

7/12/2016

**ARTICULATION AGREEMENT**

**Between the**

**ASSOCIATE IN SCIENCE DEGREE – ENGINEERING  
PROGRAM**

**Of**

**Northern Essex Community College**

**And**

**MERRIMACK COLLEGE – B.S. IN ELECTRICAL ENGINEERING  
PROGRAM**

**Summer 2016**

This articulation agreement has been established between Northern Essex Community College (NECC) and Merrimack College (MC). This agreement was developed with the intent of facilitating the success of students at Northern Essex Community College and Merrimack College as well as the transfer of course credits between the two partner institutions. Furthermore, these agreements are intended to serve as a guideline for those who desire to complete their Associates of Science Degree in Engineering (Electrical/Computer concentration) at Northern Essex Community College while also transferring into Bachelor of Science in Electrical Engineering Degree Program at Merrimack College.

Students completing their Associates of Science Degree in Engineering (Electrical/Computer concentration) at NECC in accordance with the minimum standards as set in this agreement, will be admitted to the Bachelor of Science in Electrical Engineering Degree program at MC. Furthermore, such students who complete the described series of courses will receive an Associates of Science Degree in Engineering at NECC, and may qualify for a half-tuition merit scholarship through MC. Students who do not meet the minimum standards set forth herein will be considered for admission to MC on a case-by-case basis.

#### OBJECTIVES:

1. To facilitate the completion of students' Associates of Science Degree in Engineering (Electrical/Computer concentration) at NECC.
2. To facilitate the completion of students' Bachelor of Science Degrees in various Engineering Programs at MC.
3. To encourage the transfer of qualified students from NECC to MC by providing effective and concise guidelines.
4. To award appropriate academic credit for courses completed at NECC towards MC's engineering degree programs.

#### TERMS OF THE TRANSFER ARTICULATION AGREEMENT:

1. This document is based upon the evaluation of course descriptions offered by NECC and MC. NECC courses as listed in this agreement will transfer to MC provided a grade of "C" or higher has been earned. Developmental courses or any courses that are not college level will not be accepted for transfer credit.
2. MC guarantees the acceptance of all students who complete those NECC courses in the related concentration as listed in the attached Program of Study with an overall GPA of 2.5 or higher to the Bachelor of Science in Electrical Engineering Degree Program.
3. MC guarantees the transfer of credit as stipulated in the attached Programs of Study. Merrimack College requires that at least 50% of the major be completed in residence; the total number of credits required to earn a Bachelor of Science in Electrical Engineering Degree from MC is at least 128 credits and varies by Degree Program. Merrimack College may accept up to 76 credits, however, not all courses will apply to the student's degree program.

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4. Northern Essex Community College transfer students will be subject to all general education requirements of Merrimack College as set forth in Merrimack College catalog. Northern Essex Community College students interested in participating in this agreement should be advised to take liberal arts courses that will transfer as general education electives.
5. All NECC students who have earned an Associate's degree in Engineering Science (Electrical/Computer concentration) are encouraged to apply for financial aid. Transfer students are automatically considered for transfer scholarships. After transferring, students must be continuously enrolled in the Bachelor of Science in Electrical Engineering degree program and maintain a 2.0 grade point average at MC to continue the scholarship for up to four semesters.


This agreement supersedes any prior agreements and shall remain in effect for a period of three years from the date of its enactment, with the provision that the terms specified herein will continue to apply to students admitted from Northern Essex Community College's Associate in Science Degree: Engineering program (Electrical/Computer concentration) within one year of the expiration of the agreement. Each institution agrees to provide timely notice to the other in the event of any modification to the curriculum that might affect compatibility for admission and transfer of coursework. This agreement may be subject to change, with notification, if curriculum requirements change at either institution. Students admitted to the Northern Essex Community College's Associate in Science Degree: Engineering program (Electrical/Computer concentration) prior to such notification shall be admitted to Merrimack College on the basis of this agreement. This agreement is conditional upon the Engineering Department maintaining its' program approval from the Massachusetts Board of Higher Education.





7/12/2016

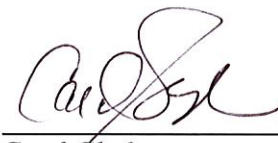
ARTICULATION AGREEMENT  
Between the Associate in Science Degree: Basic Engineering  
NORTHERN ESSEX COMMUNITY COLLEGE  
And  
MERRIMACK COLLEGE


Signature Page


  
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Lane A. Glen  
President, Northern Essex Community College  
11/30/16  
Date


  
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Christopher Hoey  
President, Merrimack College  
Date

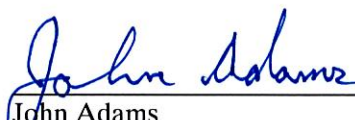
  
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William Heineman  
Vice President, Academic Affairs and Student Affairs  
11/21/16  
Date

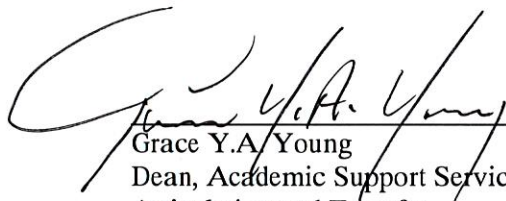
  
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Carol Glod  
Provost  
8/1/16  
Date

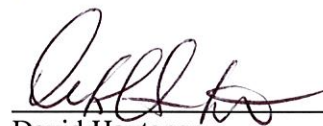
  
\_\_\_\_\_  
Kelly Sullivan  
Dean, Technology, Art, and Professional Studies  
11/29/16  
Date

  
\_\_\_\_\_  
Allan Weatherwax  
Dean, Science and Engineering  
Date

  
\_\_\_\_\_  
Paul Chanley  
Dept. Chair, Engineering and Physics  
11/22/16  
Date

  
\_\_\_\_\_  
John Adams  
Dept. Chair, Electrical Engineering  
7/27/16  
Date

  
\_\_\_\_\_  
Grace Y.A. Young  
Dean, Academic Support Services, Articulation and Transfer  
11/30/16  
Date

  
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David Hautanen  
Vice President, Enrollment Management & Retention  
8/8/16  
Date

**NORTHERN ESSEX COMMUNITY COLLEGE**  
 Engineering Science-Electrical/Computer  
 Concentration To  
**MERRIMACK COLLEGE**  
 Bachelor of Science in Electrical Engineering

<b>NECC Course Requirements &amp; Credits</b>		<b>Merrimack College Equivalent &amp; Credits</b>	
CHM 121 General Chemistry I	4	CHM 1180 Chemistry for Engineers	4
CIS 140 Intro to Computer Science	4	CSC 1610 Problem Solving with Programming	4
CTE 101 Fundamentals Digital Logic	3	EEN 1200 Digital Fundamentals	3
CTE 103 Digital Design Lab	2	Elective credit	2
ECO 201 Micro Economics	3	ECO 1202 Topics in Introductory Economics (meets Social Science elective)	3
ECO 202 Macro Economics	3	Elective Credit (meets Social Science elective)	3
ENG 101 English Composition I	3	Elective credit	3
ENG 102 English Composition II	3	FYW 1050 Introduction to College Writing	3
ENG 103 Technical Writing	3	See below (ENG 103 + EST 104 = GEN 1001)	
EST 104 Engineering Essentials & Design	3	GEN 1001 Introduction to Engineering (Writing Intensive)	4
EST 110 Engineering Design Graphics	3	Elective credit	3
EST 231-Engineering Circuit Analysis I	5	EEN 2130 Circuit Theory I	5
EST 232-Engineering Circuit Analysis II	5	EEN 2140 Circuit Theory II	5
MAT 251 Calculus I	4	MTH 1217 Calculus I	4
MAT 252 Calculus II	4	MTH 1218 Calculus II	4
MAT 253 Calculus III	4	MTH 2219 Calculus III	4
MAT 254 Differential Equations	4	MTH 2220 Differential Equations	4
PHS 131 Engineering Physics I	4	PHY 2211 Physics I	4
PHS 132 Engineering Physics II	4	PHY 2212 Physics II	4
Not required for NECC Graduation but can be taken via NECCUM (Spring year 2)	0	EEN 2270 Embedded Microprocessors (NECCUM)	4
PHI 101 Introduction to Philosophy	3	PHL 1000 Introduction to Philosophy	3