



Mechanical Technology

Program Goals Statement

This concentration prepares students as technicians and mechanical designers. Students learn aspects of mechanical engineering such as strength of materials, materials science, fluid systems, and computer-aided design.

Program Information

Students gain hands-on experience with mechanical systems (hydraulics, pneumatics and mechanisms), materials, and computer-aided design.

After Bristol

Graduates may work as mechanical/CAD designers, and manufacturing, industrial and design technicians.

If you plan to transfer to a four-year institution, speak with your advisor and visit the Transfer Affairs website at www.BristolCC.edu/transfer

Subject: Engineering
Type: Associate Degree

Campus

Campus:
Fall River
Item #
Title
Credits

General Education Courses

Item #	Title	Credits
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
ENG 102	Composition II: Writing about Literature	3

Historical Awareness - Choose one

Item #	Title	Credits
HST 113	United States History to 1877	3
HST 114	United States History from 1877	3



Humanities - Choose one

(May choose *any* Humanities elective, but the following are recommended.)

Item #	Title	Credits
ARC 201	Introduction to American Architecture	3
COM 101	Fundamentals of Public Speaking	3
COM 114	Professional Speaking	3
PHL 152	Ethics: Making Ethical Decisions in a Modern World	3
	Modern Language Elective	3

Social Phenomenon - Choose one

Item #	Title	Credits
ART 106	Survey of Art History II: Modern Art	3
GVT 111	U.S. Government	3
GVT 112	Comparative Government	3
HST 111	The West and the World I	3
HST 112	The West and the World II	3
HST 113	United States History to 1877	3
HST 114	United States History from 1877	3
HST 257	History of Modern East Asia (China and Japan)	3
PSY 271	Global Leadership	3
SOC 101	Principles of Sociology	3
SOC 212	The Sociology of Social Problems	3
SOC 252	The Sociology of Human Relations	3

Program Courses

Item #	Title	Credits
CAD 101	Computer Aided Drafting	3
CAD 111	Mechanical Design with Solidworks	3
EGR 151	Electrical Machinery	3
EGR 171	Fluid Systems	4
EGR 172	Material Science	4
EGR 251	Statics	3
EGR 254	Mechanics of Materials and Structures	4

Program Courses - Choose one

Item #	Title	Credits
EGR 102	Introduction to Sustainable and Green Energy Technologies	3
EGR 103	Computer Skills for Engineers and Technicians	3



Program Electives - Choose one

Item #	Title	Credits
CAD 172	Mechanical Design using Inventor	3
INT 110	Internship Experience	2
CHM 113	Fundamentals of Chemistry I	4
EGR 111	Fundamentals of Manual Machining	4
EGR 112	Automated Machining	3
EGR 183	Energy Efficiency and Conservation Measures	3
EGR 211	Programmable Control Systems	4
EGR 241	Clean Water Technology I	4
EGR 255	Thermodynamics	3
EGR 264	Oceanographic Technology	3
EGR 282	Wind Power Technology	4
EGR 284	Solar Power	4
EGR 299	Engineering Projects	4

Math and Science Courses

Choose two sequential Math courses and two sequential Physics courses.

Item #	Title	Credits
MTH 152	College Algebra	3
MTH 172	Precalculus with Trigonometry	4
MTH 214	Calculus I	4
MTH 215	Calculus II	4
PHY 101	Technical Physics I	4
PHY 102	Technical Physics II	4
PHY 211	General Physics I	4
PHY 212	General Physics II	4



Recommended Program Electives

For Design:

CAD 172

EGR 299

For Experiential Education:

CED 210

For Manufacturing:

EGR 115

EGR 211

For Sustainability/Green Energy:

EGR 183

EGR 282

EGR 284

For Transfer:

CHM 113

EGR 255

Recommended Course Sequence - Semester 1

Item #	Title	Credits
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
EGR 102	Introduction to Sustainable and Green Energy Technologies	3
EGR 103	Computer Skills for Engineers and Technicians	3
EGR 172	Material Science	4
MTH 152	College Algebra	3
MTH 172	Precalculus with Trigonometry	4
MTH 214	Calculus I	4

Recommended Course Sequence - Semester 2

Item #	Title	Credits
ENG 102	Composition II: Writing about Literature	3
	PHY 101 or PHY 211	4
CAD 101	Computer Aided Drafting	3
EGR 171	Fluid Systems	4
MTH 172	Precalculus with Trigonometry	4
MTH 214	Calculus I	4
MTH 215	Calculus II	4



Recommended Course Sequence - Semester 3

Item #	Title	Credits
EGR 151	Electrical Machinery	3
EGR 251	Statics	3
	PHY 102 or PHY 212	4
	Social Science Elective (3)	3
	Social Science Elective (3)	3

Recommended Course Sequence - Semester 4

Item #	Title	Credits
EGR 254	Mechanics of Materials and Structures	4
CAD 111	Mechanical Design with Solidworks	3
	Social Science Elective (3)	3
	Social Science Elective (3)	3
	Total credits:	61-63