



**Program of Study**  
**Career Field: Industrial, Manufacturing and Engineering Systems**  
**Career Cluster: Manufacturing**  
**Career Pathway: Maintenance, Installation, and Repair**



**Northeast Community College**

DEGREE:  
 Electromechanical Technology

<http://www.northeast.edu/Degrees-and-Programs/Electromechanical-Technology>

	GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	GENERAL ELECTIVES	PATHWAY ELECTIVE COURSES	EXTENDED LEARNING SCHOOL/COMMUNITY ACTIVITIES			
<b>HIGH SCHOOL</b>	9	English/Language Arts I	Algebra I	Physical Science	Geography	World Languages and Cultures Physical Education Health Education Information Technology Applications I Entrepreneurship CAD (Computer Aided Drafting) Principles of Design Principles of Construction Housing and Home Furnishings	Intro to the Built Environment The Language of Architecture and Construction Principles of Maintenance and Operations	<i>School Activities:</i> SkillsUSA, OPPD/NPPD Power Drive, FFA, Math Club, MATHCOUNTS  <i>Community Activities:</i> Do home repair projects Learn about history of the buildings in your community Work with a contractor Part-time employment within career cluster			
	10	English/Language Arts II	Geometry	Biology	World History						
	11	English/Language Arts III	Algebra II	Chemistry or other science course	American History						
	12	English/Language Arts IV	Intro to Statistics Discrete Math Pre-Calc	Physics	American Government or Economics						
<b>NORTHEAST COMMUNITY COLLEGE</b>		<b>COMMUNICATIONS</b>	<b>MATH</b>	<b>SCIENCE</b>	<b>SOCIAL SCI/HUMANITIES</b>	<b>DEGREE REQUIREMENTS</b>	<b>MAJOR COURSES</b>				
	13		Applied Mathematics I		Personal Finance		Fundamentals of Electricity and Lab	Orientation & Safety	Introduction to Machining, Welding and Lab	Automation Fundamentals	Mechanical Matter & Energy
			Applied Mathematics II					Motor Controls and Lab	Introduction to Mechanics and Lab	Total Quality Management	Job Search and Employment
	14	Career Composition				Human Relations		Introduction to Automated Controls and Lab	Motor Repair and Lab	Fluid Fundamentals and Lab	Machine Repair and Lab
							Solid State Fundamentals	Electromechanical Systems and Lab			