



## Engineering Science Transfer

**Program:** Engineering Science

**Program Code:**

ET\_ETS

**Academic Area:**

Science, Technology, Engineering and Mathematics

**Type:**

Associate in Science

**CIP Code:**

14.1301

### Program Statement

This program prepares students to transfer to engineering programs at bachelor's degree granting colleges and universities in a wide variety of disciplines including: Bio-Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, Mechanical Engineering, Engineering Systems and Facilities Engineering and many others.

### Program Information

- Students choose program electives from an approved list, based on an engineering discipline and transfer institution of their choice.
- For those students interested in transferring to an institution that Bristol does not have an existing transfer agreement, students are encouraged to contact the transfer institution directly to insure transferability of courses.
- Students should be in a Math (MTH) course every semester until they have completed their sequence, including prerequisite math courses for students who are not yet prepared for calculus.
- Students planning on transferring to UMass Dartmouth may also elect to participate in Bristol's Internship Program and/or UMass Dartmouth's Cooperative Education program.
- Completing courses in the summer will reduce fall and spring semester course loads.

### After Bristol

- Graduates of this program have successfully transferred to many four-year institutions, including Brown University, Northeastern University, University of Massachusetts, University of Rhode Island, and Worcester Polytechnic Institute.
- Bristol participates in the statewide MassTransfer program and has developed many program-to-program transfer articulation agreements which guarantee admission and credit transfer. For a complete listing of eligible MassTransfer programs, current Bristol articulation agreements, and to complete an A2B Program Search, visit the Transfer Services website to review which credits will be transferred and applied to your degree.

### Degree Requirements



## General Courses

Course #	Title	Credits
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
ENG 102	Composition II: Writing about Literature	3
ENG 215	Technical Writing	3
	HST 113 or HST 114	3

## Elective Courses

Course #	Title	Credits
	Human Expression Elective	3
	Multicultural and Social Perspectives Elective	3

## Program Courses

Course #	Title	Credits
EGR 204	Engineering Applications of MATLAB	1

## Program Electives

Course #	Title	Credits
	Engineering Science Transfer Electives	18-24
	Recommended Transfer Electives	

## Math and Science Courses

Course #	Title	Credits
CHM 113	Fundamentals of Chemistry I	4
MTH 214	Calculus I	4
MTH 215	Calculus II	4
MTH 253	Calculus III	4
MTH 254	Ordinary Differential Equations	3
PHY 211	General Physics I	4
PHY 212	General Physics II	4



## Recommended Course Sequence - Semester 1

Course #	Title	Credits
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
MTH 214	Calculus I	4
CHM 113	Fundamentals of Chemistry I	4
	Multicultural and Social Perspectives Elective	3

## Recommended Course Sequence - Semester 2

Course #	Title	Credits
ENG 102	Composition II: Writing about Literature	3
MTH 215	Calculus II	4
PHY 211	General Physics I	4
	Program Elective	3-4
	Human Expression Elective	3

## Recommended Course Sequence - Semester 3

Course #	Title	Credits
MTH 253	Calculus III	4
PHY 212	General Physics II	4
	HST 113 or HST 114	3
	Program Elective	3-4
	Program Elective	3-4

## Recommended Course Sequence - Semester 4

Course #	Title	Credits
MTH 254	Ordinary Differential Equations	3
EGR 204	Engineering Applications of MATLAB	1
ENG 215	Technical Writing	3
	Program Elective	3-4
	Program Elective	3-4
	Program Elective	3-4
	<b>Total credits:</b>	<b>64-71</b>



## Category Descriptions

### HST 113 or HST 114

Credits: 3

Choose one of the following:

<b>Course #</b>	<b>Title</b>	<b>Credits</b>
HST 113	United States History to 1877	3
HST 114	United States History from 1877	3

### Human Expression Elective

Credits: 3

Choose one Human Expression elective.

### Multicultural and Social Perspectives Elective

Credits: 3

Choose one Multicultural and Social Perspectives elective.

### Engineering Science Transfer Electives

Credits: 18-24



## Choose six of the following:

Review *recommended transfer electives* before selecting electives.

Course #	Title	Credits
BIO 126	Introduction to Biotechnology	3
BIO 127	Introduction to Biotechniques	4
BIO 145	Introduction to Forensic Science	4
CAD 101	Computer Aided Drafting	3
CAD 111	Mechanical Design with Solidworks	3
CAD 128	Civil Drafting and Design	3
CHM 114	Fundamentals of Chemistry II	4
CIS 158	Introduction to Procedural Programming	4
CIS 260	Software Specification and Design	4
EGR 103	Computer Skills for Engineers and Technicians	3
EGR 111	Fundamentals of Manual Machining	4
EGR 131	Introduction to Electrical Circuits	4
EGR 137	Digital Electronics	4
EGR 141	Introduction to Environment	3
EGR 151	Electrical Machinery	3
EGR 171	Fluid Systems	4
EGR 172	Material Science	4
EGR 211	Programmable Control Systems	4
EGR 221	Surveying I	4
EGR 222	Surveying II	4
	EGR 231 and EGR 233	4
	EGR 232 and EGR 234	4
	EGR 251 and EGR 253	4
	EGR 254 and EGR 256	4
EGR 255	Thermodynamics	3
INT 210	Internship Experience I	3
	SCI 251 and HON 260	4

## Recommended Transfer Electives

To ensure transferability, consult with your advisor, applicable transfer agreements, and/or transfer institutions before selecting electives.

Course #	Title	Credits
	Bio-engineering Electives	
	Civil and Environmental Engineering Electives	
	Electrical and Computer Engineering Electives	
	Engineering Systems and Facilities Engineering Electives	
	Mechanical Engineering Electives	
	Other Engineering Disciplines	