ADVANCED MANUFACTURING TECHNOLOGY

Award: Associate of Applied Science Degree Major: Advanced Manufacturing Technology

Additional Program Information: https://www.brcc.edu/academics/programs/advanced-manufacturing/

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

This degree is designed to develop multi-skilled technicians and operators with talents in the complete manufacturing process and emerging technologies of advanced process automation, digital design/manufacturing and continual process improvement, as well as the capability for higher level problem-solving, innovation, and leadership. Graduates will have the capacity and adaptability to perform on a team of researchers, engineers, technicians and trades craftsmen in the advanced manufacturing environment, developing new technology applications and improved operations.

Required Courses Curriculum

Code	Title	Credit Hours
General Education		Hours
Select one of the following:		3
ENG 111	College Composition I	
ENG 115	Technical Writing	
Select one of the following:		3
MTH 111	Basic Technical Mathematics	
MTH 161	Precalculus I	
Social/Behavioral Science Electiv	e (https://catalog.brcc.edu/programs-study/general-education-aas/#social)	3
Literature/Humanities/Fine Arts E	Elective (https://catalog.brcc.edu/programs-study/general-education-aas/#literature)	3
General Education Elective (https://	://catalog.brcc.edu/programs-study/general-education-aas/)	3-4
Student Development		
SDV (https://catalog.brcc.edu/ programs-study/sdv/)	Student Development	1
Technical Program Core Courses		
BUS 200	Principles of Management	3
ELE 123	Electrical Applications I	2
ETR 113	D.C. and A.C. Fundamentals I	3
IND 165	Principles of Industrial Technology I	4
IND 181	World Class Manufacturing I	3
IND 251	Automated Manufacturing Systems I	3
MAC 156	Mechanisms I	3
MEC 161	Basic Fluid Mechanics - Hydraulics/Pneumatics	4
Select one of the following:		2-3
CAD 140	Technical Drawing	
CAD 161	Blueprint Reading I	
Technical Specialization Core Cou	urses	
Technical Specialization Core Courses		14-15
Approved Technical Electives		
Approved Technical Electives		3-4
Total Credit Hours		60-64

Students should enroll in the suggested technical elective(s) specified in each specialization.

Certificates Applied Mechatronics I

Award: Career Studies Certificate

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

Purpose: To provide a broad overview of the major areas involved in the day-to-day operations of a manufacturing facility, including leadership, process improvement, financial management, and information systems. The completed career studies certificate will provide a foundation for those students seeking further study in the area of manufacturing management.

Code	Title	Credit Hours
ELE 123	Electrical Applications I	2
ETR 113	D.C. and A.C. Fundamentals I	3
MAC 156	Mechanisms I	3
MEC 161	Basic Fluid Mechanics - Hydraulics/Pneumatics	4
Select one of the following:		3
MTH 111	Basic Technical Mathematics	
MTH 161	Precalculus I	
SDV (https://catalog.brcc.edu/ programs-study/sdv/)	Student Development	1
Total Credit Hours		16

Applied Manufacturing

Award: Career Studies Certificate

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

The Applied Manufacturing certificate provides a broad overview of the major areas involved in the day-to-day operations of a manufacturing facility, including leadership, process improvement, financial management, and information systems. The completed career studies certificate will provide a foundation for those students seeking further study in the area of manufacturing management.

Code	Title	Credit Hours
Select one of the follow	ving:	2-3
CAD 140	Technical Drawing	
CAD 161	Blueprint Reading I	
IND 165	Principles of Industrial Technology I	4
IND 181	World Class Manufacturing I	3
IND 251	Automated Manufacturing Systems I	3
Technical Specialization Core Courses		4
Total Credit Hours		16-17

Students should enroll in the suggested technical elective(s) specified in each specialization