



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 |
| | Total credits: | 64-71 |



Category Descriptions

HST 113 or HST 114

Credits: 3

Choose one of the following:

| Course # | Title | Credits |
|-----------------|---------------------------------|----------------|
| 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 | 5 |
| 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 | |