

Articulation Agreement of Academic Programs

between

Bunker Hill Community College and UMass Dartmouth

**AS Electrical Engineering to BS Computer Engineering
AS Electrical Engineering to BS Electrical Engineering**

Fall, 2017, Updated Fall, 2021

The above institutions hereby enter into an agreement to facilitate the transfer of students enrolled in the Associate's Degree program in Electrical Engineering Transfer Option at Bunker Hill Community College into the Bachelor's Degree program in Computer Engineering or the Bachelor's Degree program in Electrical Engineering at 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 Electrical 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-two and one-half credits will be applied to the University of Massachusetts Dartmouth Computer 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 sixty-one and one-half credits will be applied to the University of Massachusetts Dartmouth Electrical Engineering baccalaureate degree.

3. University of Massachusetts Dartmouth guarantees a Massachusetts tuition credit for Bunker Hill Community College students who complete the Electrical 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 higher.

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 Computer 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 62.5 credits

BHCC: Electrical Engineering Transfer Option	Credits	UMD: Computer 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
Engineering Courses			
ENR 101 Intro to Engineering w/lab	4	EGR 111 Intro to Engineering and Computing	3
ENR 271 Circuit Analysis Design I w/Lab	4	ECE 201 Circuit Theory I	3.5
ENR 272 Circuit Analysis Design II w/Lab	4	ECE 202 Circuit Theory II	3.5
ENR 275 Digital Logic Systems w/Lab	4	ECE 260 Digital Logic & Computer Design	3.5
CSC 120 Intro to Computer Science and OOP ²	4	ECE 160 Foundations of Computer Engineering I	4
CSC 237 C++ Programming ²	4	ECE 161 Foundations of Computer Engineering II	4
Math & Science Courses			
CHM 201 General Chemistry I & Lab ²	4	CHM 151 Prin. of Modern Chem. I ³	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	67		62.5

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 two courses from a social science area (ECO, PSY, SOA, SSE).

² Chosen as one of your Career Electives.

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

Note: Students who want to be able to complete their degree at UMass Dartmouth in two (2) years must complete an equivalent course to UMass Dartmouth's **ECE 263 Embedded System Design** prior to transferring. This course is offered at UMassD during the spring semester and sometimes offered in the summer. 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.

Articulation Agreement for BS Electrical 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 61.5 credits

BHCC: Electrical Engineering Transfer Option	Credits	UMD: Electrical 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
Engineering Courses			
ENR 101 Intro to Engineering w/lab	4	EGR 111 Intro to Engineering and Computing	3
ENR 271 Circuit Analysis Design I w/Lab	4	ECE 201 Circuit Theory I	3.5
ENR 272 Circuit Analysis Design II w/Lab	4	ECE 202 Circuit Theory II	3.5
ENR 275 Digital Logic Systems w/Lab	4	ECE 260 Digital Logic & Computer Design	3.5
CSC 120 Intro to Computer Science and OOP ²	4	ECE 160 Foundations of Computer Engineering I	4
Math & Science Courses			
CHM 201 General Chemistry I & Lab ²	4	CHM 151 Prin. of Modern Chem. I ³	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
MAT 291 Linear Algebra ²	4	MTH 221 Linear Algebra ⁴	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	67		61.5

Note: Students who want to be able to complete their degree at UMass Dartmouth in two (2) years must complete an equivalent course to UMass Dartmouth's **ECE 250 Fundamentals of MATLAB** prior to

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² Chosen as one of your Career Electives.

³ Course will be used to meet one of your ELE Science Elective requirements.

⁴ Course will be used to meet your ELE Engineering Math requirement.

transferring. This course is offered at UMassD during the fall and spring semesters. 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.