

Articulation Agreement of Academic Programs between Bunker Hill Community College and UMass Dartmouth

AS Engineering to BS Civil Engineering AS Engineering to BS Mechanical Engineering

Fall, 2017 Updated October, 2021

The above institutions hereby enter into an agreement to facilitate the transfer of students enrolled in the Associate's Degree program in Engineering Transfer Option at Bunker Hill Community College into the Bachelor's Degree program in Civil Engineering or the Bachelor's Degree program in Mechanical Engineering at the University of Massachusetts Dartmouth.

University of Massachusetts Dartmouth's designated representative will be the Senior Coordinator for New Student Transfer and Bunker Hill Community College's representative will be the Coordinator of Enrollment of Transfer Services.

Objectives:

- 1. To attract qualified students to Bunker Hill Community College and University of Massachusetts, Dartmouth.
- 2. To promote and facilitate an efficient transition of transfer students between institutions.
- 3. To provide specific information and guidelines for transfer students.
- 4. To encourage academic coordination and cooperation, including curricular reviews, on-site visits, and joint academic advising for students attending Bunker Hill Community College

Stipulations and Guarantees:

- 1. University of Massachusetts Dartmouth guarantees acceptance of Bunker Hill Community College students who complete the Engineering Transfer Option with a cumulative GPA of 2.5.
- 2. Transfer of Credits:
 - a) Transfer students who complete the prescribed courses as designated in the attached articulation agreement with a C- or better will be guaranteed that sixty-three credits will be applied to the University of Massachusetts Dartmouth Civil Engineering baccalaureate degree.
 - b) Transfer students who complete the prescribed courses as designated in the attached articulation agreement with a C- or better will be guaranteed that fifty-seven credits will be

applied to the University of Massachusetts Dartmouth Mechanical Engineering baccalaureate degree.

3. University of Massachusetts Dartmouth guarantees a Massachusetts tuition credit for Bunker Hill Community College students who complete the Engineering Transfer Option with a cumulative GPA of 3.0. The tuition credit is renewable if the UMassD GPA is maintained at 3.0 or better.

Mutual Responsibilities:

- 1. Both institutions agree to maintain current listings of the course equivalencies. This will be the responsibility of the two designated representatives.
- 2. Bunker Hill Community College and University of Massachusetts Dartmouth will incorporate a summary of this agreement into official publications and web sites.
- 3. Bunker Hill Community College and University of Massachusetts Dartmouth agree to encourage qualified students to participate in this program by providing information, advising and other assistance required to foster a seamless transition from the two-year institution to the four-year institution.

Review/Revision:

- 1. Both institutions will review this agreement every three years. Substantive changes in the courses or program of either institution will require a review of this articulation agreement. Revisions will be implemented with one-year notice prior to termination of the agreement.
- 2. Every three years, upon review of this agreement, UMass Dartmouth shall provide BHCC with data on BHCC transfer students pursuing programs identified in this agreement to determine the success rates for BHCC students who transfer to UMass Dartmouth under this agreement.

Data to be shared with BHCC:

- Number of BHCC students who transferred to UMass Dartmouth pursuing programs identified in this agreement
- Date of enrollment at UMass Dartmouth
- Date of degree completion
- Cumulative grade point average

This data shall not contain any personally identifiable information and will be used solely for the purposes described herein. With the exception of the Data Recipient of BHCC, the Coordinator of Enrollment, the data shall not be shared or made available to any unauthorized personnel or other third party unless otherwise specified in this agreement.

Articulation Agreement for BS Civil Engineering

Summary of Benefits:

- Guaranteed Admission with a cumulative GPA of 2.5
- Massachusetts tuition credit for students with a BHCC cumulative GPA of 3.0 (renewable if UMassD GPA is maintained at 3.0 or better)
- Guaranteed transfer and applicability of 63 credits

Bunker Hill Community College:	Credits	UMD: Civil Engineering	Credits				
Engineering Transfer							
General Courses							
ENG 111 College Writing I	3	ENL 101 Critical Writing and Reading I	3				
ENG 112 College Writing II	3	ENL 102 Critical Writing and Reading II	3				
Community & Cultural Contexts ¹	3	University Studies	3				
General Education Elective ¹	3	University Studies	3				
Creative Work ¹	3	University Studies	3				
ECO 202 Microeconomics ²	3	ECO 231 Microeconomics	3				
HON 200 Honors Seminar ²	3	HUM 800 Humanities Elective	3				
	Engineering Courses						
ENR 101 Intro to Engineering w/lab	4	EGR 111 Intro to Engineering and	3				
ENR 103 Fundamentals of CAD & Design ²	3	Computing CEN 161 Civil Engineering Design Graphics	2				
ENR 260 Engineering Statics	3	EGR 241Eng. Mech. I: Statics	3				
ENR 265 Engineering Dynamics	3	EGR 242 Eng. Mech. II: Dynamics	3				
ENR 270 Strength of Materials	3	CEN 202 Mechanics of Materials	3				
	Math & Scien	nce Courses					
CHM 201 General Chemistry I & Lab	4	CHM 151 Principles of Modern Chemistry I & CHM 161	3				
		Intro to Applied Chemistry I	1				
CHM 202 General Chemistry II & Lab	4	CHM 152 Principles of Modern Chemistry II	3				
MAT 281 Calculus I	4	MTH 151 Analytical Geometry and Calculus I	4				
MAT 282 Calculus II	4	MTH 152 Analytical Geometry and Calculus II	4				
MAT 283 Calculus III	4	MTH 211 Analytical Geometry and Calculus III	4				
MAT 285 Ordinary Differential Equations	4	MTH 212 Differential Equations	3				
PHY 251 College Physics I w/lab	4	PHY 113 Classical Physics I	4				
PHY 252 College Physics II w/lab	4	PHY 114 Classical Physics II	4				
Total Credits	66		63				

¹ Students should speak with an Engineering Student Support & Services (ES³) advisor at UMass Dartmouth about proper transfer of general education courses. Ideally you will want to choose courses from the following UMass Dartmouth departments to meet UMassD University Studies requirements: ARH, ECO, HST, HUM, MUS, PHL, PSY, SOA, SSE. Use UMass Dartmouth's equivalency database (https://webapps.umassd.edu/transfers/) to see how BHCC courses may transfer. Do not choose more than one course from a social science area (ECO, PSY, SOA, SSE).

² Chosen as one of your Career Electives.

Additional course eligible for transfer					
CHM 251 Organic Chemistry I	4	CHM 251 Organic Chemistry I ³	3		

Articulation Agreement for BS Mechanical Engineering

Summary of Benefits:

• Guaranteed Admission with a cumulative GPA of 2.5

 $^{^3}$ Course can be used to meet one of your CEN Technical Electives (as the CEN Science Elective).

- Massachusetts tuition credit for students with a cumulative GPA of 3.0 (renewable if UMassD GPA is maintained at 3.0 or better)
- Guaranteed transfer and applicability of 57 credits

Bunker Hill Community College: Engineering Transfer	Credits	UMD: Mechanical Engineering	Credits		
General Courses					
ENG 111 College Writing I	3	ENL 101 Critical Writing and Reading I	3		
ENG 112 College Writing II	3	ENL 102 Critical Writing and Reading II	3		
Community & Cultural Contexts ¹	3	University Studies	3		
General Education Elective ¹	3	University Studies	3		
Creative Work ¹	3	University Studies	3		
	Engineerin	g Courses			
ENR 101 Intro to Engineering w/lab	4	EGR 111 Intro to Engineering and	3		
AND ENR 103 Fundamentals of CAD &	2	Computing	2		
Design ² AND	3	MNE 101 Intro to Mechanical	3		
CSC 125 Python Programming ²	3	Engineering			
ENR 260 Engineering Statics	3	EGR 241Eng. Mech. I: Statics	3		
ENR 265 Engineering Dynamics	3	EGR 242 Eng. Mech. II: Dynamics	3		
Math & Science Courses					
CHM 201 General Chemistry I & Lab	4	CHM 151 Prin. of Modern Chem. I &	3		
		CHM 161Intro to Applied Chem. I	1		
CHM 202 General Chemistry II & Lab	4	CHM 152 Prin. of Modern Chem. II ³	3		
MAT 281 Calculus I	4	MTH 151 Analytical Geometry and	4		
		Calculus I			
MAT 282 Calculus II	4	MTH 152 Analytical Geometry and Calculus II	4		
MAT 283 Calculus III	4	MTH 211 Analytical Geometry and	4		
		Calculus III			
MAT 285 Ordinary Differential	4	MTH 212 Differential Equations	3		
Equations					
PHY 251 College Physics I w/lab	4	PHY 113 Classical Physics I	4		
PHY 252 College Physics II w/lab	4	PHY 114 Classical Physics II	4		
Total Credits	63		57		

Note: Students who want to be able to complete their UMassD degree in two (2) years must complete UMass Dartmouth's MNE 220 – Engineering Thermodynamics before transferring. This course is regularly offered during the spring semester. Equivalent courses from other institutions are allowed but must have prior approval from UMassD. Speak with an ES³ advisor at UMass Dartmouth for more information.

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² Chosen as one of your Career Electives.

³ Course will be used to meet your MNE Science Elective requirement.