

ENGINEERING TECHNOLOGY

Award: Associate of Applied Science Degree

Major: Engineering Technology

Additional Program Information: <https://www.brcc.edu/academics/programs/mechanical-design/>

Potential Additional Funding Information: <https://www.brcc.edu/g3/>

Possible occupations for graduates: engineering assistant, mechanical engineer technician, industrial engineer technician, quality control technician, material testing technician, and technical salesperson.

The A.A.S. degree program in Engineering Technology is designed for people who seek employment or professional development in the area of mechanical engineering technology. Technical electives can be selected to suit the student's specific career objectives.

Required Courses Curriculum

First Semester		Credit Hours
CAD 140	Technical Drawing	3
ENG 111 or ENG 115	College Composition I or Technical Writing	3
Literature/Humanities/Fine Arts (https://catalog.brcc.edu/programs-study/general-education-transfer/#literature)		3
MEC 111	Materials for Industry	3
MTH 161	Precalculus I	3
SDV (https://catalog.brcc.edu/programs-study/sdv/)	Student Development	1
Credit Hours		16
Second Semester		
CAD 241	Parametric Solid Modeling I	3
ECO 150	Economic Essentials: Theory and Application	3
MEC 112	Processes of Industry	3
MTH 162	Precalculus II	3
Credit Hours		12
Third Semester		
CAD 225	Machine Drawing and Design	3
CAD 242	Parametric Solid Modeling II	3
EGR 121	Foundations of Engineering	2
EGR 130	Statics and Strength of Materials Engineering Tech	5
PHY 201	General College Physics I	4
Credit Hours		17
Fourth Semester		
EGR 245	Engineering Mechanics - Dynamics	3
EGR 247	Mechanics of Materials Laboratory	1
EGR 285	Capstone Project	1
MEC 211	Machine Design I	4
Technical Elective ²		3
Select one of the following:		3
PHY 202	General College Physics II	
Technical Elective ²		
Credit Hours		15
Total Credit Hours		60

¹ Students may not receive credit towards graduation requirements for both ECO 120 and ECO 201 or ECO 120 and ECO 202.

² ARC 121, ARC 122, CAD 243, MEC 225, MEC 255, and MTH 263 may be used as technical electives.

Certificates

Engineering Assistant

Award: Career Studies Certificate

Potential Additional Funding Information: <https://www.brcc.edu/g3/>

Purpose: Teaches skills for the design of manufacturing products used in everyday life. The graduate will be competent in computer-aided design (CAD) systems and be able to complete complicated parts and assemblies.

Code	Title	Credit Hours
CAD 140	Technical Drawing	3
ENG 115	Technical Writing	3
MEC 111	Materials for Industry	3
MEC 112	Processes of Industry	3
MTH 161	Precalculus I	3
SDV (https://catalog.brcc.edu/programs-study/sdv/)	Student Development	1
Total Credit Hours		16

Senior Engineering Assistant

Award: Career Studies Certificate

Potential Additional Funding Information: <https://www.brcc.edu/g3/>

Purpose: Teaches skills for the advanced design of manufacturing products used in everyday life. The graduates will have advanced skills in computer-aided design (CAD) systems and be able to complete the design of complicated parts and assemblies.

Code	Title	Credit Hours
CAD 241	Parametric Solid Modeling I	3
EGR 121	Foundations of Engineering	2
MTH 162	Precalculus II	3
PHY 201	General College Physics I	4
CAD 242	Parametric Solid Modeling II	3
Technical Elective ¹		3
Total Credit Hours		18

¹ ARC 121, ARC 122, CAD 243, MEC 225, MEC 255, and MTH 263 may be used as technical electives.