



## Life Sciences/Physics

### Program Goals Statement

This program is designed for students who plan to transfer to a four-year institution and major in Physics or a related field. The goal is to provide students with a solid foundation in the knowledge and skills that they will need to succeed at a four-year institution.

### Program Information

- This program is designed to prepare students who plan to transfer to a four-year institution and major in Physics or a related field.
- Students will be introduced to each of the four major branches of physics: mechanics, electromagnetism, thermodynamics, and modern physics. This gives students a strong foundation on which to build the last two years of a Physics major.
- All General Education requirements will be met.

### After Bristol

- Transfer to a four-year institution and take the last two years of a major related to Physics; these include Physics, Astrophysics, Applied Physics, Mathematics, or Engineering, among others.
- Consider utilizing the MassTransfer program to make a seamless transfer to a state university.
- Visit [bristolcc.edu/transfer](http://bristolcc.edu/transfer) for more information on transferring.
- Physics majors can go on to teach or research within the field of physics, and can also work as a data analyst, software developer, materials scientist, patent agent, health physicist, science writer, and more. Some physics majors even end up working in finance or government.

**Subject:** Physics  
Life Sciences  
**Type:** Associate Degree

### Campus

**Campus:**  
Fall River  
Item #  
Title  
Credits

### Degree Requirements



## General Courses

Item #	Title	Credits
COM 101	Fundamentals of Public Speaking	3
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
ENG 102	Composition II: Writing about Literature	3
	HST 113 or HST 114	3
SCI 117	History and Philosophy of Science	3

## Elective Courses - Choose 1 Social - Ethical

Item #	Title	Credits
GVT 111	U.S. Government	3
GVT 112	Comparative Government	3
GVT 251	State and Local Government	3
PHL 101	Introduction to Philosophy	3
PHL 152	Ethics: Making Ethical Decisions in a Modern World	3
SOC 101	Principles of Sociology	3

## Elective Courses - Choose 1 Technical Literacy

Item #	Title	Credits
CAD 101	Computer Aided Drafting	3
CIS 111	Introduction to Business Information Systems	3
CIS 120	Programming: Logic, Design and Implementation	3
CIS 155	Introduction to C++ Programming	3
CIS 156	Visual Basic	3
CIS 157	Object-Oriented JAVA Programming I	4
	CIS 158 or EGR 103	

## Program Courses

Item #	Title	Credits
MTH 214	Calculus I	4
MTH 215	Calculus II	4
MTH 253	Calculus III	4
MTH 254	Ordinary Differential Equations	3
PHY 101	Technical Physics I	4
	PHY 102 or PHY 211	
PHY 212	General Physics II	4



## Program Electives - Choose 4 of the following

Item #	Title	Credits
AST 211	Introduction to Astrophysics (Short)	4
AST 212	Introduction to Astrophysics II	4
BIO 121	Fundamentals of Biological Science I	4
BIO 122	Fundamentals of Biological Science II	4
CHM 113	Fundamentals of Chemistry I	4
CHM 114	Fundamentals of Chemistry II	4
EGR 231	Electrical Engineering I	3
EGR 233	Electrical Engineering I Laboratory	1
EGR 232	Electrical Engineering II	3
EGR 234	Electrical Engineering II Laboratory	1
EGR 251	Statics	3
EGR 253	Advanced Statics	1
EGR 255	Thermodynamics	3
PHY 120	Introduction to Modern Physics	3

## Recommended Course Sequence - Semester 1

Item #	Title	Credits
COM 101	Fundamentals of Public Speaking	3
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
MTH 214	Calculus I	4
SCI 117	History and Philosophy of Science	3

## Recommended Course Sequence - Semester 2

Item #	Title	Credits
ENG 102	Composition II: Writing about Literature	3
	HST 113 or HST 114	3
MTH 215	Calculus II	4
	PHY 101 or PHY 211	4

## Recommended Course Sequence - Semester 3

Item #	Title	Credits
MTH 253	Calculus III	4
	PHY 102 or PHY 212	4



## Recommended Course Sequence - Semester 4

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
MTH 254	Ordinary Differential Equations	3
<b>Total credits:</b>		<b>63-64</b>