

**Agreement of Articulation of Academic Programs
Between Bristol Community College's
Engineering Science Transfer Program
And Massachusetts Maritime Academy's
Facilities and Environmental Engineering Program**

Engineering Science Transfer

ENG 11	Writing from Experience	3 credits
ENG 12	Introduction to Literature	3 credits
ENG 15	Technical Writing	3 credits
SSC 17 or BSS elec.	Technology and Society or Behavioral/Social Science Elec. (see Pg. 160)	3 credits
HUM elec.	Humanities/Arts elec. (See Pg. 160)	3 credits
HST 20 or 21	Ancient World or Middle Ages	3 credits
HST 22 or 23	Early Modern Europe and World or Modern Europe and World	3 credits
MTH 14	Calculus I	4 credits
MTH 15	Calculus II	4 credits
MTH 53	Calculus III	4 credits
MTH 54	Ordinary Differential Equations	3 credits
CHM 13	Fundamentals of Chemistry I	4 credits
CHM 14	Fundamentals of Chemistry II	4 credits
PHY 11	General Physics I	4 credits
PHY 12	General Physics II	4 credits
CAD 15	Computer Aided Drafting	3 credits
ETK 13	Computer Tools for Engineers	3 credits
ETK elec.*	Elective (see below)	3/4 credits
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*Choose three of the following courses to fulfill ETK elective requirements:
ETK 29/31, ETK 30/32, ETK 56, ETK 58, ETK 59, ETK 64, ETK 70,
ETK 79
ETK 59, ETK 64, and ETK 70 are recommended for MMA.

Background

Building on the Transfer Compact and Joint Admissions Policies established by the Board of Higher Education to enhance and simplify the transfer of students within the Massachusetts Commonwealth Higher Education System, this agreement is intended to address the specific programs, course by course, for the participating institutions. Massachusetts Maritime Academy (MMA) has an especially structured curriculum with a high degree of prerequisite related courses, it is important that the student aspiring to articulate with MMA for the completion of the baccalaureate degree in Facilities and Environmental Engineering be aware from the outset of the entire plan of study.

Objectives of this Agreement

1. To attract qualified students to both institutions.
2. To retain students within the Commonwealth Higher Education System.
3. To provide clear guidelines to students and their advisors for meeting degree requirements in the most efficient and timely manner in order that they may complete their MMA baccalaureate degree requirements in two additional years or the equivalent after transfer from Bristol Community College (BCC).
4. To facilitate cooperation, coordination and collaboration between BCC and MMA.

Stipulation of this Agreement

1. This agreement will apply to the BCC associate degree graduate in Engineering Science Transfer program with a minimum grade point average of 2.50 with no grade below a "C". Such grades below a "C" will be denied credit and will have to be made up at MMA. This could delay graduation beyond two years after transfer to MMA.
2. MMA will accept such a student with full junior status as if she or he had been matriculated at MMA for their freshman and sophomore years.

Review/Revision Provisions

1. Annual review of this agreement shall take place between the Mathematics, Science and Engineering Division of BCC and the Engineering Department of MMA.
2. Substantive changes in the curriculum relating to either of these articulation programs will require discussions between the appropriate representatives. At the request of either party, a review of the contents or implementation of the agreement will be conducted by the two institutions. In cases where such changes would delay graduation or require more course work, the earlier requirements would be operative.

Assistance Provisions

1. BCC will incorporate a summary of this agreement into official publications.
2. BCC and MMA will both agree to encourage qualified students to participate in this program by providing advisement, information, or any other assistance to ease the transition of students from BCC to MMA.

Mutual Responsibilities

1. Both institutions agree to maintain current listings of course equivalencies which shall be the responsibility of the MMA registrar and the BCC Director of Transfer Affairs. The junior and senior Facilities and Environmental Engineering plan of study for the transferred student is attached.
2. BCC is responsible for assisting the transfer applicant in compiling the required credentials for application, which shall include BCC associate degree transcript, other applicable college transcripts, and the MMA admission form.
3. The MMA Admissions Office will forward a letter of acceptance, total credits accepted, and articulation of these credits toward graduation from MMA. MMA will also consider transfer students from BCC for inclusion in the Cadet Regiment at their option. If the transfer student opts for resident (i.e. Regimental) status, she or he would be required to complete the two week freshman orientation program to participate in the regimental lifestyle until recognized as an upperclassman by the senior class. Non-Regimental students are not eligible for on campus housing at MMA.

Financial aid will be available to transfer students. Estimates of awards can be obtained by writing to the MMA Financial Aid Office after all necessary admission and financial aid forms are completed and received by MMA.

BCC Transfer Students must have completed the Engineering Science Transfer program with recommended ETK electives for MMA. The curriculum at Massachusetts Maritime Academy is as follows:

**Facilities and Environmental Engineering
Transfer Student Plan of Studies**

Semester 1- Fall Term

<u>Course #</u>	<u>Course Title</u>	<u>Class</u>	<u>Lab</u>	<u>Total</u>
EN-1111	Introduction to Steam Engineering	2	1	2.5
EN-2111	Auxiliary Machinery II	3	2	4.0
EN-2112	Machine Tool Technology	1	3	2.0
EN-3111	Electrical Machines	3	0	4.0
EN-3111L	Electrical Machines Lab	0	2	1.0

SS-2231	Macro-Economics		3	0	3.0
					Total Credits 16.5

Winter Term

<u>Course #</u>	<u>Course Title</u>		<u>Class</u>	<u>Lab</u>	<u>Total</u>
EN-2221	Cooperative II		6	0	6.0
					Total Credits 6.0

Semester 2- Spring Term

<u>Course #</u>	<u>Course Title</u>		<u>Class</u>	<u>Lab</u>	<u>Total</u>
EN-2222	Commercial Boilers		3	2	4.0
EN-3211	Thermodynamics		3	0	3.0
EN-3212	Electronics		3	0	3.0
EN-3212L	Electronics Lab	0	2	1.0	
EN-3213	Refrigeration		2	1	2.5
EN-3112	Strength of Materials		3	0	3.0
EN-3112L	Strength of Materials Lab		0	2	1.0
					Total Credits 17.5

Summer Term

<u>Course #</u>	<u>Course Title</u>		<u>Class</u>	<u>Lab</u>	<u>Total</u>
EN-3221	Cooperative III	6	0	6.0	
					Total Credits 6.0

Semester 3-Fall Term

<u>Course #</u>	<u>Course Title</u>		<u>Class</u>	<u>Lab</u>	<u>Total</u>
SS-4131	Engineering Economics	3	0	3.0	
EN-4121	Electrical Distribution		3	0	3.0
EN-4111	Fluid Mechanics		3	0	3.0
EN-4112	Thermo/Fluids Lab		0	2	1.0
SS-2121	American Government	3	0	3.0	
	Free Elective 1		3	0	3.0
					Total Credits 16.0

Winter Term

<u>Course #</u>	<u>Course Title</u>		<u>Class</u>	<u>Lab</u>	<u>Total</u>
EN-4221	Cooperative IV		6	0	6.0
					Total Credits 6.0

Semester 4- Spring Term

<u>Course #</u>	<u>Course Title</u>		<u>Class</u>	<u>Lab</u>	<u>Total</u>
GESS-5	Social Science Group III		3	0	3.0
EN-4223	Instrumentation & Control		3	0	3.0
HU 0321	American Literature		3	0	3.0
	Free Elective 2		3	0	3.0
					Total Credits 12.0