapid expansion of Big Data in the 21st century emphasizes the need for skilled employees in bioinformatics, biostatistics, and computer programming in the bioscience sector.[3] The benefits that come from academic-based research and a strong pipeline of talent will help sustain these needs in the New Haven bioscience community.

It is crucial for Southern Connecticut State University to work closely with the City of New Haven and the Industry & Educational Advisory Board to support this economic sector through workforce development. A recent Gallup study reported that 96% of chief academic officers claimed to be "extremely or somewhat" confident that they were preparing students to be part of the workforce, yet only 11% of the employers agreed that those graduates had the skills and competencies required.[4] Company representatives on the Industry & Educational Advisory Board consistently comment that they struggle to hire qualified candidates and often need to look beyond Connecticut to recruit new employees.[5] Connecticut Innovations, the Department of Economic and Community Development, and CURE surveyed 81 bioscience companies at the Biotechnology Industry Organization (BIO) International Convention in Philadelphia in June 2015, where State and CURE officials sought to attract companies to Connecticut. The survey revealed that 43% of companies saw access to talent as the top consideration for location decisions, followed by access to partners (32%) and access to funding (10%). The survey of biotechnology companies also found that 40% feel personalized medicine will be the largest growth area over the next decade, and that early-stage funding is the greatest challenge for the industry, followed by talent acquisition, and federal funding.[6] In a 2015 Biotechnology Industry Report, New England's public companies ranked second in the USA in percent change increase in number of companies from 2013 to 2014. They collectively generated a 27% revenue increase within that time frame.[7] The growing market for biotechnology companies in New England provides Southern Connecticut State University with the opportunity to prepare Connecticut residents to contribute to productive scientific enterprises.

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[2] Connecticut Economic Resource Center (2012)
[3] Alex Philippidis. "Data, Business, and Regulatory Savvy Driving New Hiring", Clinical OMICS, September 16th, 2015.
[4] 2013 Gallup/Lumina Foundation Business Leaders Poll on Higher Education
[5] Bioscience Academic & Career Pathway (Bio-Path) Advisory Board Meeting, September 18th, 2015
[6] 2015 Connecticut Innovations/CURE/Department of Economic and Community Development BIO International Convention Survey
[7] Glen Giovannetti et al. "Biotechnology Industry Report 2015: Beyond Borders, Reaching New Heights", Ernst & Young, 2015.

The university has also conducted extensive research, reviewed the Bureau of Labor Statistics' (BLS) Occupational Outlook Handbook, and discussed career employment opportunities with our Industry & Educational Advisory Board members. This proposal includes a list of prospective job titles in **Appendix B** for review. The university has listed both entry-level positions for recent graduates and those jobs requiring further educational credentials. This program will be open to current Southern students, those transferring to the university through the regional high schools and community colleges, as well as current employees in the bioscience industry who would like to advance their career through additional coursework or certificate programs. This program will also be eligible for the New Haven Promise scholarship program which covers the cost of tuition for New Haven residents who meet program eligibility.

- 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?

The new B.S. in Biotechnology allows Southern to take a leadership role in providing baccalaureate-level education in biotechnology through a curriculum that provides an accessible, affordable, and relevant educational experience. This program has a unique niche in the region, as it is directly linked to regional companies for internships and future employment, and the faculty already present at Southern have the expertise to administer this program. The university's highly credentialed and industry-experienced faculty represents the greatest strength of the program, which has been developed in close collaboration with industry partners. The learning objectives outlined in this paper represent the very best of modern pedagogical practices. Furthermore, the Transfer and Articulation Agreement (TAP) facilitates the transfer of community college students for bachelor's degree completion. The most recent transfer agreement with Gateway Community College helps to ensure a pipeline of local students and Southern's commitment to New Haven Promise helps to provide the critical accessibility for local high school students. The university is conveniently located close to downtown New Haven and combined with the strong outpouring of support from regional industry and educational partners, the program is well positioned for success.

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program. *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

The CSCU TAP agreement and the most recent Transfer Agreement between Southern Connecticut State University and Gateway Community College ensure a seamless transfer experience for incoming students. Faculty within Southern's Biology department are closely examining the pathway and the most effective ways to advise community college students such that all credits transfer into the university and students can begin their coursework at the junior level. This will require collaborative communication and program development with the community colleges. At present, the TAP pathway allows for those students interested in the Bachelor of Science in Biotechnology program the ability to transfer in as a Junior with 60 credits. These students will then have their remaining 60 credits to complete at Southern.

While the university plans to work closely with all regional community colleges, Southern has developed particularly strong connections with both Gateway Community College (GCC) and Middlesex Community College (MCC). Faculty members from Southern have met with GCC and identified a number of programmatic pathways including: Biomedical Engineering Technology, Natural Science & Mathematics, and Engineering Science. The university will also be meeting with faculty members at MCC to discuss alignment with their Associate in Science degree in Biotechnology.   Similar connections with Naugatuck Valley Community College (NVCC) are in the very early stages of development.

- Please indicate what similar programs exist in other institutions within your constituent unit [8], and how unnecessary duplication is being avoided.

Southern Connecticut State University has conducted extensive research on biotechnology degree programs across the state in order to assess the work of our peer institutions and to position this program properly such that unnecessary duplication can be avoided. The following universities currently offer bioscience programs as outlined below:

Public Academic Institutions

- **Central Connecticut State University (CCSU)** – CCSU offers a Bachelor of Science in Biomolecular Sciences with a Biotechnology specialization. However, CCSU does not currently offer a formal Bachelor of Science in Biotechnology. [9]

- **Eastern Connecticut State University (ECSU) –** ECSU offers a Biotechnology undergraduate course with a laboratory component, but does not currently offer a formal Bachelor of Science in Biotechnology[10].

- **Western Connecticut State University (WCSU) –** WCSU offers a Bachelor of Arts in Chemistry with a Biotechnology option, but does not offer a formal Bachelor of Science in Biotechnology. The interdisciplinary Biotechnology program option is currently under review.[11]

- **University of Connecticut (UConn)** – UConn has a Biotechnology-Bioservices Center (BBC) that was established by the State of Connecticut as a Center of Excellence in 1986. In 2003, it was reorganized as a multidisciplinary center with a mission to facilitate research productivity in the biological sciences and related disciplines. UConn offers both an undergraduate and graduate degree in biomedical engineering[12].

Private Academic Institutions

- **Quinnipiac University (QU)** – QU offers a Bachelor of Science in Biomedical Sciences with a Biotechnology undergraduate course, but does not currently offer a formal Bachelor of Science in Biotechnology[13]. QU also has a small Master of Science in Molecular and Cell Biology degree program.

- **University of Bridgeport (UB)** – UB offers both a Bachelor of Science and Bachelor of Arts in Biology with a Biomedical Science/Biotechnology track option. UB also offers a Master of Science in Biomedical Engineering[14].

- **University of New Haven (UNH)** – UNH currently offers a Bachelor of Science in Biotechnology degree program[15].

- **Wesleyan University (WU)** – WU offers a Bachelor of Arts Biology Major with a Genetics, Genomics, and Bioinformatics pathway as well as a Molecular Biology and Biochemistry Major. WU also offers a Bachelor of Arts in Anthropology with a Major Concentration in Embodiment and Biopolitics pertaining to the socio-cultural aspects of biotechnology.[16]

- **Yale University** (Yale) – Yale offers a Bachelor of Arts and a Bachelor of Science in Molecular, Cellular, and Developmental Biology with a Biotechnology track option. The W.M. Keck Biotechnology

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[9] Central Connecticut State University Academic Programs
[10] Eastern Connecticut State University Academic Programs
[11] Western Connecticut State University Academic Programs
[12] University of Connecticut Academic Programs and Research Facilities
[13] Quinnipiac University Academic Programs
[14] University of Bridgeport Academic Programs
[15] University of New Haven Academic Programs
[16] Wesleyan University Academic Programs

Resource Laboratory at Yale provides approximately 113 genomic, proteomic, biostatistical, bioinformatics, and high performance computing technologies to Yale and non-Yale researchers[17].

In our assessment, the only other competing program in the state at the undergraduate level resides at the University of New Haven. We believe that Southern's program curriculum is distinct enough, the university has garnered enough industry endorsement, and the incoming pathways are robust enough to justify an additional program along the southern corridor of Connecticut. Southern's program has modernized all of its biotechnology-related courses to include the most recent laboratory technology, developed new courses with industry input, and can rapidly place biology undergraduates into local industry internships. It is also important to recognize that affordability is an important factor for many of our incoming students. Southern's program will represent an affordable option that is closely aligned with regional employment needs due to our active partnerships with the Industry & Educational Advisory Board.

- Please provide a description/analysis of employment prospects for graduates of this proposed program.

The aforementioned June 2015 survey of 81 bioscience companies conducted by Connecticut Innovations, the Department of Economic and Community Development, and CURE revealed that 43% of companies saw access to talent as the top consideration for location decisions, followed by access to partners (32%) and access to funding (10%)[18]. The survey of biotechnology companies also found that 40% feel personalized medicine will be the largest growth area over the next decade, and that early-stage funding is the greatest challenge for the industry, followed by talent acquisition and federal funding. This information demonstrates a strong national need for academic pipelines and strong employment prospects.

The university has complemented these efforts with research through the Occupational Outlook Handbook on the Bureau of Labor Statistics (BLS) website. We have attached these findings in **Appendix B**. At the undergraduate level, the university has identified four (4) primary career pathways for graduates of the B.S. in Biotechnology degree – biological technicians, microbiologists, material scientists, and natural science managers. While these are broad employment categories, the Industry & Educational Advisory Board will assist the university with identifying more specific and timely job openings for university graduates. Southern plans to build a very robust internship program that will position students to access industry opportunities.

This program is not only intended to provide baccalaureate graduates with entry-level employment, but also to provide additional training for current employees in the bioscience sector. The university has included job prospects for individuals at the masters and doctoral level in **Appendix B**. One particularly encouraging statistic is that employment of biotechnologists (molecular biologists and biochemists) is projected to grow 19% from 2012 to 2022, faster than the average for all occupations.[19]

Cost Effectiveness and Availability of Adequate Resources
(Please provide a short narrative that generally considers projections of program enrollment and graduation, revenues and expenses, existing and needed resources, including faculty and administrative cost, and any major cost implications)

The university has included a program budget as **Appendix C** to accompany this proposal. Southern is projecting modest and attainable student enrollment within the first three years of this program as our marketing team, Industry & Educational Advisory Board, community partners, and Office of Institutional Advancement assist with outreach and promotion. Administration in the School of Arts & Sciences has worked closely with the Biology and Chemistry departments to assess the administrative, human resources, and equipment expenses that will be needed to support this program. These are included in the attached budget. Southern plans to add a full-time faculty member in the second year of operation in alignment with program growth. The University has also included an additional adjunct faculty member in the first year of the program and will hire a total of three adjunct

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[17] Yale University Academic Programs
[18] 2015 Connecticut Innovations/CURE/Department of Economic and Community Development BIO International Convention Survey
[19] Bureau of Labor Statistics - Occupational Outlook Handbook - Molecular Biologists and Biochemists

faculty in years 2 and 3 of the program. SCSU has also included a Lab Technician, Graduate Assistant, and two University Assistants in the budget to provide the necessary lab and administrative support for this program. The university anticipates a starting cohort of 20 students in the B.S. in Biotechnology degree (beginning in the Fall 2017 semester) and 18 current students in the biotechnology concentration that will begin in Spring 2018. The earliest graduation date for students entering in Fall 2016 with an Associate's degree would be May 2019.

The only program expenses not covered by traditional student tuition and fees include additional equipment, student scholarships, and university-paid internship opportunities. As part of the signed Memorandum of Understanding, the university's Office of Institutional Advancement will be working closely with the City of New Haven, Industry & Educational Advisory Board members, and other partner organizations on an outreach campaign to raise a modest level of funding to cover these costs. The total expenses for student scholarships and internships will not exceed $235,000 over the next three years.

SECTION 3: PROGRAM QUALITY ASSESSMENT

Overall Learning Goal/Principal Learning Outcome for the Program: There are 4 overall learning outcomes for the program - to produce professionals who understand: Energy is Required by and Transformed in Biological Systems, Macromolecular Structure Determines Function and Regulation, Information Storage and Flow Are Dynamic and Interactive, and Discovery Requires Objective Measurement, Quantitative Analysis, & Clear Communication.

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program and concisely describe assessment methodologies to be used in measuring the outcomes. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes in 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. **Energy is required by and transformed in Biological Systems.**
   a. Given knowledge of common mechanisms of regulation for bio-macromolecules, students will predict the sites and nature of regulation in pathways that transform energy.
   b. Given knowledge of the basic structure of fatty acids, triglycerides, nucleotides, and carbohydrates; students will compare and contrast the synthesis, storage, and transformation of macromolecules from which living organism harvest derive energy.
   c. Given a macromolecule, students will explain the contribution of entropy, enthalpy and temperature of a macromolecule and water (associated and in bulk solvent) in a folded versus unfolded state.
   d. Given a biological example, students will explain how thermodynamically unfavorable processes can occur.

Assessment methodologies include examinations, performance assessments, oral presentations, written projects, team-building projects, portfolio assessments as tied to the course and program objectives.

2. **Macromolecular Structure Determines Function and Regulation**
   a. Given the knowledge of bio macromolecules, students will identify, draw (sketch) and know properties (functions) of bio macromolecules.
   b. Given a list of macromolecules, students will devise an experiment on how they interact or interpret results of experiments on their interactions.
   c. Given structural changes of a macromolecule, students will predict the impact of structural substitution would have on macromolecule structure and function.
   d. Given experimental data, students will assess how enzymes facilitate biochemical reactions.
   e. Given that evolutionary forces such as gene duplications and genomic mutations can provide changes in protein structure(s) and function(s) students will explain how protein structures might change while retaining an evolutionarily conserved function.

Assessment methodologies include examinations, performance assessments, oral presentations, written projects, team-building projects, portfolio assessments as tied to the course and program objectives.

3. **Information Storage and Flow Are Dynamic and Interactive.**
   a. Given an understanding of replication, transcription and translation, students will determine how changes in DNA sequence affect the amino acid sequence of the protein it encodes.
   b. Given an understanding of common mechanisms of gene regulation, students will explain or predict changes in transcription in response to biologic variables.
   c. Given an understanding of genetic information transfer, students will explain the role of RNA in the flow of genetic information.
   d. Given an understanding of evolution and natural selection, students will make predictions on how environmental factors will affect information flow over generations.
   e. Given an understanding of commonly encountered signal transduction mechanisms, students will understand the critical role of mutations in changes to amino acids and ultimately phenotype

Assessment methodologies include examinations, performance assessments, oral presentations, written projects, team-building projects, portfolio assessments as tied to the course and program objectives.

4. **Discovery Requires Objective Measurement, Quantitative Analysis, & Clear Communication.**
   a. Given an appropriate question and a working knowledge of BMB, students will formulate hypotheses, design experiments, and assess the quality of experimental design.
   b. Given a fundamental understanding of Biotechnology concepts, students will formulate experiments and assess the quality of experiments addressing molecular structure, assays of biological function, and isolation/ separation of biomolecules.
   c. Given a data set, students will assess the reliability of the data and draw appropriate conclusions.
   d. Given a set of data, students will appropriately present and interpret the data.

Assessment methodologies include examinations, performance assessments, oral presentations, written projects, team-building projects, and portfolio assessments as tied to the course and program objectives.

Program Administration *(Describe qualifications and assigned FTE load of administrator/faculty member responsible for the day-to-day operations of the proposed academic program. Identify individual for this role by name or provide time frame for prospective hiring)*

Dr. Sean Grace is an Associate Professor and Chairperson in the Biology Department at SCSU and will serve as the primary administrator for this program. Dr. Nicholas Edgington will serve as program coordinator and receive 1 credit of release time to manage the program and serve as the main contact for the Industry and Academic Advisory Committee.

Faculty *(Please complete the faculty template provided below to include current full-time members of the faculty who will be teaching in this program and, as applicable, any anticipated new positions/hires during the first three years of the program and their qualifications)*

How many new full-time faculty members, if any, will need to be hired for this program?
Several current faculty who have the proper educational and research experience are prepared to teach the program. Southern Connecticut State University will offer this program with current faculty in Fall 2016. However, the university anticipates program growth and plans to add or reallocate resources as necessary to meet student needs. Southern has included a full-time faculty member in the second year of this program aligned with anticipated program growth.
What percentage of the credits in the program will they teach? 75%

What percent of credits in the program will be taught by adjunct faculty? 25%

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program.

The university anticipates robust growth for this in-demand program and will hire adjunct faculty members to teach coursework in this program as needed. The department will specifically look to hire PhD candidate in molecular biology or biochemistry.

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. Please include these resources in the Resources and Cost Analysis Projection sheet for BOR review)*

It is anticipated that additional library collections will be needed as well as funding for marketing efforts aimed at promoting the program throughout New England. Additional faculty may be needed as the program grows.

Curriculum

*(Please list courses for the proposed program, including the core/major area of specialization, prerequisites, electives, required general education courses (undergraduate programs), etc. Using numerals, map the Learning Outcomes listed in the previous section to relevant program courses in this table. Mark any new courses with an asterisk * and attach course descriptions. Mark any courses that are delivered fully online with a double asterisk ** Please modify this format as needed)*

Course Number and Name	L.O. # [20]	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses				**Other Related/Special Requirements**		
BIO 102 Biology	1a,b 2a,b 4a,c,d		4			
BIO 220 Genetics	2&3a,b,c 4a,b,c,d		4			
BIO 233 Microbiology	1a,d,2b.c.e 3a,d,e 4d		4			
BIO 296 Genomics I	2a,b,c,d,e 3a,c,d,e 4a,b,c,d		4			
BIO 393 Introduction to Bioinformatics	2b,c,d,e 3c,d,e 4a,b,c,d		4			
BIO 436 W Molecular Biology or BIO 467 Laboratory Course in Biotechnology or BIO 386 Genomics II	1a,b,c,d 2b,c,d,e 3a,b,d,e 4a,b,c,d		4			
BIO 466 Advanced Cell & Molecular Biology or BIO 451 Tissue Culture Workshop	2b,c,d,e 3a,b,c,d,e 4a,b,c,d		4			
BIO 497 In-Service Training in Biotechnology	1a,d 4a,b,c,d		3			
BIO 491 Seminar in Biotechnology	1d,2e,3e, 4a,b,c,d		1			
Core Course Prerequisites				**Cognate Courses in the Field**		
LEP Program: MAT 150 Calculus*			4	CHE 121 General Chemistry II		4
LEP Program: PHY 123 Critical Thinking and Science for Future Leaders*			4	CHE 260 Organic Chemistry I CHE 261 Organic Chemistry II		4 4
LEP Program: CHE 120 General Chemistry I*			4	CHE 450 Biochemistry I or CHE Medicinal Chemistry or CHE 458 Drug Discovery		3-4
LEP Program: BIO 103 Biology II			4	MAT 221 Intermediate Applied Statistics		4
BIO 396 Synthetic Biology: Engineering Life			4	PHY 230 Physics for Scientists & Engineers I		4
CHE 121 General Chemistry II			4			
*These courses are in the LEP program and restricted for BS Biotechnology.						

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[20] From the Learning Outcomes enumerated list provided at the beginning of Section 3 of this application.

Total Other Credits Required to Issue Credential *(e.g. GenEd/Liberal Arts Core/Liberal Ed Program)* *48 credits Gen Ed core (LEP) 32 Biology Credits, 28 Cognate Courses (appear above in the Elective Courses in the Field), 12 Free Electives*			

Program Outline *(Please provide a summary of program requirements including total number of credits for the degree, special admission requirements, capstone or special project requirements, etc. Indicate any requirements and arrangements for clinical affiliations, internships, and practical or work experience.*

The Biology Department has created a new degree option in Biotechnology, for 120 credits, by course revision and course creation with the help of Mathematics, Physics, and Industry. This includes 52 credits in the Liberal Education Program, 32 credits required in Biology, 23-24 cognate credits required from Chemistry, Physics and Math, and 12 free elective courses.

<u>**B.S. in Biotechnology: Program Overview.**</u>
Biotechnology is applied molecular and cellular biology. Our students will master a broad range of lab skills applicable to biology and biotechnology. Students will know and understand a broad range of basic biological concepts, will master applied research skills at an advanced level to prepare them for a career in molecular biology and biotechnology. Our students will be able to generate hypotheses, design approaches to test them, and interpret the data from those tests to reach valid conclusions. Additionally, students will develop oral and written communication skills relevant to professional positions in the biotechnology workforce.

Courses that currently serve students interested in careers in molecular biology and biotechnology include:
  a. BIO 102 Biology I,
  b. BIO 103 Biology II
  c. BIO 220 Genetics
  d. BIO 233 Microbiology: Revised approved course
  e. BIO 393 Introduction to Bioinformatics. New course developed with help of Computer Science and Mathematics departments in collaboration with the Industry & Educational Advisory Board
  f. BIO 436W Cell and Molecular Biology (Writing-W)
  g. BIO 466 Advanced Cell and Molecular Biology
  h. BIO 467 Biotechnology: Lab skills course and research methods
  i. BIO 296 and 386: Genomics I & II. Part of the (<u>HHMI SEA-PHAGES</u>) program. New Courses
  j. BIO 396 - Synthetic Biology: Engineering Life. Revised course
  k. BIO 491 Seminar in Biotechnology. New course

The program is designed to provide academic excellence for current students, future TAP students and transfer students. The program provides a pipeline of trained undergraduates who can obtain employment in the local biotechnology industry upon graduation.

Admission requirements:
There are no admission requirements beyond those stated in the SCSU catalog. However, potential students will be identified through the New Haven Promise Program and provided free tuition if they meet the eligibility requirements. In addition, all TAP majors are available to enter the program and

transfer students who meet the pre-requisite requirements.

Work and Internship Affiliations:
The program anticipates internship opportunities with local biotechnology companies.

Full-Time Faculty Teaching in this Program *(Note: If you anticipate hiring new faculty members 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)*

Faculty Name and Title	Institution of Highest Degree	Area of Specialization and Pertinent Experience	Other Administrative or Teaching Responsibilities
Dr. Sarah Crawford	Columbia University of New York	Cancer Biology	Biology Graduate Program Coordinator
Dr. Nicholas Edgington	Iowa State University	Yeast Molecular Biology, Genomics	
Dr. Elizabeth Roberts	Rutgers University	Microbial Ecology	
Dr. Sean Grace	University of Rhode Island	Environmental Physiology	Chairperson
Dr. Meghan Barboza	University of Florida	Physiology and Histology	
Dr. Steven Burian	University of Maine	Biodiversity	
Dr. Miranda Dunbar	University of Regina	Environmental Physiology	
Dr. Michael Fisher	Tufts University	Microbiology and Cyanobacteria	
Dr. Rachel Jeffrey	University of California, Los Angeles	Neurobiology & Physiology	
Dr. Rebecca Siladay	Stanford University	Plant Cell Biology & Development	
Dr. Jonathan Weinbaum	Texas Tech University	Vertebrate Morphology	

APPENDIX A:

Bioscience Academic & Career Pathway (Bio-Path)
Industry and Educational Advisory Board Members

I. **Industry Representatives**
   a. **Alexion Pharmaceuticals**
      i. Nicolas Phillips, Community Outreach Manager

   b. **CONNSTEP**
      i. Jack Crane, Director, Growth & Innovation Services

   c. **CURE**
      i. Susan Froshauer, President and CEO
      ii. Edward Goodwin, Vice President of Strategic Alliances

   d. **The Jackson Laboratory for Genomic Medicine**
      i. Walter Nakonechny, Associate Director of Genomic Education

   e. **Mount Sinai Genetic Testing Laboratory**
      i. Todd Arnold, Managing Director

   f. **Oregon Health & Science University**
      i. Abhijit (Jit) Banerjee, Director, Business Development

   g. **PEP Lacey Manufacturing**
      i. Kenneth Lisk, President, Lacey Manufacturing

   h. **DiscoveRx Corporation**
      i. Bill Newsome, Vice President, Head Business Development/Global Operations

   i. **Yale University/IsoPlexis**
      i. Rong Fan, Associate Professor, Department of Biomedical Engineering, Yale University & Co-Founder, Isoplexis

II. **Educational Representatives**
   a. **Gateway Community College**
      i. Mark Kosinski, Vice President of Academic Affairs
      ii. Vicki Bozzuto, Dean of Workforce Development and Continuing Education

   b. **Middlesex Community College**
      i. Michelle Kraczkowski, Biotechnology Program Coordinator

   c. **New Haven Public School System**
      i. Richard Therrien, K-12 Science Supervisor

III. **Community Partners**
   a. **Economic Development**
      i. Michael Piscitelli, City of New Haven Deputy Economic Development Administrator
      ii. Ginny Kozlowski, CEO, Economic Development Corporation of New Haven
      iii. Usha Pillai, Bioscience Strategist, Economic Development Corporation of New Haven

   b. **Workforce Alliance**
      i. Fred Pratt, CT Works Recruitment & Placement Coordinator

APPENDIX B:

Entry-Level Job Prospects and Future Career Pathways

Job Title	Job Duties	Educational Requirement	Median Pay (2012)	Job Growth (2012 – 2022)	Employment Change
Biological Technician	Biological technicians help biological and medical scientists conduct laboratory tests and experiments.	Bachelor's Degree	$39,750	10%	8,000
Microbiologist	Microbiologists study microrganisms such as bacteria, viruses, algae, fungi, and parasites. They attempt to understand how these organisms live, grow, and interact with their environment.	Bachelor's Degree	$66,260	7%	1,400
Chemist, Materials Scientist	Chemists and materials scientists study substances at the atomic and molecular levels and the ways in which substances react with each other. They use their knowledge to develop new and improved products and to test the quality of manufactured goods.	Bachelor's Degree	$73,060	6%	5,400
Natural Sciences Manager	Natural sciences managers supervise the work of scientists, including chemists, physicists, and biologists. They direct activities related to research and development, and coordinate activities such as testing, quality control, and production	Bachelor's Degree	$115,730	6%	2,900
Biochemist, Biophysicist	Biochemists and biophysicists study the chemical and physical principles of living things and of biological processes, such as cell development, growth, and heredity.	Doctoral or Professional Degree	$81,480	19%	5,400
Medical Scientist	Medical scientists conduct research aimed at improving overall human health. They often use clinical trials and other investigative methods to reach their findings.	Doctoral or Professional Degree	$76,980	13%	13,700
Post-Secondary Teacher	Postsecondary teachers instruct students in a wide variety of academic and vocational subjects beyond the high school level. They also conduct research and publish scholarly papers and books.	Master's or Doctoral Degree	$68,970	19%	236,400

Connecticut Bioscience Workforce Entry-Level Employment Opportunities October 2015

Company Name	Job Title	Educational Requirement	Job Description	Salary	Location
The Connecticut Agricultural Experiment Station	**Fall/Winter Research Assistant**	Bachelor's Degree in science or related field.	Assist with forestry and urban tree physiology research studies. Working outdoors doing physical labor in field conditions.	$10.50/hr 35 hours/wk	New Haven, CT
Connecticut Analytical Corporation	**Biological Research Assistant**	Candidates considered will include those with a degree in biology, chemistry, molecular biology, genetics, micro-biology or related field. A minimum of a B.S. in one of the fields mentioned above or related degree plus 2 years of related research experience. Individuals with an M.S. with 2+ years experience preferred, Ph.D. or Ph.D. track preferred.	Work as part of a scientific team responsible for the development and experimentation of innovative biomedical devices and tests. The position will involve performing a range of biological and chemical analyses to support the company's R&D programs.	N/A	Bethany, CT
Core Informatics	**Genomics Application Specialist**	Bachelor's degree in a natural science discipline; or equivalent combination of education and professional experience	Seeking a laboratory scientist who has deep experience in Next Generation Sequencing (NGS) workflows to join our newly created Application Management team as a Genomics Application Specialist. Experience with informatics and/or software development experience preferred. Helps build apps to support vendor-specific workflows, and work with the Genomics App Manager to prioritize apps based on customer needs, opportunities in the market, and strategic fit.	N/A	Branford, CT

Ikonisys	****Open Invitation for Resumes on Careers page****	N/A	When working in a dynamic environment that encourages independent, empowered thinking to accomplish the success of a greater whole, growth on all levels is contagious. We emphasize a culture of diverse, qualified professionals who can work cross-functionally, constantly challenging the status-quo to achieve results above and beyond expectations.	N/A	New Haven, CT
IsoPlexis	**Biological Data Analyst (Internship)**	Bachelor's degree in Cell Biology, Immunology, Biochemistry, or Biostatistics	Alpha testing and providing feedback on our proprietary analytics software. Obtaining, reading and extracting data from a wide array of cellular response publications. Processing internal data obtained from our platform, interpreting the results, and providing summary presentations. Using and providing feedback on internally developed data analytics methods. Develop and assist with implementing data collection systems that optimize statistical efficiency and data quality.	N/A	Branford, CT
Ivy Biomedical Systems, Inc.	****Open Invitation for Resumes on Careers page****	N/A	Ivy Biomedical offers distinctive career opportunities in a variety of fields such as engineering and clinical application development. We are looking for dedicated and creative professionals who want to help us grow and help to shape the future of patient care.	N/A	Branford, CT
Staffing Company Kelly Services, Inc. on behalf of **"Medical Device Manufacturer"**	**Micro-Biologist I**	BS Degree in Science Biology Experience: College biology courses/laboratory; Analytical chemistry or toxicology course load or experience preferred	Entry level, lab-based position whose major purpose is to review product sterilization documentation and to support the laboratory. Prepare all media that is needed for testing, keep the laboratory stocked with supplies, keep all dishware cleaned in a timely fashion, and sterilize all instrumentation and attire used in laboratory. Conducts direct product testing and environmental monitoring.	N/A	North Haven, CT
Mount Sinai Genetic Testing Laboratory	**Associate Researcher I**	Bachelor's Degree in science or related field.	Under moderate supervision, conducts routine and standardized experiments using advanced techniques specific to the research project. Analyzes and assists in interpreting moderately complex results. Performs assays to support research studies. Assists in new and unexpected research experiments and techniques.	N/A	Branford, CT

APPENDIX C:

Connecticut Board of Regents for Higher Education

APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA[1] BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

Institution	Southern Connecticut State University				*Date*	4/6/2016
Proposed Program	B.S. in Biotechnology					

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers *(from other programs)+*	16	2	26	3	30	3
New Students *(first time matriculating)*	18	2	22	3	26	4
Continuing *(students progressing to credential)*			14	2	29	4
Headcount Enrollment	34	4	62	8	85	11
Total Estimated FTE per Year	35		65		90	

PROJECTED Program Revenue	Year 1		Year 2		Year 3	
	Full Time*	Part Time**	Full Time*	Part Time**	Full Time*	Part Time**
Tuition *(Do not include internal transfers)*	$258,336	$23,712	$486,864	$47,424	$695,520	$65,208
Program-Specific Fees+	$12,580	$1,480	$12,966	$2,460	$16,730	$3,070
Other Rev. *(Annotate in text box below)*						
Total Annual Program Revenue	$296,108		$549,714		$780,528	

PROJECTED Expenditures*	Year 1		Year 2		Year 3	
	Number *(as applicable)*	Expenditure	Number	Expenditure	Number	Expenditure
Administration *(Chair or Coordinator)*	1	$5,190	1	$5,190	1	$5,190
Faculty *(Full-time, total for program)***	0	$0	1	$126,048	1	$132,350
Faculty *(Part-time -total for program)#*	1	$30,448	3	$95,885	3	$100,637
Support Staff~	3	$105,085	3	$110,340	3	$115,857
Library Resources Program		$1,000		$1,000		$1,000
Equipment *(List as needed)*	Attached Below	$185,039	Attached Below	$29,523	Attached Below	$134,528
Other (e.g. student services)		$0		$0		$0
Estimated Indirect Cost *(e.g. student services, operations, maintanance)*						
Total ESTIMATED Expenditures		$326,762		$367,985		$489,562

* Note: Capital outlay costs, institutional spending for research and service, etc. can be excluded.

Please provide any necessary annotations:
* FT Tuition is based on current rate for in-state student - $4,968 per semester.
** PT Tuition is based on $494 per credit
*** FT Faculty position estimated at Assistant Professor rate plus appropriate fringe rates; increase of 5% assumed for Yr 3.
+ Program-Specific Fees include a $60 per course lab fee and a $250 one-time program fee.
# Increasing number of adjunct faculty teaching 8 credits each @ $1,730/credit, plus appropriate fringe rates; increase of 5% each year.
~ Support Staff include a Lab Technician, Graduate Assistant and two University Assistants (1 FT / 1 PT). Total expenditures include salaries and fringe rates.
Assumptions:
Calculations include a 20% attrition rate for continuing students. Internal transfers only include those students seeking a biotechnology concentration.
One (1) new FT Faculty Position will be required to teach additional sections in the program - starting Year 2.
This proposed program is expected to positively impact FULL TIME Enrollment at SCSU.
For purposes of simple comparison, tuition rates HAVE NOT been increased after FY2016.

	AY 16/17	AY 17/18	AY 18/19
	Year 1	**Year 2**	**Year 3**
Biology Dept. Equipment Needs			
Compound Microscope(x14)	$ 21,000		$ 21,000
TissueLyser II	$ 10,511		
SPRI Imager(?)			$ 97,000
dd PCR	$ 137,000		
ZOE Fluorescent Cell Imager		$ 12,995	
Bio-Rad Teaching Lab Package	$ 16,528	$ 16,528	$ 16,528
Total Expenses:	**$ 185,039**	**$ 29,523**	**$ 134,528**

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CT BOARD OF REGENTS FOR HIGHER EDUCATION

RESOLUTION

concerning

a New Program

April 29, 2016

RESOLVED: That the Board of Regents for Higher Education approve the licensure of a program in Construction Management leading to a Certificate at Capital Community College for a period of three years until May 30, 2019

A True Copy:

Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Licensure of a program in Construction Management leading to a Certificate at Capital Community
College for a period of three years until May 30, 2019.

BACKGROUND
<u>Summary</u>
The certificate in Construction Management will prepare students for immediate employment in entry
level jobs in the industry. Graduates of the program will acquire basic knowledge and skills in
sustainable construction, administrative procedures, resource management and construction processes
for building. Further, graduates will have the ability to utilize construction documents for quantity take-
offs, to participate in construction job-site office meetings and to provide related documentation and
correspondence.

<u>Need for the Program</u>
The employment projections in the Construction Management look bright for students completing the
proposed certificate. The Connecticut Department of Labor forecasts a 13.2% increase in construction
management jobs between 2012 and 2022 and indicates that this is an "in demand growth" employment
sector. Likewise, a 16% growth increase is anticipated nationally in the same timeframe. In addition,
on the local level, the Metropolitan District Commission initiated a $1 billion project to improve the
area's water quality by 2020, thereby increasing the local demand for construction managers. Other
construction projects such as the New Britain-Hartford busway, the Hartford Yardgoats stadium, and the
Jackson Laboratories in Farmington may also create a demand for program graduates.

<u>Curriculum</u>
Courses
CTC*140 Construction Graphics/Quantity Takeoff
CTC*222 Building Construction Systems
CTC*229 Construction Estimating
ARC*240 Environmental Systems
Technical Elective
ACC*115 Principles of Financial Accounting
CSA*105 Introduction to Software Applications
ENG*101 Composition
Math Elective

In addition to the acquisition of general education competencies, graduates that complete this program
will be able to:

1. Interpret and effectively utilize construction and construction-related documents including reference
materials, contracts, specifications, codes and ordinances.
2. Understand and conduct quantity take-off processes using manual mathematical models/techniques
and takeoff software.
3. Estimate construction costs for bidding and other purposes and assess the appropriateness of various
construction methods, materials and environmental systems in specific situations.
4. Understand the theory and use of construction tools and/or equipment, including those related to
testing and measurement.
5. Demonstrate manual drafting skills.

6. Display the knowledge and skills required in the planning and management of a construction project including use of project software.
7. Identify and resolve problems related to aspects of construction management.

Students

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers (*from other programs*)	1	3	1	4	1	6
New Students (*first time matriculating)*	2	3	2	5	2	7
Continuing (*students progressing to credential)*	0	0	3	5	3	12
Headcount Enrollment	3	6	6	14	6	25
Total Estimated FTE per Year	4.8		10.4		14.8	

Faculty
No new faculty will be hired for the Construction Management certificate program. All program courses will be taught by incumbent faculty.

Learning Resources
There are no new equipment or software costs for this certificate. Students will have resources available in the library and Academic Success Center.

Facilities
Students in the certificate program will use the same facilities as the AS and AAS Construction Management degrees that are already in place.

Fiscal Note
The College does not project any new cost implications that will result from implementing the proposed certificate since it is aligned with existing AS and AAS Construction Management degrees that are already in place.

 Review of Documents:
   a)   Campus Review
   b)   Campus Budget and Finance
   c)   Campus President
   d)   Academic Council
   e)   System Office

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
APPLICATION FOR NEW PROGRAM APPROVAL (Public Higher Education Institutions)

SECTION 1: GENERAL INFORMATION	
Institution: Capital Community College	Date of Submission to BOR Office:

Most Recent NEASC Institutional Accreditation Action and Date: Ten Year Accreditation, 2006

Program Characteristics	**Program Credit Distribution**
Name of Program: **Construction Management** **Construction Management Certificate**	# Cr in Program Core Courses: **12 Cr**
Degree: Title of Award *(e.g. Master of Arts)* **N/A**	# Cr of Electives in the Field: **3 Cr**
Certificate: *(specify type and level)* **Construction Management**	# Cr of Free Electives: **0 Cr**
	# Cr Special Requirements *(include internship, etc.):* **7 Cr**
Anticipated Program Initiation Date: **Fall, 2016**	# Cr of General Education Courses: **6-7 Cr**
Anticipated Date of First Graduation: **Spring, 2018**	<u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **28-29 Cr**
Modality of Program: **X** On ground Online Combined	From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **28-29 Cr**
If "Combined", % of fully online courses? **N/A**	
Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: **28-29 Cr**	

Type of Approval Action Being Sought: Licensure OR   Licensure and Accreditation
Suggested CIP Code No. *(optional)*   Title of CIP Code   CIP Year:

If establishment of the new program is concurrent with discontinuation of related program(s), please list for each program:
Program Discontinued: CIP: DHE# (if available):   Accreditation Date:
Phase Out Period   Date of Program Termination

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Business & Technology / 950 Main St., Hartford, CT

Program Accreditation:
•   If seeking specialized/professional/other accreditation, name of agency and intended year of review:
•   If program prepares graduates eligibility to state/professional license, please identify:
(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. Debbie Thomas	Title: Dean of Academic Affairs	Tel.: (860) 906-5010 e-mail: dthomas@ccc.commnet.edu

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION
APPLICATION FOR NEW PROGRAM APPROVAL (Public Higher Education Institutions)

SECTION 2: PROGRAM PLANNING ASSESSMENT *(To be used for BOR Review Only)*

Alignment of Program with Institutional Mission, Role and Scope

The proposed Construction Management Certificate aligns with Capital Community College's (CCC) mission to offer certificates that prepare individuals for careers and for transfer into associate and baccalaureate programs. The proposed certificate will prepare graduates for entry-level employment in construction management related fields, as well as provide foundational coursework required in the Construction Management AS and AAS degrees offered at the college.

Consistent with Capital's mission, the certificate in Construction Management will prepare students for immediate employment in entry level jobs in the industry. Graduates of the program will acquire basic knowledge and skills in sustainable construction, administrative procedures, resource management and construction processes for building. Further, graduates will have the ability to utilize construction documents for quantity take-offs, to participate in construction job-site office meetings and to provide related documentation and correspondence.

Addressing Identified Needs

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities?

The Construction Management certificate is being developed as part of CCC's participation in the Northeast Resiliency Consortium - a US Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant. The TAACCCT grant objective is to create programs that train Trade Adjustment Assistance (TAA)-impacted workers, veterans, unemployed and under-employed workers for current and emerging jobs. The proposed certificate meets the goals of the TAACCCT grant, in both developing highly skilled workers for the construction management industry, and in providing students an articulate transfer to a bachelor degree at CCSU. The TAACCT grant provides funding to support many facets of the proposed program including instruction, prior-learning assessment, recruitment and retention, and job placement services.

The certificate was collaboratively developed by CCC faculty and local employers serving on CCC's Construction Management Advisory Council. Advisory council members provided extensive input into the knowledge and skills graduates need to succeed in their organizations. This input was fully incorporated into the curriculum and course learning outcomes.

The employment projections in the Construction Management look bright for students completing the proposed certificate. The Connecticut Department of Labor forecasts a 13.2% increase in construction management jobs between 2012 and 2022[1] and indicates that this is an "in demand growth" employment sector. Likewise, a 16% growth increase is anticipated nationally in the same timeframe[2]. In addition, on the local level, the Metropolitan District Commission initiated a $1 billion project to improve the area's water quality by 2020, thereby increasing the local demand for construction managers. Other construction projects such as the New Britain-Hartford busway, the Hartford Yardgoats stadium, and the Jackson Laboratories in Farmington may also create a demand for program graduates.

Students with previous construction background who have completed the Construction Management certificate at CCC can find employment in one or more of the following areas: project manager, project engineer, estimator, superintendent, foreman, inspector, facility manager and other construction management related fields.

Further, the proposed certificate is designed to serve both students interested in immediate entry-level employment, as well as serving as a path to the AS or AAS in construction management at CCC, or transfer to a baccalaureate institution.

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[1] Connecticut Labor Market Information, CT Department of Labor, *CT Occupational Projections,2012-2022 Edition*, Construction and Extraction Occupations, retrieved from http://www1.ctdol.state.ct.us/lmi/projections2012/management.asp.
[2] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Construction Managers, retrieved from http://www.bls.gov/ooh/management/construction-managers.htm#tab-6.

- 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?

The proposed certificate program will leverage many strengths of the institution to produce highly-skilled graduates for construction management. Since this proposed certificate is aligned with existing AS and AAS degrees in Construction Management already offered at CCC, there will be no additional instructional or curricular costs for the college resulting from this certificate. In addition, through CCC's participation in the Northeast Resiliency Consortium (NRC) TAAACCT grant, the college has additional resources to hire faculty, market the new certificate, recruit students, institute prior-learning assessments, develop internship opportunities and support job placement.

The certificate will provide a new option for students interested in careers in construction management. Through TAAACCT funding, the program will also attract TAA workers and veterans who may possess prior experience and background they can leverage for success in the program.

The NRC grant proposes a stacked structure to promote student retention in degree programs. This certificate would serve as a natural path to the AS or AAS degrees in Construction Management at Capital. In addition, CCC has an agreement with the CT Carpenters Union (CU) to allow CU training credits to be evaluated for technical elective credits in the AS and AAS CM degrees which would also apply to this certificate. In addition, a non-credit program at Capital is also being developed with the goal of serving as a possible technical elective for these programs. These options for prior learning credit give experienced students a head start with completion of this certificate.

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

CCC already has an articulation agreement with CCSU to transfer the Construction Management-Associate in Science Degree (AS). Courses from the certificate are part of the AS program, therefore they would also transfer.

- Please indicate what similar programs exist in other institutions within your constituent unit, and how unnecessary duplication is being avoided

Naugatuck Valley Community College and Three Rivers Community College have similar certificate programs in construction management, however, there is no duplication, because the service area for each of these colleges is distinct from Capital Community College's.

- Please provide a description/analysis of employment prospects for graduates of this proposed program

As previously noted, local and national employment prospects for graduates of this program are good since CT forecasts a 13.2% increase (approximately 660 new openings)[3] and the U.S. Department of Labor forecasts a 16% increase (approximately 78,200 new openings)[4] in construction management jobs between 2012 and 2022. In addition, local demand for construction managers is likely to increase due to projects such as the $1 billion Metropolitan District Commission project to improve the area's water quality by 2020, the New Britain-Hartford busway, the Hartford Yardgoats stadium, and the Jackson Laboratories in Farmington.

The proposed Construction Management Certificate will provide graduates with the technical skills for entry-level jobs such as project manager, project engineer, estimator, superintendent, foreman, inspector, and facility manager.

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[3]Connecticut Labor Market Information, CT Department of Labor, *CT Occupational Projections,2012-2022 Edition*, Construction and Extraction Occupations, retrieved from http://www1.ctdol.state.ct.us/lmi/projections2012/management.asp.
[4]Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Construction Managers, retrieved fromhttp://www.bls.gov/ooh/management/construction-managers.htm#tab-6.

Cost Effectiveness and Availability of Adequate Resources

(Please provide a one-paragraph narrative on the attached MSExcel Pro-Forma Budget)

See Attached Pro-Forma Budget for the Construction Management Certificate

The College does not project any new cost implications that will result from implementing the proposed certificate since it is aligned with existing AS and AAS Construction Management degrees that are already in place.

Through CCC's participation in the Northeast Resiliency Consortium, CCC has received funding for a full-time Construction Management Assistant Professor/Program Coordinator to teach and coordinate all CM courses and programs at the college. This would include the courses in this proposed certificate since they are already included in the existing degree programs. Upon completion of the grant period, the college expects to retain this position. There are also no new equipment or software costs for this certificate.

The grant has also provided funding for positions to support program recruitment and retention. This includes a Recruitment & Retention Coordinator and a Veteran Services Coordinator to assist with attracting and retaining veterans to the program. CCC will continue to work with Capital Workforce Partners to notify TAA and WIOA eligible workers of the new program offerings. Through these efforts and others, CCC projects an enrollment of more than 30 students in the certificate program by the third year the program is offered. The grant also funds a Job Developer/Placement Coordinator to assist students with job placement after graduation.

SECTION 3: PROGRAM QUALITY ASSESSMENT

Overall Learning Goal/Principal Learning Outcome for the Program:

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program and concisely describe assessment methodologies to be used in measuring the outcomes. If the program will seek external accreditation or qualifies graduates to opt for a professional/occupational license, please frame outcomes in 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)*

In addition to the acquisition of general education competencies, graduates that complete this program will be able to:

1. Interpret and effectively utilize construction and construction-related documents including reference materials, contracts, specifications, codes and ordinances.
2. Understand and conduct quantity take-off processes using manual mathematical models/techniques and takeoff software.
3. Estimate construction costs for bidding and other purposes and assess the appropriateness of various construction methods, materials and environmental systems in specific situations.
4. Understand the theory and use of construction tools and/or equipment, including those related to testing and measurement.
5. Demonstrate manual drafting skills.
6. Display the knowledge and skills required in the planning and management of a construction project including use of project software.
7. Identify and resolve problems related to aspects of construction management.

(Course mapping to each learning outcome is included in the "Curriculum" section of this proposal)

Various assessment methodologies will be used to measure program outcomes:

- Lab assignments, written and oral exercises, quizzes, and exams
- Presentations and reports demonstrating application of concepts and proficiency of skills
- Group projects that demonstrate cumulative understanding of concepts
- Case studies/portfolios that include application of concepts and demonstration of skills

Program Administration *(Describe qualifications and assigned FTE load of administrator/faculty member responsible for the day-to-day operations of the proposed academic program. Identify individual for this role by name or provide time frame for prospective hiring)*

Coordination of this CM certificate will be under the purview of the Program Coordinator for the Construction Management Degree program that already exists at the College. This position has the rank of Assistant Professor with the minimum qualifications of a Master's degree in construction management or related field. This individual must have expertise in construction management, work experience in the construction management or related fields, and teaching experience. The individual has a load of 15 contact/credit hours with one course release (three contact hours are equivalent to nine non-teaching hours per week) for administrative functions.

Faculty *(Please complete the faculty template provided below to include current full-time members of the faculty who will be teaching in this program and, as applicable, any anticipated new positions/hires during the first three years of the program and their qualifications)*

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

CCC currently employs a full-time grant funded Assistant Professor/Program Coordinator for the existing Construction Management AS and AAS degrees. This individual will also coordinate this CM certificate. This position is currently being funded by the NRC grant, however the College expects to retain the position upon completion of the grant period.

- What percentage of the credits in the program will they teach?

The college anticipates that 100% of the discipline-specific courses will be taught by the full-time CM Assistant Professor/Program Coordinator. (Required program courses in Accounting, Computer Software Applications, English, and Math will be taught by existing CCC faculty in those respective areas.)

- What percent of credits in the program will be taught by adjunct faculty?

Adjunct faculty will be added as necessary to accommodate additional sections due to increased program enrollment.

- Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program:

Adjunct faculty will be required to have a minimum of a Master's degree in construction management or related fields, as well as teaching and work experience.

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. Please include these resources in the Resources and Cost Analysis Projection sheet for BOR review)*

Lab Equipment

CCC will be able to use existing laboratories and lecture rooms to teach all the proposed courses in the certificate program.

Construction management testing equipment and simulators for students to use during classes and labs were previously purchased using NRC TAACCCT grant funding that is already in place. No additional equipment or software is needed for this certificate.

Total for Equipment and Software: $0

Curriculum

(Please provide details as available and keep in mind the summary of Program Credit Distribution completed in Section 1.)
Please list courses for the proposed program, including the core/major area of specialization, prerequisites, electives, required general education courses (undergraduate programs), etc. Using numerals, map the Learning Outcomes listed in the previous section to relevant program courses in this table. Mark any new courses with an asterisk* and attach course descriptions. Mark any courses that are delivered fully online with a double asterisk**Please modify this format as needed.

Construction Management Certificate

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs.	Course Number and Name	L.O. #	Cr Hrs.
Program Core Courses				Other Related/Special Requirements		
CTC 140 Construction Graphics/Quantity Takeoff	1,2	CSA 105	3	ACC* 115 Principles of Financial Accounting	1,3,7	4
CTC 222 Building Construction Systems	1,5	ENG 101	3	CSA 105 Introduction to Software Applications	1,6	3
CTC 229 Construction Estimating	1,2,3,6,7	ENG 101, MAT 137, CTC 140, & CTC 222	3			
ARC 240 Environmental Systems	1,4		3			
____ Technical Elective	varies		3			
Core Course Requirements			15	Other Related Requirements		7
General Education Courses						
ENG 101 Composition			3			
____ Math Elective			3-4			
			6-7			
Total Other Credits Required to Issue Credential*(e.g. GenEd/Liberal Arts Core/Liberal Ed Program)*						28-29

New Course Descriptions

No new courses are required for Construction Management Certificate.

Course Descriptions for required Program Core Courses in the proposed certificate program from 2015-2016 Catalog.

CTC 140 Construction Graphics/Quantity Takeoff
Understand and interpret construction documents for building and heavy construction. Focus of course will be on the analysis of architectural and structural drawings and specifications. Understand quantity take-off processes and conduct take-offs of site work, concrete, rough carpentry, light –gage steel construction, masonry, steel, sheathing and interior finishes. Prerequisite: CSA 105.

CTC 222 Building Construction Systems
This course introduces students to procedures as a construction management professional. These include a basic body of knowledge of construction, job identification, terminology, and the use of equipment as used in light and heavy construction. This course also provides an introduction to sustainable construction that includes site selection and documentation, fundamentals of green building construction, and sustainable construction methods. Prerequisite: ENG* 101.

CTC 229 Construction Estimating
The course is focused on reviewing construction costs in more detail for the purpose of construction estimating and bidding. Estimation of cost calculations will include pricing labor, material and equipment costs in the areas of site work, concrete, masonry, steel, carpentry, roofing, finishes, mechanical and electrical systems. Prerequisites: ENG 101, MAT 137, CTC 140, CTC 222.

ARC 240 Environmental Systems
Building mechanical systems including plumbing, HVAC, electrical and systems integration. Formerly listed as ARC 2217, not open to students who have successfully completed ARC 2217.

Technical Electives
These vary among the following options:
- CTC 160 Surveying
- CTC 205 Sustainability and the Built Environment
- CTC 220 Project Management
- ARC 108 Building Materials
- ARC 229 Structures
- ARC 221 Contracts and Specifications
- ARC 223 Blueprint Reading
- ARC 227 Codes and Ordinances
- CAD112/113 Computer Aided Drafting I / Lab
- Additional technical electives though existing transfer equivalency options

Full-Time Faculty Teaching in this Program *(Note: If you anticipate hiring new faculty members 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)*

Faculty Name and Title	Institution of Highest Degree	Area of Specialization/Pertinent Experience	Other Administrative or Teaching Responsibilities
Basia Dellaripa, Assistant Professor, Construction Management	Pursuing M.S. Central CT State University	Construction Management 20+ yrs of industry experience in CM field	Program Coordinator, Construction Management

CT Board of Regents for Higher Education APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA [1] BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

Institution	Capital Community College	*Date* 4/4/2016
Proposed Program	Construction Management Certificate	

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers *(from other programs)*	1	3	1	4	1	6
New Students *(first time matriculating)*	2	3	2	5	2	7
Continuing *(students progressing to credential)*	0	0	3	5	3	12
Headcount Enrollment	3	6	6	14	6	25
Total Estimated FTE per Year	4.8		10.4		14.8	

PROJECTED Program Revenue	Year 1		Year 2		Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition *(Do not include internal transfers)*	$7,416	$5,562	$19,096	$19,096	$19,652	$37,340
Program-Specific Fees						
Other Rev. *(Annotate in text box below)*	$1,660		$2,210		$2,792	
Total Annual Program Revenue	$14,638		$40,403		$59,783	

PROJECTED Expenditures*	Year 1		Year 2		Year 3	
	Number *(as applicable)*	Expenditure	Number *(as applicable)*	Expenditure	Number *(as applicable)*	Expenditure
Administration *(Chair or Coordinator)*						
Faculty *(Full-time, total for program)*						
Faculty *(Part-time -total for program)*					2	$14,967
Support Staff						
Library Resources Program						
Equipment *(List as needed)*						
Other (e.g. student services)						
Estimated Indirect Cost *(e.g. student services, operations, maintanance)*						
Total ESTIMATED Expenditures		$0		$0		$14,967

* Note: Capital outlay costs, institutional spending for research and service, etc. can be excluded.

Please provide any necessary annotations:

Through CCC's participation in the Northeast Resiliency Consortium, CCC receives funding for a Recruitment & Retention Coordinator and Veterans Services Coordinator to support program recruitment. Through these efforts and others, CCC projects an enrollment of more than 30 students in the certificate program by the third year the program is offered. The grant additionally funds a Job Developer/Placement Coordinator to coordinate job placement for students. During and after the grant period, CCC will use existing full-time faculty in the Construction Management program to teach courses and coordinate the program.

Tuition revenue and faculty expenditure estimates above assume a 3% increase each year

[1] This PRO FORMA budget provides reasonable assurance that the program can be established and is sustainable. Some assumptions and/or formulaic methodology may be used and annotated in the text box.

ITEM
Approval of the 2016 promotions and tenures recommended by the Connecticut State University
presidents.

<u>SUMMARY</u>

In accordance with the CSU-AAUP Collective Bargaining Agreement, the Board awards
promotion and tenure to state university faculty. The contract prescribes a thorough, multi-level
review process at the campus and recommendations that are forwarded to the Board have been
approved by the university president and provost. The Board of Regents acts on the presidents'
recommendations. The letters of recommendation are attached.
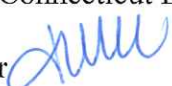
4/29/2016 – Academic and Student Affairs Committee
5/10/2016 – Board of Regents

M E M O R A N D U M

TO: Mark E. Ojakian
President, Connecticut Board of Regents for Higher Education

FROM: Jack Miller
President, Central Connecticut State University

DATE: April 19, 2016

SUBJECT: Promotion and Tenure

I am pleased to present my recommendations for instructional faculty promotion and tenure to be effective with the Academic Year 2016-17:

To Professor:
Fiona Pearson, Sociology
Paul Petterson, Political Science
Rebecca Wood, Psychological Science
Monique Durant, Accounting
Cheryl Crespi, Accounting
Sean Walsh, Physical Education & Human Performance
Roger Bilisoly, Mathematical Sciences
James Mulrooney, Biomolecular Sciences
Oscar Perdomo, Mathematical Sciences
Michael Wizevich, Geological Sciences
Shuju Wu, Computer Electronics & Graphics Technology

To Associate Professor:
Garfield Blake, Economics
Paramita Dhar, Economics
Mathew Foust, Philosophy
Julie Schnobrich-Davis, Criminology & Criminal Justice
Thomas Zummer, Design

To Assistant Professor:
Yonty Friesem, Communication
Anurag Rimzhim, Psychological Science

To Coach IV:
Eric Blake, Athletics

To Associate Librarian:
Steven Bernstein, Library

The following will be granted tenure:
Darren Sweeney, Journalism
- Paramita Dhar, Economics
- Julie Schnobrich-Davis, Criminology & Criminal Justice
Jared Ragusett, Economics
Christina Robinson, Economics
Harold Vedeler, History
- Thomas Zummer, Design
Jill Espelin, Nursing
Nancy Peer, Nursing
Namhun Lee, Manufacturing & Construction Management
Chad Williams, Computer Science
- Shuju Wu, Computer Electronics & Graphics Technology

/sm

* * * Communication Result Report (Apr. 19. 2016 3:13PM) * * *

1)
2)

Date/Time: Apr. 19. 2016 3:12PM

File No.	Mode	Destination	Pg(s)	Result	Page Not Sent
0151	Memory TX Courtney	30009	P. 2	OK	

Reason for error
E. 1) Hang up or line fail
E. 3) No answer
E. 5) Exceeded max. E-mail size
E. 2) Busy
E. 4) No facsimile connection
E. 6) Destination does not support IP-Fax

OFFICE OF THE PRESIDENT

CCSU
Central Connecticut State University

MEMORANDUM

TO: Mark E. Ojakian
President, Connecticut Board of Regents for Higher Education

FROM: Jack Miller
President, Central Connecticut State University

DATE: April 19, 2016

SUBJECT: Promotion and Tenure

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To Professor:
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Oscar Perdomo, Mathematical Sciences
Michael Wizevich, Geological Sciences
Shuju Wu, Computer Electronics & Graphics Technology

To Associate Professor:
Garfield Blake, Economics
Paramita Dhar, Economics
Mathew Foust, Philosophy
Julie Schnobrich-Davis, Criminology & Criminal Justice
Thomas Zummer, Design

EASTERN CONNECTICUT STATE UNIVERSITY

A Liberal Education. Practically Applied.

Office of the President

DATE: April 14, 2016

TO: Mark Ojakian
             President of the Board of Regents

FROM: Elsa M. Núñez
             President

SUBJECT: RECOMMENDATIONS FOR PROMOTION AND TENURE

I recommend the following individuals for promotion and/or tenure for action by the Board of Regents at its May meeting. The effective date for all actions is August 22, 2016.

For Tenure:

Dr. Wayne F. Buck, Business Administration Department
Dr. Martin Mendoza-Botelho, Political Science, Philosophy and Geography Department
Dr. Meredith J. Metcalf, Environmental Earth Science Department
Ms. Kristen Morgan, Performing Arts (Theatre) Department
Dr. Niti Pandey, Business Administration Department

For Promotion to the rank of Professor, in rank order:

Dr. Jamel Otswald, History Department
Dr. Benjamin Pauley, English Department
Dr. Ricardo Perez, Sociology, Anthropology and Social Work Department

For Promotion to the rank of Associate Professor, in rank order:

Dr. Meredith J. Metcalf, Environmental Earth Science Department
Dr. Garrett M. Dancik, Mathematics and Computer Science Department
Dr. Martin Mendoza-Botelho, Political Science, Philosophy and Geography Department
Dr. Niti Pandey, Business Administration Department
Dr. Mehdi Khorami, Mathematics and Computer Science Department
Ms. Kristen Morgan, Performing Arts (Theatre) Department

For Promotion to the rank of Librarian, in rank order:

Ms. Sandra Rosado, Library Services
Ms. Carol Reichardt, Library Services

EMN/go

cc: Dr. Estela Lopez, Interim Provost & Senior VP Academic & Student Affairs
        Ms. Maureen McClay, Executive Assistant, Academic Affairs

Southern Connecticut State University

Mary A. Papazian, Ph.D.
PRESIDENT

April 15, 2016

Mr. Mark Ojakian
President, Board of Regents for Higher Education
Connecticut State Colleges and Universities
39 Woodland Street
Hartford, CT 06105-2237

Dear Mr. Ojakian:

The following are my recommendations for Promotion and Tenure, which will be effective August 22, 2016:

TENURE

Dr. Sousan Arafeh (Educational Leadership)
Dr. Charles Baraw (English)
Dr. Kelly Bordner (Psychology)
Dr. Aaron Clark (Mathematics)
Dr. Miranda Dunbar (Biology)
Dr. Jess Gregory (Educational Leadership)

Dr. Elizabeth Roberts (Biology)
Dr. Marie McDaniel (History)
Dr. Marie Nabbout-Cheiban (Mathematics)
Dr. Regine Randall (Special Education and Reading)
Dr. William Rowe (Social Work)
Dr. Stephen Tomczak (Social Work)

PROMOTION

From Assistant to Associate Professor:

Dr. Sousan Arafeh (Educational Leadership)
Dr. Charles Baraw (English)
Dr. Kelly Bordner (Psychology)
Dr. Jess Gregory (Educational Leadership)
Dr. Mark Groskreutz (Special Education and Reading)

Dr. Marie McDaniel (History)
Dr. Marie Nabbout-Cheiban (Mathematics)
Dr. Elizabeth Roberts (Biology)
Dr. Stephen Tomczak (Social Work)

From Associate to Full Professor:

Dr. Amal Abd El-Raouf (Computer Science)
Dr. Aaron Clark (Mathematics)
Dr. Robert Forbus (Marketing)
Dr. Misty Ginicola (Counseling and School Psychology)

Dr. Christine Unson (Public Health)
Dr. Xiaomei Yang (Philosophy)

Promotion to Coach II:

Joseph Van Gilder (Athletics)

Promotion to Coach IV:

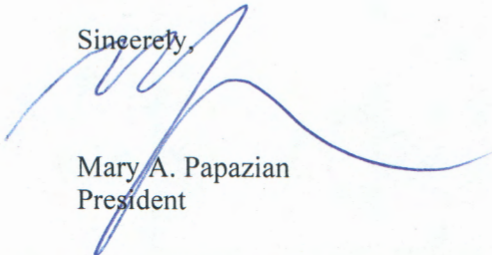Kelley Frassinelli (Athletics)

Please let me know if you have any questions.

Sincerely,

Mary A. Papazian
President

cc: J. Bailey, SCSU Chief of Staff
E. Durnin, SCSU Provost and Vice President for Academic Affairs

To: Mark E. Ojakian
President
Connecticut State Colleges & Universities

From: Dr. John B. Clark

Date: March 24, 2016

Re: WCSU Promotion & Tenure Recommendations

I support and concur with the recommendations of Provost Jane Gates
that the following faculty members receive promotion and tenure:

Tenure
Neeta Connally
Divya Sharma
Bozena Padykula
Monica Sousa
Catherine Vanaria

Promotion to Professor
Terrence Dwyer
Donald Gagnon
Leslie Lindenauer
Michael Nolan
Joan Palladino

Promotion to Associate Professor
Neeta Connally
Chin-Wen Huang
Monica Sousa

Promotion to Coach IV
Heather Stone

c: F. Cratty, Human Resources
J. Gates, Academic Affairs
W. Petkanas, Promotion & Tenure Committee

To: Mark E. Ojakian
President
Board of Regents for Higher Education
Connecticut State Colleges & Universities

From: Dr. John B. Clark

Date: December 4, 2015

Re: Tenure Recommendation

I support and concur with Provost Jane Gates's recommendation that
Dr. Stavros Christofi from our Mathematics Department be awarded
tenure.

c: F. Cratty, Assoc. V.P. for Human Resources
J. Gates, Provost/V.P. for Academic Affairs
J. Hamer, Chair, Mathematics Dept.
M. Alexander, Dean, Macricostas School of Arts & Sciences
W. Petkanas, Chair, Promotion & Tenure Committee

<u>CT BOARD OF REGENTS FOR HIGHER EDUCATION</u>

RESOLUTION

Concerning

Endowed Chair

April 29, 2016

RESOLVED, that the Board of Regents for Higher Education designates Mr. Donald DeFronzo
to fill the Governor William A. O'Neill Endowed Chair in Public Policy and
Practical Politics at Central Connecticut State University, to begin service on June
1, 2016.

A True Copy:

_____
Erin A. Fitzgerald, Secretary of the
CT Board of Regents for Higher Education

ITEM
Designation of Donald DeFronzo to fill the Governor William A. O'Neill Endowed Chair in Public
Policy and Practical Politics at Central Connecticut State University

RECOMMENDED MOTION FOR FULL BOARD
RESOLVED: That the Board of Regents for Higher Education designates Mr. Donald DeFronzo to fill
the Governor William A. O'Neill Endowed Chair in Public Policy and Practical
Politics at Central Connecticut State University, to begin service on June 1, 2016..

BACKGROUND
Central Connecticut State University has requested designation of Donald DeFronzo to fill the
Governor William A. O'Neill Endowed Chair in Public Policy and Practical Politics. Through Board
Resolution #2000-72, the former Board of Trustees for the Connecticut State University System
established the Endowed Chair in Public Policy and Practical Politics at Central Connecticut State
University. President Jack W. Miller, upon recommendation and review by the Chair of the CCSU
Department of Political Sciences, the Executive Director of the CPPSR, the Dean of the Carol A.
Ammon College of Liberal Arts & Social Sciences, and the CCSU Provost, has recommended that the
endowed chair be filled by Mr. DeFronzo. President Miller's recommendation and additional
background material are attached.

4-29-2016 – BOR-Academic and Student Affairs Committee
5-10-2016 – Board of Regents

M E M O R A N D U M

Via Facsimile

TO: Mark Ojakian
           President, Connecticut Board of Regents for Higher Education

FROM: Dr. Jack Miller
           President

DATE: March 22, 2016

SUBJECT: Recommendation to Appoint Donald DeFronzo to the Governor William A. O'Neill
            Endowed Chair in Public Policy and Practical Politics

I am writing to request approval from the Connecticut Board of Regents for Higher Education to appoint Mr. Donald DeFronzo, of New Britain, Connecticut, to succeed the late Senator Eileen Daily as holder of the Governor William A. O'Neill Endowed Chair in Public Policy and Practical Politics at Central Connecticut State University.

Following a national search, the O'Neill Chair Search Committee recommended the appointment of Mr. DeFronzo unanimously.

The O'Neill Endowed Chair is housed in the Center for Public Policy and Social Research (CPPSR), which has been duly designated as a Connecticut Higher Education Center of Excellence. This appointment will be as a State of Connecticut re-employed retiree for a period of one year, renewable yearly at CCSU's discretion, for up to two additional separate and distinct one-year terms.

This proposed appointment, which has my full support, has been reviewed and recommended by the Chair of the CCSU Department of Political Science, the Executive Director of CPPSR, the Dean of the Carol A. Ammon College of Liberal Arts & Social Sciences, and the CCSU Provost.

Mr. Donald DeFronzo has had a professional career in public service spanning the last forty years.

A lifelong student of public policy, he earned a Master's Degree in Public Affairs (MPA) from the University of Connecticut in 1976, which he has characterized as an "asset" that has "helped inform" his "engagement in a wide range of public policy issues over the years."

Mr. DeFronzo has served as Mayor of the City of New Britain, Connecticut, as executive director of a large regional non-profit human service agency (HRA of New Britain), as president of a large public

employees union, as a State Senator in Connecticut's General Assembly and as a Commissioner in Governor Malloy's administration.

This highly varied experience in policy development encompasses both the public and non -profit arenas, leadership positions representing both management and labor, and service in both executive and legislative branches of government. The duties of the O'Neill Chair would give him the opportunity to share this breadth of experience, perspective and knowledge with CCSU students, to collaborate with CCSU faculty and to assist the public policy outreach work of the Center to state and municipal policymakers, and to the public at large.

As Senate Chair of the Legislature's Government Administration and Elections Committee from 2003 to 2007, Mr. DeFronzo sponsored and helped to write Connecticut's nationally recognized campaign finance reform legislation, successfully sought reforms to state contracting and ethics policies, and helped modernize Connecticut's election system. This is a policy area he is interested in pursuing with our students and faculty.

Also in his legislative career, as Chair of the Finance Committee's Bonding Sub Committee, Mr. DeFronzo helped give direction and oversight to the state's capital spending plan. As Senate Chair of the Transportation Committee from 2008 to 2011 he dealt firsthand with Connecticut's longstanding and difficult transportation issues.

As Commissioner of Connecticut's Department of Administrative Services, DeFronzo was responsible for procurement, construction projects, leasing and property acquisition, fleet operations and personnel policy for the state. Under his watch, government efficiency initiatives resulted in an estimated $60 million of savings to the state of Connecticut.

Mr. DeFronzo possesses a great depth of public policy experience that will certainly enrich our campus community. He will connect students and faculty to resources that will greatly support the O'Neill Endowed Chair's emphasis on practical politics, as intended by the CSU BOT creation of the Chair in 2000, and by the BOT appointment of Governor O'Neill as the first holder of the Chair (2000 – 2007).

As the O'Neill Chair Holder, Mr. DeFronzo's responsibilities would consist of:
- instructing a class, to be determined in consultation with the Political Science Department, with targeted start of fall 2016;
- addressing issues of public policy and practical politics through public lectures and by organizing and participating in campus forums;
- guest lecturing in state/local government or other relevant classes in which special expertise is held by the Chair Holder;
- arranging for policymakers to address CCSU students and faculty as guest speakers;
- facilitating University collaborations with state governmental leadership on policy initiatives;
- mentoring students, especially those with a public service career path;
- supporting CPPSR outreach and programming (Veterans History Project, training of public servants, legislative forums, Confucius Institute, etc.).

I have attached a copy of Mr. DeFronzo's résumé for your review. Thank you for considering this recommendation, which I would appreciate you forwarding to the Board of Regents for approval.

Donald J. DeFronzo

Education: Master's of Public Administration, May 1976
University of Connecticut
Storrs, Connecticut

            Major Courses: Financial Administration
Public Management Techniques
Policy and Program Development
Program Evaluation
Planning Theory and Plan Development

Recipient of Karl A. Bosworth Award for Academic Achievement – 9/75

            Bachelor of Arts, May 1970
Fairfield University, Fairfield, Connecticut
Dual Major: Social Sciences and Education
Major Courses: Government, History, Political Science,
                    Education, Psychology
Dean's List: Three Semesters

Work Experience:

2011 to 2015 – Commissioner of the state Department of Administrative Services under Governor Dannel Malloy. Retired January, 2015.

2002 to 2011 -Member of the Connecticut State Senate representing New Britain, Berlin and Farmington.

2006 to 2011 -Adjunct Faculty Goodwin College (part time)

January 1996 to 2002 - Executive Director, Human Resources Agency of New Britain. Full executive and administrative responsibility for major non profit community action agency employing 240 employees with an annual budget of $14 million. Programs include Energy Assistance, Head Start, Day Care, Lead Abatement, Health Education, HIV Prevention, Substance Abuse Counseling, Jobs First and Youth Recreation.

November 1993 to December 1995 – Planning Analyst Supervisor – Connecticut Office of Policy and Management. Coordinative work in planning and policy development.

Major involvement in regional planning activities, the development of state block grant proposals, legislative reviews and environmental analysis.

November 1989 to November 1993 -Mayor, City of New Britain, Connecticut. Chief Executive Officer of a municipal corporation with over 800 employees and a 130 million dollar budget. Full administrative responsibility for policy development, budgeting, personnel administration, negotiations, and financial management.

April 1980 to November 1989 – Planning Analyst Supervisor, Connecticut Office of Policy and Management. Supervisory and coordinative responsibility for the planning, application and planned expenditure of federal human service block grant funds flowing into Connecticut. Tasks included plan preparation, analysis, interagency coordination, staff supervision and program evaluation related to the State's use of 27 million dollars in federal Social Services Block Grant funding.

March 1978 to April 1980 - Senior Planning Analyst, Connecticut Office of Policy and Management. Staff work done in preparation of Connecticut's annual Title XX Social Services funding application included report writing, statistical analysis, and public pmiicipation activities.

June 1977 to March 1978 - Community Organizer, Connecticut Association for Human Services. Worked as central office staff providing training and technical assistance to citizen advisory boards and community based organizations. Tasks included program reviews, legislative and policy analysis, report writing and training activities.

July 1976 to June 1977 -Program Coordinator, Constructive Workshop, New Britain, Connecticut. Administered training programs for mentally and physically disabled and emotionally disturbed clients.

1976 to 1977 - Claims Adjuster, Connecticut Department of Labor, Durational Employee

1971 to 1975 -Respiratory Therapy, Hartford Hospital – Selective Service Assignment (alternative to military service)

Civic and Social Activities:

Former member Human Resources Agency Board of Directors
Former member New Britain Board of Public Welfare
Former Chairman (State Employees) United Way Fund Drive
Former Officer Fagan Little League
Fonner secretary of the Connecticut Conference of Municipalities

Former president of 3200 member state employee union (1982-1989)
Former national vice president of the American Federation of Teachers (1986-1989)
Former member American Society for Public Administration
Former member Board Boys and Girls Club
Former member Democratic State Central Committee (1982-1986)
Former member Charter Revision Commission – City of New Britain
Former member East Side Action Group
Former member of State Council on Temporary Assistance for Needy Families
Co-Chair, New Britain Early Childhood Council
Chailman, New Britain Housing Authority (1995-2002)
Incorporator, New Britain General Hospital
Incorporator, Connecticut Mental Health Affiliates
Incorporator, YMCA
Member NAACP
Member Democratic Town Committee (1978-2003)
Member Sons of Italy

Other Recognitions:

1989 American Federation of Teachers
      "Trailblazer Award - For Early Efforts and Commitment to Organizing State
      Employees

1991 Operation Desert Storm - Certificate of Appreciation For Support of New Britain
      Service Personnel

1993 Outstanding Achievement Award
      - Sons of Italy –

2000 Certificate of Merit
      Outstanding Community Service in Support of the Needs of the Disabled
      - from the Connecticut Down Syndrome Congress -

2001 John P. Shaw Distinguished Service Award
          NAACP –

2003 Breath of Life Award - American Lung Association

2003 Connecticut YMCA's Legislator of the Year Award

2004 "Yes I Can" Award for Advocacy on behalf of the disabled.

Numerous other Legislative recognitions

Highlights of HRA - Work:

- Helped create approximately 400 Pre School Child Development slots in New Britain since 1997

- Directed the expansion of health services, counseling and housing opportunities For HIV Positive persons

- Oversaw the development of the regions largest Welfare to Work/Jobs Training and Career Development Program

- Reinvigorated the Community Organizing Mission of HRA

- Growth of Agency

- Diversity of Staff -(38% White, 44% Hispanic, 16% African American, 2% Other)

ITEM
Center of Excellence for Social & Emotional Learning at Central Connecticut State University

RECOMMENDED MOTION FOR FULL BOARD

WHEREAS   Section 10a-25h(a) of the Connecticut General Statutes provides that Board of Regents for Higher Education acting as the board of trustees for constituent units is authorized to establish and administer centers to be known as Connecticut higher education centers of excellence, and

WHEREAS   The Connecticut State University Board of Trustees Resolution #01-87 provides a policy and procedures to establish Connecticut higher education centers of excellence, and

WHEREAS   The Board of Regents' Academic Program Review Policy extends the periodic review for CSU Centers and Institutes from five to seven years, and

WHEREAS   Centers of excellence established under these procedures are to go out of existence on December 31 seven years after their inception unless action to the contrary is taken by the Board; therefore be it

RESOLVED: That the Board of Regents for Higher Education establishes the Center of Excellence for Social & Emotional Learning at Central Connecticut State University; to exist until December 31, 2023, unless approved for continuance pursuant to Board policy

BACKGROUND
Central Connecticut State University (CCSU) has requested that the Board of Regents establish a Center of Excellence for Social & Emotional Learning as allowed under CGS 10a-25h and through procedures established by the former Connecticut State University Board of Trustees (BR#01-87).

System Office staff review of the proposal indicates it is consistent with the statutory definition of a center of excellence as well as the missions of both the Connecticut State Colleges & Universities System and CCSU. As required by Board policy, the materials provided by the University make a case for need, identify objectives and faculty resources, present a plan for financial support, and outline an evaluation and assessment plan.

In establishing the new Center, CCSU's School of Education and Professional Studies will build upon a growing body of research on social and emotional learning, and existing implementations of that knowledge base referenced in its proposal. The Center will address an existing gap in professional development for human service providers. The Center will offer schools and other professional agencies clear, evidence-based recommendations as guides in their integration of social and emotional learning into their curricula and professional cultures.

RATIONALE
Need

The proposed Center will adopt the following definition in its operations:

> Social and emotional learning is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

> Its core competencies are

> 1. Self-awareness
> 2. Self-management
> 3. Social awareness
> 4. Relationship skills
> 5. Responsible decision making

There are many benefits of teaching students a quality, structured social and emotional (SEL) curriculum. Researchers have documented better academic performances, improved attitudes and behaviors, fewer negative behaviors and reduced emotional distress. Teachers, counselors and other practitioners of human services can be taught to develop their own SEL competence, increasing their effectiveness in supporting student/client development.

It is instructive to note that legislation at both the federal and state levels have been introduced to either support SEL or require that teachers receive SEL training. The proposed Center will serve the community by raising awareness about the importance of SEL and will inform policy makers at all levels of the need to be proactive in building healthy cultures in human services.

CCSU's School of Education and Professional Studies has already undertaken a number of efforts to advance social and emotional learning; including incorporating SEL into teacher preparation, piloting a screening tool with a local school district, and planning a new certification program that promotes infant mental health.

Goal and Objectives

> The goal of the Central Connecticut State University Center of Excellence for Social & Emotional Learning is to provide education, training and research support to CCSU students, Connecticut citizens, and professional organizations to promote innovative approaches to enhancing and sustaining social and emotional learning across the life span.

The Center's objectives, aligned in support of its goal, are listed in the Assessment and Evaluation chart at the end of this report.

The Center will undertake a number of activities/events to accomplish its objectives. These activities/events include:

1. Establish a statewide training and resource center

2. Conduct grant development to support applied research interventions by faculty members involving undergraduate and graduate students

3. Host an annual conference

4. Offer certification though continuing education

Faculty and Staff Involvement

The inaugural director of the Center, faculty and staff will be identified following Board approval of its establishment. A partially reassigned faculty member will become the director. Two graduate assistants will work within the Center to support its training, education and research. Secretarial support will come from existing staff.

An Internal Advisory Committee will consist of faculty members from the various academic programs of the School of Education and Professional Studies and other human service departments at CCSU. This committee will be charged with ensuring that the CCSU community can access the expertise and opportunities afforded to its faculty, staff and students through the professional training, education programs, and research opportunities conducted under through the auspices of the Center.

Membership in a proposed External Advisory Committee includes Dr. Linda Lantieri, co-founder of the Collaborative for Academic, Social, and Emotional Learning, colleagues from similar academic entities at Yale University and the University of Massachusetts, and representatives from the Connecticut State Department of Education. This committee will be charged with evaluating the breadth, depth, and overall quality of the Center's training, education and research efforts through the auspices of the assessment and evaluation processes.

Budget

Revenue to support the Center will come from three sources. Grant funds from the CCSU Foundation available to the Dean of the School of Education and Professional Studies will be at their highest in the start-up year at $28,880 and decrease in each successive year. Operating Funds from the School of Education and Professional Studies to be allocated to the Center will increase each year from an initial amount of $62,834 to $70,720 in Year 5. The Center aspires to become self-sustaining after its start-up period. The activities to achieve the Center's objectives outlined above are also to be implemented to generate revenue. Other revenue will be generated via an aggressive development campaign and funds resulting from the Center's delivery of services and conducting events. These revenues streams are expected to produce $25,000 during the initial year and more than double by Year 5 to $55,000.

Five-Year Revenues and Expenses

BUDGET CATEGORIES	Year 1 (FY17)	Year 2 (FY18)	Year 3 (FY19)	Year 4 (FY20)	Year 5 (FY21)	TOTAL
REVENUE						
1. Gifts/Grant Support[a]	$28,880	$7.346	$5,857	$5,412	$5,015	**$52,510**
2. General Fund[b]						
3. Operating Fund[c]	$62,834	$64,719	$66,660	$68,661	$70,720	**$333,594**
4. Other Revenue[d]	$25,000	$48,000	$51,000	$53,000	$55,000	**$232,000**
5. **TOTAL REVENUE** (lines 1-4)	**$116,714**	**$120,065**	**$123,517**	**$127,073**	**$130,735**	**$618,104**
EXPENSES						
1. Personnel[e]	$81,301	$83,740	$86,252	$88,840	$91,505	**$431,638**
2. Fringe Benefits	$30,413	$31,325	$32,265	$33,233	$34,230	**$161,466**
3. Travel	$2,500	$2,500	$2,500	$2,500	$2,500	**$12,500**
4. Equipment & Supplies	$1,500	$1,500	$1,500	$1,500	$1,500	**$7,500**
5. Contractual						
6. Construction[f]						
7. Other	$1,000	$1,000	$1,000	$1,000	$1,000	**$5,000**
8. Total Direct Costs (lines 1-8)	$161,714	$120,065	$123,517	$127,073	$130,735	**$618,104**
9. Indirect Costs[g]						
10. **TOTAL COSTS** (lines 8-9)	**$161,714**	**$120,065**	**$123,517**	**$127,073**	**$130,735**	**$618,104**
NET						
1. **TOTAL REVENUE - TOTAL COSTS**	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
surplus / (deficit)						
2. **OPERATIONAL BALANCE**	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
from previous year						

NOTES:

a. Include and break out revenues from foundations and gift/nonoperational revenues from other sources. Provide description in Budget Narrative.

b. Include revenues for support of Center/Institute from block grant (e.g. Reassigned time for faculty supported on block grant)

c. Include revenues for support of Center/Institute from operating funds (e.g. tuition and fees).
d. Other revenue includes operating revenue (fees charged to participants, event fees, etc.) and/or other sources not listed above. Provide description in Budget Narrative.
e. Include breakout and costs for faculty reassigned time and costs for other personnel. Provide detail and FTE estimate in proposal narrative on faculty and staff involvement.
f. Include breakout and costs for new construction and costs for renovation or upgrade of existing facility/space.
g. Estimate costs for facilities use, utilities consumption, etc.

Assessment and Evaluation Plan

Center's Objectives			
a) Develop pedagogical approaches that infuse SEL into pre-service and graduate training for educators, school counselors, marriage and family therapists, nurses, school leaders, and gerontology specialists.	b) Establish a CCSU training center that provides evidence-based professional development in SEL to professionals working with individual across the lifespan.	c) Establish a research hub involving CCSU faculty, undergraduate, and graduate students to develop collaborative, interdisciplinary and globally relevant studies rooted in best practices in social and emotional learning.	d) Inform state and federal policy makers about the importance of fostering social and emotional learning in schools and across the lifespan to support positive outcomes for children and other populations served.
Evaluation and Reporting Procedures			
Assessment metrics have been established for each objective. The degree to which the metrics are achieved will be independently determined by the Internal Advisory Committee (Objective a) or the External Advisory Committee (Objectives b, c, & d). These internal, annual assessments will be incorporated into the Center's annual institutional report. An initial 7-year (sunset) review will be conducted according to the CSU Guidelines for Academic Centers and Institutes. If approved for continuance, the Center will continue to conduct intensive 7-year reviews.			

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

SECTION 1: GENERAL INFORMATION	
Institution: ECSU	Date of Submission to BOR Office:
Most Recent NEASC Institutional Accreditation Action and Date: 2010 Reaccredited for ten year term	

Original Program Characteristics	Original Program Credit Distribution
CIP Code No. Title of CIP Code CIP Year: 2000 or 2010 Name of Program: Degree: Title of Award *(e.g. Master of Arts)* **N/A** Certificate: *(specify type and level)* **N/A** Date Program was Initiated: Modality of Program: On ground Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: 24	# Cr in Program Core Courses: # Cr of Electives in the Field: # Cr of Free Electives: # Cr Special Requirements *(include internship, etc.):* <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution:

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

x Licensure and Accreditation (specify whether New Certificate, Minor, Option, Concentration, or Other) New Minor

    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

Modified Program Characteristics	Modified Program Credit Distribution
Name of Program: **MINOR IN INSURANCE** Degree: Title of Award *(e.g. Master of Arts)* **N/A** Certificate [1]: *(specify type and level)* Program Initiation Date: **Spring 2017** Modality of Program: X On ground Online Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential *(i.e. include program credits, GenEd, other)*: **24** for minor, **120** for degree Other:	# Cr in Program Core Courses: **9** # Cr of Electives in the Field: **6** # Cr of Free Electives: # Cr Special Requirements *(include internship, etc.):* Pre-requisites **9** <u>Total # Cr in the Program</u> *(sum of all #Cr above)*: **24** From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: **15**

If program modification is concurrent with discontinuation of related program(s), please list for such program(s):

Program Discontinued: CIP: DHE# (if available):   Accreditation Date:

Phase Out Period   Date of Program Termination

Institution's Unit *(e.g. School of Business)* and Location *(e.g. main campus)* Offering the Program: Department of Business Administration, School of Education and Professional Studies, Eastern Connecticut State University

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 license, please identify:

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

Institutional Contact for this Proposal: Dimitrios Pachis	Title: Provost & Vice President (Academics)	Tel. 860) 465-5246 e-mail: pachis@easternct.edu

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[1] If creating a Certificate program from existing courses belonging to a previously approved baccalaureate/associate degree program, enter information such that program in the "Original Program" section.

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

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[2] Final CIP assignment will be done by BOR staff in consideration of suggested number (if provided) and in consultation with administrative offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

SECTION 2: BACKGROUND, RATIONALE AND NATURE OF MODIFICATION
(Please Complete Sections as Applicable)

Background and Rationale *(Please provide the context for and need for the proposed modification, and the relationship to the originally approved program)*

As applicable, please describe:

- How does the program address CT workforce needs and/or the wellbeing of CT society/communities? *(Succinctly present as much factual evidence and evaluation of stated needs as possible)*

  It is estimated that Affordable Care Act could be worth more than $90 billion to the insurance industry. The world insurance industry expanded by more than 4.5 percent in 2010 to reach close to $4.1 trillion. The market is forecast to reach over $5.1 trillion in 2015, representing a 26 percent increase in five years. Life insurance represents the leading market segment with almost 58 percent of the overall market in terms of value. In addition, the Bureau of Labor Statistics predicts about 1 million job increase in the financial activities between 2012 and 2022, a 5 million job increase in the Health care and social assistance for the same period. As Health care and social assistance activities increase so will insurance for those activities.

  Most of the students that will enroll in this Minor in Insurance are students pursuing degrees in Finance, Accounting, Business and Economics. Connecticut Department of Labor projects annual job openings of 1,477 between 2012 and 2022 and an increase of 5421 in job opportunities for the same period for graduates in finance, accounting, economics, or business administration Finance Occupations labor Market in Connecticut.

  It is important that we support our students to be in a position to take advantage of the opportunities created by this growth in the finance sector and the insurance industry by introducing this minor in Insurance.

  References
  Value Penguine, http://www.valuepenguin.com/2013/12/how-much-obamacare-worth-insurance-companies
  Deloitte Market Line, http://www.reportlinker.com/ci02425/Insurance.htm
   Bureau of Labor Statistics, Industry employment and output projections to 2022, Monthly Labor Review, December 2013, http://www.bls.gov/opub/mlr/2013/article/industry-employment-and-output-projections-to-2022.htm
  Connecticut Department of Labor http://www1.ctdol.state.ct.us/TEPS/SupplyDemand_ClusterDetail2.aspx?sCode=1501

- 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?

  The existing infrastructure and facilities will be used for this new Minor in Insurance. Many of the courses in the program are already in existence and are offered every semester with vacancies for more student enrolment. Students are required to take three of the five core courses that will be introduced. We estimate that three adjunct faculty will be required but most courses are taught by existing faculty with strong background in appropriate areas.

- Please describe any transfer agreements with other institutions under the BOR that will become instituted as a result of the approval of this program *(Please highlight details in the Quality Assessment portion of this application, as appropriate)*

- Please indicate what similar programs exist in other institutions within your constituent unit [3], and how unnecessary duplication is being avoided

  Two universities in Connecticut have similar programs, University of Connecticut and University of Hartford. University of Connecticut's program is geared more to Actuarial Science. As a result of the Affordable Care Act, global and national insurance industry growth, projected increase in the financial activities between 2012 and 2022 and Health care and social assistance for the same period contained above, it is obvious that the state is not producing enough qualified manpower for this envisaged growth in the insurance industry.

- Please provide a description/analysis of employment prospects for graduates of this proposed program

  The Bureau of Labor Statistics predicts about 1 million job increase in the financial activities between 2012 and 2022, a 5 million job increase in the Health care and social assistance for the same period. As Health care and social assistance activities increase so will insurance for those activities.

Description of Modification *(Please provide a summary of the modifications to curriculum, admissions or graduation requirements ,mode of delivery etc., and concisely describe how the institution will support these changes.*
Minor requiring 24 credits

Description of Resources Needed *(As appropriate please summarize faculty and administrative resources, library holdings, specialized equipment, etc. Details to be provided in the next section, as appropriate)*
3 part-time faculty

Other Considerations

Previous Three Years Enrollment and Completion for the Program being Modified

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers *(from other programs)*	10	5	12	7	10	5
New Students *(first time matriculating)*	15	10	15	10	15	10
Continuing *(students progressing to credential)*	0	0	19	11	11	7
Headcount Enrollment	25	15	46	28	36	22
Total Estimated FTE per Year						

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[3] Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

Curriculum Details for a Program Modification *(to be use as appropriate for specific modification request)*[4]						
Course Number and Name [5]	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
Program Core Courses			Take 3 courses for a total of 9 credits	**Other Related/Special Requirements**		
FIN 300 Risk Management and Insurance	1,2,3,4,5	ECO 215 or MAT 216 ; BUS/FIN 245; BUS 205; and any 2 of the following courses: BUS 250; BUS 260; BUS/FIN 346; BUS/FIN 347; and BUS/FIN 348	3			
FIN 400 Life Insurance	1,2,3,4,5	FIN 300 Risk Management and Insurance	3			
FIN 401 Health Insurance	1,2,3,4,5	FIN 300 Risk Management and Insurance	3			
FIN 402 Insurer Operations	1,2,3,4,5	FIN 300 Risk Management and Insurance	3			
FIN 403 Commercial Property and Liability Insurance	5, 7,8	FIN 300 Risk Management and Insurance	3			
Core Course Prerequisites			9 credits	**Elective Courses in the Field**		Take two courses for a total of 6 credits
ECO 215 Statistics for Business and Economics **or**			3	BUS 250 Business Law	1,2,3,4,5,7,8	3
MAT 216 Statistical Data Analysis			3	BUS/FIN 347 Financial Institutions and Markets **or** BUS 347 Financial Institutions and Markets	1,2,3,4,5,7,8	3
BUS/FIN 245 Business Finance			3	BUS/FIN 348 Personal Financial Planning	1,2,3,4,5,7,8	3
BUS 205 Information Management			3	BUS/FIN 346 Investment Analysis	1,2,3,4,5,7,8	3
				BUS 260 Operations Management	1,2,3,4,5, 6, 7,8	3
Total Other Credits Required to Issue Modified Credential						

Learning Outcomes - L.O. *(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)*

1. Intellectual skills would be manifested in creative problem solving, including comprehension of an unfocused set of facts, and identification and anticipation of problems. They would also involve the identification of ethical issues and the application

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[4] **Details of course changes for Community College institutions should be provided with enough detail to introduce necessary changes in the centralized programmatic database for that system.**

[5] Make any detail annotations for individual courses as needed to understand the curricular modifications taking place

of a value-based system to deal with them. All the courses in the program have elements of this. It will specifically apply to FIN 300 Risk Management and Insurance, FIN 400 Life Insurance, FIN 401 Health, FIN 402 Insurer Operations and Policy, FIN 403 Commercial Property and Liability, BUS 250 Business Law, or BUS/ FIN 347 Financial Institutions and Markets, BUS/FIN 346 Investment Analysis, BUS/FIN 348 Personal Financial Planning, and BUS 260 Operations Management are relevant here The assessment methods includes end of topic discussions, class assignments, individual and group assignment and presentations, case studies, quizzes and examinations

2. Communication skills would encompass developing effective business presentation skills and professionalism in the presentation and defense of points of view through formal and informal, written and oral communications. This must involve the ability to listen, gain information and to understand opposing points of view. It means using both human and electronic sources for obtaining and organizing information. The assessment methods includes end of topic discussions, class assignments, individual and group assignment and presentations, case studies, quizzes and examinations

3. Critical thinking is reasonable, reflective, responsible, and skillful thinking that is focused on   deciding what to believe or do. A person who thinks critically can ask appropriate questions, gather relevant information, efficiently and creatively sort through this information, reason logically from this information, and come to reliable and trustworthy conclusions about the world that enable one to live and act successfully in it. Critical thinking helps students to identify, formulate and solve problems, and develops analytical skills. It also enhances group problem-solving skills and decision making abilities. FIN 300 Risk Management and Insurance, FIN 400 Life Insurance, FIN 401 Health, FIN 402 Insurer Operations and Policy, FIN 403 Commercial Property and Liability, BUS 250 Business Law, or BUS/FIN 347 Financial Institutions and Markets, BUS/FIN 346 Investment Analysis, BUS/FIN 348 Personal Financial Planning, and BUS 260 Operations Management are relevant here he assessment methods includes end of topic discussions, class assignments, individual and group assignment and presentations, case studies, quizzes and examinations.

4. Technical Proficiency involves the knowledge of financial theory, and application, contemporary issues as well as the ability to use techniques, technological skills and modern financial tools for the practice and management of financial information. The assessment methods includes end of topic discussions, class assignments, each student's use of technology in computer labs. FIN 245 Business Finance and BUS 205 Information Management is relevant here.

5. Diligence involves working with enthusiasm and persistence in completing a task as well as the ability to consistently apply accepted principles, theories, rules and regulations. Reports graded by faculty and peer reviews.

6. Statistical Knowledge development will assist students in formulating different plans and policies using statistics. They will learn to forecast the future trends and tendencies, estimate the market fluctuations and changes in the demand conditions. MAT 216 Statistical Data Analysis and ECO 215 Statistics for Business and Economics. The assessment methods includes end of topic discussions, class assignments, individual and group assignment and presentations, case studies, quizzes and examinations

7. Acquisition of industrial professional Knowledge. To effectively operate in a particular, students must be fortified with knowledge of the activities of that industry. FIN 300 Risk Management and Insurance, FIN 400 Life Insurance, FIN 401 Health, FIN 402 Insurer Operations and Policy, FIN 403 Commercial Property and Liability, BUS 250 Business Law, or BUS/FIN 347 Financial Institutions and Markets, BUS/FIN 346 Investment Analysis, BUS/FIN 348 Personal Financial Planning, and BUS 260 Operations Management are relevant here. The assessment methods includes end of topic discussions, class assignments, individual and group assignment and presentations, case studies, quizzes and examinations.

8. Legal knowledge of Liability is very important in this minor because risk coverage in insurance can result in liability should the protected event occur. BUS 250 Business Law. The assessment methods includes end of topic discussions, class assignments, individual and group assignment and presentations, case studies, quizzes and examinations.

SECTION 3: RESOURCE AND FINANCIAL CONSIDERATIONS

Two-Year Cost Effectiveness and Availability of Adequate Resources
(Please provide attach a Pro-Forma Budget for the modification of program in the format provided)

CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

*APPLICATION FOR **MODIFICATION OF ACCREDITED PROGRAM** (Public Higher Education Institutions) - 01/20/12*

Institution	E.C.S.U.			Date	2/25/2015
Proposed Program	Minor in Insurance				

PROJECTED Enrollment	First Term Year 1		First Term Year 2		First Term Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers *(from other programs)*	10	5	12	7	10	5
New Students *(first time matriculating)*	15	10	15	10	15	10
Continuing *(students progressing to credential)*	0	0	19	11	11	7
Headcount Enrollment	25	15	46	28	36	22
Total Estimated FTE per Year	30		54		41	

PROJECTED Program Revenue	Year 1		Year 2		Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition *(Do not include internal transfers)*	$69,000	$25,440	$156,400	$99,216	$165,600	$55,968
Program-Specific Fees						
Other Rev. *(Annotate in text box below)*	$110,990		$245,804		$240,396	
Total Annual Program Revenue	$205,430		$501,420		$461,964	

PROJECTED Expenditures*	Year 1		Year 2		Year 3	
	Number *(as applicable)*	Expenditure	Number	Expenditure	Number	Expenditure
Administration *(Chair or Coordinator)*						
Faculty *(Full-time, total for program)*						
Faculty *(Part-time -total for program)*	2	$36,330*	3	$77,850		$77,850
Support Staff						
Library Resources Program						
Equipment *(List as needed)*						
Other (e.g. student services)						
Estimated Indirect Cost *(e.g. student services, operations, maintanance)*						
Total ESTIMATED Expenditures		$36,330		$77,850		$77,850

* Note: Capital outlay costs, institutional spending for research and service, etc. can be excluded.

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 identiy 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."

Please provide any necessary annotations:

<u>Notes</u>

* Only only one additional adjunct faculty will be required to teach in the prerequisite core course in the first semester

E.C.S.U. 80 percent sophomore retention rate was used to estimate the number of continuing students for year 2

E.C.S.U 70 percent E.C.S.U. junior retention rate was used to estimate the number of continuing students for year 3

E.C.S.U At Home 2014-2015 tuition rate of $4,600 was used as tuition for full time students. Tuition and fees of $5,090.

$424 *per* cred + $433 per credit respectively, http://www.easternct.edu/continuingeducation/reginfo.htm were used to estimate the revenue for part-time students. on ECSU website,

NEW ENGLAND ASSOCIATION OF SCHOOLS & COLLEGES, INC.
COMMISSION ON INSTITUTIONS OF HIGHER EDUCATION

March 29, 2016

Mr. Edward D. Klonoski
President
Charter Oak State College
55 Paul J. Manafort Drive
New Britain, CT 06053-2142

Dear President Klonoski:

It is my pleasure to inform you that at its meeting on March 4, 2016, the Commission on Institutions of Higher Education considered the revised proposal submitted by Charter Oak State College regarding its plans to offer the Master of Science in Organizational Leadership degree and voted to take the following action:

> that the substantive change proposal to offer a Master of Science in Organizational Leadership (MSOL) degree be accepted and the degree be encompassed within the institution's accreditation, with an effective date of July 1, 2016;

> that the College's accreditation at the master's level be limited to the Master of Science in Organizational Leadership and the institution be reminded that, should it plan to offer additional programs at the master's level, it needs to submit a report to the Commission, in keeping with the Policy on Substantive Change;

> that an on-site evaluation of the MSOL program be scheduled for Fall 2017;

> that the report prepared in advance of the Fall 2017 evaluation give emphasis to the institution's success in implementing the MSOL program, with particular attention to:

> 1. implementing plans for prior learning assessment and assessment of student learning in the program;

> 2. achieving enrollment and revenue goals;

> 3. assuring appropriate support, including academic advising, for students enrolled in the program.

The Commission gives the following reasons for its action.

The report submitted by Charter Oak State College was accepted, and the Master of Science in Organizational Leadership program encompassed within the institution's accreditation because the Commission finds that the proposed program fits within the institution's mission and fulfills the relevant *Standards for Accreditation* and relevant Commission policies.

The Commission commends Charter Oak State College (COSC) for its well-developed proposal outlining the institution's plans to offer its first graduate program, a Master of Science in Organizational Leadership. The 33-credit program is intended to provide working professionals "the competencies needed by managers to improve the effectiveness of their organizations." Courses will be offered online, and COSC has in place an effective infrastructure to support online learning. Learning outcomes are appropriate for the master's level. Six of the credits toward the degree may be transferred in from other graduate programs, and six may be earned through prior learning assessment. COSC has well established and effective procedures to assess prior learning. We note with approval that the College will hire a doctorally qualified program director; adjunct faculty with appropriate qualifications and experience will support the program.

The effective date of inclusion of the MSOL within Charter Oak State College's accreditation is July 1, 2016, when the revised *Standards for Accreditation*, which permit prior learning assessment at the graduate level, take effect.

We remind you that any plans to offer additional programs at the master's level will need to be reviewed by the Commission, consistent with our Policy on Substantive Change. It is generally the case that before granting general approval at the higher degree level within the institution's range of academic offerings, the Commission expects to see developed capacity at the higher degree, success with initial programs, and, as appropriate, the development of an institutional culture supporting academic programming at the higher degree.

Commission policy requires an on-site evaluation of the new program within two years of its initiation and before the first class is graduated. The report prepared for the visit in Fall 2017 should update the Commission to reflect and assess actual experience in implementing the degree program. A copy of the relevant policy and procedures is enclosed for your information.

In addition, the institution is asked, in its report, to give emphasis to three matters related to our standards on *The Academic Program, Students, Financial Resources* and *Faculty*.

As noted above, Charter Oak State College will use its well-established procedures for prior learning assessment to evaluate competency-based portfolios prepared by MSOL students. In addition, faculty will develop rubrics to assess students' success in achieving the outcomes specified for each MSOL course and for the culminating Applied Research Project. In the report prepared for the Fall 2017 visit, we welcome information about COSC's success in implementing these plans for the assessment of student learning. Relevant here is our standard on *The Academic Program*:

> Credit for prior experiential or non-collegiate sponsored learning is awarded ... with appropriate oversight by faculty and academic administration. When credit is awarded on the basis of prior experiential or non-collegiate sponsored learning alone, student learning and achievement are demonstrated to be at least comparable in breadth, depth, and quality to the results of institutionally provided learning experiences. The policies and procedures for the award of credit for prior or experiential learning are clearly stated and available to affected students (4.35).

> The institution implements and provides support for systematic and broad-based assessment of what and how students are learning through their academic program and experiences outside the classroom. Assessment is based on clear statements of what

students are expected to gain, achieve, demonstrate, or know by the time they complete their academic program. Assessment provides useful information that helps the institution to improve the experiences provided for students, as well as to assure that the level of student achievement is appropriate for the degree awarded (4.48).

The institution's approach to understanding student learning focuses on the course, program, and institutional level. Evidence is considered at the appropriate level of focus, with the results being a demonstrable factor in improving the learning opportunities and results for students (4.49).

We understand COSC expects to enroll 20 students in the MSOL program each semester beginning in Fall 2016. Although a loss of $108,000 is anticipated for the first year of the program, net income of $97,000 is expected for FY2017, growing to $260,000 in FY2019. The Fall 2017 evaluation will afford Charter Oak State College an opportunity to update the Commission on its initial success in achieving these enrollment and revenue goals. We remind you of our standards on *Students* and *Financial Resources*:

Consistent with its mission, the institution sets and achieves realistic goals to enroll a student body that is broadly representative of the population the institution wishes to serve ... (6.1).

The institution's multi-year financial planning is realistic and reflects the capacity of the institution to depend on identified sources of revenue and ensure the advancement of educational quality and services for students (9.3).

The proposal submitted by Charter Oak State College outlines the institution's plans to provide MSOL students comprehensive support services, including academic advising. We note that advising will be "handled by the faculty, mentors, and the Program Director" and will include the use of online tools such as "email, chats, webinars, and the student portal." We look forward to learning, in Fall 2017, of COSC's success in assuring that MSOL students are provided with "an array of student services appropriate to its mission and the needs and goals of its students" (6.11). Our standard on *The Academic Program* offers this additional guidance:

The institution has in place an effective system of academic advising that meets student needs for information and advice and is compatible with its educational objectives. Faculty and other personnel responsible for academic advising are adequately informed and prepared to discharge their advising functions. Resources are adequate to ensure the quality of advising for students regardless of the location of instruction or the mode of delivery (5.19).

We remind you that the *Standards for Accreditation* have been revised, and the new standards go into effect on July 1, 2016. Therefore, the report prepared by Charter Oak State College in advance of the Fall 2017 visit should reference the 2016 standards.

The Commission expressed appreciation for the report submitted by Charter Oak State College and hopes its preparation contributed to institutional improvement. It appreciates your cooperation with the effort to provide public assurance of the quality of higher education in New England.

You are encouraged to share this letter with all of the institution's constituencies. It is Commission policy to inform the chairperson of the institution's governing board of action on its accreditation status. In a few days we will be sending a copy of this letter to Mr. Nicholas M. Donofrio. The institution is free to release information about this report and the Commission's

Mr. Edward D. Klonoski
March 29, 2016
Page 4

action to others, in accordance with the enclosed policy on Public Disclosure of Information about Affiliated Institutions.

If you have any questions about the Commission's action, please contact Barbara Brittingham, President of the Commission.

Sincerely,

Patricia Maguire Meservey

Patricia Maguire Meservey

PMM/jm

Enclosures

cc: Mr. Nicholas M. Donofrio