

# **ARTICULATION AGREEMENT**

Between the

Associate in Science Degree: Engineering

of

Bunker Hill Community College

and the

**UNIVERSITY OF MASSACHUSETTS LOWELL**  
Civil & Mechanical Engineering

April 2008

This articulation agreement has been established between Bunker Hill Community College and the University of Massachusetts Lowell, College of Engineering. This agreement was developed with the intent of facilitating the transfer process from Bunker Hill Community College (BHCC) to the University of Massachusetts Lowell. These agreements will serve as a guideline for those who desire to transfer from BHCC into the Engineering Programs at the University of Massachusetts Lowell.

Students completing the AS Engineering degree program at Bunker Hill Community College, in accordance with the minimum standards as set in this agreement by the College of Engineering at the University of Massachusetts Lowell, will be admitted to the University of Massachusetts Lowell as juniors. Such students will qualify for all the benefits of the Joint Admissions Program. Students who do not meet the aforementioned minimum standards will be considered for admission to the University of Massachusetts Lowell on a case-by-case basis.

#### OBJECTIVES:

1. To encourage the transfer of qualified students from Bunker Hill Community College to the University of Massachusetts Lowell.
2. To award academic credit for courses completed at Bunker Hill Community College that meet the terms of the Associate in Science Degree: Engineering Program as stated in this agreement for transfer to the Bachelor of Science in Engineering Degree Program at the University of Massachusetts Lowell.
3. To provide effective and concise guidelines for students seeking to transfer to the University of Massachusetts Lowell. Students will have accurate and clear information regarding the transfer of their coursework from BHCC to the Bachelor's Degree Program at the University of Massachusetts Lowell.

#### TERMS OF THE TRANSFER ARTICULATION AGREEMENT:

1. The University of Massachusetts Lowell guarantees the acceptance of students, who complete the Associate in Science Degree: Engineering Program at Bunker Hill Community College with an overall GPA of 2.5 or higher, to the Bachelor of Engineering Degree Program.
2. The University of Massachusetts Lowell guarantees the transfer of credit as stipulated in the attached Programs of Study. This agreement assumes the completion of the Associate Degree and completion of the courses listed on the attached Programs of Study. The University of Massachusetts Lowell may require that 50% of the major be completed in residence; a minimum total of 128 credits for Civil Engineering and 129 credits for Mechanical Engineering, must be completed to earn a Bachelor of Engineering Degree. The University of Massachusetts Lowell may accept courses taken beyond the Associate Degree (60 credits); however, students are encouraged to contact the transfer advisor at the University of Massachusetts Lowell for approval.
3. Bunker Hill Community College transfer students will be subject to all general education requirements of the University of Massachusetts Lowell as set forth in the University of Massachusetts Lowell catalog. Students meeting the requirements of the Commonwealth Transfer Compact will be exempt from 35 credits of University general education requirements, but will be required to meet any specific College of Engineering general education requirements. Meeting the Commonwealth Transfer Compact requires AS Engineering students to take 3 additional credit hours in Behavioral and Social Science and 6 additional credit hours in Humanities and Fine Arts, beyond the requirements of the AS Engineering Degree.
4. This document is based upon the evaluation of course descriptions presented to the University of Massachusetts Lowell. Courses as listed in this agreement will transfer to the

University of Massachusetts Lowell provided a grade of "C-" or higher has been earned. When appropriate, the requirements of the Commonwealth Transfer Compact will be honored.

5. Bunker Hill Community College students interested in participating in this agreement should be advised to take the suggested liberal arts courses. These courses are required at the University of Massachusetts Lowell and students are advised to complete them as part of their Associate Degree.

This agreement shall remain in effect for a period of three years from the date listed below, with the provision that the terms specified herein will continue to apply to students admitted from Bunker Hill Community College's Associate in Science Degree: Engineering program 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 Bunker Hill Community College's Associate in Science Degree: Engineering program prior to such notification shall be admitted to the University of Massachusetts Lowell 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.

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BUNKER HILL COMMUNITY COLLEGE

and the

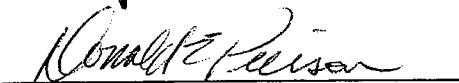
UNIVERSITY OF MASSACHUSETTS LOWELL

Civil & Mechanical Engineering

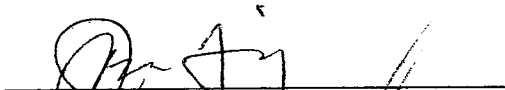
Signatures



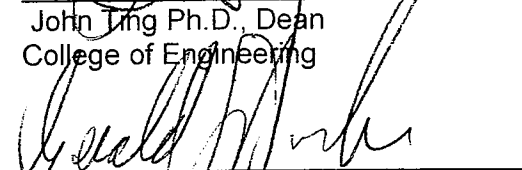
Martin Meehan, Chancellor  
University of Massachusetts Lowell



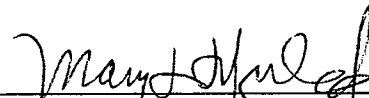
Donald Pierson, Ph.D.  
Interim Provost




John Ting Ph.D., Dean  
College of Engineering



Gerald Durkin, Associate Dean of  
Enrollment/Director of Transfer  
Admissions



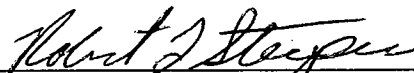
Mary L. Fifield, Ph.D., President  
Bunker Hill Community College



Charles Abasa-Nyarko, Ph.D.  
Vice President, Academic Affairs



S. Leonard Mhlaba, Dean  
Arts and Sciences



Robert Steeper, Chairperson  
Science Department

6/9/2008  
Date

6/20/2008  
Date

## Bunker Hill Community College – U Mass Lowell

<b>Transfer Articulation Agreement</b> <b>Associate in Science Degree: Engineering</b>
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Bunker Hill Community College Degree Requirements		U Mass Lowell Transfer Course Equivalents	
<b>Core Requirements – 36 Credits</b>			
PHY251 College Physics I/Lab	4	95.141/96.141 Physics I/Lab	4
PHY252 College Physics II/Lab	4	95.144/96.144 Physics II/Lab	4
ENR101 Intro to Engineering/Lab	4	25.107, 25.108 Intro Engineering I/Lab	4
MAT281 Calculus I	4	92.131 Calculus I	4
MAT282 Calculus II	4	92.132 Calculus II	4
MAT283 Calculus III	4	92.231 Calculus III	4
MAT285 Differential Equations	4	92.236 Differential Equations	4
CHM 201 General Chemistry/Lab I	4	84.121, 123 Chemistry I/Lab	4
CHM 202 General Chemistry/Lab II	4	84.122, 124 Chemistry II/Lab	4
<b>Concentration courses – 15 Credits</b>			
ENR260 Engineering Statics	3	14.203 or 22.211 Statics	3
ENR265 Engineering Dynamics	3	14.205 or 22.213 Dynamics	3
ENR270 Strength of Materials	3	14.204 or 22.212 Strength of Materials	3
Career Elective**	3	See recommended courses below	
Career Elective **	3	See recommended courses below	
<b>Gen Ed Requirements – 15 Credits</b>			
(detailed on attached pages)			
<b>Total Credits</b>	<b>66</b>		

\*\* In order to facilitate transfer to UMass Lowell's College of Engineering, Mechanical or Civil and Environmental Engineering Programs, it is recommended that a student take Gen Ed courses that will fulfill the Commonwealth Transfer Compact or select from the following UMass Lowell courses, or their equivalents, to meet the BHCC Career Elective Requirements:

Civil and Environmental Engineering

14.225 Surveying & Lab  
 14.286 Prob & Stats for Engr  
 14.226 Geomatics

Mechanical Engineering

22.201, 22.202 Design Lab I and II  
 22.296 Mech Behav Mat'ls  
 22.212 Mechs of Materials  
 16.211 Fund of Electricity

Students desiring to transfer to UMass Lowell in other areas of engineering should consult with the UMass Lowell Transfer Counselor for course recommendations for BHCC Career Electives.

## Bunker Hill Community College General Education Requirements

Bunker Hill Community College Gen Ed Requirements		U Mass Lowell Transfer Course Equivalents	
<b>College Writing</b>	6		
ENG111 College Writing I		42.101 College Writing I	3
ENG112 College Writing II		42.102 College Writing II	3
<b>Individual &amp; Society: One course</b>	3		
GOV101 Gov & Politics in US		46.101 Intro American Politics	3
GOV103 State & Local Politics		46.265 State & Local Politics	3
PSY101 Principles of Psychology		47.101 Intro to Psychology	3
PSY107 Group Dynamics		47.299 Psychology 200 level elective	3
SOC101 Principles of Sociology		48.101 Intro to Psychology	3
SOC109 Cultural Anthropology		48.102 Social Anthropology	3
<b>World View: One course</b>	3		
ECO201 Macroeconomics		49.202 Economics I	3
ECO202 Microeconomics		49.201 Economics II	3
GEO101 World Regional Geography		88.101 World & Regional Geography	3
HIS 101 History of Western Civ I		43.105 Western Civilization I	3
HIS102 History of Western Civ II		43.106 Western Civilization II	3
HIS111 World Civilization I		43.107 World Civilization I	3
HIS112 World Civilization II		43.106 The Modern World	3
HIS151 US History I		43.111 US History to 1877	3
HIS152 US History II		43.112 US History Since 1877	3
PHL111 World Religions		45.296 Intro to World Religions	3
PHL113 Religions of Middle East		45.299 Philosophy 200 level elective	3
<b>Quantitative Thought</b> Fulfilled by concentration requirements			
<b>Science &amp; Technology</b> Fulfilled by concentration requirements			
<b>Humanities</b>	3		
FLM101 Film as Art		59.199 Intercollegiate A&S 100 elec	3
FLM102 American Cinema		59.199 Intercollegiate A&S 100 elec	3
HUM110 American Culture		40.248 Values in American Culture	3
LIT Literature Courses		Consult UMass Lowell	3