



## Chemistry

**Program:** Life Sciences

**Program Code:**

LF\_LFCH

**Academic Area:**

Science, Technology, Engineering and Mathematics

**Type:**

Associate in Science

**Campus:**

Fall River

**CIP Code:**

40.0501

### Program Goals Statement

This program is designed for students who plan to transfer to 4-year institutions and major in Chemistry or a related field. Students graduating from Bristol Community College with an Associates in Science with Chemistry concentration will be qualified for entry-level employment in a chemistry-related career.

### Program Information

- This program is designed to prepare students for transfer to 4-year institutions to major in Chemistry or a chemistry-related field and will give them the necessary skill sets for employment as an Associate Scientist I or Chemistry Laboratory Technician.
- Students take transferable General Studies courses (up to 24 credits), as well as Laboratory-Intensive Science Elective courses in their area of interest.
- After completion of the degree program, students will have a strong foundation in Chemistry that prepares them to be successful in their next program of study or career.

### After Bristol

- With an Associates in Science - Life Science/Chemistry degree, students will be able to transfer to 4-year institutions with a solid background in Chemistry, which allows them to take upper level chemistry classes at their next institution. They will also have completed at least 24 credits of General Studies requirements that should transfer to their new school.
- Graduates will have the necessary skill sets to seek employment as an Associate Scientist I or Chemistry Laboratory Technician.
- Bristol participates in the Statewide MassTransfer program and has developed many program-to-program transfer articulation agreements which guarantee admission and credit transfer.



## MassTransfer A2B Pathway

The Life Sciences - Chemistry program is a MassTransfer A2B Mapped Program with some Massachusetts State Universities. When choosing electives, complete an A2B Program Search to determine available transfer institutions and to ensure all credits will be transferred and applied to your degree.

## Degree Requirements

### General Courses

| Course # | Title                                    | Credits |
|----------|--|---------|
| COM 104  | 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       |
| PSY 101  | General Psychology                       | 3       |

### Program Courses

| Course # | Title                                | Credits |
|----------|--------------------------------------|---------|
| BIO 121  | Fundamentals of Biological Science I | 4       |
| CHM 113  | Fundamentals of Chemistry I          | 4       |
| CHM 114  | Fundamentals of Chemistry II         | 4       |
| CHM 220  | Introductory Analytical Chemistry    | 4       |
| CHM 225  | Biochemistry                         | 4       |
| CHM 235  | Organic Chemistry I                  | 4       |
| CHM 236  | Organic Chemistry II                 | 4       |
|          | Two-course Math Sequence             | 7-8     |
|          | CAD 101, CIS 111, CIS 120 or EGR 103 | 3       |



## Program Electives

Choose two of the following:

| Course # | Title                                 | Credits |
|----------|---------------------------------------|---------|
| BIO 122  | Fundamentals of Biological Science II | 4       |
| BIO 127  | Introduction to Biotechniques         | 4       |
| BIO 240  | Cell Biology                          | 4       |
| BIO 250  | Introduction to Immunology            | 4       |
| ENG 215  | Technical Writing                     | 3       |
| MTH 214  | Calculus I                            | 4       |
| MTH 215  | Calculus II                           | 4       |
| PHY 211  | General Physics I                     | 4       |
| PHY 212  | General Physics II                    | 4       |

## Recommended Course Sequence - Semester 1

| Course # | Title                          | Credits |
|----------|--------------------------------|---------|
| CHM 113  | Fundamentals of Chemistry I    | 4       |
| CSS 101  | College Success Seminar        | 1       |
| ENG 101  | Composition I: College Writing | 3       |
|          | MTH 152, MTH 172 or MTH 214    | 3-4     |
| PSY 101  | General Psychology             | 3       |

## Recommended Course Sequence - Semester 2

| Course # | Title                                    | Credits |
|----------|--|---------|
| BIO 121  | Fundamentals of Biological Science I     | 4       |
| CHM 114  | Fundamentals of Chemistry II             | 4       |
| ENG 102  | Composition II: Writing about Literature | 3       |
|          | MTH 172, MTH 214 or MTH 215              | 4       |
|          | CAD 101, CIS 111, CIS 120 or EGR 103     | 3       |

## Recommended Course Sequence - Semester 3

| Course # | Title                             | Credits |
|----------|-----------------------------------|---------|
| CHM 220  | Introductory Analytical Chemistry | 4       |
| CHM 235  | Organic Chemistry I               | 4       |
| COM 104  | Fundamentals of Public Speaking   | 3       |
|          | HST 113 or HST 114                | 3       |
|          | Program Elective                  | 3       |



## Recommended Course Sequence - Semester 4

| <b>Course #</b> | <b>Title</b>          | <b>Credits</b> |
|-----------------|-----------------------|----------------|
| CHM 225         | Biochemistry          | 4              |
| CHM 236         | Organic Chemistry II  | 4              |
|                 | Program Elective      | 3              |
|                 | Program Elective      | 3              |
|                 | <b>Total credits:</b> | <b>60-63</b>   |