



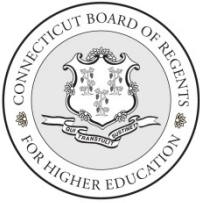
CONNECTICUT STATE  
COLLEGES & UNIVERSITIES

BOARD OF REGENTS FOR HIGHER EDUCATION

**BOR ACADEMIC AND STUDENT AFFAIRS COMMITTEE  
AGENDA**

**Friday, April 24, 2015 – 9:30 a.m.  
61 Woodland Street, Hartford, CT 06105  
3<sup>rd</sup> Floor Board Conference Room**

1. Approval of Minutes – March 27, 2015
2. CONSENT ITEMS
  - a. Modifications of Program
    - i. BOT: Executive Assistant – AS [name change] – Housatonic CC
    - ii. BOT: Administrative Support Assistant Certificate – Housatonic CC
    - iii. Business Administration: Customer Service/Marketing Option = AS [name change] – Housatonic CC
    - iv. Fine Arts – AA – Quinebaug Valley CC
  - b. Terminations
    - i. Child Development Associate – Certificate – MCC
3. ACTION ITEMS
  - a. Promotions and Tenures
    - i. Central CSU
    - ii. Eastern CSU
    - iii. Southern CSU
    - iv. Western CSU
  - b. Honorary Degree – Three Rivers CC
  - c. Establishment of a Middle College – Capital CC
  - d. Accreditation
    - i. Health Information Management – BS – Charter Oak SC
  - e. New Programs
    - i. Master of Science in Organizational Effectiveness and Leadership – Charter Oak SC
    - ii. Software Engineering – AAS – Norwalk CC
    - iii. Mobile Programming – AAS – Norwalk CC
    - iv. Mathematics – AS – Manchester CC
4. INFORMATION ITEMS
  - a. Academic Program Review Report
  - b. TAP Update –
    - i. Biology Pathway
    - ii. TAP Protocol
  - c. Below-Threshold –
    - i. Psychology-Concentration in Behavior Analysis – Eastern CSU
    - ii. Renaissance Studies Minor – Southern CSU
    - iii. Urban Affairs Minor – Southern CSU
    - iv. Medical Spanish for Health and Human Service Professionals Minor – Southern CSU
5. OTHER BUSINESS



# CT BOARD OF REGENTS FOR HIGHER EDUCATION

## ACADEMIC & STUDENT AFFAIRS COMMITTEE

Meeting March 27, 2015

9:30 a.m.

39 Woodland Street, Hartford

### MINUTES

Regents Present: Merle Harris (by conf), Stephen Adair (by conf), Naomi Cohen (by conf), Lawrence DeNardis (by conf)

Regents Absent: Eugene Bell, Craig Lappen, Catherine Smith

Staff Present: Estela Lopez, Maureen McClay, Elsa Nunez (by conf), Arthur Poole, Jane Williams

Other Attendees: Rhona Free (ECSU) – by conf.

Chair Merle Harris called the meeting to order at 9:31 a.m.

1. Minutes of March 13, 2015 – **L. DeNardis moved to approve the minutes; seconded by N. Cohen and unanimously approved.**

2. Action Item

- a. CSU-AAUP Faculty Research Grants. **A motion to approve was made by N. Cohen, seconded by L. DeNardis.** Chair Harris described the background and purpose of the item. Provost Lopez added additional remarks. There were comments by President Nunez. Dr. Adair also mentioned the enormous work of the review committee. **The vote was taken and it was unanimously approved.**

Chair Harris mentioned the information item that would be included on the upcoming full Board meeting on the CSU Sabbaticals. There was a brief discussion with President Nunez providing a brief overview of the process at the universities.

There was no other business. There was a motion to adjourn by N. Cohen, seconded by L. DeNardis and unanimously approved. The meeting adjourned at 9:39 a.m.

**ITEM**

Modification of the name and curriculum of a program in Business Office Technology leading to an Associate of Science degree at Housatonic Community College

**BACKGROUND**Summary

The purpose of these changes is to make the degree more contemporary in name and focus. The name change to “Administrative Assistant” from “Executive Assistant” follows the lead of the International Association of Administrative Professionals (IAAP), the prominent trade organization in this field. The curriculum changes reflect the new roles of individuals in these positions – less keyboarding, more business-focused, and more dependent on technology. The changes also recognize that today’s students enter the program with a higher level of proficiency in some skills that were previously developed in this program.

Need for the Program

Due to changes in the economy and advances in technology, the role of the administrative assistant has changed requiring the proposed modifications in this program. This is a terminal degree leading to a new position or enhanced performance in an existing role. Today’s administrative assistant must be more familiar with general business and organizational concepts as well as be proficient in the use of a broader range of software tools.

Curriculum**Original Courses**

BOT112 Keyboarding for Info Pro II  
BOT215 Word Processing Applications II  
Elective Business  
Elective Business

**Replacement Courses**

Elective (Business—BBG,BMK,BMG,BFN)\*  
CSA106 Introduction to Computer Applications  
Elective (Business—BBG,BMK,BMG,BFN)\*  
Elective (Business—BBG, BMK,BMG,BFN)\*

\*Choices for elective are: BMG220 Human Resource Management; BBG240 Business Ethics; BMK207 Consumer Behavior; BBG215 Global Business; BBG107 Sports Management; BBG101 Introduction to Business; BMK201 Principles of Marketing; BFN125 Principles of Banking

Students

This degree continues to be a good option for students – first time and returning -- with an interest in the office support field. As a result of these changes, students will be even better prepared for the modern office.

Faculty

Existing full time and adjunct faculty already teach the courses that will be included in the program as proposed.

Learning Resources

Suitable resources are already available to support the courses in this program which are already being offered through the Business Administration Department.

**Facilities**

Existing facilities already accommodate the current courses that will become part of this program under this proposal.

**Fiscal Note**

No additional expense will be required as a result of these proposed changes. A modest increase in enrollment in this program will lead to additional tuition.

**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

<b>Institution:</b> Housatonic Community College	<b>Date of Submission to BOR Office:</b> February, 2015
Most Recent NEASC Institutional Accreditation Action and Date: October 2012	
<b>Original Program Characteristics</b> CIP Code No. EB18 Title of CIP Code 520401 CIP Year: 2000 or 2010 Name of Program: BOT: EXECUTIVE ASSISTANT Degree: Title of Award (e.g. Master of Arts) <b>Associate in Science</b> Certificate: (specify type and level) Date Program was Initiated: 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): 60-62	<b>Original Program Credit Distribution</b> # Cr in Program Core Courses: 24-26 # Cr of Electives in the Field: 36 # Cr of Free Electives: # Cr Special Requirements (include internship, etc.): <u>Total # Cr in the Program (sum of all #Cr above): 60-62</u> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>60-62</b>
<b>Type of Program Modification Approval Being Sought (mark all that apply):</b> 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 BOT: Administrative Assistant (contemporary title/used by IAAP association)	
<b>Modified Program Characteristics</b> Name of Program: BOT: Administrative Assistant Degree: Title of Award (e.g. Master of Arts) <b>Associate in Science</b> Certificate <sup>1</sup> : (specify type and level) Program Initiation Date: Fall 2014 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 Other:	<b>Modified Program Credit Distribution</b> # Cr in Program Core Courses: 24-25 # Cr of Electives in the Field: 37 # Cr of Free Electives: # Cr Special Requirements (include internship, etc.): <u>Total # Cr in the Program (sum of all #Cr above): 61-62</u> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>61-62</b>
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: <ul style="list-style-type: none"> <li>• If seeking specialized/professional/other accreditation, name of agency and intended year of review:</li> <li>• If program prepares graduates eligibility to state/professional license, please identify:</li> </ul> (As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)	
<b>Institutional Contact for this Proposal:</b> Elizabeth Roop	Title: Dean, Academic Affairs Tel.: 203-332-5061 e-mail: <a href="mailto:eroop@hcc.commnet.edu">eroop@hcc.commnet.edu</a>

<sup>1</sup> 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.

**ITEM**

Modification of the curriculum in a program leading to a Certificate in “Business Office Technology: Administrative Support Assistant” at Housatonic Community College

**BACKGROUND****Summary**

The purpose of the modest changes in this certificate program is to better cover skills required of administrative assistants in today’s modern offices. The revised curriculum focuses less on keyboarding, more on general business, and more on office technology and computer applications. It is anticipated this more contemporary focus will make the program appeal to a wider group of students. Also, many students already have some of the basic skills that were previously taught in the program. Removing that redundancy makes room for more valuable course options.

**Need for the Program**

The role of administrative assistant has changed. Economic influences and advances in office technology have changed the role of administrative assistants which thus require the proposed modifications in this program. Today’s administrative assistant must be more familiar with general business and organizational concepts as well as being proficient in the use of a broader range of software tools. This is a terminal degree leading to a new position or enhanced performance in an existing role.

**Curriculum****Original Courses**

BOT\*E112 Keyboarding for Info Pro II

Elective Business

Elective Business

**Replacement Courses**

CSA\*E106 Introduction to Computer Applications

Elective Business (BBG, BMK, BMG, BFN)\*

Elective Business (BBG, BMK, BMG, BFN)\*

\*Choices for electives are: BMG220 Human Resource Management; BBG240 Business Ethics; BMG2078 Consumer Behavior; BBG215 Global Business; BBG107 Sports Management; BBG101 Introduction to Business; BMG201 Principles of Marketing; BFN125 Principles of Banking

**Students**

This certificate will prepare students – recent high school graduates and others returning to school later in life – for jobs in this field. While students are encouraged to move from this certificate to an associate’s degree program, it will not always be the case. The certificate will prepare students for entry level support positions.

**Faculty**

Current full time and adjunct faculty will continue to teach the program’s required courses, all of which are presently being offered.

**Learning Resources**

No additional resources are required to teach the revised curriculum.

Facilities

No additional facilities are required to teach the revised curriculum.

Fiscal Note

No additional expense will be required as a result of these proposed changes. A modest increase in enrollment in this program will lead to some additional tuition.

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

<b>Institution:</b> Housatonic Community College	<b>Date of Submission to BOR Office:</b> February, 2015
Most Recent NEASC Institutional Accreditation Action and Date: October 2012	
<b>Original Program Characteristics</b> CIP Code No. EJ09    Title of CIP Code 520401    CIP Year: 2000    or 2010 Name of Program: BOT: ADMINISTRATIVE SUPPORT ASSISTANT Degree: Title of Award (e.g. Master of Arts) Certificate: (specify type and level) C2 Date Program was Initiated: 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): 30	<b>Original Program Credit Distribution</b> # Cr in Program Core Courses: 3 # Cr of Electives in the Field: 27 # Cr of Free Electives: # Cr Special Requirements (include internship, etc.): <u>Total # Cr in the Program (sum of all #Cr above): 30</u> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 30
<b>Type of Program Modification Approval Being Sought (mark all that apply):</b> Licensure and Accreditation (specify whether New Certificate, Minor, Option, Concentration, or Other) X Significant Modification of Courses/Course Substitutions Offering of Program at Off-Campus Location (specify new location) Offering of Program Using an Alternate Modality (e.g. from on ground to online) Change of Degree Title or Program Title	
<b>Modified Program Characteristics</b> Name of Program: BOT: ADMINISTRATIVE SUPPORT ASSISTANT Degree: Title of Award (e.g. Master of Arts) Certificate <sup>1</sup> : (specify type and level) C2 Program Initiation Date: FALL 2014 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): 31 Other:	<b>Modified Program Credit Distribution</b> # Cr in Program Core Courses: 3 # Cr of Electives in the Field: 28 # Cr of Free Electives: # Cr Special Requirements (include internship, etc.): <u>Total # Cr in the Program (sum of all #Cr above): 31</u> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: 31
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: <ul style="list-style-type: none"> <li>• If seeking specialized/professional/other accreditation, name of agency and intended year of review:</li> <li>• If program prepares graduates eligibility to state/professional license, please identify:</li> </ul> (As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)	
<b>Institutional Contact for this Proposal:</b> Elizabeth Roop	Title: Dean, Academic Affairs Tel.: 203-332-5061 e-mail: <a href="mailto:eroop@hcc.commnet.edu">eroop@hcc.commnet.edu</a>

<sup>1</sup> 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*

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

BOR Sequence Number (to be assigned):

Approved 2010 CIP Code No. <sup>2</sup> (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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<sup>2</sup> 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.

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## 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) We are updating the courses that are offered through the business elective course where a student can choose in consort with his/her academic advisor course(s) that would pertain to his/her career goals in this dynamic field.
- 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 curriculum has been updated to meet industry's technological needs and our faculty and resources are in place, thus, providing the education required of the Administrative Support Assistant.
- 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 <sup>3</sup>, and how unnecessary duplication is being avoided Some of the community colleges in Connecticut provide a Certificate program for the person that wants to begin his/her career as an administrative support specialist.
- Please provide a description/analysis of employment prospects for graduates of this proposed program IAAP indicates that there are over 100,000 Administrative Assistants and Administrative Support Specialists positions available in all professions.

**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.

Original Courses	Replacement Courses
BOT*E112 Keyboarding for Info Pro II	CSA*E106 Introduction to Computer Applications
Elective Business	Elective Business (BBG, BMK, BMG, BFN)*
Elective Business	Elective Business (BBG, BMK, BMG, BFN)*

\*Choices for electives are: BMG220 Human Resource Management; BBG240 Business Ethics; BMG2078 Consumer Behavior; BBG215 Global Business; BBG107 Sports Management; BBG101 Introduction to Business; BMG201 Principles of Marketing; BFN125 Principles of Banking

**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)

All faculty and administrative resources are in place. All library and equipment resources are also in place.

**Other Considerations**

<sup>3</sup> Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	First Term, Year 2011		First Term, Year 2012		First Term, Year 2013	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Transfer Students				1	1	1
New Students		1		1		
Returning Students		1		1	1	1
ACTUAL Headcount Enrollment	0	2	0	3	2	2
ACTUAL FTE per Year	3,478		3,459		3,245	
Size of Credentialed Group for Given Year						

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

Curriculum Details for a Program Modification <i>(to be use as appropriate for specific modification request)</i> <sup>4</sup>						
Course Number and Name <sup>5</sup>	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>				<b>Other Related/Special Requirements</b>		
ENG*E101 Composition		ENG*091	3			
<b>Core Course Prerequisites</b>				<b>Elective Courses in the Field</b>		
ACC*E113 Financial Accounting			3	Elective Business (BBG, BMK, BMG, BFN)	3	
BOT*E111 Keyboarding for Info Pro I			3	Elective Business (BBG, BMK, BMG, BFN)	3	
BOT*E137 Word Processing Applications			3			
BOT*215 Administrative Procedures			3			
BBG*E210 Business Communication			3			
BMG*E210 Organization Behavior			3			
CSA*E106 Introduction to Computer Applications			4			
<b>Total Other Credits Required to Issue Modified Credential</b>						
<b>Learning Outcomes - L.O.</b> <i>(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)</i> <ol style="list-style-type: none"> <li>1. Demonstrate speed and accuracy in keyboarding and computer application skills that would meet current industry standards.</li> <li>2. Demonstrate a knowledge and understanding of the automated office including managing the office environment, and its systems and issues.</li> <li>3. Use logic to make decisions, solve problems, acquire and use information and evaluate outcomes for clarification.</li> </ol>						

<sup>4</sup> 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.

<sup>5</sup> Make any detail annotations for individual courses as needed to understand the curricular modifications taking place

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## 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)*

**ITEM**

Modification of a program in marketing leading to an Associate of Science degree at Housatonic Community College

**BACKGROUND**Summary

Previously entitled “Customer Service/Marketing,” the program’s general focus has been on retailing. This proposal changes the name of the program to “Marketing” and allows students to take a wider variety of marketing courses to meet degree requirements.

Need for the Program

As amended, the program will prepare students for broader employment opportunities and for further study in more areas of Marketing. For example, students could choose to focus on marketing communications. The new program better reflects the true breadth of marketing and will make the major more attractive and useful to students. The curriculum will also accommodate the creation of additional courses in emerging marketing disciplines.

CurriculumOriginal Courses

BMK106 Principles of Selling

BMK123 Principles of Customer Service

BMK205 Business to Business Marketing

OR

BMK241 Principles of Advertising

\*Choice of Electives: BMK106 Principles of Selling; BMK123 Principles of Customer Service; BMK104 Principles of Retailing; BMK216 Internet Marketing; BMK241 Principles of Advertising; BMK205 Business to Business Marketing; BMK214 International Marketing

Replacement Courses

Elective Business (Marketing)\*

Elective Business (Marketing)\*

Elective Business (Marketing)\*

Students

The program will prepare students for broader employment opportunities.

Faculty

Existing faculty are teaching the courses which become electives in this amended program.

Learning Resources

No additional resources are required to teach the revised curriculum.

Facilities

No additional facilities are required to teach the revised curriculum.

Fiscal Note

No additional expense. Some increase in enrollment will increase revenue.

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

<b>Institution:</b> Housatonic Community College	<b>Date of Submission to BOR Office:</b> February, 2015
Most Recent NEASC Institutional Accreditation Action and Date: October, 2012	
<b>Original Program Characteristics</b> CIP Code No. EB55    Title of CIP Code 520101    CIP Year: 2000    or 2010 Name of Program: Business Administration: Customer Service/Marketing Option Degree: Title of Award (e.g. Master of Arts) <b>Associate in Science</b> Certificate: (specify type and level) Date Program was Initiated: 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): 61-63	<b>Original Program Credit Distribution</b> # Cr in Program Core Courses: 24-26 # Cr of Electives in the Field: 37 # Cr of Free Electives: # Cr Special Requirements (include internship, etc.): <u>Total # Cr in the Program (sum of all #Cr above): 61-63</u> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>61-63</b>
<b>Type of Program Modification Approval Being Sought (mark all that apply):</b> 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 Business Administration: Marketing Option (updating Degree Title)	
<b>Modified Program Characteristics</b> Name of Program: Business Administration: Marketing Option Degree: Title of Award (e.g. Master of Arts) <b>Associate in Science</b> Certificate <sup>1</sup> : (specify type and level) Program Initiation Date: Fall 2014 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): 61-63 Other:	<b>Modified Program Credit Distribution</b> # Cr in Program Core Courses: 24-26 # Cr of Electives in the Field: 37 # Cr of Free Electives: # Cr Special Requirements (include internship, etc.): <u>Total # Cr in the Program (sum of all #Cr above): 61-63</u> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>61-63</b>
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: <ul style="list-style-type: none"> <li>• If seeking specialized/professional/other accreditation, name of agency and intended year of review:</li> <li>• If program prepares graduates eligibility to state/professional license, please identify:</li> </ul> (As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)	

<sup>1</sup> 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

Institutional Contact for this Proposal: Elizabeth Roop	Title: Dean, Academic Affairs	Tel.: 203-332-5061 e-mail: <a href="mailto:eroop@hcc.commnet.edu">eroop@hcc.commnet.edu</a>
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### BOR REVIEW STATUS (For Office Use Only - please leave blank)

BOR Sequence Number (to be assigned):	
Approved 2010 CIP Code No. <sup>2</sup> (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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<sup>2</sup> 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.

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## 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)

We are updating the Program to reflect the needs of industry in the 21<sup>st</sup> century so we are listing the program as: Business Administration: Marketing so the student choose from a variety of business courses via Academic Advising that will address the needs of business in his/her choice of career goals.

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) To be able to provide job readiness for the associate degree graduate in the Business Administration: Marketing degree program.
- 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? Our faculty and resources provide the latest and up-to-date information in the field of domestic, international, and internet marketing, retailing and sales, customer service, and advertising.
- 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 <sup>3</sup>, and how unnecessary duplication is being avoided All community colleges in the State provide similar Marketing degree program that reflect the needs of our region at Housatonic Community College.
- Please provide a description/analysis of employment prospects for graduates of this proposed program Students can acquire employment utilizing the skills learned in the Business Administration: Marketing Option degree program directly after graduation or they can continue their education at a four-year institution.

**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.

Original Courses

BMK106 Principles of Selling

BMK123 Principles of Customer Service

BMK205 Business to Business Marketing

OR

BMK241 Principles of Advertising

Replacement Courses

Elective Business (Marketing)\*

Elective Business (Marketing)\*

Elective Business (Marketing)\*

\*Choice of Electives: BMK106 Principles of Selling; BMK123 Principles of Customer Service; BMK104 Principles of Retailing; BMK216 Internet Marketing; BMK241 Principles of Advertising; BMK205 Business to Business Marketing; BMK214 International Marketing

**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)

All resources are in place concerning faculty, library, and equipment.

**Other Considerations**

<sup>3</sup> Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	First Term, Year 2010		First Term, Year 2011		First Term, Year 2012	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers	2	1	2	3	0	3
New Students	1	3	4	2	4	4
Returning Students	9	14	4	9	5	14
ACTUAL Headcount Enrollment	12	18	10	14	9	21
ACTUAL FTE per Year	3602		3478		3439	
Size of Credentialed Group for Given Year						

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

Curriculum Details for a Program Modification <i>(to be use as appropriate for specific modification request)</i> <sup>4</sup>						
Course Number and Name <sup>5</sup>	L.O. #	Pre- Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>				<b>Other Related/Special Requirements</b>		
ENG*E101 Composition		ENG*E043	3			
ENG*E102 Literature & Composition		ENG*E101	3			
Elective Behavioral Science		ENG*E101	3			
Elective Soc. Sci. ECN101 or ECN102		ENG*E101	3			
Elective Science		ENG*E101	3			
Elective Mathematics		MAT*E095	3			
Elective Humanities		ENG*E101	3			
Elective Fine Arts		ENG*E101	3			
<b>Core Course Prerequisites</b>				<b>Elective Courses in the Field</b>		
BBG*E101 Intro to Business OR BES*E118 Prin. Of Small Business Management			3	Elective Business (Marketing)	3	
ACC*E113 Financial Accounting			3	Elective Business (Marketing)	3	
BMK*E201 Principles of Marketing			3	Elective Business (Marketing)	3	
CSA*E106 Introduction to Computer Applications			4			
BMG*E210 Organizational Behavior			3			
BFN*E201 Principles of Finance			3			
BMG*E210 Business Communication						
BMK*E207 Consumer Behavior			3-3-3			
BBG*E231 Business Law I						
<b>Total Other Credits Required to Issue Modified Credential</b>						
<b>Learning Outcomes - L.O.</b> <i>(Please list up to seven of the most important student learning outcomes for the program, and any changes introduced)</i> <ol style="list-style-type: none"> <li>1. Demonstrate an understanding of basic theory and practice of business administration and customer service marketing</li> <li>2. Demonstrate the ability to read, understand, and prepare standard types of business communications.</li> <li>3. Demonstrate analytical, problem-solving, and decision-making skills applicable to business administration, customers service, and marketing.</li> <li>4. Demonstrate proficiency in the use and interpretation of data and information as applied to the various applications in business administration, customer service, and marketing.</li> </ol>						

<sup>4</sup> 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.

<sup>5</sup> Make any detail annotations for individual courses as needed to understand the curricular modifications taking place

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## 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)

## ITEM

Modification of QVCC's Associate's Degree in Fine Arts; name change and credit reduction.

## BACKGROUND

Summary

The AA in Fine Arts does not accurately reflect the courses the courses we are offering; Graphic Design I & II, Web Design, Illustration I, Computer Animation, Introduction to Computer Graphics, Advanced Computer Graphics, and Digital Video Editing.

A more inclusive, accurate and up to date name for the degree is **Visual Arts**, which encompass all of the courses we offer including fine arts courses (Drawing, Painting, Sculpture, Ceramics, Printmaking) the above graphics courses and photography.

Total number of credits will **reduce to 60 from the present number of 66** (see curriculum section).

Need for the Program

This program offers an excellent alternative in terms of duplication of the first two years (generally referred to as the foundation years) at a four-year art college or university art department. Three Rivers Community College offers a similar degree. Unnecessary duplication is avoided as courses at QVCC are different. We offer students an excellent introduction into several areas such as Illustration, Animation, Digital Video, Computer Graphics & Printmaking.

Curriculum

Admissions requirements (open) will remain the same. Total number of credits will **reduce to 60 from the present number of 66**. Mode of delivery will remain the same. The institution is supportive of these changes due to the fact that numerous substitutions have had to be performed at the time of graduation audit due to students not being able to fulfill the curriculum requirements of their current Option track

Students

PROJECTED Enrollment	First Term Year 1		First Term Year 2	
	Full Time	Part Time	Full Time	Part Time
Internal Transfers ( <i>from other programs</i> )				
New Students ( <i>first time matriculating</i> )	23	5	26	4
Continuing ( <i>students progressing to credential</i> )	20	6	23	6
Headcount Enrollment	43	11	49	10

Faculty

Annie Joly, Program Coordinator and Associate Professor of Fine Arts  
B.F.A., Rhode Island School of Design  
M.F.A., Marywood University  
Mark Szantyr, Professor of Fine Arts  
B.F.A., M.F.A., University of Connecticut

Learning Resources

No additional resources required. Library resources remain the same.

Facilities

No change

Fiscal Note

<b>PROJECTED Program Revenue</b>	Year 1		Year 2	
	Full Time	Part Time	Full Time	Part Time
Tuition <i>(Do not include internal transfers)</i>	\$166,238	\$21,604	\$189,434	\$19,640
Program-Specific Fees	\$15,480	\$3,960	\$17,640	\$3,600
Other Rev. <i>(Annotate in text box below)</i>				
<b>Total Annual Program Revenue</b>	\$207,282		\$230,314	

Review of Documents:

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

Accreditation:

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

Institution: <b>Quinebaug Valley Community College</b>		Date of Submission to BOR Office:	
Most Recent NEASC Institutional Accreditation Action and Date: 2012			
<b>Original Program Characteristics</b> CIP Code No.                      Title of CIP Code                      CIP Year: <b>2014-2015</b> Name of Program: <b>Fine Arts</b> Degree: Title of Award (e.g. <i>Master of Arts</i> ) Associates in Fine Arts Certificate: Date Program was Initiated: <b>2011</b> (last date of change) Modality of Program:    On ground            Online    x Combined If "Combined", % of fully online courses? <b>4%</b> Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): <b>66</b>		<b>Original Program Credit Distribution</b> # Cr in Program Core Courses: <b>15</b> # Cr of Electives in the Field: <b>15</b> # Cr of Free Electives: <b>3</b> # Cr Special Requirements (include internship, etc.): <b>0</b> <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>66</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>66</b>	
Type of Program Modification Approval Being Sought (mark all that apply): Licensure and Accreditation (specify whether New Certificate, Minor, Option, Concentration, or Other) <b>X</b> 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) <b>X</b> Change of Degree Title or Program Title <b>Other X:</b> Reduce # of credits in the program, eliminate all options within the degree and consolidate into one degree, change one core requirement, allow art courses to be used as humanities elective.			
<b>Modified Program Characteristics</b> Name of Program: <b>Visual Arts</b> Degree: Title of Award (e.g. <i>Master of Arts</i> ) <b>AA Visual Arts</b> Certificate <sup>1</sup> : Program Initiation Date: <b>Fall 2015</b> Modality of Program:    On ground*            Online            XCombined If "Combined", % of fully online courses? <b>4%</b> Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): <b>60</b> Other:		<b>Modified Program Credit Distribution</b> # Cr in Program Core Courses: <b>15</b> # Cr of Electives in the Field: <b>12</b> # Cr of Free Electives: <b>33</b> # Cr Special Requirements (include internship, etc.): <b>0</b> <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>27</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>60</b>	
If program modification is concurrent with discontinuation of related program(s), please list for such program(s): Program Discontinued: <b>AA Fine Arts</b> CIP:                      DHE# (if available):                      Accreditation Date: Phase Out Period <b>Two Years</b> Date of Program Termination: <b>May, 2015</b>			
Institution's Unit (e.g. <i>School of Business</i> ) and Location (e.g. <i>main campus</i> ) Offering the Program: <b>Main Campus - majority</b> Other Program Accreditation: <ul style="list-style-type: none"> <li>• If seeking specialized/professional/other accreditation, name of agency and intended year of review:</li> <li>• If program prepares graduates eligibility to state/professional license, please identify:</li> </ul> (As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)			

<sup>1</sup> 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*

Institutional Contact for this Proposal: Annie Joly	Title: Program Coordinator, Fine Arts	Tel.: 860 932-4102 e-mail: ajoly@qvmc.commnet.edu
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### BOR REVIEW STATUS *(For Office Use Only - please leave blank)*

BOR Sequence Number (to be assigned):	
Approved 2010 CIP Code No. <sup>2</sup> (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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<sup>2</sup> 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.

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## 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)

### Change degree name from AA Fine Arts to AA Visual Arts

Currently, students graduating in the department receive an AA degree in Fine Arts.

This degree name does not accurately reflect courses that we have been offering including; Graphic Design I & II, Web Design, Illustration I, Computer Animation, Introduction to Computer Graphics, Advanced Computer Graphics, and Digital Video Editing.

A more inclusive, accurate and up to date name for the degree is **Visual Arts**, which encompass all of the courses we offer including fine arts courses (Drawing, Painting, Sculpture, Ceramics, Printmaking) the above graphics courses and photography.

### Eliminate all options within the degree and consolidate into one degree

Currently there are 66 credits in the degree. Since the implementation of this credit increase (2011) there has been a decline in declared majors and graduates in the program. It is now impossible to finish the degree in two years. Bringing it back to 60 credits would most likely help to increase retention rates and the number of declared majors.

### Restructuring of three program Options into one

Presently there are three options within the parent Fine Arts major: Fine Art Option, Graphic Arts Option and a Photography Option. Within each option each student must currently take five core courses (common to all the options) and a prescribed track within their option, plus one art elective. If a student wishes to take more than one course outside of their option they will not gain credit for that course towards their degree, unless a substitution is given at the time of the graduation audit.

This has been problematic for the department for several reasons. First, this forces students into deciding to pursue a specific track, which can be limiting. It is customary that students enrolled in a four-year art program are not required to elect a major area until first semester junior year, or earliest second semester sophomore year.

Second, it reduces class enrollment size since the eligible pool of students in the department that are required to take a particular course (in that option) are much smaller.

Also, with a decline in enrollment, we have had many required courses for these tracks cancelled due to low enrollment, the result being that students have had to substitute classes outside of their option.

By consolidating the Degree options into one degree in Visual Arts, students focused in a particular direction will STILL have the ability to do so by simply choosing those courses 'on the menu'. Consolidating the program will decrease the numerous amounts of substitutions that are a result of classes not filling and students having to scramble for another class. It will also significantly streamline the advising and graduation process.

### Add and delete core required classes

Add **ART 122 Three-Dimensional Design** as a core course within the program. Delete **ART 109 Color Theory** (added in 2011) in the required core. Research shows many more schools require a 3-d Design component to their core over Color Theory.

### ART, DGA and GRA courses allowed for humanities elective credits

Currently students are required to take nine credits of humanities courses as part of their General Education component but are not allowed to take any Art (ART), Digital Graphic Arts (DGA) or Graphic Arts (GRA) classes to fulfill their humanities elective requirements (and LAS requirements) other than one Art History class. Many of our students wish to enroll in both of the Art History courses and occasionally other studio classes that we offer, but currently do not obtain credit toward their major to do so. Eliminating this (while still keeping the LAS elective restriction) would increase enrollment in art courses and offer more flexibility among humanities options and decrease substitutions. Art should be part of any humanities option.

## CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

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) 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?**

Since we are not expanding the program, resources and faculty will remain the same. Curriculum will remain the same and students enrolled in the program will complete the standard five core courses (with one change to the core as proposed) yet have more flexibility. This will help with retention, enrollment, transfer options and overall health of the program.

QVCC is the only institution offering this type of program in this area of northeast Connecticut. Students would have to drive a considerable distance to enroll in a similar program at a four-year institution. Our competition includes Rhode Island School of Design, University of Hartford, UConn, and ECSU at a fraction of the cost. Our students are finding that QVCC is a viable alternative for the first two years before transferring to a four-year institution to pursue their Bachelor's degree.

**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)**

Presently, there are no set transfer agreements with BOR institutions. However, many of our graduates have gone on to transfer to ECSU. Specific courses through the TAP are either completed or targeted, but do not hinge on this approval.

**Please indicate what similar programs exist in other institutions within your constituent unit <sup>3</sup>, and how unnecessary duplication is being avoided.**

This program offers an excellent alternative in terms of duplication of the first two years (generally referred to as the foundation years) at a four-year art college or university art department. Three Rivers Community College offers a similar degree. Unnecessary duplication is avoided as courses at QVCC are different. We offer students an excellent introduction into several areas such as Illustration, Animation, Digital Video, Computer Graphics & Printmaking. Also, TRCC is a considerable driving distance for many of our students.

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

Most of our students in the art program go on to pursue a four-year degree (BA or BFA). This is highly encouraged, as prospective employers (and members of the Art Advisory Board) attest to the fact that students who hold a bachelors degree are more eligible to secure employment, especially in the areas of graphic arts and teaching. However, we do, on occasion have students who upon completing an internship, have secured employment as a result.

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<sup>3</sup> Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

**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.*

Admissions requirements (open) will remain the same. Total number of credits will reduce to 60 from the present number of 66. Mode of delivery will remain the same. The institution is supportive of these changes due to the fact that numerous substitutions have had to be performed at the time of graduation audit due to students not being able to fulfill the curriculum requirements of their current Option track.

See above for summary details and rationale of modifications:

- **Program name change from Fine Arts to Visual Arts**
- **Reduction of required degree program credits from 66 to 60**
- **Restructuring of three program Options into one**
- **One addition and one deletion of core Art Department required classes**
- **ART, DGA and GRA courses allowed for humanities elective 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)*

No additional resources required. Library resources remain the same.

**Other Considerations**

N/A

## Previous Three Years Enrollment and Completion for the Program being Modified

ACTUAL Enrollment	First Term, Year 2012-2013		First Term, Year 2013-2014		First Term, Year 2014-2015	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers						
New Students	11	5	17	10	20	6
Returning Students	29	41	18	33	18	26
ACTUAL Headcount Enrollment						
ACTUAL FTE per Year						
Size of Credentialed Group for Given Year	Total year: 86		Total year: 78		Total year: 70	

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

Curriculum Details for a Program Modification <i>(to be use as appropriate for specific modification request)</i> <sup>4</sup>						
Course Number and Name <sup>5</sup>	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>				<b>Other Related/Special Requirements</b>		
ART*111 Drawing I	1,4,5,6,7	none	3			
ART*121 Two –Dimensional Design	1,3,4,5,6,7	none	3	33 credits of General Education core		
ART*122 Three –Dimensional Design	1,2,3,4,5,6,8	none	3			
DGA*111 Introduction to Computer Graphics	1,2,3,4,5,6	none	3			
ART*101 Art History I or ART*102 Art History II	5,7,8,9	none	3			
<b>Core Course Prerequisites</b>				<b>Elective Courses in the Field – Choose 12 credits</b>		
				ART*131 Sculpture I		3
				ART*161 Ceramics I		3
No perquisites for all core courses				ART*151 Painting I & ART*152 Painting II		3
				ART*167 Printmaking I		3
				DGA*212 Advanced Computer Graphics		3
				GRA*151 Graphic Design I & GRA*252 Graphic Design II		3
				GRA*221 Illustration I		3
				GRA*271 Computer Animation I		3
				ART*141 Photo I & ART*142 Photo II		3
				ART*241 Photography Workshop		3
				GRA*230 Digital Imaging		3
				DGA*283 Digital Video Editing		3
				DGA*240 Web Design		3
				ART* 293 Internship in Art		3
				ART*296 Advanced Studio		3
<b>Total Other Credits Required to Issue Modified Credential</b>						

<sup>4</sup> 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.

<sup>5</sup> Make any detail annotations for individual courses as needed to understand the curricular modifications taking place

## CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

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

1. Effectively utilize the fundamental elements of design such as color, composition, line, form, texture, value and space.
2. Demonstrate a competency in skills, procedures and techniques necessary, including dexterity with both manual and/or digital tools to complete their projects.
3. Demonstrate the ability to conceptualize ideas into a visual representation.
4. Demonstrate the ability to follow a creative project from conception to completion.
5. Demonstrate desirable work habits, creative thinking and the ability to solve problems.
6. Effectively critique one's own work and the work of others.
7. Demonstrate an appreciation of the relationships of works of art in relation to culture and human experience.
8. Demonstrate an ability to address art and design in an interdisciplinary context.
9. Demonstrate an ability to develop complex and sophisticated ideas through independent research.

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## 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)

N/A

# CT Board of Regents for Higher Education

Modification of an Accredited Program **PRO FORMA** <sup>1</sup> **BUDGET** 1/20/12

Institution

QVCC

Date

2/11/2015

Proposed Program

AA Visual Arts

PROJECTED Enrollment	First Term Year 1		First Term Year 2			
	Full Time	Part Time	Full Time	Part Time		
Internal Transfers (from other programs)						
New Students (first time matriculating)	23	5	26	4		
Continuing (students progressing to credential)	20	6	23	6		
Headcount Enrollment	43	11	49	10		
<b>Total Estimated FTE per Year</b>						

PROJECTED Program Revenue	Year 1		Year 2			
	Full Time	Part Time	Full Time	Part Time		
Tuition (Do not include internal transfers)	\$166,238	\$21,604	\$189,434	\$19,640		
Program-Specific Fees	\$15,480	\$3,960	\$17,640	\$3,600		
Other Rev. (Annotate in text box below)						
<b>Total Annual Program Revenue</b>	\$207,282		\$230,314			

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

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

Please provide any necessary annotations:

Revenue: Assuming FY15 tuition of \$1,933/semester F/T and \$982/semester P/T (6 cr.) plus \$90 in studio fees.

Expenditures: QVCC is proposing to combine the existing three Fine Arts degree program options into simply one Visual Arts degree. Since there will not be an increase in the amount of courses offered, there will be no additional costs associated with this program consolidation.

<sup>1</sup> 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****Termination of the Child Development Associate (CDA) Certificate at Manchester Community College.****BACKGROUND**Summary

The CDA Certificate at MCC started in 1997 through a grant from the Hartford Foundation for Public Giving. At that time, institutions offering childcare were required to employ personnel with at least twelve college credits. The CDA program offered a directed twelve-credit certificate focused on early childhood education. This program provided an important credential for almost eighteen years. Recent changes, and upcoming changes, will require state funded early childhood education centers to employ practitioners with a minimum of an associate's degree.

Need for the Program

Given the above-mentioned changes to state requirements the CDA certificate no longer offers students a way to obtain work or improve their earning power.

Curriculum

ECE* 222	Methods and Techniques in Early Childhood Education
ECE* 103	Creative Experiences/Children
ECE* 290	Student Teaching I
ECE* 291	Student Teaching II

Students

Enrollment was strong during the first ten years of the certificate's existence, but has been in steady decline over the past five years. Last spring a decision was made not to accept any new students in the program. Only five students had applied and only three were eligible. Those three students were advised to enroll in the associate's degree program. All six students remaining in the program will graduate at the end of the Spring 2015 semester.

Faculty

Current faculty will teach exclusively in the Early Childhood Education, A.S. degree program. In the past the program coordinator taught twelve credits per academic year exclusively in the CDA certificate courses.

Learning Resources

CDA courses were taught in the Early Childhood Education (ECE) classroom/lab using the same equipment used in the Early Childhood Education, A.S. courses.

Facilities

Termination of the CDA Certificate program frees up the Early Childhood Education classroom for other courses, such as English and First Year Experience, that are traditionally run in smaller classrooms. The ECE classroom seats twenty-four students.

Fiscal Note

Termination of the program saves Manchester Community College approximately \$32,000.00 in adjunct salaries and benefits.

Review of Documents:

- a) Campus Review

All groups at the College approve of the termination of this certificate. It was proposed by the Early Childhood Education department, approved in its Academic Division and supported by both the Provost and President at MCC.

- b) Campus Budget and Finance
- c) Campus President
- d) Academic Council
- e) System Office

Accreditation:

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

APPLICATION FOR DISCONTINUATION OF EXISTING PROGRAM (Public Higher Education Institutions) – 03/03/15

## SECTION 1: GENERAL INFORMATION

<b>Institution:</b> Manchester Community College		<b>Date of Submission to BOR Office:</b>	
Discontinued Program: Child Development Associate Certificate		CIP: 190709	DHE# (if available):
Date: March 3, 2015		Accreditation	
Phase Out /Teach Out Period Spring 2015 Expected Date of Program Termination Fall 2015			
<b>Program Characteristics</b>			
Name of Program: Child Development Associate			
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: Social Science, Hospitality and Culinary Arts Division, Manchester			
<b>Institutional Contact for this Proposal:</b> Christopher M. Paulin		<b>Title:</b> Director	<b>Tel.:</b> 860.512.2752 <b>e-mail:</b> cpaulin@manchestercc.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)	

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

APPLICATION FOR DISCONTINUATION OF EXISTING PROGRAM (Public Higher Education Institutions) – 03/03/15

## 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 Child Development Associate Certificate (CDA) was created with the help of a grant from the Hartford Foundation for Giving in 1997. It served to enhance skills of individuals currently working in childcare. The students in the certificate program were either already employed or volunteered on a regular basis in childcare. The certificate program was fully enrolled for the first ten years of its tenure, generally graduating approximately 20 students per year. Over the last eight years the program has been in gradual decline and has become costly to run. In order to gain new employment students are recommended to enroll in the Early Childhood Education, A.S. Degree which is a state priority for workforce preparation. The CDA Certificate no longer provides workforce preparation.

### 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.)*

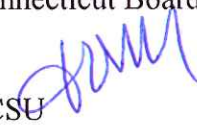
Realizing the declining enrollment, a decision was made not to bring in any students to the certificate in Spring 2014 in preparation for Fall 2015. Only five students had applied and only three were eligible. These students were steered into the A.S. degree. The six students currently enrolled in the certificate program will all graduate in May 2015. No Phase Out/Teach Out strategy is necessary.



Central Connecticut State University

**MEMORANDUM**

**TO:** Dr. Gregory W. Gray  
President, Connecticut Board of Regents for Higher Education

**FROM:** Jack Miller  
President, CCSU 

**DATE:** April 17, 2015

**RE:** Promotion and Tenure

I am pleased to present my recommendations for instructional faculty promotion and tenure to be effective with the Academic Year 2015-16. This letter certifies that, to the best of my knowledge, there is nothing in the background of the candidates that would prove to be an embarrassment to the Board of Regents. Also submitted is a short paragraph highlighting each candidate's qualifications for promotion and/or tenure.

To Professor

Krishna Saha, Mathematical Sciences  
Ravindra Thamma, Manufacturing and Construction Management  
Lisa Frank, Finance  
Kathy Czynnik, Finance  
Henry Greene, Marketing  
Mary McCarthy, Accounting  
Burlin Barr, English  
Beth Merenstein, Sociology  
Kimberly Kostelis, Physical Education and Human Performance  
Julia Kara-Soteriou, Reading and Language Arts  
Cara Mulcahy, Reading and Language Arts

To Associate Professor

Marian Anton, Mathematical Sciences  
Xiaobing Hou, Computer Electronics and Graphics Technology  
Namhun Lee, Manufacturing and Construction Management  
Edward Moore, Engineering  
Fu-Shang Wei, Engineering  
Scott Bartley, Theatre  
Susan Koski, Criminology and Criminal Justice  
Christina Robinson, Economics  
Jason Melnyk, Physical Education and Human Performance

To Assistant Professor

Karen Santoro, Mathematical Sciences

To Coach II

Jennifer Prozzo

Greg Shell

The following will be granted tenure:

Khaled Hammad, Engineering

Xiaobing Hou, Computer Electronics and Graphics Technology

Edward Moore, Engineering

Talat Salama, Manufacturing and Construction Management

Karen Santoro, Mathematical Sciences

Fu-Shang Wei, Engineering

Matthew Martin, Physical Education and Human Performance

Jason Melnyk, Physical Education and Human Performance

Scott Bartley, Theatre

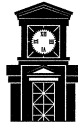
Susan Koski, Criminology and Criminal Justice

Mary McCarthy, Accounting

Mark Cistulli, Management Information Systems

JM/rp

Attachments




EASTERN CONNECTICUT STATE UNIVERSITY

A Liberal Education. Practically Applied.

*Office of the President*

DATE: April 16, 2015

TO: Dr. Gregory Gray  
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 24, 2015.

To the best of my knowledge, I hereby certify that there is nothing in the background of the candidates that would prove to be an embarrassment to the Board of Regents.

**For Tenure:**

Dr. W. Dickson Cunningham, Environmental Earth Science Department  
Ms. Tracy Sutherland, Library Services

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

Dr. W. Dickson Cunningham, Environmental Earth Science Department  
Dr. Melanie Evans, Psychology Department  
Dr. Alita Cousins, Psychology Department  
Dr. Daniel Donaghy, English Department  
Dr. Bonsu Osei, Mathematics & Computer Science Department  
Dr. Weiping Liu, Business Administration Department  
Dr. Joel Rosiene, Mathematics & Computer Science Department

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

Ms. Janice Wilson, Library Services  
Mr. Bruce Johnston, Library Services

**For Promotion to the rank of Associate Librarian in rank order:**

Ms. Tracy Sutherland, Library Services

**For Promotion to the rank of Athletic Trainer IV in rank order:**

Ms. Julie Alexander, Athletics

**For Promotion to the rank of Coach IV in rank order:**

Ms. Katherine Manizza, Athletics

**For Promotion to the rank of Coach III in rank order:**

Mr. Greg DeVito, Athletics

Mr. Christian D'Ambrosio, Athletics

Ms. Christine Hutchison, Athletics

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, 2015

Dr. Gregory Gray  
President, Board of Regents for Higher Education  
Connecticut State Colleges and Universities  
39 Woodland Street  
Hartford, CT 06105-2237

Dear Dr. Gray:

The following are my recommendations for Promotion and Tenure, which will be effective August 24, 2015:

**TENURE**

Wendeline Hardenberg (Library Services)  
Klay Kruszek (Mathematics)  
Lynn Kwak (Marketing)  
William Lunn (Exercise Science)  
Kelly Mabry (Communication Disorders)  
Theresa Marchant-Shapiro (Political Science)  
Helen Marx (Elementary Education)  
Michael Mink (Public Health)  
Gregory Robbins (Management/MIS)  
Kari Sassu (Counseling & School Psychology)  
Todd Schwendemann (Physics)  
Jeffrey Webb (Chemistry)

**PROMOTION**

**From Assistant to Associate Professor:**

Adiel Coca, (Chemistry)  
William Lunn (Exercise Science)  
Kelly Mabry (Communication Disorders)  
Theresa Marchant-Shapiro (Political Science)  
Helen Marx (Elementary Education)  
Kari Sassu (Counseling & School Psychology)  
Todd Schwendemann (Physics)

**From Associate to Full Professor:**

Mark Cameron (Social Work)  
Kevin Colwell (Psychology)  
Matthew Enjalran (Physics)  
Adam Goldberg (Elementary Education)  
Andrew Smyth (English)  
Daniel Swartz (Exercise Science)

Dr. Gray  
April 15, 2015  
Page two

**Promotion to Athletic Trainer III:**  
Allison Dale

**Promotion to Coach II:**  
Nathan Cole  
Mathew Hurst

**Promotion to Coach III:**  
Michael Makubika

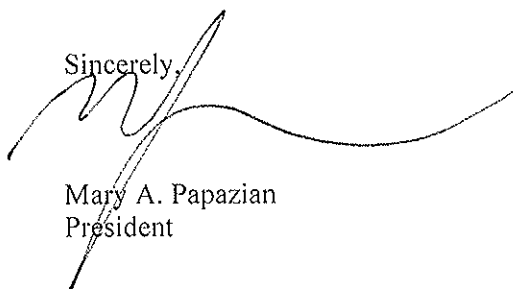
**Promotion to Coach IV:**  
Michael Donnelly  
Melissa Stoll  
John Wallin

**Promotion to Associate Librarian:**  
Wendeline Hardenberg

**Promotion to Librarian:**  
Jacqueline Toce

Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mary A. Papazian', with a long, sweeping horizontal line extending to the right.


Mary A. Papazian  
President

cc: J. Bailey, SCSU Chief of Staff  
B. Bergeron, SCSU Provost and Vice President for Academic Affairs



OFFICE OF THE PRESIDENT  
JAMES W. SCHMOTTER, PH.D

**To:** Gregory W. Gray  
President, Board of Regents for Higher Education  
Connecticut State Colleges and Universities

**From:** James W. Schmotter 

**Date:** March 25, 2015

**Re:** Promotion & Tenure Recommendations

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I support and concur with Provost Jane Gate's recommendations that the following faculty members receive promotion and tenure:

***Promotion to Associate Professor***

Jamie Begian  
Jay Brower  
Linda Warren

***Promotion to Professor***

Galina Bakhtiarova  
Daniel Barrett  
Robyn Housemann  
Joshua Rosenthal

***Tenure***

Jay Brower  
Mohinder Dugal  
Linda Forbes  
Nicholas Greco  
James Greene  
Becky Eide Hall  
Catherine O'Callaghan  
Linda Warren

c: F. Cratty, Assoc. VP for Human Resources  
J. Gates, Provost/VP for Academic Affairs  
W. Petkanas, P&T Committee Chair



PROVOST/VICE PRESIDENT FOR ACADEMIC AFFAIRS

March 31, 2015

Dr. Estela Lopez  
Interim Provost and Senior Vice President  
Academic & Student Affairs  
Board of Regents for Higher Education  
39 Woodland Street  
Hartford, CT 06105  
Tel: 860-723-0058  
Email: [LopezE@ct.edu](mailto:LopezE@ct.edu)

Dear Dr. Lopez,

The information presented in this document was collected and abstracted from documents approved by the DEC, Deans and the University Promotion and Tenure Committee in support of the 2015 promotion and tenure decisions. Please contact me should you need additional information.

Sincerely,

Jane McBride Gates, Ph.D.  
Provost and Vice President for Academic Affairs

c: Maureen McClay



OFFICE OF THE PRESIDENT  
JAMES W. SCHMOTTER, PH.D

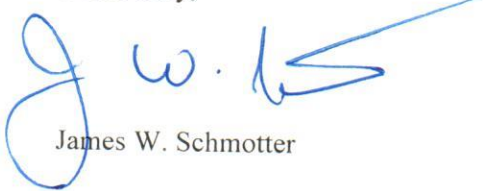
April 2, 2015

Gregory W. Gray  
President  
Board of Regents for Higher Education  
Connecticut State Colleges and Universities  
39 Woodland Street  
Hartford, CT 06105

Dear Dr. Gray:

The decision to grant promotion or tenure is one that is of central importance to Western Connecticut State University, where the quality of education is dependent upon the strength of the quality of the individuals appointed as members of the faculty. I, hereby certify to the best of my knowledge, following a rigorous and effective review process, that there is nothing in the background of the candidates that provide evidence of moral turpitude.

Yours truly,



James W. Schmotter

**ITEM**

Approval of Nomination for Honorary Degrees

**RECOMMENDED MOTION FOR FULL BOARD**

RESOLVED, That the nominee for an honorary degree, as presented below, be approved according to the guidelines in the Board policies presently in effect granting honorary degrees to honor a person for unusual and exemplary accomplishments and to advance the work and reputation of the Connecticut State Colleges and Universities

**BACKGROUND**

Granting of Honorary Degrees will be conferred at commencements. Identification of recipients is under the supervision of the presidents, with approval of the Academic & Student Affairs Committee and confirmation of the Board of Regents. The candidate below has been recommended by the college president and approved by the Academic & Student Affairs Committee for conferral of an honorary degree at commencement.

**ANALYSIS**

Additional Honorary Degree Nominations for 2015 Commencement:

Institution	RECIPIENT	Commencement Date
Three Rivers Community College	Jeffrey R. Godley	May 29, 2015

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**Three Rivers Community College****Jeffrey R. Godley**

Three Rivers Community College nominates for an honorary associate degree Mr. Jeffrey R. Godley. Mr. Godley practices in the area of residential and commercial real estate, banking law that includes commercial litigation and foreclosures, municipal law, and planning and zoning law. He is a graduate of Western New England College School of Law where he served as Managing Editor of the Western New England Law Review. He has authored "Defining the CIA's Intelligence Sources as an Exemption to the Freedom of Information Act - CIA v. Sims, 471 U.S. 159 (1985)", 9 Western New England Law Review 333 (1987). He has previously served as a legal research clerk for the Connecticut Judicial Department until joining Brown Jacobson in 1989.

Mr. Godley is a public member, representing the State of Connecticut, of the Commission on Institutions of Higher Education, New England Association of Schools and Colleges. He is Legal Counsel for, and an ex officio member of the Board of Directors of The Chamber of Commerce of Eastern Connecticut, Inc. He is past President, of the Three Rivers Community College Foundation, a past member of the Executive Board of the Connecticut Rivers Council, Boy Scouts of America, and a Corporator of Chelsea Groton Bank. In 2006 Mr. Godley received the National

Distinguished Service Award from the Boy Scouts of America and in 2013 the Connecticut Rivers Council, Boy Scouts of America, presented him with their Outstanding Leadership Award.

Mr. Godley has long been active in a number of professional organizations, including the Connecticut Bar Association (Past Member House of Delegates and Board of Governors), New London County Bar Association and Mashantucket Pequot Bar Association (Treasurer). His noteworthy leadership, ability to inspire our youth and unwavering commitment to our community sends a strong message of responsibility beyond self-interest.

04/24/2015 – Academic & Student Affairs Committee

05/21/2015 – Board of Regents

**CT BOARD OF REGENTS FOR HIGHER EDUCATION**

**RESOLUTION**

concerning

Establishment of a Middle College

April 24, 2015

RESOLVED: That the Management Operation Agreement between the Board of Regents on behalf of Capital Community College and the Hartford Board of Education for the Capital Community College Magnet Academy be approved.

A True Copy:

---

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



**ITEM**

Establishment of a Middle College

**BACKGROUND**

At the October 2014 meeting of the Board of Regents (BOR) the Regents authorized Capital Community College (CCC) to continue discussions with the Hartford Public Schools Board of Education (HPS) on the establishment of Capital Community College Magnet Academy (CCCMA). Discussions between CCC and HPS have resulted in the attached Management Operation Agreement outlining the operational and financial terms for CCCMA. The agreement has been reviewed and approved by the System Office.

Upon approval of the agreement, Capital Community College Magnet Academy will be located and operate at Capital Community College. The middle college will be an inter-district magnet school under the Milo Sheff vs William A. O'Neil stipulation and proposed order, dated December 13, 2013.

CCCMA serves students in the eleventh and twelfth grades. The academy is designed with a theme of "Community Engaged Learning" which strives to encourage students to think of themselves as members of a multicultural society whose vitality and health depends upon individuals who care about the community.

CCCMA is designated as an inter-district magnet Sheff School. The purpose of an inter-district magnet school is to reduce, eliminate or prevent racial, ethnic or economic isolation of public school students, while offering a high-quality curriculum that supports educational improvement. Overall, CCCMA's goal is to provide students with personalized and innovative learning in an early college high school environment on the campus of Capital Community College, which supports students from diverse backgrounds in developing the goals, values, self-discipline, work habits, academic and life skills needed to achieve personal success and to become engaged citizens for the good of the community and society at large.

**ITEM**

Accreditation of the Health Information Management Bachelor of Science program at Charter Oak State College.

**BACKGROUND**Summary

The Health Information Management program was licensed in 2012. Charter Oak will have students graduating from the program as early as this summer, but definitely in the fall; therefore it is necessary to have the program accredited.

Need for the Program

The program was developed in response to need determined by, and with hired a grant funds from, the Connecticut Department of Higher Education, the Department of Public Health and the Office of Workforce Competiveness. The need was reinforced by a marketing study Charter Oak had commissioned.

Currently there are 69 students in the program. Enrollment will continue to grow once the program receives its national accreditation from CAHIIM. Additionally, Charter Oak has articulation agreements in place with the various health information technology programs, coding programs, etc. at the community colleges. The field of Health Information Management is growing as all health facilities are moving to electronic health records.

Curriculum

The curriculum combines health related courses, a foundation in the sciences, a foundation in information technology, with management courses. A couple of adjustments were made to the curriculum to better align it with the community college programs and the national standards. The curriculum was developed in be in alignment with the national standards. It is 121 credits. It meets the liberal arts and general education requirements.

We have practicum agreements with Middlesex Hospital, Hartford Hospital and Yale Hospital. Additional agreement will be secured based on student need.

Students

Currently there are 69 students in the program.

Faculty

CAHIIM requires that we have one full time person with the requisite credentials as the program director and a second full time person that has some responsibilities for the program, but doesn't need to be full time in the program. Both are full time administrators with teaching responsibilities. The Director oversees the program and is responsible for the curriculum, accreditation, supervising the faculty, recommending faculty for hiring, and evaluating faculty. The Assistant Director is responsible for advising students, teaching in the program, assisting the coordinator in the management of the program. However, he has other teaching responsibilities as well. The faculty who teach in the program are all adjuncts as are all of our faculty. They all have the credentials for the courses they teach and all have gone through our standard recruitment, hiring, and evaluation process.

Learning Resources

Library and tutoring services are in place.

Facilities

NA

Fiscal Note

The program was financially solvent for this year and should continue to be solvent. Program development was paid for by the grant.

Review of Documents:

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

Accreditation:

The program went through the substantive change process with NEASC. The campus visit was held. Final action from NEASC is this spring. CAHIIM visit is scheduled for July 30,31, 2015.

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## SECTION 1: GENERAL INFORMATION

<b>Institution:</b> Charter Oak State College	<b>Date of Submission to BOR Office:</b> 02/15/2015	
Most Recent NEASC Institutional Accreditation Action and Date: November 21, 2011		
<b>Program Characteristics</b> Name of Program: <b>Health Information Management</b> Degree: Title of Award (e.g. Master of Arts) <b>BS</b> Certificate: (specify type and level) <b>NA</b> Date of Program Initiation: <b>Fall 2012</b> Anticipated Date of First Graduation: <b>Fall 2015</b> Modality of Program:    On ground <input checked="" type="checkbox"/> Online    Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): <b>121</b>	<b>Program Credit Distribution</b> # Cr in Program Core Courses: <b>37</b> # Cr of Electives in the Field: <b>39</b> # Cr of Free Electives: <b>12</b> # Cr Special Requirements (include internship, etc.): <b>3</b> <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>121</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>121</b>	
CIP Code No. <b>51.0706</b> Title of CIP Code <b>Health Information Administrator</b>		
Institution's Unit (e.g. School of Business) and Location (e.g. main campus) Offering the Program: <b>Charter Oak State College Online</b>		
Program Accreditation: If seeking specialized/professional/other accreditation, name of agency and intended year of review: <b>CAHIIM - (Commission on Accreditation of Health Informatics and Information Management)</b> Intended year to seek accreditation will be <b>Fall 2014</b> .  CAHIIM standards can be found online at <a href="http://www.cahiim.org/Files-Standards/2012_HIM_Bacc_Stndrds_elec.pdf">http://www.cahiim.org/Files-Standards/2012_HIM_Bacc_Stndrds_elec.pdf</a>  • If program prepares graduates eligibility to state/professional license, please identify: <b>Registered Health Information Administrator (RHIA)</b>		
<b>Institutional Contact for this Proposal:</b> Dr. Emily Lewis	<b>Title:</b> Academic Dean	<b>Tel.:</b> 860-515-3860 <b>e-mail:</b> elewis@charteroak.edu

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

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

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

## SECTION 2: UPDATE OF PROGRAM CHANGES AND ENROLLMENTS

### Program Outline

The Health Information Management major provides students with an understanding of medical science, patient information management, information technology and business management that make up this allied healthcare profession. The total number of credits for this degree is 121. Courses are arranged in two groups: HIM Foundation courses and HIM major courses. This division establishes a background in fundamentals before more advanced subject matters are studied. Students are required to take a practicum. To be admitted to the program, students must have at least 9 college credits with a 2.0. Charter Oak requires the Cornerstone course and Capstone course for all students. The major is designed for ease of transfer from associate degree programs.

### Curricular and Other Program Changes

Subject matter experts were engaged to develop the HIM program and individual courses. Further, when the current Program Director was hired in September 2013, the entire curriculum was re-evaluated against the CAHIIM requirements and some changes were made to ensure that all CAHIIM standards would be met. Based on the evaluation, the following improvements were made:

1. HIM 210 Medical Billing and Coding I was divided into two courses, adding HIM 211 Medical Billing and Coding II, in order to cover detailed, lengthy and complex material at a better pace for student success
2. HCA 311 Healthcare Economics was eliminated. This course is not required for HIM curriculum and it was removed to make room for HIM 211 (mentioned above).
3. HIM 420 Health Care Research and Quality was redeveloped to better reflect CAHIIM standards and to prepare students for the RHIA exam
4. HIM 498 Health Information Practicum was added. CAHIIM requires a practicum that can include virtual experience but must also include some live HIM experience at a healthcare facility.
5. HCA 115 Medical Record Science was changed to HIM 115 Principles of Health Information Management to reflect modern terminology. The course was also revised to ensure it reflected a thorough introduction to the HIM profession.

### Compliance with Special Requirements Given at the time of Program Licensure

NA

### Other Narrative Background to be Considered Since Licensure

Since the BOR license approval, the HIM Bachelor of Science program is in Candidacy Status, pending accreditation review by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). CAHIIM accreditation is expected in the field of health information management and employers will expect graduates to pursue the Registered Health Information Administrator (RHIA) credential. The self-assessment has been accepted and the CAHIIM visit team has been identified. They are reviewing the self-assessment and program staff are awaiting word of CAHIIM team visit dates.

When the program was initially being developed, CAHIIM required only one full-time program director. Frank Valier was hired in that role. However, leadership for the HIM major changed in September 2013, based on the need to conform to the new CAHIIM requirements. The CAHIIM requirement necessitates that the HIM program have two full-time employees with a director that has a RHIA credential. Charter Oak hired Cindy Edgerton, MHA, MEd, RHIA, as the Program Director and Frank Valier transitioned to the Assistant Director role. The addition of the Assistant Director role strengthened the program by offering the students continuous advising and the presence of health IT

## CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

expertise in the classroom. Both the director and assistant director have developed HIM courses and teach in the program.

The Program Director reports to the Academic Dean. The director has a combination of administrative and teaching responsibilities. The college allows the Program Director to make decisions regarding program development, course development, curriculum, syllabi and all management of the program. The administration truly looks to the Program Director for her expertise in HIM education and CAHIIM accreditation. The Program Director is expected to lead and manage the program. There is continuous communication between the Program Director and Assistant Director and a formal meeting monthly.

The HIM advisory committee has been expanded to ten members representing six states and a variety of healthcare organizations. Annual meetings have been held in January 2014 and January 2015. Advisory Committee members are included in major decisions regarding the program and they are asked for input regarding program updates and industry trends.

Agreements have been signed with the Harford Hospital system and the Middlesex Hospital system that will allow for professional practice experience for HIM students at over 58 sites. Two additional agreements are pending final signatures. Arrangements will be made for out-of-state students as need arises.

In addition, since Charter Oak is relatively new at offering majors, NEASC required a substantive change review. The substantive change visit occurred in October, the visitor's report has been filed, and the NEASC Board will consider the approval this spring.

Since the beginning of the program, 108 students have enrolled. Of the 108, 23 students have left Charter Oak for the following reasons: 6 academic dismissals, 12 administrative withdrawals, 8 voluntary withdrawals, 2 graduates (in other majors). 64 remain in the HIM program, and 16 have transferred to other programs within Charter Oak.

### Enrollment and Credentialing Information

ACTUAL 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 In	0	0	2	0	0	2
New Students	0	1	4	12	6	21
Returning Students	0	0	7	5	5	19
ACTUAL Headcount Enrollment	0	1	13	17	11	42
ACTUAL FTE per Year	7.7		23.0		Year not yet complete	
PROJECTED FTE (at Licensing)	30		60		90	
ACTUAL-PROJECTED	-22.3		-37		-37 with two terms to go	
Size of First Credentialed Group	NA		Date of Award of First Credential		NA	

# CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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

Details of Curriculum Changes for a Licensed Program <i>(to be used as needed)</i>						
Course Number and Name <sup>1</sup>	L.O. # <sup>2</sup>	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>				<b>Other Related/Special Requirements</b>		
HCA 311 Health Care Economics						
HIM 211 Medical Coding and Billing II	1, 2, 3	See all 4 Below	3			
HCA 115 Medical Record Science						
HIM 115 Principles of Health Info Mgmt	1, 4, 6, 7, 8					
MGT 450 MGT 451 Team Leadership						
HIM 498 Health Information Practicum	All					
HCA 350 Transcultural Competency						
<b>Core Course Prerequisites</b>				<b>Elective Courses in the Field</b>		
BIO 130 Human Biology			4	Recommended – HCA or MGT		12
BIO 212 Anatomy and Physiology			4	<b>Recommended – HCA 350</b>		
BIO 215 Pathophysiology			3			
HCA 105 Medical Terminology			3			
<b>Total Other Credits Required to Issue Credential</b> NA						
<p><b>Other Narrative Background Since Licensure Approval</b> (As needed, consider other changes such as program need and demand, transfer agreements developed, etc.)</p> <p>Since licensure approval, the HIM Program Director and Assistant Director have worked with the community colleges that have the associate's level HIM degree to develop articulations. An articulation with Middlesex Community College and Northwestern Connecticut Community College has been finalized. An articulation with Capital Community College is pending signature. In addition, credential reviews have been conducted for nine HIM-related credentials and credit equivalency has been established for each. This work assists with marketing the program as well as ease of transfer for potential students.</p>						
<p><b>Learning Outcomes</b> - L.O. <i>Upon graduation, health information management students will be able to:</i></p> <ol style="list-style-type: none"> <li>1. Manage and collect patient health information</li> <li>2. Code diagnosis and procedures for reimbursement and billing</li> <li>3. Manage health care organization revenue cycles</li> <li>4. Administer electronic medical/health records systems</li> <li>5. Administer health information exchange systems</li> <li>6. Prepare health informatics reports that doctors, nurses, and other health care providers rely on to deliver quality health care</li> <li>7. Protect the confidentiality and privacy of health records</li> <li>8. Ensure the security of health records</li> <li>9. Supervise HIM professionals</li> <li>10. Prepare HIM financial plans and budgets</li> <li>11. Manage HIM technology projects</li> </ol>						

<sup>1</sup> Modify format as needed. Please use ~~Strikeout~~ text to indicate elimination and **Bold** text to mark the substitution.

<sup>2</sup> Learning Outcome

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

## SECTION 3: ENROLLMENT, CREDENTIALLING AND FINANCIAL CONSIDERATIONS

### Program Resources and Cost Estimates

*Please see the enclosed Resources and Cost Estimates spreadsheet.*

The College has established an annual budget for the HIM program. The program is on track to being self-supporting in 2015-16. There are no more program development costs, the costs of administering the program and the faculty costs are covered by the tuition, and the marketing costs are already built into the marketing budget. If we factor in the students who matriculated at the college and then transferred to other programs, we have a positive balance. Although we have not set tuition for next year, we anticipate it will be around 5%. With a 5% increase and the current pattern of enrollment and retention, the college will have a positive revenue stream. In addition we hope to have our CAHIIM accreditation which will boost enrollment.

The budget sheet shows a small balance for last year due to the Assistant Director's salary being partially offset by non-HIM students taking some of the courses. That will continue, but as the program grows there will be more HIM students taking the courses and probably separate sections for non-HIM students.



**Institution**

Charter Oak State College

**Date**

2/23/2015

**Licensed Program**

Bachelor of Science in Health Information Management

**Note 1:** FY15 is not complete at this reporting time. Actual revenue and expenses are for Fall 2014 only.

**Note 2:** Enrollment consists of registered HIM students at the time.

**Note 3:** FTE is the annual sum of credits taken by HIM students divided by 30.

**Note 4a:** Revenue and fees are for all courses taken by HIM students, including general education courses and electives.

**Note 4b:** Revenue also includes tuition from non-HIM students who took courses from the HIM Program Coordinator.

**Note 5a:** Teaching expenses are pro-rated (e.g., if a course has 50% HIM students, then 50% of the course compensation is allocated to the HIM program).

**Note 5b:** The HIM Program Coordinator salary is a separate line with no portion listed in the "Teaching Faculty" line.

ACTUAL Enrollment	First Term Year 1 Fall 2012		First Term Year 2 Fall 2013		First Term Year 3 Fall 2014	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers	0	0	2	0	0	2
New Students	0	1	4	12	6	21
Returning Students	0	0	7	5	5	19
ACTUAL Headcount Enrollment	0	1	13	17	11	42
ACTUAL FTE per Year	7.7		23.0		Year not yet complete	
PROJECTED FTE (at Licensing)	12		24		36	
ACTUAL-PROJECTED	-4.3		-1.0		NA	
Size of First Credentialed Group	None yet		None yet		None yet	

Actual Program Revenue	Year 1 FY13		Year 2 FY14		Year 3 FY15	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition	\$19,054	\$38,913	\$138,213	\$167,574	\$49,055	\$98,877
Program Specific Fees	\$1,083	\$5,244	\$4,800	\$12,000	\$2,635	\$10,133
Other Rev. (Annotate in text box below)						
ACTUAL Program Revenue	\$64,294		\$322,587		\$160,700	



**ITEM**

New Program: Charter Oak State College-- Masters of Science in Organizational Effectiveness and Leadership

**BACKGROUND**Summary

The M.S. in Organizational Effectiveness and Leadership is a 33 credit graduate-level, online program designed for adults working in supervisory and management level positions in the business and non-profits sectors. Because the program is online, geared to working adults, has a liberal transfer policy, and recognizes prior learning, it continues the tradition and mission of the college. In addition, it puts Charter Oak in the same league as its peer colleges. Since this degree is at a higher level than our current degrees, Charter Oak would have to request substantive change approval from NEASC.

Need for the Program

Charter Oak has conducted a number of needs surveys of its graduates, reviewed job outlook data, and conducted a literature review, all of which confirmed the need for this degree. Employments trends in CT and nationally show professional and managerial jobs increasing and the literature shows that these jobs more and more require graduate degrees.

Curriculum

The curriculum was designed by faculty with doctorates in organizational leadership and non-profit management. It was based on an extensive review of the literature and on similar programs being offered nationally. The program is not designed to be an MBA, but instead focuses on leadership and “people” skills with embedded “hard” skills, such as accounting. The curriculum is composed of a core with two tracks—business or non-profit.

Students

The college will recruit from its own graduates and recruit nationally via online marketing. The target audience is adults who are working in supervisory or management positions in business or non-profits.

Faculty

Faculty will be hired to develop and teach the courses. All faculty will be adjunct and have a doctorate in the subject area being taught. In addition, we will look to hire faculty who have significant work experience, have taught online, and understand adult learning theory. A full time director will be hired to oversee the program, to do the initial advising, etc. Additional staff is planned in the budget as the program grows.

Learning Resources

The college will review its library data-bases to insure that it has the appropriate resources to support the program. Money has been set aside in the budget for library acquisitions, if needed.

Facilities

NA

Fiscal Note

The program is expected to be in the black in year two. Starting any new program requires upfront capital to pay for staff, course development, and marketing. All expenses that are incurred before any tuition revenue can follow. Our Business Office carefully calculated the revenue and expenses. The college has set aside money to cover the start up costs.

Review of Documents:

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

Accreditation:

The program will need to be sent to NEASC for a substantive change.

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**SECTION 1: GENERAL INFORMATION**

<b>Institution:</b> Charter Oak State College	Date of Submission to BOR Office: Approved 6/12/2012 but never went to BOR Academic and Student Affairs Committee. I have updated the data, budget, and name of the degree.
Most Recent NEASC Institutional Accreditation Action and Date: 5 year review in 2011.	
<b>Program Characteristics</b> Name of Program: Master of Science in Organizational Effectiveness and Leadership Degree: Title of Award (e.g. Master of Arts) <b>MS</b> Certificate: (specify type and level) Anticipated Program Initiation Date: Fall 2015 Anticipated Date of First Graduation: Spring 2016 Modality of Program: On ground    Online <input checked="" type="checkbox"/> Combined If "Combined", % of fully online courses? 83% Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): 33	<b>Program Credit Distribution</b> # Cr in Program Core Courses: 24 # Cr of Electives in the Field: 9 # Cr of Free Electives: # Cr Special Requirements (include internship, etc.): <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>33</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>0</b>
Type of Approval Action Being Sought: <input checked="" type="checkbox"/> Licensure    OR <input type="checkbox"/> 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: Academic Affairs -Online	
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)	
<b>Institutional Contact for this Proposal:</b> Shirley M. Adams	Title: Provost  Tel.: 860-515-3836 e-mail: sadams@charteroak.edu

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

BOR Sequence Number (to be assigned):	
Approved 2010 CIP Code No. <sup>1</sup>	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)	

<sup>1</sup> 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.

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**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)*

Charter Oak State College's statutory mission is to "develop and implement programs to improve opportunities in higher education through alternative modes of service, including but not limited to guidance and information services, registration and validation services, examination and degree-granting services, technological delivery systems, and projects of research and development." The College has developed expertise through more than thirty- seven years experience in each of these areas. This has allowed almost 13,500 individuals to earn undergraduate degrees who would not otherwise have completed a college degree, often because of family, job or financial responsibilities.

In fulfilling its mission to provide flexible approaches to higher education, Charter Oak State College recognizes that learning takes place in many forms. The College is one of only a few institutions around the country that have successfully developed an alternative to the traditional higher education model. As a nontraditional college, Charter Oak offers no classroom instruction; instead it is recognized as a key provider of innovative distance learning programs that for more than forty-one years has afforded adults the opportunity to earn undergraduate degrees through a combination of online courses, award of credit for courses taken at other colleges and universities, independent guided study, and a rigorous process of testing and assessment. In providing its students with the opportunity to earn degrees that are equivalent in quality and rigor to those earned at other accredited institutions of higher education, Charter Oak collaborates with and complements the missions of other Connecticut colleges and universities.

Currently, Charter Oak State College awards four degrees: the Associate in Arts, the Associate in Science, the Bachelor of Arts, and the Bachelor of Science. Recently Charter Oak added majors in health care administration, cybersecurity, health information management, business and psychology. The proposal to offer a Master of Science in Organizational Effectiveness and Leadership is a natural extension of Charter Oak's recognized expertise in serving adult learners. This degree fits the non-traditional character of Charter Oak State College by drawing upon students' current knowledge and "real world" experiences while providing in-depth and theoretical knowledge regarding organizational effectiveness. The program is consistent with the statutory charge of the Charter Oak State College, "to confer such certificates and degrees as are appropriate to programs of postsecondary and higher learning and in accordance with the recommendations of the board's faculty of consulting examiners on the basis of examinations and other forms of validation and evaluation of learning, including transfer credit" (Subsection (e) (1) of Sec. 10a-143 of the Connecticut General Statutes). Offering a graduate level degree is an appropriate progression in Charter Oak State College's evolution. In 2009, Charter Oak received legislative authorization to offer master's degrees. Sec. 10a-143c was changed to read:

"There shall continue to be a Board for State Academic Awards which shall be an independent constituent unit of the state system of higher education with authority to grant undergraduate and graduate credits and degrees on the basis of examinations and other forms of evaluation, validation of learning including transfer of credit, and its own courses."

Through the proposed Master of Science in Organizational Effectiveness and Leadership, Charter Oak State College is expanding its efforts to serve working adult students who want and need a flexible program format. In developing its first graduate level program, Charter Oak is responding

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to Connecticut's need for a state of the art knowledge-based workforce.

### 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)*

### Employment Trends

As a program focused on the leadership and change aspects of management, in contrast to the emphasis of traditional MBA programs on management skills, the proposed Master of Science in Organizational Effectiveness and Leadership is designed to provide the competencies needed by managers to improve the effectiveness of their organizations. Charter Oak State College's proposed master's degree addresses the needs of Connecticut's business, public sector and nonprofit workforce for leaders who understand the importance of interpersonal interactions, group and team collaboration, quantitative and qualitative research, and cultural diversity in organizational development and how that understanding helps create an effective organization.

Current research supports the idea that tomorrow's leaders need to be able to "inspire action, be optimistic, have integrity, support and facilitate your team, have confidence, communicate and be decisive." (Peter Economy, published in Inc. [www.petereconomy.com/7-traits-of-highly-effective-leaders/](http://www.petereconomy.com/7-traits-of-highly-effective-leaders/) August 2013.)

It is also reinforced by a study published in the July 30, 2014, Harvard Business Review by Jack Zenger and Joseph Folkman.

#### WHAT LEADERSHIP SKILLS DO YOU NEED MOST?

These competencies were voted the most important for all management positions.



SOURCE ZENGER/FOLKMAN

HBR.ORG

This is further reinforced by Sandra Larson, consultant, who was the Executive Director of Management Assistance Program (MAP) for Nonprofit, Inc. for 14 years. Her skill list includes passion, holder of vision, creativity, intellectual drive and knowledge, confidence and humility, communicator, planner or organizer, interpersonal skills, and other business skills" (dependent on skill set of staff).

<http://managementhelp.org/leadership/traits/leader.htm>

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In 2008, the following basic competency model for “effective” nonprofit leaders was proposed in the Looking Glass Institute Study titled “Nonprofit Leadership Development: A model for identifying growing leaders within the nonprofit sector” conducted by Dewey and Kaye, the 5<sup>th</sup> oldest nonprofit consulting firm.

- Client Focus
- Decision Quality
- Delegation Skills
- Ethics, Integrity and Trust
- Interpersonal Skills
- Managing Vision and Mission
- Motivating Others
- Presentation Skills
- Priority Setting
- Strategic Agility

A report of a poll done by SHRM (the Society for Human Resource Management) in conjunction with the WSJ.com/Careers shows that many soft skills are even more important for experienced workers than for those newly entering the workforce (Klaus, 2010). These skills include “critical thinking/problem-solving, leadership, professionalism/work ethic, teamwork/collaboration and adaptability/flexibility.” When Johnson and Johnson studied 358 randomly selected managers, the best performers had “significantly higher levels of self-awareness, self-management capability, social skills and organizational savvy” (Klaus, 2010). And a 2010 study by the GMAC (Graduate Management Admission Council) reported that MBA graduates were “sorely lacking” in strategic thinking, written and oral communication, leadership and adaptability,” all classified as “soft skills.”

“Soft” skills are necessary at all levels, from entry to top management, and a variety for job areas. For example, *Computerworld’s* 2007 hiring and skills survey showed that IT employers look for new hires who display both the technical skills and a range of soft skills including teamwork, communication, initiative, curiosity and risk-taking (Klaus, 2010). A 2007 study done by the IAAP (International Association of Administrative Professionals) found that 67% of HR professionals would hire an applicant whose soft skills were excellent even though they lacked the technical abilities. On the other hand, only 9 % would hire someone with excellent technical skills who lacked interpersonal skills. And, finally, Dr. Phil Gardner of the Collegiate Employment Research Institute at Michigan State University (2009) reports that employers of college graduates primarily look for the following key abilities when hiring:

- Building professional relationships
- Analyzing, evaluating and interpreting data
- Engaging in *continuous* learning
- Communicating through persuasion and justification
- Planning & managing a project
- Creating new knowledge.

Peter Drucker said “management is doing things right, leadership is doing the right thing. ‘ The Masters in Organizational Effectiveness and Leadership focuses on leadership, not management. It differs from



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a traditional MBA in that an MBA prepares a person for management; whereas the MS in Organizational Effectiveness and Leadership prepares a person for leadership (adapted from Clarke University).

MBA Focus		MOE Focus
Management		Leadership
Quantitative		Qualitative
Controlling & Maintaining		Empowering & Changing
Traditional		Contemporary
Structures / Processes		People / Relationships
Hard Skills		Soft Skills

The Connecticut Department of Labor data for 2012-2022 shows a growth of 12-13% in the categories that are closely aligned to management areas. Professional and managerial jobs increasingly require master's level education.

While national job growth currently is virtually non-existent with the labor market contraction following the economic downturn, ten-year projections are optimistic, especially for managerial and professional occupations. The Bureau of Labor Statistics (BLS) Employment Projections (December 2009) report a projected increase of 10.6% in "Management, business, and financial occupations" and 13.8% in "Professional and related occupations," the two categories most likely to describe the MSOE graduates. The BLS also projects the highest job growth in health care/social services and professional and business services jobs between 2008-2018. In addition, according to the Nonprofit Employment Trends Survey 2013, prepared by Nonprofit HR Solutions and the Improve Group, 44% of the non-profits plan to expand staff in 2014. (Nonprofits make up 10% of the nation's workforce.) Most of the growth will be in program management and support and fundraising. There is also a 17% turnover rate at the lower level and a 21% at the mid-management level which will allow for people to enter into the field.

In addition, many people, who do not have graduate degrees, are promoted into management level positions. This degree will give them credit for college-level learning already mastered making their graduate degree easier to attain.

### Student Demand

In fall 2000, Charter Oak State College conducted a survey of its graduates to assess the potential student interest in pursuing an online master's degree program and to determine what programmatic areas were of primary interest to these potential students. Approximately 75% of the respondents indicated that they would be interested in earning a master's degree from Charter Oak. Of these respondents, 83% expressed an interest in an online degree. In addition, the survey identified the primary areas of potential student interest as business management, health professions and interdisciplinary studies. In spring 2004, Charter Oak State College conducted an online survey of its current students and alumni to assess interest in the proposed Masters of Science degree. Responses

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were received from 654 students and alumni with over 57% (377) saying they were interested in the degree. Of the 43% who said they were not interested, most had already earned a master's degree or wanted a degree in a different area. Nonetheless, many of those students wrote notes encouraging Charter Oak State College to offer master's level degrees and gave suggestions for other fields of study. Charter Oak conducted another study of its graduates in 2009 and once again found great interest in the master's degree. A total of 291 (73.9% of the respondents) seniors and recent graduates indicated that they would be interested in the proposed master's degree. Through its focus on management in business in the public and the nonprofit sectors, the proposed Master of Science in Organizational Effectiveness and Leadership addresses the areas of greatest interest identified by Charter Oak State College's graduates. Charter Oak continues to receive requests to offer a master's degree. As an interdisciplinary program, it provides knowledge and competencies in the fields of business, organizational communication, psychology, and ethics, as well as computer skills necessary for decision-making.

- 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?

Charter Oak State College's currently fulfills its mission to provide "diverse and alternative opportunities for adults to earn degrees" through the associate and bachelor's degree programs in a variety of disciplines offered by Charter Oak State College. As part of its long-range planning, the previous Board (BSAA) recognized the need to expand the range of its degree offerings to the graduate level in order to fully address its statutory mission for a workforce which continues to require more education. In response to this identified need, Charter Oak State College began exploring the development of a master's degree program approximately twelve years ago. The decision to focus its initial master's level offering on organizational effectiveness and leadership was based on a needs assessment conducted by Charter Oak State College that included a survey of Charter Oak alumni. Business and organizational management was identified through the survey as one of the primary areas of need. Non-profit management was an area identified by then the Department of Higher Education, so a non-profit track was added to the degree.

The proposed Master of Science in Organizational Effectiveness and Leadership builds on Charter Oak State College's experience and expertise in providing business and management courses at the undergraduate level, its successful online advising and mentoring process, and its assessment program for prior college-level learning. The College currently offers a Bachelor of Science degree with major in business administration and a concentration in organizational leadership. Graduates of this program as well as graduates of our major and concentration in health care administration, major in health information management, and concentration in public safety administration will be prime candidates for this degree. Other students have graduated with an individualized concentration combining business courses with another discipline. The business related concentrations include some coursework that is similar in content, although not level, to that of the proposed Master of Science in Organizational Effectiveness and Leadership in the areas of principles of management, organizational behavior, human resource management, leadership, managerial skills, and information technology.

### Degree Completions in Selected Programs

Program	FY10	FY11	FY12	FY13	FY14
Business	32	65	73	43	47
Org. Leadership	16	14	25	24	40
HCA	8	12	14	22	31
HIM	0	0	0	0	0
Public Safety Admin.	13	7	10	11	13

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Indiv. Studies (Bus. Admin.)	63	49	35	18	11
Indiv. Studies (Org. Lead.)	1	1	0	0	1
Indiv. Studies (HCA)	12	11	17	3	1
Indiv. Studies (PSA)	15	9	2	3	0
<b>Total</b>	<b>160</b>	<b>168</b>	<b>176</b>	<b>124</b>	<b>144</b>

The master's degree program continues Charter Oak State College's focus on the non-traditional learner and non-traditional program delivery and faculty structure. It will allow students to earn up to 15 credits through transfer or by demonstrating equivalent competencies. The assessment of competency is similar to that of Western Governors University's (WGU) approach, although at WGU a student uses assessment to demonstrate competency for all credits in their M.B.A. program.

Oversight and faculty expertise for our undergraduate business and business-related is provided by the Business Committee which reports to the College's Academic Council. Several members of this committee, as well as a member of the Behavioral Sciences and Human Services Committee, who have experience teaching in graduate programs have consulted with Charter Oak in designing the curriculum of the proposed Master of Science in Organizational Effectiveness and Leadership. They will form the core of a new advisory committee for the program, following program approval.

During the program development process, the curriculum was reviewed by organizational behavior and business faculty from outside of Connecticut and its design was compared to similar degree programs at other regionally accredited institutions. The curriculum also was reviewed by a local committee comprised of members of the profit and nonprofit sectors.

- 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)*

Students would be able to transfer in up to 15 credits from other regionally accredited institutions.

- Please indicate what similar programs exist in other institutions within your constituent unit <sup>2</sup>, and how unnecessary duplication is being avoided

Charter Oak State College is one of only a few institutions of higher education in the country that provides students the opportunity to do the coursework needed to earn a degree through a combination of online learning, award of credit for courses taken at other accredited colleges or universities in the United States, testing, portfolio review, and contract learning. In its exclusive focus on serving the educational requirements of working adults whose needs are not met by conventional collegiate programs, Charter Oak is a valuable resource for Connecticut's citizens. The only institutions in the Northeast that offer similar educational options are Thomas Edison State College in New Jersey and Empire State College and Excelsior College in New York. The proposal to expand its educational offerings to include master's level programs reflects Charter Oak State College's commitment to maintaining a similar range of educational services for

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<sup>2</sup> Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

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citizens of Connecticut who have already earned a bachelor's degree.

The demand for and availability of online education has rapidly expanded across the United States. The following institutions provide a sample of the online graduate offerings in organizational management and organizational leadership offered by colleges and universities around the country: Capella University, Fielding Institute, Mercy College, Regis University, Saint Mary's College of California, Southern New Hampshire University, and the University of Phoenix. A number of other institutions, such as Antioch New England Graduate School and George Mason University, offer master's degrees in organizational management, development, and leadership specifically tailored for working adults that include online course components. The growth of online education, particularly at the graduate level, is evidence of the educational need for Charter Oak State College's proposed Master of Science in Organizational Effectiveness and Leadership.

Currently, in Connecticut, there are five programs that have some similarity in content to the proposed Master of Science in Organizational Effectiveness and Leadership: Eastern Connecticut State University's Master of Science in Organizational Management, the University of Hartford's Master of Science in Organizational Psychology, the University of New Haven's Master of Arts in Industrial Organizational Psychology, Quinnipiac University's Masters in Organizational Leadership, and Post University's MBA with a Leadership focus. Charter Oak's program is different in that, staying with one of its core values of recognizing that learning can take place in a variety of ways, it allows students to earn up to 15 credits in transfer or via assessment. It is about "just in time learning" in that it is designed to meet the current needs of the workforce. And it is low cost.

Information on the number of graduates from similar programs currently available in Connecticut is provided as follows:

52.1003 Organizational Behavior Studies (Connecticut)																		
	Market Share			Program Completers														
				2008-09			2009-10			2010-11			2011-12			2012-13		
	Institution			M	W	Total	M	W	Total	M	W	Total	M	W	Total	M	W	Total
Bachelor's degree																		
1	Quinnipiac University			6	18	24	5	14	19	4	12	16	0	2	2	1	4	5
Master's degree																		
1	Albertus Magnus College			4	11	15	3	7	10	9	11	20	8	9	17	3	7	10
2	Central Connecticut State University			3	6	9	5	11	16	3	6	9	0	0	0	0	0	0
3	Eastern Connecticut State University			8	4	12	1	8	9	6	4	10	12	7	19	1	5	6
4	Quinnipiac University			15	23	38	17	22	39	17	16	33	18	46	64	22	44	66
5	University of Hartford			7	16	23	2	10	12	4	9	13	2	9	11	4	6	10
	Subtotal			37	60	97	28	58	86	39	46	85	40	71	111	30	62	92
	Program Completer Total			43	78	121	33	72	105	43	58	101	40	73	113	31	66	97

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Source: [www.edeps.org](http://www.edeps.org)

- Please provide a description/analysis of employment prospects for graduates of this proposed program  
This program is designed for people who are already employed but want to enhance their skills or move up the career ladder. We addressed need in the first section of this proposal.

## Cost Effectiveness and Availability of Adequate Resources

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

As indicated on the attached Resources Summary, Charter Oak State College is estimating a deficit in its first year. Charter Oak will cover the costs of program implementation during the first year through existing resources. The College anticipates recovering these costs by the second year of program operation. The Charter Oak State College Foundation has indicated it will provide some program support, particularly for marketing and scholarships.

## 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. Graduates will be able to design, initiate, and manage organizational change
2. Graduates will be able to apply analytic, problem-solving, communication, computer, team-work and decision-making skills to actual and simulated situations
3. Graduates will be able to demonstrate the impact of individual behavior and group dynamics on organizational processes and structures
4. Graduates will be able to work with and develop in-person and virtual teams
5. Graduates will be able to conduct applied research and write reports based on the research

The proposed Master of Science in Organizational Effectiveness and Leadership is provided through an online competency-based curriculum. To complete the degree, students will earn a total of 33 credits through a series of 11 course modules. The course modules are organized in terms of the major skills and competencies needed for effective organizational leadership. The final two modules are a culminating experience. Module 10 focuses on Understanding Research through the provision of basic research techniques for both quantitative and qualitative research methodologies. Module 11, the Capstone, requires students to develop and complete an Applied Research project. In the Capstone Seminar students present their research projects for review and evaluation by faculty and by other students. The Applied Research project provides an opportunity for students to integrate theory and practice through designing and implementing a real-world project in organizational effectiveness and leadership. In the Capstone Seminar presentations students will demonstrate their understanding of theory, be able to address various perspectives on their projects, recognize and build effective project development strategies, and exhibit creativity in project design and originality in analyzing result.

The first module is designed to assist students in meeting on of the major objectives of the program: building skills for facilitating constructive interaction, collaboration, and teamwork within organizations. During the first module students will meet via web conferencing to begin establishing relationships with the faculty, administrators, and other students in the program. The students will be introduced to the program requirements and expectations, the online technology, online orientation, the team design of courses, and to the support services provided by Charter Oak State College, including advising, mentoring, and library support. In addition, they complete the competencies outlined for module 1. All course modules will incorporate the key curriculum components of team building, threaded online discussions, mentoring, and assessment.

- Team Building: The team-based learning process integrated into all course modules fosters the building of learning

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communities. Learning communities mirror processes that are essential for organizational effectiveness: interactive collaborative learning, socially-constructed meaning achieved through questioning and consensus building, sharing of resources, expressions of support and encouragement exchanged among learning community members, and willingness to incorporate joint initiatives among people in distant locations. The course modules will present students with practical problems faced by organizations that require the development of solutions through teamwork. As a result of their process students gain direct experience in how teams function and how to develop team-based organizations. As part of their coursework, students will be assigned varying roles analogous to those of work teams within organizations. Students will be assessed on the work of the team as a whole and on their individual contributions as members of the team.

- Threaded Discussions, Chat Rooms, E-Mail, Webinars, Skype: These internet-based modalities provide the primary mechanisms for students to work with each other and with faculty in establishing a learning community and developing teamwork skills and competencies.
- Mentors: The instructors for the courses will serve as mentors to the students. If additional mentors are needed they will be drawn from the core consulting faculty.
- Assessment: Using the student learning outcomes for each course module, faculty will develop rubrics for assessing and grading students' success in achieving the outcomes, as well as the level of student participation in threaded discussions and contributions to the teamwork activities, and for the final project. A team of faculty, serving as the equivalent of a thesis committee, will assess and grade the final project. In addition, students will have an opportunity to assess their own skills on a regular basis to determine strengths and areas that need improvement.

Internal Evaluation: To ensure adherence to its mission of serving adult students through non-traditional program formats, Charter Oak State College maintains rigorous internal evaluation procedures. The College's standard procedures will be utilized for on-going monitoring and evaluation of the proposed Master of Science in Organizational Effectiveness and Leadership program. A member of the core faculty with the expertise in the content area will review the course as it is being developed. The course will be developed utilizing Charter Oak's template for online courses and will meet Quality Matters standards for online courses. The course developers will receive assistance from Charter Oak's instructional design team and the instructor will be required to complete the online orientation for teaching faculty and the computer security course. In addition the first time the module is taught a core faculty member will be assigned to monitor and evaluate each module. Students will evaluate the courses each time they are taught and that feedback will be provided to the faculty by the administration.

Charter Oak also uses Starfish Retention Solution to monitor student and faculty participation in its online courses and Acxiom student verification software. Charter Oak also uses Turnitin, which is both a plagiarism detection tool and a tool for teaching students to correctly cite resources..

**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)

For the building phase of the program, 6 months to 1 year, the program will be administered by the Academic Dean, with assistance from the Assistant Director of the HIM program, and a part-time director. They will coordinate the hiring of the teaching faculty, course development, and marketing/recruiting efforts. The Academic Dean holds a Ed.D. in Adult Education with a distance education emphasis, M.S. in Training and Development with a minor in Organizational Development, and a B.S. in Organizational management. The Assistant Director of the Health Information Management program has a DBA, MBA, and BSBA. The coordinator will have a doctorate in organizational change, organizational leadership, or a similar program. In addition a half-time person will be hired to admit and advise students. As student enrollment grows, the director will become full time and take over the administration of the program and the support staff will increase accordingly.

**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? 0

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



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What percent of credits in the program will be taught by adjunct faculty? 100%

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

All of the faculty will be adjunct, to keep in line with the faculty status of all Charter Oak faculty. The teaching faculty will all have terminal degrees in the subject area they are teaching or the equivalent in experience.

An established core of well –qualified faculty consultants is a recognized and important feature of Charter Oak’s delivery model. In addition to the teaching faculty, Charter Oak will establish a core faculty committee to oversee the program. Charter Oak recruits and appoints consulting faculty from public and independent institutions in Connecticut. Charter Oak currently has more than 85 core faculty members. The core faculty establish degree requirements, review degree programs, review program outcomes, review the programs of individual degree candidates, approve recommendations of outside examiners in specific subject when required to validate the award of credits, review and adopt college-level examinations, and make recommendations for awarding of degrees. Through this process, Charter Oak insures that its degrees reflect the standards of the community of accredited institutions in Connecticut.

Charter Oak plans to maintain its current procedures and high academic standards for appointing core faculty to oversee the proposed Master of Science in Organizational Effectiveness and Leadership. An initial ten member core faculty committee will be recruited and appointed for the new graduate level program. These core faculty will have doctoral degrees and experience in teaching at the graduate level in fields appropriate to the curriculum.

**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)*

In addition to hiring staff to develop and teach the courses and mentor the students, we will need to add library resources, especially in the non-profit area. This has been budgeted.

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**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. # <sup>3</sup>	Pre- Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>				<b>PreReq</b>		
5XXXDeveloping the Learning Community	3		3			
5XXXPersonal Leadership	3		3			
5XXXOrganizational Landscapes	1		3			
5XXXGroup Process and Team Dynamics	3		3			
6XXXIntercultural/Global Perspectives	3		3			
6XXXDeveloping and Leading Others	4		3			
6XXXApplied Research	2		3	Statistics		3
6XXX Capstone Project	5		3			
<b>Business Track</b>				<b>Non-Profit Track</b>		
5XXXBusiness Tools			3	5XXXNon-Profit Management		3
5XXEEffective Communications			3	5XXXNon-Profit Resource Development and Fund Raising		3
6XXXChange			3	6XXXRoles of Non-Profits in Fostering Social Change		3
<b>Total Other Credits Required to Issue Credential</b> (e.g. GenEd/Liberal Arts Core/Liberal Ed Program)						
<p><b>Program Outline</b> (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.")</p>						

Admission to the Master of Science in Organizational Effectiveness and Leadership is based on the following criteria:

- Graduation with a bachelor's degree from a regionally accredited institution with a grade point average of 3.0 or better.
- Submission of an admissions application that includes completion of two required essays, official undergraduate transcripts, two letters of recommendation, and a professional resume. The essays will be used to assess writing competency. If a student's writing ability is

<sup>3</sup> From the Learning Outcomes enumerated list provided at the beginning of Section 3 of this application



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determined to be inadequate for graduate studies, the student will need to complete a writing course before resubmitting his/her application.

- It is recommended that applicants have at least five years of professional experience, particularly at the supervisory/managerial level.
- Applicants who have completed a bachelor's degree outside of the United States must have their transcripts evaluated by WES (World Education Services) or ECE (Educational Credential Evaluators, Inc.).
- For students from non-English speaking countries, the Test of English as a Foreign Language (TOEFL) is required. A minimum score of 600 (paper) or 250 (electronic) is required.
- Recognizing that many adults who did not do well as undergraduates are successful supervisors and managers, students will be able to enter the program if they can demonstrate the equivalent level of competence through work experiences.

The course modules required to earn the proposed Master of Science in Organizational Effectiveness and Leadership are described in the following section. All course modules will be available online. To successfully complete the program students must provide evidence of mastery of the program competencies included in each course module. Students have the option of demonstrating achievement of the program competencies through taking the course modules online, through outcomes-based assessments, and through transfer of credits from accredited colleges and universities. A minimum of 18 credits must be earned through Charter Oak State College courses. Students have the option of substituting the Non-Profits Electives, Modules 12, 13, and 14 for Modules 3,6,and 9.

### **Master of Science in Organizational Effectiveness and Leadership Curriculum**

#### ***Module 1***

#### ***Developing the Learning Community***

***3 credits***

Provides learners with a background in relationship building and group/team development. Focuses on theoretical constructs of the learning organization. Explores diversity as a challenge and an opportunity at the individual, group, and organizational levels. Provides students an opportunity to explore the reflective principles, problems, practices, and behaviors necessary for the development of a learning organization. Using the Argyris and Schon model of the reflective practitioner, students develop skills for continual critical self-reflection.

#### ***Competencies***

- Explain the phases of group development (Comprehension)
  - Define and apply the phases of group development (Knowledge)
  - Understand role of norms in groups and teams (Comprehension)
  - Analyze the effect of group/team norms (Analysis)
- Explain the role of learning in an organization (Comprehension)
  - Explain how learning impacts an organization (Analysis)
- Explain the impact of individual differences on interpersonal, group and organizational behavior (Comprehension)
  - Assess the impact of individual diversity on interpersonal, group, and organizational behavior (Evaluation and Application)
- Build relationships among people with diverse backgrounds (Synthesis)
  - Describe how to build relationships (Knowledge)

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- Compare and contrast relationship building techniques (Analysis)
- Understand impact of one's behavior on others (Comprehension)
  - Predict outcomes based on action (Application)
  - Make appropriate choices based on predicted outcomes (Synthesis and Application)
- Develop ability to assess and understand one's own actions and the motivational factors and theories for those actions (Comprehension and Evaluation)
  - Evaluate, assess, and apply motivational theories (Application, Analysis, and Evaluation)

### ***Module 2***

#### ***Personal Leadership***

***3 credits***

Explores historical and emerging leadership models and theories. Provides students with opportunities to assess personal work behaviors using a variety of standardized instruments and experiential exercises and to create a personal leadership skill development plan based on feedback and self-reflection.

#### ***Competencies***

- Create a comprehensive self-assessment based on summarizing the results of leadership inventories (Synthesis and Evaluation)
  - Using various tools, determine your strengths and weaknesses (Application)
  - Critique various assessment tools and make recommendations for appropriate use (Analysis and Evaluation)
  - Collect and use 360 degree feedback (Knowledge and Application)
- Develop ability to motivate self and others (Application)
  - Identify self-motivators (Knowledge)
  - Compare major motivational theories and techniques and describe how they may be applied for motivating others. (Analysis)
- Explain roles and skills required for effective leadership (Comprehension)
  - Compare and evaluate major leadership styles and theories (Analysis and Evaluation)
  - Match/apply appropriate leadership styles and skills to various situations (Application)
- Create leadership development plans (Synthesis)

### ***Module 3***

#### ***Effective Communication***

***3 credits***

Provides students with the skills to communicate effectively in both online and face-to-face contexts. Explores communication models including dyadic, small groups, formal and informal communication.

#### ***Competencies***

- Communicate effectively orally and in writing (Application)
  - Write on assigned topic (Application)
  - Make a presentation (Application)
- Develop active listening skills
  - Demonstrate effective active listening skills in selected assignments (Application)
- Give and receive thoughtful feedback (Application)
- Build and maintain relationships (Synthesis)
- Apply the theories of communication and learning, including the theories of symbolic organization (humanistic and social scientific approaches), discourse and interaction, relational communication, and small groups and organizations (Application)
- Utilize social and professional networking sites (Application)

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- Utilize new media (Application)

### **Module 4**

#### **Group Process and Team Dynamics**

**3 credits**

Explores conceptual and applied models of group process and team dynamics. Focuses on inter-group and intra-group relations and methods for measuring and improving group effectiveness.

#### **Competencies**

- Explain the complexities of groups and teams including task and process roles (Comprehension)
  - Describe and analyze interactions observed of groups and teams (Comprehension and Analysis)
- Select appropriate group models for specific conditions/situations (Analysis)
- Apply individual and interpersonal skills in a group/team setting (Application)
- Demonstrate ability to increase team effectiveness (Comprehension)
  - Determine when and how to intervene to improve team effectiveness (Analysis and Application)
- Develop ability to evaluate and measure team/group effectiveness (Evaluation)
- Demonstrate ability to work with virtual and distributed teams (Application)
- Demonstrate team leadership skills (Application)

### **Module 5**

#### **Organizational Landscape**

**3 credits**

Provides the history and development of the principles and practices of designing organizational structures. Explores the role of open systems in increasing organizational effectiveness. Considers the influence of such factors as organizational goals, life cycle, culture and environment on organization design decisions. Emphasizes the roles of key business disciplines in achieving the organization's mission.

#### **Competencies**

- Explain models and complexity of organizational structure and design (Comprehension)
  - Compare the major organizational design models (Analysis)
- Explain the nature of open systems (Comprehension)
  - Interpret how the open systems approach applies to the individual's organization (Synthesis)
  - Understand the role of culture in an organization (Comprehension)
  - Assess the culture of an organization with which you are familiar (Application)
- Explain the relationship between strategy and structure (Comprehension)
  - Describe the three levels of strategy (Comprehension)
- Explain the stages of an organization's growth (Comprehension)
  - Analyze a case by assessing strategy and structure and how they fit with growth stage (Synthesis)
- Explain the roles of an organization's functions (accounting, marketing, finance, project management, human resources, law, strategic planning) in furthering the organization's mission (Comprehension)
  - Demonstrate how the roles of key business disciplines help achieve an organization's mission and goals and identify the points of intersection. (Application and Synthesis)

### **Module 6**

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### **Change**

**3 credits**

Provides an understanding of change and resistance to change from individual, group, and organizational levels. Critically examines different types of change – incremental, transitional, transformative, and strategic – and their implementation in performing systems change work. Examines models and tools for planned change.

#### **Competencies**

- Explain the role of learning in organizational change (Comprehension)
  - Evaluate the importance of and illustrate the role that learning plays in an organization (Evaluation and Application)
- Explain the roles and relationships of information technology in organizational design, decision-making, culture, learning, and change (Comprehension)
  - Assess the impact that information technology has on key organizational elements (Evaluation)
- Explain models and tools for planned change (Comprehension)
  - Compare and evaluate major change models and tools including: data collection, interviewing, action research and appreciative inquiry (Analysis and Evaluation)
- Apply appropriate models using case studies (Application)
- Demonstrate data collection techniques (Application)
- Demonstrate how to handle resistance to change (Application)
- Diagnose organizational culture (Evaluation)
- Facilitate planned change (Application)

### **Module 7**

**3 credits**

#### **Intercultural/Global Perspectives**

Examines trends in globalization, including virtual work teams and the effect of emerging digital technology and its impact on global relations. Focuses on the importance of culture in organizations and its impact on organizational performance. Explores diversity as a challenge and an opportunity at the individual, group, and organizational levels. Provides understanding of how distance affects the dialogic process in cross cultural, virtual teams.

#### **Competencies**

- Explain the implications of operating as an individual, a group, or an organization in an international environment (Comprehension)
  - Describe the role culture plays in international interactions (Knowledge)
  - Compare how American-based international companies operate in the United States and overseas (Analysis)
  - Analyze various scenarios as they apply to key culture theories (Analysis)
- Describe the role that ethics plays in individual, group and organizational behavior in intercultural interactions (Knowledge)
  - Analyze the difference between business ethics in the U.S. and in a global organization and then explain how to develop appropriate policies to accommodate (Analysis and Synthesis)
- Explain the impact of individual differences on interpersonal, group and organizational behavior in the multicultural context (Comprehension)
- Understand, value and encourage diverse viewpoints in class interactions (Application)
- Develop empathy for others (Application)

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- Demonstrate a sense of empathy in situations involving global or diverse issues/people. (Application)
- Build relationships among diverse people (Synthesis)
  - Develop an organizational plan for building multicultural and multigenerational relationships (Application)

### ***Module 8***

#### ***Developing and Leading Others***

***3 credits***

Examines theory and practice of leadership models and concepts. Builds on coaching, mentoring, motivational, and empowerment models to develop effective leadership skills.

#### ***Competencies***

- Demonstrate roles and skills required for effective leadership (Application)
- Coach and mentor individuals on career and performance issues (Synthesis)
  - Mentor one or two individuals and journal the experience (career issues) (Application)
  - Coach two to four individuals and journal the experience (performance issues) (Application)
- Motivate self and others. (Application)
  - Compare theories of empowerment as applied to self (Analysis and Application)
- Empower others and self (Application)
  - Demonstrate how to empower others as well as yourself (Application)
- Create and enroll others in a shared vision (Synthesis)
  - Create a vision for your company and explain how you will get buy-in (Synthesis and Application)
- Explain the nature and value of creativity in individuals and organizations (Comprehension)
  - Apply creative techniques in an assignment (Application)

### ***Module 9***

#### ***Business Tools***

***3 credits***

Focuses on accounting and financial concepts and their application in effective management and leadership. Emphasizes Balanced Scorecard, a tool for facilitating effective strategic and market plans.

#### ***Competencies***

- Demonstrate the ability to review and critique budgets, financial statements, audit reports, marketing plans, and strategic plans (Application and Synthesis)
  - Analyze an organization based on Balanced Scorecard factors (Analysis)
  - Analyze and compare financial case studies (Synthesis and Analysis)
  - Write evaluation reports on the strategic and marketing plans of select organizations (Analysis)

### ***Module 10***

#### ***Applied Research Project***

***3 credits***

Provides basic research techniques and language for both qualitative and quantitative research methods. Focuses on how to use research as a tool for problem solving and organizational intervention. Students begin their applied research project which is part of their capstone course. The research project will be approved by the student's project mentor. It should be a work-based project focused on a researchable question. (prerequisite statistics)

#### ***Competencies***

- Explain quality indicators for both quantitative and qualitative research (Comprehension)

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- Assess quality of research reports (Evaluation)
- Explain the process and principles of project/program evaluation (Comprehension)
  - Develop or select an evaluation tool for project/program evaluation (Analysis, Synthesis, and Evaluation)
  - Conduct a program evaluation (Application)
- Design a research study (Synthesis)
- Gain approval by the organization for the study (Synthesis and Application)
- Complete a literature review (Application)
- Develop and complete an action research project (Synthesis and Application)

### ***Module 11***

#### ***Capstone Seminar***

***3 credits***

The Capstone Seminar provides an opportunity for students to complete their research projects and present and receive feedback on their research projects. The projects will be evaluated by peers and faculty. It also provides students an opportunity to reflect upon and integrate their course learning with their life and work experiences and to relate their learning to effectiveness within their organizational work environments.

#### ***Competencies***

- Present final research projects (Application, Synthesis, and Evaluation)
- Verbally reflect on their educational experience and articulate how what they have learned will lead to greater organizational effectiveness (Application and Synthesis)

### **Nonprofit Electives: (Will substitute for modules 3, 6, and 9.)**

### ***Module 12***

#### ***Nonprofit Resource Development and Fundraising***

***3 credits***

Focuses on the history, theories, skills, and practices of fundraising. Explores fundraising, including how fundraising emanates from the organization's strategic plan; how marketing has an impact on fundraising; the components of a successful fundraising campaign; fundraising ethics and legal issues; and the basic techniques of fundraising such as annual giving, grant writing, special events, and capital campaigns.

#### ***Competencies***

- Explain the history of philanthropy and the philosophy of giving (Comprehension)
- Develop a fundraising campaign as an outgrowth of an organizational mission and strategic plan (Synthesis and Application)
- Implement various fund raising techniques (Synthesis and Application)
- Communicate effectively orally and in writing (Application)
  - Write on assigned topic (Application)
  - Make a presentation (Application)
- Develop active listening skills
  - Demonstrate effective active listening skills in selected assignments (Application)
- Utilize social and professional networking sites (Application)
- Utilize new media (Application)

### ***Module 13***



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### ***Nonprofit Management***

***3 credits***

Focuses on current issues, theories, policies, and methods in the development and management of nonprofit organizations. Emphasizes strategic planning, marketing, how to use financial information to make operating and capital budgeting decisions, how to analyze long-term financial options, and the skills necessary for effective organizational leadership.

#### ***Competencies***

- Explain how nonprofit management differs from both public and business management (Comprehension)
- Demonstrate the ability to review and critique budgets, financial statements, audit reports, marketing plans, and strategic plans (Application and Synthesis)
- Articulate the ethical dimension of public service, especially as related to the duties and responsibilities of the director and the board (Application and Synthesis)
- Write evaluation reports on the strategic and marketing plans of nonprofit organizations (Analysis)
- Analyze a case study of managing and leading a volunteer workforce (Application)
- Demonstrate use of metrics in performance and program evaluation (Application)

### ***Module 14***

#### ***Role of Nonprofits in Fostering Social Change      3 credits***

Focuses on the impact of nonprofit organizations in fostering social change in a community, and the roles of the director and board in bringing about social change. Examines nonprofit organizations that have succeeded in implementing social change, as well as organizations that have not succeeded.

#### ***Competencies***

- Explain the role of culture in an organization (Comprehension)
- Explain the relationship between the executive director and the board, as well as other structural relationships (Comprehension)
- Explain the ethical issues typical to nonprofit organizations, such as conflict of interest, fiduciary responsibility, and board organization (Comprehension)
- Develop a plan that demonstrates the role a nonprofit plays in the community, especially as related to bringing about social change (Synthesis and Application) (Master's Project)
- Assess the culture of an organization with which you are familiar (Application)

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**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
All faculty will be adjunct with the appropriate credentials.			

Budget: Because Charter Oak will have to hire staff and build the courses in the first year of the program, the first year will show a loss in revenue. After the first year the program becomes self-sustainable. (See attached budget sheet and how we calculated revenue and expenses.)



## MS in Organizational Effectiveness and Leadership Budget

Budget Items	FY 16	FY 17	FY 18	FY 19
<b>EXPENDITURES</b>				
Director 1 of Graduate Programs 3/4 Time	60,175	80,233	84,245	88,457
Fringe for Director	42,724	31,291	32,855	62,804
Program Recruiter/Advisor 3/4 Time	45,134	58,425	61,346	64,414
Fringe for Recruiter	32,045	41,482	43,556	45,734
Clerical Support	-	36,592	38,422	40,343
Fringe for Clerical Support	-	25,980	27,279	28,643
Course Developers 15 @ 2,500	45,000	0	0	0
Course Developers Fringe	16,650	-	0	0
Instructional Design	30,000	-	0	0
Fringe for Instructional Design	18,000	-	0	0
Library Additions	16,350	10,900	10,900	10,900
Course Monitors to Review Courses after rollout	2,000	2,000	2,000	2,060
Fringe on Course Monitors	740	740	740	185
Advisory Committee	1,000	4,500	4,635	4,774
Instruction/330 per student	39,600	158,400	198,000	237,600
Fringe on Instruction	14,652	58,608	73,260	87,912
Marketing	100,000	100,000	100,000	100,000
Web Cameras for Faculty	1,000	0	0	0
Bridge for Class Video Display	8,000	8,000	8,000	8,000
<b>Total Expenditures</b>	<b>473,069</b>	<b>617,151</b>	<b>685,238</b>	<b>781,826</b>
<b>REVENUE</b>				
Course Tuition	324,000	1,296,000	1,620,000	1,620,000
College Fee	19,200	76,800	96,000	96,000
Technology Fee	3,000	12,000	15,000	15,000
Application Fees	6,000	6,000	8,250	10,000
<b>Total Revenue</b>	<b>352,200</b>	<b>1,390,800</b>	<b>1,739,250</b>	<b>1,741,000</b>
<b>GAIN/LOSS</b>	<b>(120,869)</b>	<b>773,649</b>	<b>934,762</b>	<b>959,174</b>

## **MS in Organizational Effectiveness and Leadership Budget**

**ITEM**

Licensure of a program in Software Engineering leading to an Associate of Applied Science degree at Norwalk Community College.

**BACKGROUND**Summary

The A.A.S. in Software Engineering is one of two degree programs to be offered to students in the Norwalk Early College Academy (NECA). NECA is the first Connecticut Early College Opportunity (CT-ECO) school to be opened in the state. NECA is a partnership established among Norwalk Public Schools (NPS), Norwalk Community College (NCC), and IBM that follows the 9-14 model developed by IBM and implemented initially at the Pathways to Technology (P-Tech) high school in Brooklyn, NY. In the model, IBM provides a skills assessment indicating jobs available in high demand and those skills needed to fill them.

Need for the Program

In the latest skills assessment, IBM identifies Software Development and Support as the job category in highest demand.

In addition, The CT Department of Labor has identified Computer-related fields as some of the most in-demand jobs in Connecticut. Computer-related jobs in Connecticut are projected to grow 18% from 2010 – 2020. In-demand jobs include Computer Programmers, Information Security Analysts, Web Developers, and Computer Network Architects. The DOL has identified the following as “Hot Jobs:”

Computer Systems Analyst

Software Developer, Applications

Software Developer, Systems Software

Network System Administrator

Computer System Administrator

Computer Support Specialist

Source: <http://www1.ctdol.state.ct.us/lmi/projections2010/computers.asp>

The CT Department of Labor has forecasted incredible growth in IT-related fields through 2020:

Occupation	% Growth 2010 - 2020
Computer Systems Analyst	19.3%
Software Developer, Applications	21.4%
Software Developer, Systems	31.7%
Database Administrator	21.4%
Network and Computer Systems Admin	20.6%
Computer Support Specialist	15.7%
Web Developer	15.8%
Information Security Analyst	15.8%
Average Growth	17.7%
All Occupations in CT	9.6%

Source: <http://www1.ctdol.state.ct.us/lmi/projections.asp>

The Federal Bureau of Labor projects the same trend nationwide:

Occupation	% Growth 2010 - 2020
Software Developer	30%
Network and Computer Systems Admin	28%
Computer Programmer	12%
Web Architect and Developer	22%
All Computer Occupations	22%
All Occupations	12%

Source: <http://www.bls.gov/ooh>

This A.A.S. degree seeks to address these needs.

### Curriculum

IBM identifies the following skills needs for Software Development:

<b>Expertise</b>
Apply Knowledge of DB2 (a Database Management System)*
Apply Knowledge of Java & JavaScript
Apply Knowledge of Lean/Agile Principles
Apply Knowledge of Python Scripting
Apply Knowledge of XML Schema, XPath, and XSLT
Code C++**
Code HTML
Develop Code Using Eclipse (an Integrated Development Environment)*
Develop Web Applications Using CSS
Develop Web Applications Using Dojo
Develop XML Applications

\*NCC replaces DB2 with Oracle and Eclipse with Netbeans.

\*\*NCC doesn't teach C++ but, instead, teaches Java as well as other modern programming languages.

This A.A.S. degree teaches students the above skills through the following classes:

<b>Program Core Courses</b>
CSC 108 Introduction to Programming
CST 153 Web Development and Design I
CSC 233 Database Development I
EGR 111 Introduction to Engineering
CST 252 Web Development and Design II
CSC 111 Bioinformatics
CSC 226 Object Oriented Programming Using Java
CST 255 XML for the WWW
CST 121 Operating Systems
CSC 265 Software Engineering Methods

The Software Engineering degree supports NCC's mission by providing a solid general education as well as a thorough coverage of the topics and skills supporting the dynamic information technology field. Programmatic goals relate to the mission in the following manner:

- (a) Provide students with skills needed to gain entry level or higher employment;
- (b) Provide students with appropriate educational experiences that give them the written, verbal, and interpersonal skills necessary to function as a team member in the IT environment as well as transfer to higher-level institutions;
- (c) Provide students with course work and experience that improves on existing skills or develops new ones; and,
- (d) Work in partnership with business and industry in responding to the employment and training needs in the field of information technology.

### Learning Outcomes

Upon successful completion of all major requirements, graduates will be able to:

1. Show mastery of the software engineering knowledge and skills, and professional issues necessary to begin practice as a software engineer;
2. Work as an individual and as part of a team to develop and deliver quality software artifacts;
3. Reconcile conflicting project objectives, finding acceptable compromises within limitations of cost, time, knowledge, existing systems, and organizations;
4. Design appropriate solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal, and economic concerns;
5. Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for problem identification and analysis, software design, development, implementation, verification, and documentation;
6. Demonstrate an understanding and appreciation for the importance of negotiation, effective work habits, leadership, and good communication with stakeholders in a typical software development environment;
7. Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.

Source: Association For Computing Machinery Curricula

Recommendation <http://sites.computer.org/ccse/SE2004Volume.pdf>

### Students

The first cohort of 87 NECA students is currently completing their first year. Recruiting for the second cohort of students is underway. The model calls for cohorts of up to 100 students per year. In addition, traditional NCC students will have the opportunity to complete the degree.

### Faculty

NCC Faculty are acknowledged experts in their fields and they bring years of practical experience to the classroom. In the fast moving field of Information Technology, curriculum must be updated continually in order to provide students with the skills needed to succeed. NCC Faculty continually updates their skills so that they can teach them to students.

### Learning Resources

NCC provides all of the resources necessary for the degree. The College works to promote student success through quality instruction and state-of-the-art technology.

#### Facilities

Norwalk Community College is ideally located to offer the program. Lower Fairfield County possesses businesses ranging from IT start-ups to industry stalwarts, all of which need skilled IT workers in all facets of IT and at all levels. The Software Engineering degree will provide area businesses with a skilled workforce. The Center for Information Technology at NCC is a state of the art facility housing numerous PC and Mac-based computer labs.

#### Fiscal Note

The A.A.S. degree is made up of classes already being offered by NCC. Enrollment is expected to be 100 students per year in the NECA program. Costs and revenue are yet to be determined. Existing faculty currently teach courses in the program but NECA enrollments will triple the number of students in the Computer Sciences. Additional full-time and part-time faculty will no doubt be required.

#### 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 NEW PROGRAM APPROVAL** (Public Higher Education Institutions) - **01/20/12**

**3SECTION 1: GENERAL INFORMATION**

<b>Institution:</b> Norwalk Community College	<b>Date of Submission to BOR Office:</b>
<b>Most Recent NEASC Institutional Accreditation Action and Date:</b>	
<b>Program Characteristics</b> Name of Program: Software Engineering Degree: Title of Award (e.g. Master of Arts) <b>Associate of Applied Science</b> Certificate: (specify type and level) Anticipated Program Initiation Date: Fall 2015 Anticipated Date of First Graduation: Spring 2017 Modality of Program: On ground    Online    X Combined If "Combined", % of fully online courses? 40% Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): 61	<b>Program Credit Distribution</b> # Cr in Program Core Courses: 38 # Cr of Electives in the Field: 0 # Cr of Free Electives: 0 # Cr Special Requirements (include internship, etc.): 0 <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>38</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>30</b>
<b>Type of Approval Action Being Sought:</b> Licensure   OR   X   Licensure and Accreditation <b>Suggested CIP Code No. (optional)</b> 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):                      Accreditation Date: Phase Out Period                      Date of Program Termination	
<b>Institution's Unit</b> (e.g. School of Business) and <b>Location</b> (e.g. main campus) Offering the Program: Main Campus	
<b>Other Program Accreditation:</b> <ul style="list-style-type: none"> <li>If seeking specialized/professional/other accreditation, name of agency and intended year of review:</li> <li>If program prepares graduates eligibility to state/professional license, please identify:</li> </ul> (As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)	
<b>Institutional Contact for this Proposal:</b> Thomas J. Duffy	<b>Title:</b> Chair, Computer Science <b>Tel.:</b> 203-857-6892 <b>e-mail:</b> tduffy@norwalk.edu

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

<b>BOR Sequence Number</b> (to be assigned):	
Approved 2010 CIP Code No. <sup>1</sup>	Title of CIP Code
<b>Log of BOR Steps Towards Program Approval:</b>	
Nature and Resolution number for BOR Approval:	Date of Approval:
Conditions for Approval (if any)	

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

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**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)*

The mission statement of Norwalk Community College (NCC) in concert with and in support of the Community Colleges' comprehensive System Mission Statement, commits NCC to providing students with a broad range of affordable career, technical, and liberal arts and sciences opportunities leading to employment, transfer, and lifelong learning. Additionally, the College works to promote student success through quality instruction and state-of-the-art technology. The college is also committed to expanding partnerships with business, industry, government and the community by offering educational services, including job training, and by organizing conferences and seminars.

The Associate of Applied Science in Software Engineering degree supports NCC's mission by providing a solid general education as well as a thorough coverage of the topics and skills supporting the dynamic information technology field. Programmatic goals relate to the mission in the following manner:

- (a) Provide students with skills needed to gain entry level or higher employment;
- (b) Provide students with appropriate educational experiences that give them the written, verbal, and interpersonal skills necessary to function as a team member in the IT environment as well as transfer to higher-level institutions;
- (c) Provide students with course work and experience that improves on existing skills or develops new ones; and,
- (d) Work in partnership with business and industry in responding to the employment and training needs in the field of information technology.



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**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 CT Department of Labor has identified Computer-related fields as some of the most in-demand jobs in Connecticut. Computer-related jobs in Connecticut are projected to grow 18% from 2010 – 2020. In-demand jobs include Computer Programmers, Information Security Analysts, Web Developers, and Computer Network Architects. The DOL has identified the following as “Hot Jobs:”

Computer Systems Analyst

Software Developer, Applications

Software Developer, Systems Software

Network System Administrator

Computer System Administrator

Computer Support Specialist

Source: <http://www1.ctdol.state.ct.us/lmi/projections2010/computers.asp>

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?

Norwalk Community College is ideally located to offer the program. Lower Fairfield County possesses businesses ranging from IT start-ups to industry stalwarts, all of which need skilled IT workers in all facets of IT and at all levels. The Information Technology degree will provide area businesses with a skilled workforce.

NCC Faculty are acknowledged experts in their fields and they bring years of practical experience to the classroom. In the fast moving field of Information Technology, curriculum must be updated continually in order to provide students with the skills needed to succeed. NCC Faculty continually update their skills so that they can teach them to students.

The Center for Information Technology at NCC is a state of the art facility housing numerous PC and Mac-based computer labs. The AAS degree is made up of classes already being offered by NCC.

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*)

Articulation agreements between NCC and area baccalaureate institutions exist for the Computer Science degree. These institutions include Fairfield University, Sacred Heart University, and Southern Connecticut State University. The Software Engineering degree, although not a transfer degree, possesses many classes in common with the Computer Science degree. As such, there will be opportunity for students to transfer.

- Please indicate what similar programs exist in other institutions within your constituent unit <sup>2</sup>, and how unnecessary duplication is being avoided

An AS in Computer Science exists at NCC and there is some duplication. Students in the NCC – NPS P-Tech program, the 9 – 14 model program introduced recently by Governor Malloy, will be offered the AAS degree.

As with all AAS degrees, the intention is to graduate students ready for the workforce.

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

The CT Department of Labor has forecasted incredible growth in IT-related fields through 2020:

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<sup>2</sup> Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

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Occupation	% Growth 2010 - 2020
Computer Systems Analyst	19.3%
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The Federal Bureau of Labor projects the same trend nationwide:

Occupation	% Growth 2010 - 2020
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Network and Computer Systems Admin	28%
Computer Programmer	12%
Web Architect and Developer	22%
All Computer Occupations	22%
All Occupations	12%

Source: <http://www.bls.gov/ooh>

In addition, in NCC's service area, IT-related occupations are among the most lucrative.

	Median Wage	Avg. Wage	Entry Level	10 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile
All Computer Occupations	85,884	90,351	53,731	48,078	143,272
Statewide (All Occupations)	41,865	53,526	22,989	19,615	96,029

Source: <http://www1.ctdol.state.ct.us/lmi/wages/PAGE0051.asp>

Source: <http://www.bls.gov/ooh/computer-and-information-technology/home.htm>

### Cost Effectiveness and Availability of Adequate Resources

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

This degree will be one of the degrees offered to Norwalk Early College Academy students as part of the P-Tech initiative.

Enrollment is expected to be at least 100 students per year in the P-Tech program. Costs and revenue are yet to

## **CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**

*APPLICATION FOR NEW PROGRAM APPROVAL (Public Higher Education Institutions) - 01/20/12*

be determined. Existing faculty currently teach courses in the program but P-Tech enrollments will triple the number of students in the Computer Sciences. Additional full-time and part-time faculty will no doubt be required.

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**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)

Upon successful completion of all major requirements, graduates will be able to:

1. Show mastery of the software engineering knowledge and skills, and professional issues necessary to begin practice as a software engineer;
2. Work as an individual and as part of a team to develop and deliver quality software artifacts;
3. Reconcile conflicting project objectives, finding acceptable compromises within limitations of cost, time, knowledge, existing systems, and organizations;
4. Design appropriate solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal, and economic concerns;
5. Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for problem identification and analysis, software design, development, implementation, verification, and documentation;
6. Demonstrate an understanding and appreciation for the importance of negotiation, effective work habits, leadership, and good communication with stakeholders in a typical software development environment;
7. Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.

Source: Association For Computing Machinery Curricula Recommendation

<http://sites.computer.org/ccse/SE2004Volume.pdf>

**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)

The program will be coordinated by Thomas J. Duffy, Chair, Computer Science. Release time will be at least 6 contact hours per year.

**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? 2

What percentage of the credits in the program will they teach? 60%

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

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program: Master's in Computer Science or related field and/or extensive professional experience in the field. Teaching credentials preferred.

**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)

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**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. # <sup>3</sup>	Pre- Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>				<b>Other Related/Special Requirements</b>		
CSC 108 Introduction to Programming	1,2,4,5	Eligibility for MAT 172	4			
CST 153 Web Development and Design I	1,3,4,7	Eligibility for ENG 101	4			
CSC 233 Database Development I	1,3,5,7	Eligibility for ENG 101	4			
EGR 111 Introduction to Engineering	4,7	MAT 136	3			
CST 252 Web Development and Design II	1,3,4,7	CST 153	3			
CSC 111 Bioinformatics	1,4,6	BIO 121	4			
CSC 226 Object Oriented Programming Using Java	1,2,4,5,7	CSC 108	4			
CST 255 XML for the WWW	1,4,7	CSC 108	4			
CST 121 Operating Systems	2,5,7	CSC 108	3			
CSC 265 Software Engineering Methods	1,2,3,4,5,6,7	CSC 226 or CST252				
<b>General Education Core Courses</b>				<b>Elective Courses in the Field</b>		
ENG 101 English Composition						
ENG 102 Literature and Composition						
COM 173 Public Speaking						
HIS 201 or HIS 202 US History I or II						
BIO 121 General Biology I						
MAT 254 Calculus I						
IDS 210 The Creative Voice						
<b>Total Other Credits Required to Issue Credential</b> (e.g. GenEd/Liberal Arts Core/Liberal Ed Program)						<b>23</b>

**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 Software Engineering major includes 38 credits in the major as well as 21 credits of General education for a total of 61 credits. Coursework is logically sequenced so that graduates will be prepared to enter the field upon graduation with useful, employable skills. Since the major shares courses with the Computer Science transfer program, students wishing to proceed

<sup>3</sup> From the Learning Outcomes enumerated list provided at the beginning of Section 3 of this application

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to baccalaureate-granting institutions may do so by transferring credit on a course-by-course basis.

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[illegible]

# Connecticut Board of Regents for Higher Education

## APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA <sup>1</sup> BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

Institution Norwalk Community College Date 12/15/2014  
Proposed Program Mobile Programming

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 <i>(from other programs)</i>	0	0	15	5	15	5
New Students <i>(first time matriculating)</i>	30	0	30	5	30	5
Continuing <i>(students progressing to credential)</i>	0	0	30	0	60	5
Headcount Enrollment	30	0	75	10	105	15
<b>Total Estimated FTE per Year</b>						
	30	0	75		105	

PROJECTED Program Revenue	Year 1		Year 2		Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition <i>(Do not include internal transfers)</i>	\$0	\$0	\$45,000	\$2,000	\$90,000	\$4,000
Program-Specific Fees						
Other Rev. <i>(Annotate in text box below)</i>						
<b>Total Annual Program Revenue</b>	\$0		\$47,000		\$94,000	

PROJECTED Expenditures*	Year 1		Year 2		Year 3	
	Number <i>(as applicable)</i>	Expenditure	Number	Expenditure	Number	Expenditure
Administration <i>(Chair or Coordinator)</i>	1	\$15,000	1	\$15,000	1	\$15,000
Faculty <i>(Full-time, total for program)</i>	2	\$135,000	2	\$135,000	3	\$205,000
Faculty <i>(Part-time -total for program)</i>	1	\$15,000	1	\$15,000	2	\$30,000
Support Staff	0					
Library Resources Program	0					
Equipment <i>(List as needed)</i>	0					
Other <i>(e.g. student services)</i>	0					
Estimated Indirect Cost <i>(e.g. student services, operations, maintenance)</i>	0					
<b>Total ESTIMATED Expenditures</b>		\$165,000		\$165,000		\$250,000

\* 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 identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

Please provide any necessary annotations:

<sup>1</sup> 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.



# Connecticut Board of Regents for Higher Education

APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA <sup>1</sup> BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

<sup>1</sup> 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

Licensure of a program in Mobile Programming leading to an Associate of Applied Science degree at Norwalk Community College.

## BACKGROUND

Summary

The A.A.S. in Mobile Programming is one of two degree programs to be offered to students in the Norwalk Early College Academy (NECA). NECA is the first Connecticut Early College Opportunity (CT-ECO) school to be opened in the state. NECA is a partnership established among Norwalk Public Schools (NPS), Norwalk Community College (NCC), and IBM that follows the 9-14 model developed by IBM and implemented initially at the Pathways to Technology (P-Tech) high school in Brooklyn, NY. In the model, IBM provides a skills assessment indicating jobs available in high demand and those skills needed to fill them.

Need for the Program

In the latest skills assessment, IBM identifies Software Development and Support as the job category in highest demand. In addition, IBM identifies mobile as a “strategic growth area [that] should form a foundation for all roles.”

In addition, The CT Department of Labor has identified Computer-related fields as some of the most in-demand jobs in Connecticut. Computer-related jobs in Connecticut are projected to grow 18% from 2010 – 2020. In-demand jobs include Computer Programmers, Information Security Analysts, Web Developers, and Computer Network Architects. The DOL has identified the following as “Hot Jobs:”

Computer Systems Analyst  
 Software Developer, Applications  
 Software Developer, Systems Software  
 Network System Administrator  
 Computer System Administrator  
 Computer Support Specialist

Source: <http://www1.ctdol.state.ct.us/lmi/projections2010/computers.asp>

The CT Department of Labor has forecasted incredible growth in IT-related fields through 2020:

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The Federal Bureau of Labor projects the same trend nationwide:

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Software Developer	30%
Network and Computer Systems Admin	28%
Computer Programmer	12%
Web Architect and Developer	22%
All Computer Occupations	22%
All Occupations	12%

Source: <http://www.bls.gov/ooh>

This A.A.S. degree seeks to address these needs.

### Curriculum

IBM identifies the following skills needs for Software Development:

<b>Expertise</b>
Apply Knowledge of DB2 (a Database Management System)*
Apply Knowledge of Java & JavaScript
Apply Knowledge of Lean/Agile Principles
Apply Knowledge of Python Scripting
Apply Knowledge of XML Schema, XPath, and XSLT
Code C++**
Code HTML
Develop Code Using Eclipse (an Integrated Development Environment)*
Develop Web Applications Using CSS
Develop Web Applications Using Dojo
Develop XML Applications

\*NCC replaces DB2 with Oracle and Eclipse with Netbeans.

\*\*NCC doesn't teach C++ but, instead, teaches Java as well as other modern programming languages.

This A.A.S. degree teaches students the above skills in addition to Mobile Programming through the following classes:

<b>Program Core Courses</b>
CSC 108 Introduction to Programming
CST 153 Web Development and Design I
CSC 233 Database Development I
EGR 111 Introduction to Engineering
CSC 262 Programming Mobile Devices I
CSC 234 Database Development II
CSC 226 Object Oriented Programming Using Java
CST 255 XML for the WWW
CSC 263 Programming Mobile Devices II

The Mobile Programming degree supports NCC's mission by providing a solid general education as well as a thorough coverage of the topics and skills supporting the dynamic information technology field. Programmatic goals relate to the mission in the following manner:

- (a) Provide students with skills needed to gain entry level or higher employment;
- (b) Provide students with appropriate educational experiences that give them the written, verbal, and interpersonal skills necessary to function as a team member in the IT environment as well as transfer to higher-level institutions;
- (c) Provide students with course work and experience that improves on existing skills or develops new ones; and,
- (d) Work in partnership with business and industry in responding to the employment and training needs in the field of information technology.

### **Learning Outcomes**

Upon successful completion of all major requirements, graduates will be able to:

1. Demonstrate an understanding of connections between various mobile platforms and programming languages;
2. Demonstrate the ability to use an IDE (integrated development environment);
3. Demonstrate the use of OOP(object oriented programming) techniques in program design and development;
4. Demonstrate writing, compiling and executing code in Object Oriented programming languages;
5. Test programs and troubleshoot simple problems;
6. Understand relational database design methodology and be able to use database software to build, modify, and query relational databases;
7. Produce logical software solutions to problems.

### **Students**

The first cohort of 87 NECA students is currently completing their first year. Recruiting for the second cohort of students is underway. The model calls for cohorts of up to 100 students per year. In addition, traditional NCC students will have the opportunity to complete the degree.

### **Faculty**

NCC Faculty are acknowledged experts in their fields and they bring years of practical experience to the classroom. In the fast moving field of Information Technology, curriculum must be updated continually in order to provide students with the skills needed to succeed. NCC Faculty continually updates their skills so that they can teach them to students.

### **Learning Resources**

NCC provides all of the resources necessary for the degree. The College works to promote student success through quality instruction and state-of-the-art technology.

### **Facilities**

Norwalk Community College is ideally located to offer the program. Lower Fairfield County possesses businesses ranging from IT start-ups to industry stalwarts, all of which need skilled IT

workers in all facets of IT and at all levels. The Mobile Programming degree will provide area businesses with a skilled workforce. The Center for Information Technology at NCC is a state of the art facility housing numerous PC and Mac-based computer labs.

Fiscal Note

The AAS degree is made up of classes already being offered by NCC. Enrollment is expected to be 100 students per year in the NECA program. Costs and revenue are yet to be determined. Existing faculty currently teach courses in the program but NECA enrollments will triple the number of students in the Computer Sciences. Additional full-time and part-time faculty will no doubt be required.

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 NEW PROGRAM APPROVAL** (Public Higher Education Institutions) - **01/20/12**

**SECTION 1: GENERAL INFORMATION**

<b>Institution:</b> Norwalk Community College	<b>Date of Submission to BOR Office:</b>
<b>Most Recent NEASC Institutional Accreditation Action and Date:</b>	
<b>Program Characteristics</b> Name of Program: Mobile Programming Degree: Title of Award (e.g. Master of Arts) <b>Associate of Applied Science</b> Certificate: (specify type and level) Anticipated Program Initiation Date: Fall 2015 Anticipated Date of First Graduation: Spring 2017 Modality of Program: On ground    Online <input checked="" type="checkbox"/> Combined If "Combined", % of fully online courses? 40% Total # Cr the Institution Requires to Award the Credential (i.e. include program credits, GenEd, other): 62-64	<b>Program Credit Distribution</b> # Cr in Program Core Courses: 31-33 # Cr of Electives in the Field: 6-8 # Cr of Free Electives: 0 # Cr Special Requirements (include internship, etc.): 0 <u>Total # Cr in the Program</u> (sum of all #Cr above): <b>39-41</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>39-41</b>
<b>Type of Approval Action Being Sought:</b> Licensure   OR <input checked="" type="checkbox"/> Licensure and Accreditation <b>Suggested CIP Code No. (optional)</b> 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):                      Accreditation Date: Phase Out Period                      Date of Program Termination	
<b>Institution's Unit</b> (e.g. School of Business) and <b>Location</b> (e.g. main campus) Offering the Program: Main Campus	
<b>Other Program Accreditation:</b> <ul style="list-style-type: none"> <li>If seeking specialized/professional/other accreditation, name of agency and intended year of review:</li> <li>If program prepares graduates eligibility to state/professional license, please identify:</li> </ul> (As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)	
<b>Institutional Contact for this Proposal:</b> Thomas J. Duffy	<b>Title:</b> Chair, Computer Science <b>Tel.:</b> 203-857-6892 <b>e-mail:</b> tduffy@norwalk.edu

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

<b>BOR Sequence Number</b> (to be assigned):	
Approved 2010 CIP Code No. <sup>1</sup>	Title of CIP Code
<b>Log of BOR Steps Towards Program Approval:</b>	
Nature and Resolution number for BOR Approval:	Date of Approval:
Conditions for Approval (if any)	

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

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

**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)*

The mission statement of Norwalk Community College (NCC) in concert with and in support of the Community Colleges' comprehensive System Mission Statement, commits NCC to providing students with a broad range of affordable career, technical, and liberal arts and sciences opportunities leading to employment, transfer, and lifelong learning. Additionally, the College works to promote student success through quality instruction and state-of-the-art technology. The college is also committed to expanding partnerships with business, industry, government and the community by offering educational services, including job training, and by organizing conferences and seminars.

The Associate of Applied Science in Mobile Programming degree supports NCC's mission by providing a solid general education as well as a thorough coverage of the topics and skills supporting the dynamic information technology field. Programmatic goals relate to the mission in the following manner:

- (a) Provide students with skills needed to gain entry level or higher employment;
- (b) Provide students with appropriate educational experiences that give them the written, verbal, and interpersonal skills necessary to function as a team member in the IT environment as well as transfer to higher-level institutions;
- (c) Provide students with course work and experience that improves on existing skills or develops new ones; and,
- (d) Work in partnership with business and industry in responding to the employment and training needs in the field of information technology.

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
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**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 CT Department of Labor has identified Computer-related fields as some of the most in-demand jobs in Connecticut. Computer-related jobs in Connecticut are projected to grow 18% from 2010 – 2020. In-demand jobs include Computer Programmers, Information Security Analysts, Web Developers, and Computer Network Architects. The DOL has identified the following as “Hot Jobs:”

Computer Systems Analyst

Software Developer, Applications

Software Developer, Systems Software

Network System Administrator

Computer System Administrator

Computer Support Specialist

Source: <http://www1.ctdol.state.ct.us/lmi/projections2010/computers.asp>

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?

Norwalk Community College is ideally located to offer the program. Lower Fairfield County possesses businesses ranging from IT start-ups to industry stalwarts, all of which need skilled IT workers in all facets of IT and at all levels. The Information Technology degree will provide area businesses with a skilled workforce.

NCC Faculty are acknowledged experts in their fields and they bring years of practical experience to the classroom. In the fast moving field of Information Technology, curriculum must be updated continually in order to provide students with the skills needed to succeed. NCC Faculty continually update their skills so that they can teach them to students.

The Center for Information Technology at NCC is a state of the art facility housing numerous PC and Mac-based computer labs. The AAS degree is made up of classes already being offered by NCC.

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*)

Articulation agreements between NCC and area baccalaureate institutions exist for the Computer Science degree. These institutions include Fairfield University, Sacred Heart University, and Southern Connecticut State University. The Mobile Programming degree, although not a transfer degree, possesses many classes in common with the Computer Science degree. As such, there will be opportunity for students to transfer.

- Please indicate what similar programs exist in other institutions within your constituent unit <sup>2</sup>, and how unnecessary duplication is being avoided

An AS in Computer Science exists at NCC and there is some duplication. Students in the NCC – NPS P-Tech program, the 9 – 14 model program introduced recently by Governor Malloy, will be offered the AAS degree.

As with all AAS degrees, the intention is to graduate students ready for the workforce.

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

The CT Department of Labor has forecasted incredible growth in IT-related fields through 2020:

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<sup>2</sup> Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut



## CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

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Occupation	% Growth 2010 - 2020
Computer Systems Analyst	19.3%
Software Developer, Applications	21.4%
Software Developer, Systems	31.7%
Database Administrator	21.4%
Network and Computer Systems Admin	20.6%
Computer Support Specialist	15.7%
Web Developer	15.8%
Information Security Analyst	15.8%
Average Growth	17.7%
All Occupations in CT	9.6%

Source: <http://www1.ctdol.state.ct.us/lmi/projections.asp>

The Federal Bureau of Labor projects the same trend nationwide:

Occupation	% Growth 2010 - 2020
Software Developer	30%
Network and Computer Systems Admin	28%
Computer Programmer	12%
Web Architect and Developer	22%
All Computer Occupations	22%
All Occupations	12%

Source: <http://www.bls.gov/ooh>

In addition, in NCC's service area, IT-related occupations are among the most lucrative.

	Median Wage	Avg. Wage	Entry Level	10 <sup>th</sup> Percentile	90 <sup>th</sup> Percentile
All Computer Occupations	85,884	90,351	53,731	48,078	143,272
Statewide (All Occupations)	41,865	53,526	22,989	19,615	96,029

Source: <http://www1.ctdol.state.ct.us/lmi/wages/PAGE0051.asp>

Source: <http://www.bls.gov/ooh/computer-and-information-technology/home.htm>

### Cost Effectiveness and Availability of Adequate Resources

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

This degree will be one of the degrees offered to Norwalk Early College Academy students as part of the P-Tech initiative.

Enrollment is expected to be at least 100 students per year in the P-Tech program. Costs and revenue are yet to

## **CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**

*APPLICATION FOR NEW PROGRAM APPROVAL (Public Higher Education Institutions) - 01/20/12*

be determined. Existing faculty currently teach courses in the program but P-Tech enrollments will triple the number of students in the Computer Sciences. Additional full-time and part-time faculty will no doubt be required.

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
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**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)

Upon successful completion of all major requirements, graduates will be able to:

1. Demonstrate an understanding of connections between various mobile platforms and programming languages;
2. Demonstrate the ability to use an IDE (integrated development environment);
3. Demonstrate the use of OOP(object oriented programming) techniques in program design and development;
4. Demonstrate writing, compiling and executing code in Object Oriented programming languages;
5. Test programs and troubleshoot simple problems;
6. Understand relational database design methodology and be able to use database software to build, modify, and query relational databases;
7. Produce logical software solutions to problems.

**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)

The program will be coordinated by Thomas J. Duffy, Chair, Computer Science. Release time will be at least 6 contact hours per year.

**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? 2

What percentage of the credits in the program will they teach? 60%

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

Describe the minimal qualifications of adjunct faculty, if any, who will teach in the program Master's in Computer Science or related field and/or extensive professional experience in the field. Teaching credentials preferred.

**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)

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**APPLICATION FOR NEW PROGRAM APPROVAL** (Public Higher Education Institutions) - **01/20/12**

**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. # <sup>3</sup>	Pre- Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Program Core Courses</b>				<b>Other Related/Special Requirements</b>		
CSC 108 Introduction to Programming	2,5,7	Eligibility for MAT 172	4			
CST 153 Web Development and Design I	2,5,7	Eligibility for ENG 101	4			
CSC 233 Database Development I	6	Eligibility for ENG 101	4			
EGR 111 Introduction to Engineering	1		3			
CSC 262 Programming Mobile Devices I	1,2,3,4,5,7	CSC 108	3			
CSC 234 Database Development II	6	CSC 233	4			
CSC 226 Object Oriented Programming Using Java	1,2,3,4,5,7	CSC 108	4			
CST 255 XML for the WWW	1,2,5,7	CSC 108	4			
CSC 263 Programming Mobile Devices II	1,2,3,4,5,6,7	CSC 262	3			
<b>General Education Core Courses</b>				<b>Elective Courses in the Field</b>		
ENG 101 English Composition			3	Approved Elective		3/4
ENG 102 Literature and Composition			3	Approved Elective		3/4
COM 173 Public Speaking			3			
HIS 201 or HIS 202 US History I or II			3			
BIO 121 General Biology I			4			
MAT 186 Pre-Calculus			4			
IDS 210 The Creative Voice			3			
<b>Total Other Credits Required to Issue Credential</b> (e.g. GenEd/Liberal Arts Core/Liberal Ed Program)						<b>23</b>

**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 Mobile Programming major includes 39-41 credits in the major as well as 23 credits of General education for a total of 62-64 credits. Coursework is logically sequenced so that graduates will be prepared to enter the field upon graduation with useful, employable skills. Since the major shares courses with the Computer Science transfer program, students wishing to proceed to baccalaureate-granting institutions may do so by transferring credit on a course by course basis.

<sup>3</sup> From the Learning Outcomes enumerated list provided at the beginning of Section 3 of this application

**APPLICATION FOR NEW PROGRAM APPROVAL** (Public Higher Education Institutions) - 01/20/12

[illegible]

# Connecticut Board of Regents for Higher Education

## APPLICATION FOR NEW PROGRAM APPROVAL PRO FORMA <sup>1</sup> BUDGET - RESOURCES AND EXPENDITURE PROJECTIONS

Institution Norwalk Community College Date 12/15/2014  
Proposed Program Mobile Programming

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 <i>(from other programs)</i>	0	0	15	5	15	5
New Students <i>(first time matriculating)</i>	70	0	70	5	70	5
Continuing <i>(students progressing to credential)</i>	0	0	70	0	140	5
Headcount Enrollment	70	0	155	10	225	15
<b>Total Estimated FTE per Year</b>						
	70	0	155		225	

PROJECTED Program Revenue	Year 1		Year 2		Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition <i>(Do not include internal transfers)</i>	\$0	\$0	\$45,000	\$2,000	\$90,000	\$4,000
Program-Specific Fees						
Other Rev. <i>(Annotate in text box below)</i>						
<b>Total Annual Program Revenue</b>	\$0		\$47,000		\$94,000	

PROJECTED Expenditures*	Year 1		Year 2		Year 3	
	Number <i>(as applicable)</i>	Expenditure	Number	Expenditure	Number	Expenditure
Administration <i>(Chair or Coordinator)</i>	1	\$15,000	1	\$15,000	1	\$15,000
Faculty <i>(Full-time, total for program)</i>	2	\$135,000	2	\$135,000	3	\$205,000
Faculty <i>(Part-time -total for program)</i>	1	\$15,000	1	\$15,000	2	\$30,000
Support Staff	0					
Library Resources Program	0					
Equipment <i>(List as needed)</i>	0					
Other <i>(e.g. student services)</i>	0					
Estimated Indirect Cost <i>(e.g. student services, operations, maintenance)</i>	0					
<b>Total ESTIMATED Expenditures</b>		\$165,000		\$165,000		\$250,000

\* 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 identify the resources to be employed and explain how existing programs will be affected. Reallocation of resources to meet new and changing needs is encouraged, provided such reallocation does not reduce the quality of continuing programs below acceptable levels."

Please provide any necessary annotations:

<sup>1</sup> 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

Licensure and Accreditation of a program in Mathematics leading to an Associate of Science degree at Manchester Community College.

## BACKGROUND

### Summary

The mission of Manchester Community College (MCC) is to advance academic, economic, civic, personal and cultural growth by providing comprehensive, innovative and affordable learning opportunities to diverse populations. It is a learning-centered community committed to access, excellence and relevance. Both the MCC strategic plan for 2014-2019 and the Transform CScU 2020 initiative call for new program development to meet student and workforce needs. The mathematics department at Manchester Community College meets the mission of the college as well as the system and college's strategic plans to provide students with academically rigorous courses ensuring that graduates have met the learning outcomes required for success in their occupational and educational endeavors. The proposed associate degree program in mathematics will prepare graduates, and subsequently, the workforce of Connecticut, with the skills necessary to work and compete in a global environment where critical thinking and analysis, particularly in the STEM professions, is vital.

### Need for the Program

Mathematics is the foundation for science, engineering and technology and a strong background in mathematics is prerequisite for those who wish to pursue a STEM career. STEM jobs from 2000-2010 grew three times faster than non-STEM jobs. Moreover, Connecticut has been designated as having a mathematics teacher shortage by the U.S. Department of Education for each of the last ten years. Many high schools cannot find qualified mathematics teachers to fill vacancies. There is currently no program designed to prepare Connecticut Community College students for a career in mathematics or secondary mathematics education. The Associate of Science Degree in mathematics will provide a rigorous academic scaffold from which students can transition to baccalaureate programs in mathematics leading to careers in education and other STEM careers such as mathematician, actuary, analyst, computer programmer, engineer, physicist, or statistician.

### Curriculum

The proposed curriculum for the AS degree in mathematics reflects the expectation that, upon completion, students are prepared for junior level work as mathematics majors. This preparation includes Calculus I, Calculus II, Multivariable Calculus, Differential Equations, Linear Algebra and Foundations of Mathematics. While there is some variability across the Connecticut State Universities, this closely matches the first two years for mathematics majors at the CSUs and the program is well aligned with the work being done by the TAP committee. All of these courses are currently taught at Manchester Community College. All courses transfer as equivalent courses to the CSUs with the exception of Linear Algebra (ECSU) and Foundations of Mathematics (CCSU and WCSU); we are confident that these discrepancies can be corrected

with further work on TAP. To that end, before proposing the mathematics AS degree, course revisions were accomplished for Linear Algebra and the Foundations of Mathematics to facilitate alignment. The courses have a strong transfer history to regional public and private universities.

### Students

Manchester Community College has a consistently robust population of students who require upper level mathematics courses for their majors. As result, MCC offers multiple sections of the upper level calculus and differential equations courses each semester. Linear Algebra and Foundations of Mathematics are offered annually in opposite semesters. A number of students express the desire to become mathematics majors and our selection of courses is an excellent fit for them.

Having a mathematics A.S. degree would attract additional students, especially knowing that the course structure and schedule is amenable to completing all of the requirements for junior level status as a mathematics major at a university. Manchester Community College also has a very strong peer tutoring program where mathematics majors can develop their confidence as teachers of mathematics. At present, mathematics students who have demonstrated excellent academic progress work in the academic support center and the developmental mathematics lab as peer tutors and are quite successful.

### Faculty

Manchester Community College is fortunate that all of the full time faculty have experience teaching these upper level courses. Four of our full time faculty teach regularly teach courses beyond Calculus II and all full time faculty teach or have taught the beginning calculus courses. Because of this depth of experience, the academic rigor of the program is assured. In addition, there is consistent professional collaboration about curriculum and instruction as it pertains to improving student success in the upper level mathematics courses.

### Learning Resources

Manchester Community College has state of the art mathematics classrooms that include front and side projectors, white boards on all four walls, computer teacher station and document camera. One of the classrooms has computer workstations for every student. These learning centers are especially important for these courses which require modeling and simulation and displays that are able to render three dimensional images. In addition, each room is outfitted with a Texas Instrument TI-Presenter.

### Facilities

No new facilities will be required to implement this degree.

### Fiscal Note

No new expenses are anticipated for the implementation of this degree.



Review of Documents:

## a) Campus Review

The program was approved by the mathematics department, the Division of Mathematics, Science and Health Careers, the Curriculum Committee and the Academic Senate per governance policies and practice.

## b) Campus Budget and Finance

The program did not require approval by the Dean of Administration or Cabinet as it has no budgetary impact; however the Cabinet supports the proposal.

## c) Campus President

The program has the support of the President of the college.

## d) Academic Council

## e) System Office

Accreditation

The college will not be seeking any outside accreditation for the program.

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

**SECTION 1: GENERAL INFORMATION**

<b>Institution: Manchester Community College</b>	Date of Submission to BOR Office:
Most Recent NEASC Institutional Accreditation Action and Date: April 2012	
<b>Program Characteristics</b> Name of Program: <b>Mathematics</b> Degree: Title of Award: <b>Associate of Science</b> Certificate: <i>(specify type and level)</i> Anticipated Program Initiation Date: <b>September 2015</b> Anticipated Date of First Graduation: <b>May 2017</b> Modality of Program: <b>X</b> On ground    Online    Combined If "Combined", % of fully online courses? Total # Cr the Institution Requires to Award the Credential <i>(i.e. include program credits, Gen Ed, other)</i> : <b>60</b>	<b>Program Credit Distribution</b> # Cr in Program Core Courses: <b>24</b> # Cr of Electives in the Field: <b>0</b> # Cr of Free Electives: <b>14</b> # Cr Special Requirements <i>(include internship, etc.)</i> : <b>0</b> <u>Total # Cr in the Program</u> <i>(sum of all #Cr above)</i> : <b>60</b> From "Total # Cr in the Program" above, enter #Cr that are part of/belong in an already approved program(s) at the institution: <b>24</b>
Type of Approval Action Being Sought:    Licensure   OR   Licensure and Accreditation	
Suggested CIP Code No. <i>(optional)</i> 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 <i>(e.g. School of Business)</i> and Location <i>(e.g. main campus)</i> Offering the Program: <b>Math, Science and Health Careers Division</b>	
Other Program Accreditation:  <ul style="list-style-type: none"> <li>• If seeking specialized/professional/other accreditation, name of agency and intended year of review:</li> <li>• If program prepares graduates eligibility to state/professional license, please identify:</li> </ul> <i>(As applicable, the documentation in this request should addresses the standards of the identified accrediting body or licensing agency)</i>	
Institutional Contact for this Proposal: <b>Dr. Sandra Palmer</b>	Title: <b>Provost and Chief Academic Officer</b> Tel.: <b>860-512-2602</b> e-mail: <b>spalmer@manchestercc.edu</b>

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

BOR Sequence Number (to be assigned):	
Approved 2010 CIP Code No. <sup>1</sup>	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)	

<sup>1</sup>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.

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

**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)*

The mission of Manchester Community College (MCC) is to advance academic, economic, civic, personal and cultural growth by providing comprehensive, innovative and affordable learning opportunities to diverse populations. It is a learning-centered community committed to access, excellence and relevance. Both the MCC strategic plan for 2014-2019 and the Transform CSCU 2020 initiative call for new program development to meet student and workforce needs.

MCC currently offers the Associate in Art and Associate in Science degrees in more than 40 disciplines. The college's occupational programs prepare graduates for entry-level employment in positions that require foundational knowledge and practical skills, while transfer programs are equivalent to the first two years of study for a bachelor's degree.

The mathematics department at Manchester Community College provides for these students by offering academically rigorous courses that ensure graduates have met the learning outcomes required for success in their occupational and educational endeavors. We currently offer a complete array of upper level mathematics courses that accommodate the large population of students who are engineering and science majors or who plan to transfer to baccalaureate programs in other fields that require course in the calculus sequence and beyond. We consistently offer and run all of the four courses in the calculus sequence every semester as well as Linear Algebra at least once each academic year. This is the most robust upper level mathematics course offering of any of the community colleges in the CSCU system. A number of students express the desire to be mathematics majors and plan to transfer to a four year baccalaureate mathematics program after graduating from MCC. Many of these students aspire to be teachers of mathematics. By offering the A.S. degree in mathematics, we are creating an affordable pathway for our diverse student population to realize their potential as mathematics educators, scientists, engineers or another of the growing number of mathematics intensive STEM careers. As mentioned above, this is congruent with the strategic goals of the college and the CSCU system.

**Addressing Identified Needs**

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

Mathematics is embedded in all science, engineering and technology. A strong background in mathematics is prerequisite for those who wish to pursue a STEM career. STEM jobs from 2000-2010 grew three times faster than non-STEM jobs; 67 percent of GDP growth is driven by STEM innovations; and 20 percent of the STEM workforce is older than 55 and will need replacing. Quoting directly from Catherine Smith, Commissioner of the Connecticut State Department of Economic and Community Development: "When we look at the clusters that we see as a vital part of the economy, many of them are going to be reliant on the skills from STEM. This addresses the talent management and strategy that is so important for the economic development of the state. Connecticut's current economic strengths lie in the aerospace, bioscience, health care, and advanced manufacturing clusters, and in the coming years, that will expand to include green technologies, Internet, digital production, and film and media."

Moreover, Connecticut has been designated as having a mathematics teacher shortage by the U.S. Department of Education for each of the last ten years. Many high schools cannot find qualified mathematics teachers to fill vacancies. The mathematics teacher preparation process has been strengthened to ensure teachers are fully qualified. The mathematics major A.S. degree at Manchester Community College will offer an affordable and rigorous pathway to meet the needs of Connecticut business, industry and public education.

In addition, in looking at comparable programs

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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?

Manchester Community College has a strong and committed mathematics faculty. They have maintained a rigorous curriculum and MCC mathematics courses transfer to the Connecticut State Universities and the University of Connecticut. MCC has the widest array of mathematics offerings and has aligned its mathematics curriculum with that of the CSUs and UConn to provide the background needed for transfer into baccalaureate programs in mathematics at the junior year. To complete this process, we created a four credit Linear Algebra course and a four credit Foundations of Mathematics course. No other community college in the system has this complete mathematics course program. MCC has strong engineering and science programs that are serviced by the mathematics department. Many of these students plan to transfer to baccalaureate programs in the CSCU system. These factors make MCC the ideal location for implementation of a Mathematics A.S. degree.

- 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)

While no formal transfer agreements currently exist between MCC and the CSUs, the Mathematics AS degree program as defined does align well with the courses a mathematics major would take during the first two years at the CSUs. Transfer agreements are expected to be made formal during the TAP pathways process.

- Please indicate what similar programs exist in other institutions within your constituent unit<sup>2</sup>, and how unnecessary duplication is being avoided.

There are currently no other colleges in the CSCU system that offer the mathematics A.S. degree. However, there exist other discipline programs within the CT community college system. Connecticut Community Colleges offer programs in Behavioral Science and Mathematics/Science (NVCC), Natural Science and mathematics (GCC) and Environmental Science (MCC, MxCC, and NWCC). These programs serve to show that although some similar programs exist, there is no duplication of effort considering the opportunities for transfer and the lack of STEM graduates generally.

In Massachusetts, as an example, there are many community colleges already addressing the need for discipline specific associate degrees as can be seen by the chart below:

Massachusetts Community Colleges Degree Programs											
	BCC	BRCC	BHCC	CCCC	GCC	HCC	MBCC	MWCC	NECC	RCC	STCC
English			AA	AA	AA					AA	
History		C						AA	AA		AA
Mathematics			AA			AS	AA			AA	AS
Philosophy				AA					AA		AA
Political Science				AA				AA	AA		AA
Sociology			AA	AA		AA	AA				AA
Biology	AA		AS			AS			AA	AA	AA
Chemistry						AA					AA

<sup>2</sup>Constituent units are: the Connecticut Community College System, the Connecticut State University System, Charter Oak State College, and the University of Connecticut

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

Graduates with a Mathematics degree have a wide range of employment opportunities in the STEM field. Some of these careers include mathematician, actuary, analyst, computer programmer, educator, engineer, physicist, or statistician. According to the U.S. Department of Commerce, STEM occupations are projected to grow by 17.0% from 2008 to 2018, compared to 9.8% growth for non-STEM occupations. Also, STEM workers command higher wages, earning 26 percent more than their non-STEM counterparts. While the above figures are national, they are applicable to the job market here in Connecticut. The CT Department of Labor projects a 19.6% growth in the "Mathematical Science Occupations."

In addition, CareerCast has named Mathematician as the number one job in 2014 (hiring outlook and income are among the categories that occupations are judged). Other careers in the CareerCast top ten requiring strong mathematical background include actuary, statistician, software engineer and computer analyst.

Connecticut has seen a mathematics teacher shortage for the past ten years according to the U.S. Department of Education. In addition to the current shortage, the CT Department of Labor anticipates the number of postsecondary teaching positions is expected to grow by 13% over the next ten years. Secondary mathematics teacher certification now requires a bachelor's degree in mathematics. The Mathematics A.S. degree at Manchester Community College will offer an affordable and rigorous pathway to the secondary education programs at the CSUs.

## Cost Effectiveness and Availability of Adequate Resources

*(Please provide a one-paragraph narrative on the attached MExcelPro-Forma Budget)*

The program will not require any funding. The courses in the program are already in place and being taught by our mathematics faculty. We already have state of the art mathematics classrooms and computer labs to continue to offer the course sequence. Should enrollments grow, we have adequate resources to respond to this growth.

## 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)*

Upon completion of the mathematics A.S. degree program, graduates will:

1. Be proficient with and apply techniques of differential calculus to functions expressed as graphs, tables, families of functions and embedded in problems related to real world applications. This includes solving problems involving related rates and L'Hopital's rule. Assessed throughout with quizzes, examinations and cumulative final examination.  
(MAT\*254)
2. Be proficient with techniques of integral calculus as they are applied to functions expressed as graphs, tables, families of functions and embedded in problems related to real world applications. Understand and apply the fundamental theorem of calculus as it applies to functions expressed graphically and analytically. Apply integral calculus to real world problems from physics and engineering. Assessed throughout with quizzes, examinations and cumulative final examination.  
(MAT\*254 and MAT\*256)
3. Be proficient with sequences and series, including notation, convergence, applications, Taylor series, and applications of Taylor series. Assessed throughout with quizzes, examinations and cumulative final examination. (MAT\*256)

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4. Be proficient with techniques of differential and integral calculus of several variables as they are applied to multivariable functions expressed as graphs, tables, families of functions and embedded in problems related to real world applications. This includes basic understanding of vectors and vector operations and the use of Cartesian, cylindrical and spherical coordinate systems. Be proficient with rates of change of vector functions and line integrals including the fundamental theorem of line integrals and Green's theorem. Assessed throughout with quizzes, examinations and cumulative final examination. (MAT\*268)
5. Be proficient with techniques and theorems of linear algebra including using matrices to represent and solve systems of equations, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors and metric spaces. Assessed throughout with quizzes, examinations and cumulative final examination. (MAT\*274)
6. Be proficient with techniques of differential equations as they are applied to functions expressed as graphs, tables, families of functions and embedded in problems related to real world applications. This includes systems of linear and nonlinear differential equations using real and complex eigenvalues and eigenvectors. Assessed throughout with quizzes, examinations and cumulative final examination. (MAT\*285)
7. Be proficient with the applications of set theory, deductive and inductive proof, function and relation, cardinality and number theory to abstract mathematics. Assessed using quizzes and a capstone investigation. (MAT\*287)

**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)*

The program administrator will be a full-time mathematics faculty member at MCC. This faculty member should regularly teach courses in the program. At the initiation of the program in the fall of 2015, the faculty member responsible for the program administration will be Chris Hamelin. Chris is an Associate Professor of Mathematics and holds a Master of Science degree in Mathematics from the University of Connecticut

**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?

No new hires are needed for this program. One current, full-time mathematics faculty member will serve as program coordinator as an additional responsibility. Current full time mathematics department faculty will teach courses in the sequence.

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

Full-time faculty will teach most, if not all, mathematics courses in the program.

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

Occasionally, an exceptionally well qualified adjunct faculty member may be considered for teaching a mathematics course in the program. In general, adjunct faculty will teach earlier courses in the sequence before being assigned to teach higher courses in the sequence.

The remaining credits in the degree are taught by full and part time MCC faculty. The ratio of full to part time faculty will vary with each semester.

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

Adjunct faculty teaching a core mathematics course will have a minimum of two years teaching experience. The college requires a Master's degree or equivalent, exceptions may be made if the faculty member has experience and expertise in a specific area.

**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)*

All of the courses in the program except MAT\*287 are currently being taught in state of the art mathematics classrooms that already are in place at the college. MAT\*287 will be offered in the spring 2015 semester. No new equipment, classrooms or software will be needed for the program.

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## Curriculum

The following chart shows the courses for the curriculum.

Course Number and Name	L.O. # <sup>3</sup>	Pre-Requisite	Cr Hrs
<b>Mathematics A.S.</b>			
<b>Mathematics courses in program</b>			
MAT*254 Calculus I	1,2	Pre-calculus or Placement score	4
MAT*256 Calculus II	2,3	MAT*254	4
MAT*268 Multivariable Calculus	4	MAT*256	4
MAT*274 Linear Algebra	5	MAT*256	4
MAT*285 Differential Equations	6	MAT*256	4
MAT*287 Foundations of Mathematics	7	MAT*256	4
			<b>24</b>
<b>Required Program Courses</b>			
CSC* 215 Object Oriented C++			4
			<b>4</b>
<b>MCC General Education Courses</b>			
ENG* 101 English Composition			3
Physical and Natural Sciences			4
Social Sciences			3
Humanities			3
The Arts			3
General Education Elective in a Knowledge Area			3
			<b>19</b>
<b>Other courses and electives</b>			
13 credits to align with TAP transfer framework			13
			<b>13</b>
<b>Total Credits</b>			<b>60</b>

**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 Mathematics AS Degree program will provide students with the knowledge necessary and skill set necessary for entry level work in a variety of fields as well as entry at the Junior year level as Mathematics major at a four-year university. Students will complete a total of 60 credits. Of these 60 credits, 24 will be in core Mathematics courses, 4 in required electives, 19 will fulfill remaining MCC general education courses and the remaining 13 credits will fulfill the TAP transfer framework.

MAT\*287 Foundation of Mathematics will serve as a capstone course for students in the Mathematics AS program. This course should be taken in the final semester and will draw together many of the concepts of previous semesters. In addition, this course introduces students to formal logic and methods of proof that will serve as a foundation for the more abstract mathematics encountered at the junior and senior years as a math major.

<sup>3</sup> From the Learning Outcomes enumerated list provided at the beginning of Section 3 of this application.



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**Full-Time Faculty Currently 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	Pertinent Experience
Christopher Hamelin, Program Director, Associate Professor of Mathematics (full time)	MS, University of Connecticut	
Kate Bella, Associate Professor of Mathematics (full time)	MS, University of Connecticut	
Paul Edelen, Professor of Mathematics (full time)	MD, University of Connecticut	
Myrta Groeneveld, Associate Professor of Mathematics (full time)	MS, University of Connecticut	
Kathleen Peters, Professor of Mathematics (full time)	MA, University of Connecticut	
Milaim Tahiri, Associate Professor of Mathematics (full time)	MA, Central Connecticut State University	
Diane Hillyer, Professor of Mathematics (full time)	MS, Central Connecticut State University	
Michael Robillard, Professor of Mathematics (full time)	MA, SUNY-Albany	
Jana Sime, Professor of Mathematics (full time)	MBA, University of Connecticut	

No new faculty hiring is anticipated to implement the program.

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<b>Institution</b>	<b>Manchester Community College</b>				<b>Date</b>	<b>Fall 2015</b>
<b>Licensed Program</b>	<b>Mathematics, AS Degree</b>					
<b>ACTUAL Enrollment</b>	First Term Year 1 2015-2016		First Term Year 2 2016-2017		First Term Year 3 2017-2018	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Internal Transfers	5	10	5	5	5	5
New Students	5	10	5	5	5	5
Returning Students	0	0	5	10	5	10
ACTUAL Headcount Enrollment	10	20	15	20	15	20
<b>ACTUAL FTE per Year</b>	20		25		25	
<b>PROJECTED FTE (at Licensing)</b>	20		25		25	
<b>ACTUAL-PROJECTED</b>						
<b>Size of First Credentialed Group</b>			<b>Date of Award of First Credential</b>			
<b>Estimated Program Revenue</b>	Year 1		Year 2		Year 3	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Tuition and Fees (\$1933/FT; \$982/PT per sem)	\$19,330	\$19,640	\$19,330	\$19,640	\$19,330	\$19,640
Program Specific Fees	\$0	\$0	\$0	\$0	\$0	\$0
Other Rev. – Lab Fees (\$82.00/course)	\$3,280		\$3,280		\$164	
<b>ACTUAL Program Revenue</b>	\$42,250		\$42,250		\$42,250	
<b>PROJECTED Rev. (at Licensing)</b>	\$42,250		\$42,250		\$42,250	
<b>Dif. ACTUAL-PROJECTED</b>						
<b>Estimated Expenditures*</b>	Year 1		Year 2		Year 3	
	Number	Expenditure	Number	Expenditure	Number	Expenditure
Administration (Program Coordinator)	1	\$9504	1	\$9504	1	\$9504
Faculty (full-time, total for program)	0	\$0	0	\$0	0	\$0
Faculty (part-time, \$1437/WLU))	0	\$0	0	\$0	0	\$0
Support Staff	0.1	\$2,200	0.1	\$2,200	0.1	\$2,200
Library Resources Program		\$1,000		\$0		\$0
Equipment (List if needed)						
Estimated Indirect Cost(e.g. student services, facilities) @\$530/FTE		\$10,600		\$10,600		\$10,600
<b>Total Annual Expenditures</b>		\$12,704		\$12,704		\$12,704

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

**ITEM**

Academic Program Review

**RECOMMENDED MOTIONS FOR FULL BOARD**

**RESOLVED:** That the Board of Regents for Higher Education ratify the schedule for Academic Program Reviews at each CSU institution for the 2014-15 academic year.

**BACKGROUND**

The Board of Regents Academic Program Review Policy was established by a Board resolution on August 21, 2014. This Policy established a process wherein the System Office's Provost and Senior Vice President for Academic and Student Affairs will confirm with the institutions' Presidents and Chief Academic Officers to inventory a schedule of academic programs to be reviewed over the course of the academic year. Subsequently, that schedule is to be presented to the Board's Academic and Student Affairs Committee for its consideration. Upon the Committee's approval, the schedule is to be presented to the Board for its ratification.

**PROCESS**

Per the guidelines approved by the Board; the System Office's Interim Provost and Senior Vice President for Academic and Student Affairs and the institutions' Chief Academic Officers have collaboratively set a schedule for Academic Program Reviews for the 2014-15 academic year, which is attached.

Annually, the results from the academic program review process will be presented to the Board of Regents at a September/October meeting. If warranted, appropriate Board action which may include further study will ensue.

# Connecticut State Colleges & Universities

## Academic Program Review Process

### 2014-15 Academic Year Schedule

<u>Institution</u>	<u>Academic Program</u>	<u>Means of Review</u>
Asnuntuck	Business Administration <sup>2</sup>	Internal
Community	Information Technology Systems <sup>2</sup>	Internal
College	Manufacturing Machine Technology <sup>1</sup>	Internal & External
Capital	<b>No Programs scheduled for Review this Academic Year</b>	
Community		
College		
Gateway	Automotive Technology (GM) <sup>1</sup>	Internal
Community	Aviation Maintenance Technology <sup>1</sup>	Internal
College	Biomedical Engineering Technology <sup>1</sup>	Internal
	BOT: Administrative Assistant <sup>2</sup>	Internal
	BOT: Legal Administrative Assistant <sup>1</sup>	Internal
	BOT: Medical Administrative Assistant <sup>2</sup>	Internal
	BOT: Electronic Health Records & Coding <sup>1</sup>	Internal
	Business Administration: Management Option <sup>2</sup>	Internal
	Business Administration: Accounting Option <sup>2</sup>	Internal
	Business Administration: Marketing <sup>1</sup>	Internal
	Business Administration <sup>2</sup>	Internal
	Computer Engineering Technology <sup>1</sup>	Internal
	Computer Science: Networking Option <sup>2</sup>	Internal
	Computer Science <sup>2</sup>	Internal
	Drug & Alcohol Recovery Counselor <sup>2</sup>	Internal
	Early Childhood Special Education <sup>2</sup>	Internal
	Electrical Engineering Technology <sup>1</sup>	Internal
	Engineering Science/College of Technology <sup>1</sup>	Internal
	Entrepreneurial Studies <sup>2</sup>	Internal
	Environmental Science & Toxicology <sup>2</sup>	Internal
	Exercise Science & Wellness <sup>2</sup>	Internal
	Fire Technology & Administration <sup>2</sup>	Internal
	Food Service Management <sup>2</sup>	Internal
	General Automotive Technology <sup>2</sup>	Internal

<b><u>Institution</u></b>	<b><u>Academic Program</u></b>	<b><u>Means of Review</u></b>
Gateway Community College (continued)	General Engineering Technology <sup>1</sup>	Internal
	General Studies <sup>1</sup>	Internal
	Hotel/Motel Management <sup>1</sup>	Internal
	Human Services: Transfer <sup>2</sup>	Internal
	Human Services: Career <sup>2</sup>	Internal
	Human Services: Gerontology <sup>2</sup>	Internal
	Liberal Arts & Sciences <sup>1</sup>	Internal
	Manufacturing Engineering Technology <sup>1</sup>	Internal
	Mechanical Engineering Technology <sup>1</sup>	Internal
	Natural Sciences & Mathematics <sup>1</sup>	Internal
	Railroad Engineering Technology <sup>1</sup>	Internal
	Railroad: Signaling & Communications Option <sup>1</sup>	Internal
	Retail Management/Fashion Merchandising <sup>2</sup>	Internal
	Studio Art <sup>1</sup>	Internal
	Studio Art: Graphic Design <sup>1</sup>	Internal
	Technology Studies/College of Technology <sup>1</sup>	Internal
Housatonic Community College	<b>No Programs scheduled for Review this Academic Year</b>	
Manchester Community College	Accounting <sup>1</sup>	Internal
	Accounting & Business Administration <sup>1</sup>	Internal
	Business Administration <sup>1</sup>	Internal
	Marketing <sup>2</sup>	Internal
	English <sup>5</sup>	Internal
	Foreign Language <sup>5</sup>	Internal
	Philosophy <sup>5</sup>	Internal
	Health & Exercise Science <sup>1</sup>	Internal
	Criminal Justice <sup>2</sup>	Internal
	Drug and Alcohol Recovery Counselor <sup>1</sup>	Internal
	Hotel Tourism Management <sup>1</sup>	Internal
	Music Studies <sup>1</sup>	Internal
	Social Service <sup>2</sup>	Internal
Middlesex Community College	Accounting <sup>2</sup>	Internal
	Human Services <sup>2</sup>	Internal
	Multimedia <sup>2</sup>	Internal
	Science <sup>5&amp;6</sup>	Internal
	Ophthalmic Medical Assistant <sup>3</sup>	Internal & External
	Veterinary Technology <sup>1</sup>	Internal & External

<b><u>Institution</u></b>	<b><u>Academic Program</u></b>	<b><u>Means of Review</u></b>
Naugatuck Valley Community College	Automotive Technician <sup>2</sup>	Internal & External
	Business Finance <sup>2</sup>	Internal
	Computed Aided Design/Drafting <sup>2</sup>	Internal
	Early Childhood Education <sup>2</sup>	Internal & External
Northwestern Connecticut Community College	Computer Science <sup>2</sup>	Internal
Norwalk Community College	Building Efficiency & Sustainable Technology <sup>2</sup>	Internal
	Criminal Justice <sup>1</sup>	Internal
	Engineering <sup>1</sup>	Internal
	Legal Assistant <sup>2</sup>	Internal & External
	Nursing <sup>1</sup>	Internal & External
	Management <sup>1</sup>	Internal
	Science and Mathematics <sup>5</sup>	Internal
Quinebaug Valley Community College	Technology Studies Pathways <sup>1</sup>	Internal
	Business Accounting <sup>2</sup>	Internal
	Business Management <sup>2</sup>	Internal
	Criminal Justice <sup>3</sup>	Internal
	Engineering <sup>1</sup>	Internal
	English/Communications/Drama <sup>5&amp;7</sup>	Internal
	Fine Arts <sup>2</sup>	Internal
	Human Services <sup>1</sup>	Internal
	Humanities <sup>5&amp;7</sup>	Internal
	Philosophy <sup>5&amp;7</sup>	Internal
Three Rivers Community College	Social/Behavioral Sciences <sup>5&amp;7</sup>	Internal
	Technologies Studies <sup>2</sup>	Internal
	Accounting <sup>2</sup>	Internal & External
	Architectural Drafting Technology <sup>3</sup>	Internal
	Architectural Design Technology <sup>1</sup>	Internal & External
	Business Administration Management <sup>2</sup>	Internal & External
	Business Information Systems <sup>2</sup>	Internal & External
	Civil Engineering Technology <sup>1</sup>	Internal & External
	Early Childhood Education <sup>1</sup>	Internal & External
	Electrical Engineering Technology <sup>1</sup>	Internal & External

<b><u>Institution</u></b>	<b><u>Academic Program</u></b>	<b><u>Means of Review</u></b>
Three Rivers Community College (continued)	Environmental Health & Safety Management <sup>3</sup>	Internal
	Environmental Engineering Technology <sup>1</sup>	Internal & External
	Finance and Banking <sup>1</sup>	Internal & External
	Fire Technology and Administration <sup>1</sup>	Internal
	Hospitality Management, Casino Mgmt. Option <sup>2</sup>	Internal & External
	Hospitality Management, Hotel Mgmt. Option <sup>2</sup>	Internal & External
	Hospitality Mgmt., Restaurant Mgmt. Option <sup>2</sup>	Internal & External
	Introduction to Manufacturing <sup>3</sup>	Internal
	Manufacturing Engineering Technology <sup>1</sup>	Internal & External
	Marketing <sup>1</sup>	Internal & External
	Mechanical Engineering Technology <sup>1</sup>	Internal & External
	Mfg, Engrg. Tech, Laser Manufacturing Option <sup>1</sup>	Internal & External
	Nuclear Engineering Technology	Internal & External
	Pathway to Teaching Careers <sup>1</sup>	Internal
	Retail Management <sup>3</sup>	Internal
	Security & Loss Prevention <sup>3</sup>	Internal
	Small Business and Entrepreneurial Studies <sup>2</sup>	Internal & External
	Surveying and Mapping Technician <sup>3</sup>	Internal
	Sustainable Landscape Ecology & Conservation <sup>3</sup>	Internal
<hr/>		
Tunxis Community College	Graphic Design <sup>1</sup>	Internal
	Physical Therapist Assistant <sup>1</sup>	Internal
<hr/>		
Charter Oak State College	Communications <sup>5</sup>	Internal
	Computer Science <sup>5</sup>	Internal
	Public Administration <sup>5</sup>	Internal
	Criminal Justice <sup>5</sup>	Internal
	Health Information Management <sup>1</sup>	Internal & External
	Mathematics <sup>5</sup>	Internal
<hr/>		
Central Connecticut State University	Anthropology <sup>1</sup>	Internal & External
	Art Education <sup>11</sup>	Internal & External
	Biology <sup>9</sup>	Internal & External
	Chemistry <sup>1</sup>	Internal & External
	Computer Science <sup>1</sup>	Internal & External
	Computer Engineering Technology <sup>1</sup>	Internal & External

<b><u>Institution</u></b>	<b><u>Academic Program</u></b>	<b><u>Means of Review</u></b>
Central Connecticut State University (continued)	Computer Information Technology <sup>8</sup>	Internal & External
	Counselor Education <sup>8</sup>	Internal & External
	Data Mining <sup>8</sup>	Internal & External
	Early Childhood Education <sup>8</sup>	Internal & External
	Earth Science <sup>1</sup>	Internal & External
	Economics <sup>1</sup>	Internal & External
	Educational Leadership <sup>10</sup>	Internal & External
	Educational Studies <sup>8</sup>	Internal & External
	Elementary Education <sup>11</sup>	Internal & External
	English <sup>11</sup>	Internal & External
	French <sup>9</sup>	Internal & External
	German <sup>9</sup>	Internal & External
	Graphic/Information Design <sup>1</sup>	Internal & External
	History <sup>11</sup>	Internal & External
	Industrial Technology <sup>1</sup>	Internal & External
	Information Design <sup>8</sup>	Internal & External
	Italian <sup>9</sup>	Internal & External
	Marriage & Family Therapy <sup>8</sup>	Internal & External
	Mathematics <sup>11</sup>	Internal & External
	Music Education <sup>11</sup>	Internal & External
	Natural Sciences <sup>8</sup>	Internal & External
	Philosophy <sup>1</sup>	Internal & External
	Physical Education <sup>11</sup>	Internal & External
	Physics <sup>1</sup>	Internal & External
	Political Science <sup>1</sup>	Internal & External
	Public History <sup>8</sup>	Internal & External
	Reading and Language Arts <sup>12</sup>	Internal & External
	Science Education <sup>10</sup>	Internal & External
	Social Science <sup>9</sup>	Internal & External
	Social Studies <sup>10</sup>	Internal & External
	Social Work <sup>1</sup>	Internal & External
	Spanish <sup>9</sup>	Internal & External
	Special Education <sup>12</sup>	Internal & External
	Teacher Education <sup>8</sup>	Internal & External
	Teaching English as a Second Language <sup>10</sup>	Internal & External
	Technology and Engineering Education <sup>9</sup>	Internal & External

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<b><u>Institution</u></b>	<b><u>Academic Program</u></b>	<b><u>Means of Review</u></b>
Eastern Connecticut State University	Early Childhood Education <sup>11</sup>	Internal & External
	Educational Technology <sup>4</sup>	Internal & External
	Elementary Education <sup>11</sup>	Internal & External
	Mathematics <sup>1</sup>	Internal & External
	Physical Education <sup>1</sup>	Internal & External
	Reading/Language Arts <sup>4</sup>	Internal & External
	Science Education <sup>4</sup>	Internal & External
	Secondary Education <sup>12</sup>	Internal & External
	Sociology & Applies Social Relations <sup>1</sup>	Internal & External
Southern Connecticut State University	Chemistry <sup>4</sup>	Internal & External
	Environmental Education/Science Ed <sup>8</sup>	Internal & External
	Physics <sup>1</sup>	Internal & External
	Recreation and Leisure Studies <sup>1</sup>	Internal & External
	Sociology <sup>4</sup>	Internal & External
Western Connecticut State University	Biology <sup>1</sup>	Internal
	Biological & Environmental Sciences <sup>8</sup>	Internal
	Communication <sup>1</sup>	Internal
	English <sup>4</sup>	Internal
	Health Education <sup>1</sup>	Internal & External
	Health Promotion Studies <sup>1</sup>	Internal & External
	Liberal Arts <sup>1</sup>	Internal
	Media Arts <sup>1</sup>	Internal
	Theatre Arts <sup>1</sup>	Internal & External

#### **LEGEND:**

1. Undergraduate Degree only
2. Undergraduate Degree and Related Certificates
3. Certificate Program only
4. Undergraduate & Graduate Degrees
5. Discipline or Concentration – not a degree program
6. Science includes Biology, Chemistry, Astronomy, Earth Science & Physics
7. Discipline within General Studies and Liberal Arts & Sciences degree
8. Graduate Degree only
9. Undergraduate Degree and related Graduate Certificate Program
10. Graduate Certificate Program only
11. Undergraduate & Graduate Degrees & Related Certificates
12. Graduate Degree & Graduate Certificate Program

## **Biology Transfer Articulation Pathway and Degree Program**

### **Justification for Designated General Education Courses**

The Biology Transfer Articulation Pathway provides a single pathway from all 12 community colleges to all five of the 4-yr institutions.

Within the Biology Transfer Articulation Pathway and Degree Program, there are four courses that must be designated within the Framework30. These courses are necessary to prepare the students for the 200+ level Science courses. If the courses designated are not completed as the Pathway30, the students will not be able to complete the remaining courses within the program.

All courses designated in the Pathway 30 align with the Freshman and Sophomore courses taken at the 4-year institutions by their native students. The 4-yr institutions also use program courses to meet the science and math general education requirements.

- **ENG\*101 English Composition:** This course serves as the prerequisite for many courses within the biology pathway and Framework30. As a result, this course must be designated as the Written Communication 1 course. It is also a required course at many of the community colleges.
- **BIO\*121 General Biology I and CHE\*121 General Chemistry I:** Both of these courses are prerequisites to upper level courses and must be taken before transferring into a 4-yr program. In addition, the Biology Pathway has a large number of 4-credit science courses that must be taken in order to achieve Junior status at the 4- year institution. These courses meet the Scientific Reasoning and Scientific Knowledge competencies. There is no need for students to take additional science courses to meet these competencies. If students take 3-credit or 4-credit science courses that are not in the pathway, they will not be applied toward the pathway degree, it will take them longer to graduate, and/or they will not be able to transfer as juniors.
- **MAT\*186 Precalculus:** This course is a prerequisite to Calculus and General Physics, two courses that are required for the degree. This course meets the Quantitative Reasoning Competency, so the pathway designates this course so the students will be able to complete the pathway and transfer as juniors.

# Transfer Pathway and Degree Program

## Template 1

### Central Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree

[GENERAL BIOLOGY]

Community Colleges*:			CCSU	
		Credits		Credits
<b>General Education Requirements</b>				
<b>Framework30**</b>				
<b>Competency:</b>				
<b>Section A</b>				
Written I	ENG*101 English Composition	3	ENG 110	3
Written II	Gen Ed Elective	3	Skill Area I Communication Skills	3
Scientific Reasoning	BIO*121 General Biology I	4	Skill Area II Mathematics	4
Scientific Knowledge	CHE*121 General Chemistry I	4	Study Area IV Natural Sciences	4
Quantitative	MAT*186 Precalculus	4	Study Area IV Natural Sciences	4
Historical Knowledge	Gen Ed Elective	3	Study Area II History Requirement	3
Social Knowledge	Gen Ed Elective	3	Study Area II Social Sciences	3
Aesthetic Dimensions	Gen Ed Elective	3	Study Area I Arts & Humanities	3
<b>Section B</b>				
Competency:	Gen Ed Elective	3	Skill Area IV University Requirement	3
Competency:	Gen Ed Elective	3	Study Area III Behavioral Sciences	3
<b>Framework30 Credits (30-31):</b>		<b>33</b>		<b>33</b>
<b>Additional General Education Courses</b>				
			Study Area I Literature Requirement	3
			Study Area I: Arts & Humanities	3
			Study Area II: Social Sciences	3
			Study Area III: Behavioral Sciences	3
			Skill Area II: Math/Stat/Computer Science	3
			Skill Area III: Foreign Language Proficiency	0-6
Students must complete two international courses and one literature course to complete the CCSU gen ed requirements.				
<b>General Education Credits:</b>		<b>33</b>		<b>48-54</b>

<b>Major Program Courses</b>			
BIO*122 General Biology II	4	BIO 122 General Biology II	4
CHE* 122 General Chemistry II	4	CHEM200/201 Fdns of Analytical Chem/ Lab or CHEM 260/201 Fdns of Inorganic Chem/ Lab	4
PHY* 121 General Physics I or CHE*211 Organic Chemistry I	4	PHY 121 General Physics I or CHEM 210/211 Fdns of Organic Chem/Lab	4
BIO*235 Microbiology or 200's level BIO* lab science	4	BMS 316 Microbiology or BIO 200-level or higher lab science elective	4
Additional Gen Ed Elective or Calculus I	3-4	Gen Ed Elective or MATH 152 Calculus I or MATH 124 Appl Calc w/Trig	4
BIO*270 or 200's level BIO* lab science	4	BIO 200-level or higher lab science elective	4
PHY* 122 General Physics II	4	PHY 122 General Physics II	4
		PHY 121 General Physics I or Fdns of Organic Chemistry/Lab (CHEM 210/211); whichever was not taken at CC	4
		BIO 200 Integrative Biology	4
		BIO 290 Biology Research Experience I	2
		BIO electives or MATH requirement (if not completed at CC)	3-4
		BIO elective	4
		BIO 390 Biology Research Experience II or 391 Internship in Biology	1
		BIO elective	3
		BIO elective	3
<b>Program Course Credits:</b>	<b>27-28</b>		<b>52-53</b>
<b>Open Electives</b>			
		Electives	13- 21
<b>Open Elective credits:</b>			<b>13- 21</b>
<b>Total Credits at the Community College</b>	<b>60-61</b>	<b>Total Credits for the 4-Year Degree</b>	<b>120-121</b>

## Transfer Pathway and Degree Program

# Template 1

### Central Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree  
[ECOLOGY, BIODIVERSITY, EVOLUTION]

Community Colleges*:			CCSU	
		Credits		Credits
<b>General Education Requirements</b>				
<b>Framework30**</b>				
<b>Competency:</b>				
<b>Section A</b>				
Written I	ENG*101 English Composition	3	ENG 110	3
Written II	Gen Ed Elective	3	Skill Area I Communication Skills	3
Scientific Reasoning	BIO*121 General Biology I	4	Skill Area II Mathematics	4
Scientific Knowledge	CHE*121 General Chemistry I	4	Study Area IV Natural Sciences	4
Quantitative	MAT*186 Precalculus	4	Study Area IV Natural Sciences	4
Historical Knowledge	Gen Ed Elective	3	Study Area II History Requirement	3
Social Knowledge	Gen Ed Elective	3	Study Area II Social Sciences	3
Aesthetic Dimensions	Gen Ed Elective	3	Study Area I Arts & Humanities	3
<b>Section B</b>				
Competency:	Gen Ed Elective	3	Skill Area IV University Requirement	3
Competency:	Gen Ed Elective	3	Study Area III Behavioral Sciences	3
<b>Framework30 Credits (30-31):</b>		<b>33</b>		<b>33</b>
<b>Additional General Education Courses</b>				
			Study Area I Literature Requirement	3
			Study Area I: Arts & Humanities	3
			Study Area II: Social Sciences	3
			Study Area III: Behavioral Sciences	3
			Skill Area II: Math/Stat/Computer Science	3
			Skill Area III: Foreign Language Proficiency	0-6
Students must complete two international courses and one literature course to complete the CCSU gen ed requirements.				
<b>General Education Credits:</b>		<b>33</b>		<b>48-54</b>

<b>Major Program Courses</b>			
BIO*122 General Biology II	4	BIO 122 General Biology II	4
CHE* 122 General Chemistry II	4	CHEM200/201 Fdns of Analytical Chem/ Lab or CHEM 260/201 Fdns of Inorganic Chem/ Lab	4
PHY* 121 General Physics I or CHE*211 Organic Chemistry I	4	PHY 121 General Physics I or CHEM 210/211 Fdns of Organic Chem/Lab	4
BIO*235 Microbiology or 200's level BIO* lab science	4	BMS 316 Microbiology or BIO 200-level or higher lab science elective	4
Additional Gen Ed Elective or Calculus I	3-4	Gen Ed Elective or MATH 152 Calculus I or MATH 124 Appl Calculus w/Trig	3-4
BIO*270 or 200's level BIO* lab science	4	BIO 200-level or higher lab science elective	4
PHY* 122 General Physics II	4	PHY 122 General Physics II	4
		PHY 121 General Physics I or CHEM 210/211 Fdns of Organic Chemistry/Lab; whichever was not taken at CC	4
		PHY 122 General Physics II or BIO elective	4
		BIO 200 Integrative Biology	4
		BIO 290 Biology Research Experience I	2
		BIO electives or MATH requirement (if not completed at CC)	3-4
		EBE Group 1 BIO elective	3
		BIO 390 Biology Research Experience II or 391 Internship in Biology	1
		EBE group 2 BIO elective	3
		EBE group 3 BIO Elective	3
<b>Program Course Credits:</b>	<b>27-28</b>		<b>54-56</b>
<b>Open Electives</b>			
		Electives	10-19
<b>Open Elective credits:</b>			<b>10-19</b>
<b>Total Credits at the Community College</b>	<b>60-61</b>	<b>Total Credits for the 4-Year Degree</b>	<b>120- 122</b>

# Transfer Pathway and Degree Program

## Template 1

### Central Connecticut State University

Complete four-year degree with articulation of community college degree to four-year degree  
[ENVIRONMENTAL SCIENCE]

Community Colleges*:			CCSU	
		Credits		Credits
<b>General Education Requirements</b>				
<b>Framework30**</b>				
<b>Competency:</b>				
<b>Section A</b>				
Written I	ENG*101 English Composition	3	ENG 110	3
Written II	Gen Ed Elective	3	Skill Area I Communication Skills	3
Scientific Reasoning	BIO*121 General Biology I	4	Skill Area II Mathematics	4
Scientific Knowledge	CHE*121 General Chemistry I	4	Study Area IV Natural Sciences	4
Quantitative	MAT*186 Precalculus	4	Study Area IV Natural Sciences	4
Historical Knowledge	Gen Ed Elective	3	Study Area II History Requirement	3
Social Knowledge	Gen Ed Elective	3	Study Area II Social Sciences	3
Aesthetic Dimensions	Gen Ed Elective	3	Study Area I Arts & Humanities	3
<b>Section B</b>				
Competency:	Gen Ed Elective	3	Skill Area IV University Requirement	3
Competency:	Gen Ed Elective	3	Study Area III Behavioral Sciences	3
<b>Framework30 Credits (30-31):</b>		<b>33</b>		<b>33</b>
<b>Additional General Education Courses</b>				
			Study Area I Literature Requirement	3
			Study Area I: Arts & Humanities	3
			Study Area II: Social Sciences	3
			Study Area III: Behavioral Sciences	3
			Skill Area II: Math/Stat/Computer Science	3
			Skill Area III: Foreign Language Proficiency	0-6
Students must complete two international courses and one literature course to complete the CCSU gen ed requirements.				
<b>General Education Credits:</b>		<b>33</b>		<b>48-54</b>

<b>Major Program Courses</b>			
BIO*122 General Biology II	4	BIO 122 General Biology II	4
CHE* 122 General Chemistry II	4	CHEM200/201 Fdns of Analytical Chem/ Lab	4
PHY* 121 General Physics I or CHE*211 Organic Chemistry I	4	PHY 121 General Physics I or CHEM 210/211 Fdns of Organic Chem I/Lab	4
BIO*235 Microbiology or 200's level BIO* lab science	4	BMS 316 Microbiology or BIO 200-level or higher lab science elective	4
Additional Gen Ed Elective or Calculus I	3-4	Gen Ed Elective or MATH 152 Calculus I or MATH 124 Appl Calculus w/Trig	4
BIO*270 or 200's level BIO* lab science	4	BIO 200-level or higher lab science elective	4
PHY* 122 General Physics II or CHE*212 Organic Chemistry II	4	PHY 122 General Physics II or CHEM 212/213 Organic Synthesis/Lab	4
		PHYS 121 General Physics I or CHEM 210/211 Foundations of Organic Chemistry/Lab; whichever was not taken at CC	4
		PHYS 122 General Physics II or CHEM 200/201 Fdns of Analytical Chem /Lab; whichever was not taken at CC	3- 4
		CHEM 212/213 Organic Synthesis/Lab or CHEM 456 Toxicology	3-4
		BIO 200 Integrative Biology	4
		BIO 290 Biology Research Experience I	2
		BIO electives or MATH requirement (if not completed at CC)	3-4
		BIO 436 Environmental Resources and Management or BIO 438 Aquatic Pollution	3
		BIO 390 Biology Research Experience II or BIO 391 Internship in Biology	1
		ES Group 1 BIO elective	3
		ES Group 2 BIO elective	3
		ESCI 121 Physical Geology or ESCI 450 Environmental Geology	3
		CHEM 406 Environmental Chemistry	3
<b>Program Course Credits:</b>	<b>27-28</b>		<b>63- 66</b>
<b>Open Electives</b>			
		Electives	0-10
<b>Open Elective credits:</b>			<b>0-10</b>
<b>Total Credits at the Community College</b>	<b>60-61</b>	<b>Total Credits for the 4-Year Degree</b>	<b>120- 121</b>



**Transfer Pathway and Degree Program**

**Template 2**

Credits remaining in the four-year degree

[GENERAL BIOLOGY]

<b>Central Connecticut State University</b>	
<b>Remaining General Education Courses</b>	
<b>Course</b>	<b>Credits</b>
Study Area I Literature Requirement	3
Study Area I: Arts & Humanities	3
Study Area II: Social Sciences	3
Study Area III: Behavioral Sciences	3
Skill Area II: Math/Stat/Computer Science	3
Skill Area III: Foreign Language Proficiency	0-6
Students must complete two international courses and one literature course to complete the CCSU gen ed requirements.	
<b>General Education Credits</b>	<b>15-21</b>
<b>Remaining Major Program Courses</b>	
<b>Course</b>	<b>Credits</b>
General Physics I or Foundations of Organic Chemistry w/Lab (CHE 210/211) (which ever was not taken at CC)	4
BIO 200 Integrative Biology	4
BIO 290 Biology Research Experience I	2
BIO electives or MATH requirement (if not completed at CC)	3-4
BIO elective	4
BIO 390 Biology Research Experience II or BIO 391 Internship in Biology	1
BIO elective	3
BIO elective	3
<b>Program Course Credits</b>	<b>24- 25</b>
<b>Remaining Open Electives</b>	
<b>Courses</b>	<b>Credits</b>
Electives	13-21
<b>Open Elective credits</b>	<b>13-21</b>
<b>Total Credits Remaining for the 4-Year Degree</b>	<b>59-60</b>

## Transfer Pathway and Degree Program

### Template 2

Credits remaining in the four-year degree

[ECOLOGY, BIODIVERSITY, EVOLUTION]

<b>Central Connecticut State University</b>	
<b>Remaining General Education Courses</b>	
<b>Course</b>	<b>Credits</b>
Study Area I Literature Requirement	3
Study Area I: Arts & Humanities	3
Study Area II: Social Sciences	3
Study Area III: Behavioral Sciences	3
Skill Area II: Math/Stat/Computer Science	3
Skill Area III: Foreign Language Proficiency	0-6
Students must complete two international courses and one literature course to complete the CCSU gen ed requirements.	
<b>General Education Credits</b>	<b>15-21</b>
<b>Remaining Major Program Courses</b>	
<b>Course</b>	<b>Credits</b>
General Physics I or Foundations of Organic Chemistry w/Lab (CHE 210/211) (which ever was not taken at CC)	4
General Physics II or upper level Chem (200, 260, or 354); which ever was not taken at CC	3- 4
BIO 200 Integrative Biology	4
BIO 290 Biology Research Experience I	2
BIO electives or MATH requirement (if not completed at CC)	3-4
EBE Group 1 BIO elective	3
BIO 390 Biology Research Experience II or BIO 391 Internship in Biology	1
EBE group 2 BIO elective	3
EBE group 3 BIO Elective	3
<b>Program Course Credits</b>	<b>26-28</b>
<b>Remaining Open Electives</b>	
<b>Courses</b>	<b>Credits</b>
Electives	10-19
<b>Open Elective credits</b>	<b>10-19</b>
<b>Total Credits Remaining for the 4-Year Degree</b>	<b>59-60</b>

## Transfer Pathway and Degree Program

### Template 2

Credits remaining in the four-year degree

[ENVIRONMENTAL SCIENCE]

<b>Central Connecticut State University</b>	
<b>Remaining General Education Courses</b>	
<b>Course</b>	<b>Credits</b>
Study Area I Literature Requirement	3
Study Area I: Arts & Humanities	3
Study Area II: Social Sciences	3
Study Area III: Behavioral Sciences	3
Skill Area II: Math/Stat/Computer Science	3
Skill Area III: Foreign Language Proficiency	0-6
Students must complete two international courses and one literature course to complete the CCSU gen ed requirements.	
<b>General Education Credits</b>	<b>15-21</b>
<b>Remaining Major Program Courses</b>	
<b>Course</b>	<b>Credits</b>
General Physics I or Foundations of Organic Chemistry w/Lab (CHE 210/211) (which ever was not taken at CC)	4
General Physics II or upper level Chem (200/ 201); which ever was not taken at CC	3-4
Organic Synthesis 2/ lab (CHEM 212/ 213) or Toxicology (CHEM 456)	3-4
BIO 200 Integrative Biology	4
BIO 290 Biology Research Experience I	2
BIO electives or MATH requirement (if not completed at CC)	3-4
BIO 436 Environmental Resources and Management or BIO 438 Aquatic Pollution	3
BIO 390 Biology Research Experience II or BIO 391 Internship in Biology	1
ES Group 1 BIO elective	3
ES Group 2 BIO elective	3
ESCI 121 Physical Geology or ESCI 450 Environmental Geology	3
CHEM 406 Environmental Chemistry	3
<b>Program Course Credits</b>	<b>35-38</b>
<b>Remaining Open Electives</b>	
<b>Courses</b>	<b>Credits</b>
Electives	0-10
<b>Open Elective credits</b>	<b>0-10</b>
<b>Total Credits Remaining for the 4-Year Degree</b>	<b>59-60</b>

### Community College Courses

<u>Semester</u>	<u>Course</u>	<u>Credits</u>	<u>Gen Ed</u>
Year 1 Fall	BIO*121 General Biology I	4	
	CHE*121 General Chemistry I	4	
	MAT*186 Precalculus	4	
	ENG*101	3	
		15	

<u>Semester</u>	<u>Course</u>	<u>Credits</u>	<u>Gen Ed</u>
Year 1 Spring	BIO*122 General Biology II	4	
	CHE*122 General Chemistry II	4	
	<sup>1</sup> Gen Ed	3	
	MAT*254 Calculus I or Elective	4	(or 3)
		15	(or 14)

<u>Semester</u>	<u>Course</u>	<u>Credits</u>	<u>Gen Ed</u>
Year 2 Fall	PHY*121 General Physics I or CHE 211 Organic Chemistry I	4	
	BIO*235 Microbiology or 200's level BIO* lab science elective	4	
	<sup>1</sup> Gen Ed	3	
	<sup>1</sup> Gen Ed	3	
		14	

<u>Semester</u>	<u>Course</u>	<u>Credits</u>	<u>Gen Ed</u>
Year 2 Spring	PHY*122 General Physics II or CHE*212 Organic Chemistry II	4	
	BIO*270 or 200's level BIO* lab science elective	4	
	<sup>1</sup> Gen Ed	3	
	<sup>1</sup> Gen Ed	3	
	<sup>1</sup> Gen Ed	3	
		17	

TOTAL

<sup>1</sup> Gen Ed Courses selected must be used to fulfill the CSCU Framework Competencies 61 (or 60)

<sup>2</sup> Organic Chem II is not required for some CCSU programs- check with your advisor

Protocol for system-wide approval of  
“CSCU Pathway Transfer A.A. / A.S. Degree: [Discipline] Studies”

The campuses, following local governance procedures, will review and vote on endorsement of each discipline pathway. The results of these votes will be reported to the TAP Co-Managers who will bring them forward through the Academic Council to the Board of Regents for their information as they make their final decision regarding approval for the system. If approved by the Board of Regents, a pathway will be implemented on all community college campuses that can reasonably offer it. These include campuses that offer the courses or can make them available to students at other institutions and/or, when educationally viable, online. Approved pathways will be received by all four-year schools who offer a baccalaureate in the pathway discipline.

Votes will be reported from each institution to the TAP Co-Managers who will keep track of the final votes and report them to the Academic Council and to the Board of Regents for final consideration of each pathway for system adoption. TAP Co-Managers will report the final BOR decision to the Academic Council.

At the time of the initial pathway review, campuses that cannot reasonably offer or receive a pathway may decide to abstain from voting with the understanding that they will adopt the pathway in the future if circumstances change to make it possible to offer or receive the pathway. In the event that a campus can adopt – either as sending or receiving institution – an existing system-wide pathway degree in the future, that campus will follow its own governance process (without having to go through any system-wide approval process) for endorsement and notification of adoption. The TAP Co-Managers will notify the BOR of the pathway changes and the results of the campus's endorsement vote. The Co-Managers will conduct an annual review of new and discontinued courses and programs from each campus and, with the aid of the Academic Council, determine when curriculum changes create the possibility of a pathway adoption.

Each pathway will be brought forward to the BOR for consideration at their first meeting three (3) months following the pathway's introduction into campus governance processes. One (1) extra month will be allowed for the winter break and three (3) extra months for the summer when faculty are off contract. All votes reported to the Co-Managers in time for the BOR meeting will be considered by the BOR in its decision.

As a general rule, campuses will begin offering and receiving each approved pathway in the first catalogue published five (5) months following the submission of the pathway for review to the Framework and Implementation Review Committee.

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**SECTION 1: BELOW-THRESHOLD GENERAL PROGRAM INFORMATION<sup>1</sup>**

<b>Institution:</b> Eastern Connecticut State University	<b>Date of Submission to BOR Office:</b>
<b>Most Recent NEASC Institutional Accreditation Action and Date:</b> Accredited, Last review was in 2010	
<b>Characteristics of Below-Threshold Offering</b> <b>Name of Offering:</b> BS in Psychology, Concentration in Behavior Analysis <b>Type of Offering</b> (e.g. Grad Certificate, Minor, Option) <b>Concentration</b> <b>Anticipated Initiation Date:</b> Fall, 2015 <b>Anticipated Date of First Completion</b> (if applicable) : <b>Modality of Program:</b> X On ground    Online    Combined If "Combined", % of fully online courses?	<b>Credit Distribution of the Offering</b> <b># Cr in Core Courses:</b> 47 <b># Cr of Electives:</b> <b># Cr of Other:</b> 73 <b># Cr Special Requirements</b> (e.g. internship): <b>Total # Cr the Institution Requires to Award the Credential</b> 120
<b>Suggested CIP Code No.</b> (if applicable)	<b>Title of CIP Code</b>
<b>Institution's Unit</b> (e.g. School of Business) and <b>Location</b> (e.g. main campus) <b>Offering the Program:</b> Department of Psychology, School of Arts & Sciences	
<b>Description of Offering, Context and Justification</b> (Please provide a concise description of the proposed offering and learning objectives, including a list a list of courses if necessary for clarity. In one paragraph, please address need and anticipated benefits of the offering)	
<p>The Department of Psychology at Eastern Connecticut State University currently offers three concentrations: General Psychology, Psychology of Children &amp; Youth, and Industrial-Organizational Psychology. The current proposal adds a fourth concentration (in Behavior Analysis) to this major. This concentration will be built upon courses that meet the requirements set forth by the Behavior Analyst Certification Board (BACB) for the coursework component of training to be eligible to sit for the Board Certified assistant Behavior Analyst (BCaBA) exam. This training is set in the context of a rigorous major that focuses on the science of psychology and the development of critical thinking and analytic skills. As such, it includes a 5-course core in behavior analysis, with 34 additional credits in psychology.</p> <p>The Department of Psychology has offered a BACB-approved course sequence for the BCaBA credential since at least 2004, and was the first undergraduate training program in the state approved by the BACB. Until recent changes in requirements to become board certified, this consisted of a three-course sequence (PSY 205, 316, and 407). With an increase in the training requirements specified by the BACB, two new courses were developed and added to the curriculum in the 2013-2014 academic year (PSY 216 and PSY 416). In total, this five-course, 13-credit class sequence meets the requirements for the BACB's 4<sup>th</sup> edition task list.</p> <p>As the department already has a course sequence approved by the Behavior Analysis Certification Board, providing a formal distinction to the transcripts of students completing this program is a logical extension. Completion of this concentration will demonstrate that our graduates have a foundation in the field, potentially making them more successful as they pursue graduate studies. As this course sequence prepares students for a bachelor's level credential, they could also pursue their certification after completing the other requirements stipulated by the BACB, providing them with a professional advantage. Because of the possibility for certification at the bachelor's level, this concentration may provide a strong recruitment tool for the department and the university. Even without a formal concentration, the coordinator of the program regularly receives inquiries from individuals in the community about how to become certified, and several students have enrolled in our existing course sequence with this goal.</p>	

<sup>1</sup> This information report pertains to academic programs not reaching the threshold requiring Board of Regents action. Information is shared with the BOR-Academic Council and included in the BOR-Academic and Student Affairs Committee meetings. Most CSUS and COSC cases will only require the completion of Section 1. **All Community College programs require the completion of detailed course information in Section 2.**

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**Cost Effectiveness and Availability of Adequate Resources** *(As applicable, please provide a one paragraph narrative addressing resources, financial aspects of the program and how it will be sustained)*

There are currently three Board Certified Behavior Analysts in the Department of Psychology, which should provide sufficient coverage for the required course offerings. The course-sequence coordinator (i.e., the liaison to the BACB) must be a Board Certified Behavior Analyst at the Doctoral level (BCBA-D). Additionally, the faculty teaching the courses in this sequence must meet eligibility requirements set by the BACB, with board certification preferred. One benefit of having certified faculty is that they are required to stay apprised of developments within the field via the accrual of Continuing Education Units. Providing funds to offset the cost of maintaining the certification (approximately \$300 annually, per certificant, including fees and Continuing Education Units) for the three existing faculty would help to ensure the long-term success of the program and the ability of the department to meet the needs of the students enrolled with the highest-quality instruction in the field.

**Institutional Contact for this Proposal:** James Diller,  
PhD, BCBA-D

Title: Associate  
Professor of  
Psychology

Tel.: 860-465-0214  
e-mail: dillerj@easternct.edu

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

BOR Sequence Number (to be assigned):

Approved 2010 CIP Code No. *(if applicable)* <sup>2</sup>

Title of CIP Code

Log of BOR Steps:

Date for Inclusion in BOR-ASA Meeting Package:

Comments

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<sup>2</sup> If needed, CIP assignment will be done by BOR staff in consideration of suggested number and in consultation with academic offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**SECTION 2: DETAILS OF NEW OFFERING (Community Colleges)**

**Curriculum**

(Please provide details of the courses for the proposed offering. Mark any new courses with an asterisk \* and attach descriptions. Mark any courses that are delivered fully online with a double asterisk \*\*. Please modify this format as needed for each case)

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Core Courses (Behavior Analysis)</b>				<b>Other Requirements</b>		
PSY 205, Principles of Learning	1,3		3	One of the Following:		3
PSY 216, Ethics for Behavior Analysts	2	PSY 205	1	PSY 204, Psychology of Infant and Toddler	3	
PSY 316, Applied Behavior Analysis	1, 2, 3	PSY 205	3	PSY 206, Psychology of Childhood	3	
PSY 407, Learning II: Theories/Issues	1, 3	PSY 205	3	PSY 208, Psychology of Adolescence	3	
PSY 416, Sustainable Behavior	1, 2, 3		3	PSY 210, Psych Adulthood And Aging	3	
<b>Core Courses (Required of All Psychology Majors)</b>				One of the Following:		3
PSY 101, Intro to the Psych Major	3		1	PSY 301, Abnormal Psychology	3	
PSY 227, Behavioral Science Statistics	3		4	PSY 302, Psychopathology of Childhood	3	
PSY 247, Research Methods I	3	PSY 227	4	One of the Following:		3
PSY 327, Research Methods II	3	PSY 247	4	PSY 318, Sensation And Perception	3	
PSY 419, History/Systems of Psychology	3		3	PSY 418, Physiological Psychology	3	
PSY 402, Current Research in Child Psc OR PSY 409 Current Research in Psychology	3	PSY 247	3	PSY 430, Human Neuropsychology	3	
				Two of the following (including no more than 3 credits of PSY 480, 490, 491, 496, 497, 498)		6
				PSY 303, Industrial/Organizational Psychology	3	
				PSY 315, Psychology of Gender	3	
				PSY 319, Human Sexuality	3	
				PSY 325, Health Psychology	3	
				PSY 330, Evolutionary Psychology	3	
				PSY 450, Counseling And Clinical Psych	3	
				PSY 460, Seminar in Psychology	3	
				PSY 480, Independent Study	3	
				PSY 490, Teaching Assistantship	3	
				PSY 491, Research Assistant	3	
				PSY 496, Psych Intern: Group Supervision	3	
				PSY 497, Psych Intern: Individual	3	
				PSY 498, Research And Field Experience	3	
<b>Prerequisites</b>						



**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
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Total Other Credits Required to Issue Credential				73

**Other Details**

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

1. Students will learn basic principles of behavior, as specified in the disciplines of Applied Behavior Analysis, the Experimental Analysis of Behavior, and the philosophy of radical behaviorism.
2. Students will adhere to ethical principles while applying behavior-change techniques in a real-world setting.
3. Students will gain experience with a breadth of topics within the science of psychology.

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**SECTION 1: BELOW-THRESHOLD GENERAL PROGRAM INFORMATION<sup>1</sup>**

<b>Institution:</b> Southern CT State University		Date of Submission to BOR Office:	
Most Recent NEASC Institutional Accreditation Action and Date: June 2012 – reaffirmation until 2022			
<b>Characteristics of Below-Threshold Offering</b>		<b>Credit Distribution of the Offering</b>	
Name of Offering: Renaissance Studies Minor		# Cr in Core Courses: 0	
Type of Offering (e.g. Grad Certificate, Minor, Option) <b>Minor</b>		# Cr of Electives: 18	
Anticipated Initiation Date: Fall 2015		# Cr of Other: 0	
Anticipated Date of First Completion (if applicable):		# Cr Special Requirements (e.g. internship):	
Modality of Program: On ground    Online    x Combined		Total # Cr the Institution Requires to Award the Credential	
If "Combined", % of fully online courses? 0%		18	
Suggested CIP Code No. (if applicable)	Title of CIP Code	CIP Year: 2000	or 2010
Institution's Unit (e.g. School of Business) and Location (e.g. main campus) Offering the Program: School of Arts & Sciences			
<b>Description of Offering, Context and Justification</b> (Please provide a concise description of the proposed offering and learning objectives, including a list of courses if necessary for clarity. In one paragraph, please address need and anticipated benefits of the offering)			
<p>The minor in Renaissance Studies at SCSU provides the opportunity to specialize in the literature, visual art, theatre, and intellectual history of the Renaissance in England and Europe (14<sup>th</sup>-17<sup>th</sup> centuries). In consultation with the program coordinator, students create their own minor from a range of late medieval, Renaissance, and early modern courses in Art History, English, World Languages and Literatures, History, and Philosophy, distributed equally between two areas of distribution requirements: "Historical and Intellectual Foundations of the Renaissance" (9 credits) and "The Renaissance Imagination" (9 credits). If approved, SCSU would be the only public university in Connecticut to offer an undergraduate Renaissance Studies program, thus taking its place alongside University of Connecticut's Medieval Studies program and the graduate early modern studies group at Yale.</p>			
<b>Cost Effectiveness and Availability of Adequate Resources</b> (As applicable, please provide a one paragraph narrative addressing resources, financial aspects of the program and how it will be sustained)			
<p>This minor takes advantage of the more than 30 courses relevant to Renaissance Studies already being offered by the English, World Languages and Literatures, Art, History, and Philosophy departments at Southern. It requires no initial additional funding or curriculum. Required non-financial resources include: a coordinator to provide advising to new and potential minors; a university web page (linked to affiliated departments and maintained by coordinator); other promotional materials (university brochures, posters, etc.); and the opportunity to request future university funds for visiting speaker(s) to a Fall or Spring colloquium.</p>			
Institutional Contact for this Proposal: Dr. Bette Bergeron		Title: Provost	Tel.: 203-392-5350 e-mail: Bergeron@southernct.edu

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

BOR Sequence Number (to be assigned):  
 Approved 2010 CIP Code No. (if applicable) <sup>2</sup>                      Title of CIP Code  
 Log of BOR Steps:

<sup>1</sup> This information report pertains to academic programs not reaching the threshold requiring Board of Regents action. Information is shared with the BOR-Academic Council and included in the BOR-Academic and Student Affairs Committee meetings. Most CSUS and COSC cases will only require the completion of Section 1. **All Community College programs require the completion of detailed course information in Section 2.**

<sup>2</sup> If needed, CIP assignment will be done by BOR staff in consideration of suggested number and in consultation with academic offices at the institution and system proposing the program. For the final assignment, the 2010 CIP definitions will be used.

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**

***BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12***

Date for Inclusion in BOR-ASA Meeting Package:

Comments

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**SECTION 2: DETAILS OF NEW OFFERING (Community Colleges)**

**Curriculum**

(Please provide details of the courses for the proposed offering. Mark any new courses with an asterisk \* and attach descriptions. Mark any courses that are delivered fully online with a double asterisk \*\*. Please modify this format as needed for each case)

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Core Courses</b>				<b>Other Requirements</b>		
				ENG 342 Shakespeare I	1,2	3 cr
				ENG 343 Shakespeare II	1,2	3 cr
				ENG 343 Shakespeare's Contemporaries	1,2	3 cr
				ENG 398 Early Modern Women's Writers	1,2	3 cr
				ENG 380 Chaucer	1,2	3 cr
				ENG 484 Milton	1,2	3 cr
				LIT 326 Dane and His Times	1,2	3 cr
<b>Prerequisites</b>						
ENG 112 (or equivalent)			3 cr	LIT 330 Renaissance in Europe 1350-1650	1,2	3 cr
Successful completion (C or better) of LEP Tier II Cultural Expressions requirement (ART 104, 105; CHI 210; ENG 217; GEO 200; ITA 210; JPN 210; JST 200; MUS 110; PSC 240; or THR 100)			3 cr	FRE 455 Renaissance Literature	1,2	3 cr
				FRE 460 Le Siecle de Louis XIV	1,2	3 cr
				ITA 454 14 <sup>th</sup> c. Writers	1,2	3 cr
				ITA 456 Lit of the 15 <sup>th</sup> c	1,2	3 cr
				ITA 457 Prose Writers of the 16 <sup>th</sup> c	1,2	3 cr
				SPA The Golden Age	1,2	3 cr
				HIS 231 England from Romans to Cromwell	1,2	3 cr
				HIS 239 Spain and Portugal	1,2	3 cr
				HIS 247 Early Modern France	1,2	3 cr
				HIS 303 England and France in the Middle Ages	1,2	3 cr
				HIS 304 Europe in the 17 <sup>th</sup> century	1,2	3 cr
				PHI 297 Med and Renaissance Philosophy	1,2	3 cr
				PHI 306 Age of Reason: Galileo to Kant	1,2	3 cr
				PHI 342 Political Philosophy: Legitimacy and Its Limits	1, 2	3 cr
				ART 301 History of Italian Ren Art	1,2	3 cr
				ART 307 History of Baroque Art	1,2	3 cr
				ART 322 History of Northern Renaissance Art	1,2	3 cr
				ART 429 History of Dutch Art in the Age of Rembrandt	1,2	3 cr
				ART 306 History of Medieval Art	1,2	3 cr
<b>Total Other Credits Required to Issue Credential</b>						

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**Other Details** Minor is broken down into two fields of electives, or areas of knowledge: "Historical and Intellectual Foundations of the Renaissance" (9 credits) and "The Renaissance Imagination" (9 credits). Please see Appendix A of Minor Program Proposal (attached) for complete breakdown of courses under each area of knowledge.

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

1. Demonstrate comprehensive knowledge of a key period in intellectual history and the humanities - the Renaissance and Reformation of England and Europe of the 14<sup>th</sup>-17<sup>th</sup> centuries
2. Demonstrate competence in interdisciplinary modes of research and critical inquiry, based on successful completion of at least three courses in historical methodology and three courses in language and literatures, including one course in the visual arts
3. Demonstrate proficiency in oral and written communicators, through writing-intensive, analytical, and / or multi-modal design-based projects

1.

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**SECTION 1: BELOW-THRESHOLD GENERAL PROGRAM INFORMATION<sup>1</sup>**

<b>Institution:</b> Southern Connecticut State University	<b>Date of Submission to BOR Office:</b>
Most Recent NEASC Institutional Accreditation Action and Date: June 2012 –reaffirmation until June 2022	
<b>Characteristics of Below-Threshold Offering</b> Name of Offering: Urban Affairs Minor Type of Offering (e.g. Grad Certificate, Minor, Option) <b>Minor</b> Anticipated Initiation Date: Fall 2015 Anticipated Date of First Completion (if applicable): Spring 2015 Modality of Program: X On ground    Online    Combined If "Combined", % of fully online courses?	<b>Credit Distribution of the Offering</b> # Cr in Core Courses: 6 # Cr of Electives: 12 # Cr of Other: 0 # Cr Special Requirements (e.g. internship): 0 Total # Cr the Institution Requires to Award the Credential 18
Suggested CIP Code No. (if applicable)	Title of CIP Code                      CIP Year: 2000    or    2010
Institution's Unit (e.g. School of Business) and Location (e.g. main campus) Offering the Program:	
<b>Description of Offering, Context and Justification</b> (Please provide a concise description of the proposed offering and learning objectives, including a list of courses if necessary for clarity. In one paragraph, please address need and anticipated benefits of the offering)  The minor in Urban Affairs is an interdisciplinary program for students interested in urban issues, public policy and local politics. It will be housed in the Political Science Department and its core courses will be completed there. Elective courses could also include courses in History, Economics, Environmental Studies, Anthropology, Sociology, and Geography that are relevant to understanding policy issues at the local level. The proposed minor distinguishes itself from other programs in the state by its focus on the political aspects of urban life. Currently several colleges and universities in the states have Urban Studies programs which are very broadly based, potentially covering any political, social or cultural issue relevant to urban communities. Students in these programs may be able to focus on a policy issue that interests them, but they will not necessarily receive the training in politics and administration that they need to address that issue in a practical way. By grounding our Urban Affairs program within the Political Science Department, we will be better placed to prepare our students to address public policy issues within the political realm.	
<b>Cost Effectiveness and Availability of Adequate Resources</b> (As applicable, please provide a one paragraph narrative addressing resources, financial aspects of the program and how it will be sustained)  No additional resources will be needed. All courses have previously been approved and are being staffed within their home departments. Political Science, as home to the minor, will be teaching a plurality of the courses. It has a new faculty member specializing in urban affairs, hired to support its new graduate concentration in Urban and Affairs and Public Policy. Because three fourths of his time is allocated to the undergraduate program, he will be available to teach courses relevant to the minor. Advising will occur within the context of the already established departmental advisement program.	
<b>Institutional Contact for this Proposal:</b> Dr. Bette Bergeron	<b>Title:</b> Provost  <b>Tel.:</b> 203-392-5350 <b>e-mail:</b> bergeron@southernct.edu

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

BOR Sequence Number (to be assigned):	
Approved 2010 CIP Code No. (if applicable) <sup>2</sup>	Title of CIP Code
Log of BOR Steps:	
Date for Inclusion in BOR-ASA Meeting Package:	

<sup>1</sup> This information report pertains to academic programs not reaching the threshold requiring Board of Regents action. Information is shared with the BOR-Academic Council and included in the BOR-Academic and Student Affairs Committee meetings. Most CSUS and COSC cases will only require the completion of Section 1. **All Community College programs require the completion of detailed course information in Section 2.**

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**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**

*BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12*

Comments

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**SECTION 2: DETAILS OF NEW OFFERING (Community Colleges)**

**Curriculum**

*(Please provide details of the courses for the proposed offering. Mark any new courses with an asterisk \* and attach descriptions. Mark any courses that are delivered fully online with a double asterisk \*\*. Please modify this format as needed for each case)*

Course Number and Name	L.O. #	Pre-Requisite	Cr Hrs	Course Number and Name	L.O. #	Cr Hrs
<b>Core Courses</b>				<b>Other Requirements</b>		
PSC 260 US Government	1		3.0	4 courses out of the following:		
PSC 314 Urban Politics	2	PSC 260	3.0	PSC 326 Race and Ethnicity in American Politics	3	3.0
				PSC 328 State and Local Government	1, 2	3.0
				PSC 350 Public Administration	2	3.0
				PSC 351 Analysis of Public Policy	2, 3	3.0
				PSC 356 Politics and Administration in Connecticut	1, 2, 3	3.0
				ECO 307 Urban Economics	3	3.0
				ECO 311 Public Finance	3	3.0
				ENV 200 Environmental Studies II	3	3.0
				GEO 280 GIS for the Social Sciences	3	3.0
				GEO 362 Urban Geography	3	3.0
				HIS 211 History of Criminal Justice in the Americas	3	3.0
				HIS 256 The City in US History	3	3.0
				PCH 352/ANT 312 Health, Disease and Culture	3	3.0
				SOC 100 Introduction to Sociology	3	3.0
				SOC 361 Urban Sociology	3	3.0
				SOC 363 Social Inequality	3	3.0
<b>Prerequisites</b>						
None						
<b>Total Other Credits Required to Issue Credential</b>						

**Other Details**

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

1. Understand the relationship between urban political life and the state and national political environment in which it operates.
2. Analyze the relationship between key actors in urban political life: including governmental, business, non-profit, and social institutions, groups, and individuals.
3. Apply the general understanding of urban politics to one of its specific domains, such as city administration, crime, economics, education, environment, geography, health, housing, or culture.



**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

**SECTION 1: BELOW-THRESHOLD GENERAL PROGRAM INFORMATION<sup>1</sup>**

<b>Institution:</b> Southern Connecticut State University	<b>Date of Submission to BOR Office:</b>
Most Recent NEASC Institutional Accreditation Action and Date: June 2012 – reaffirmation until June 2022	
<b>Characteristics of Below-Threshold Offering</b> Name of Offering: Medical Spanish for Health and Human Service Professionals Type of Offering ( <i>e.g. Grad Certificate, Minor, Option</i> ): Minor Anticipated Initiation Date: Fall 2015 Anticipated Date of First Completion ( <i>if applicable</i> ): Spring 2017 Modality of Program: X On ground    Online    Combined If "Combined", % of fully online courses? n/a	<b>Credit Distribution of the Offering</b> # Cr in Core Courses: 15 # Cr of Electives: 0 # Cr of Other: 0 # Cr Special Requirements ( <i>e.g. internship</i> ): 3 Total # Cr the Institution Requires to Award the Credential n/a
Suggested CIP Code No. ( <i>if applicable</i> )	Title of CIP Code                      CIP Year: 2000    or    2010
Institution's Unit ( <i>e.g. School of Business</i> ) and Location ( <i>e.g. main campus</i> ) Offering the Program: SCSU Arts and Sciences	
<b>Description of Offering, Context and Justification</b> ( <i>Please provide a concise description of the proposed offering and learning objectives, including a list of courses if necessary for clarity. In one paragraph, please address need and anticipated benefits of the offering</i> )  <p><b>Description of the minor:</b></p> <p>The minor in Medical Spanish for Health and Human Service Professionals is an 18-credit sequence of courses designed to prepare future professionals to serve Spanish-speaking clients in a clinical setting by developing functional and technical Spanish language skills and cultural awareness about US Latinos. Students must take the following sequence of courses:</p> <p>SPA 220—Medical Spanish (a third semester, intermediate language course that fulfills the Tier 1, LEP multilingual communication requirement and provides students with functional language skills as well as technical vocabulary useful for health and human service professionals);</p> <p>SPA 210—Spanish IV: Latino America (a fourth semester, intermediate language course that fulfills the LEP Tier 2 American Experience requirement by expanding students' functional language skills and cultural competency about US Latinos);</p> <p>SPA 300—Spanish Composition (an intensive grammar and syntax review designed to hone students' ability to write in Spanish);</p> <p>SPA 301—Spanish Conversation (a course that provides functional practice in oral Spanish language production) or SPA 305—Spanish Composition and Conversation for Heritage Learners (a class that provides heritage learners of Spanish with functional practice in oral and written communication);</p> <p>SPA 397—Student Internship in World Languages and Literatures (a field experience course in which students will use the language skills and cultural knowledge acquired in the minor within a clinical setting at a local health or human service agency), and</p> <p>SPA 410—Theory and Practice of Translation (a course that gives students theoretical understanding of and practical experience in translation).</p> <p><b>Need and anticipated benefits of the minor:</b></p> <p>Historic, geographic, economic, cultural and political factors have contributed to the dramatic increase of the nation's Hispanic population, making the U.S. the world's second largest Spanish-speaking country. According to the Pew Research Center, in 2012, one in four of the country's newborns were Hispanic, and by 2060 Hispanics will constitute 31% of the nation's population (<a href="http://www.pewresearch.org/fact-tank/2014/07/08/a-view-of-the-future-through-kindergarten-demographics/">http://www.pewresearch.org/fact-tank/2014/07/08/a-view-of-the-future-through-kindergarten-demographics/</a>). Hispanics, Connecticut's largest minority group, comprise 14.7% of our state population. Historically,</p>	

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## CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION

### BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12

Hispanics have tended to maintain stronger ties to their culture and language than have other minority groups. Given these factors, knowledge of medical Spanish has become a necessity for health and human services professionals, yet there is no course of study being offered in the Northeast to meet current and future workforce needs. SCSU's minor in Medical Spanish for Health and Human Professionals is intended to be a secondary course of study, complementing a wide range of health and human service-related degrees, including: Nursing, Exercise Science, Public Health, Psychology, Communication Disorders, and Social Work among others. Given that SCSU is strategically located beside Connecticut's largest medical complex, we predict that local health and human service professionals are likely to enroll in the courses comprising this new minor.

In general, the nation's universities have been slow to respond to the workforce need to train health and human services providers to communicate with Spanish-speaking clients. Many universities and community colleges offer a single course in Medical Spanish similar to the course we have been offering at SCSU since 2013 (SPA 220—Medical Spanish). Yet, despite the need to prepare future workers with functional and technical Spanish language skills as well as to develop cultural awareness necessary for communication, only five institutions nation-wide offer Medical Spanish programs. If the BOR approves this minor, SCSU will be the 6th university in the country to offer a sequence of courses to train health and human service professionals with Spanish skills and will be the only university in the Northeast with a medical Spanish program.

**Cost Effectiveness and Availability of Adequate Resources** *(As applicable, please provide a one paragraph narrative addressing resources, financial aspects of the program and how it will be sustained)*

The program can sustain itself with our current resources. The Spanish section employs an adequate number of full and part time instructors to teach all of courses in the minor program. Additionally, we are currently in the midst of filling a tenure-track position in Spanish with a person with expertise in Spanish for the professions. The new hire will coordinate the minor and teach many of its courses.

**Institutional Contact for this Proposal:**  
Dr. Bette Bergeron

Title: Provost

Tel.: (203) 392-5350  
e-mail: [bergeron@southernct.edu](mailto:bergeron@southernct.edu)

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

BOR Sequence Number (to be assigned):

Approved 2010 CIP Code No. *(if applicable)* <sup>2</sup>

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Comments

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**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**

## SECTION 2: DETAILS OF NEW OFFERING *(Community Colleges)*

## Curriculum

(Please provide details of the courses for the proposed offering. Mark any new courses with an asterisk \* and attach descriptions. Mark any courses that are delivered fully online with a double asterisk \*\*. Please modify this format as needed for each case)

[illegible]

**CONNECTICUT BOARD OF REGENTS FOR HIGHER EDUCATION**  
**BELOW-THRESHOLD NEW ACADEMIC OFFERING INFORMATION REPORT FORM - 01/20/12**

Total Other Credits Required to Issue Credential

**Other Details**

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

- a) To develop awareness about the critical intersection between language proficiency, cultural dexterity and the health and human services professions, particularly among Spanish-speaking patients and their providers in the U.S. Assessment method: testing and final projects in 5 of the 6 courses comprising the minor. (There will be no testing in the internship class, but there will be a final project).
- b) To develop basic, intermediate and advanced medical terminology in Spanish, medical interpreting and translation skills, and cultural fluency to help students better serve their Spanish-speaking clients. Assessment method: testing and final projects in 5 of the 6 courses comprising the minor. (There will be no testing in the internship class, but there will be a final project).
- c) To ensure that there is a critical mass of health and human services professionals within the Connecticut workforce to serve the state's Spanish-speaking population. (We will be able to judge the overall success of the minor—and in particular its ability to meet state workforce needs—by keeping in touch with alumni and finding out if they are using their medical Spanish skills in the field.