



**Program of Study**  
**Career Field: Industrial, Manufacturing and Engineering Systems**  
**Career Cluster: Science, Technology, Engineering and Mathematics**  
**Career Pathway: Science and Math**



**Northeast Community College**

DEGREE:  
 Pre-Engineering

<http://www.northeast.edu/Degrees-and-Programs/Pre-Engineering>

	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	English Composition I	Analytic Geometry and Calculus I	General Chemistry I	General Physics I	English Composition II			Professionalism in Science		
		Fund. of Communication	Analytic Geometry and Calculus II	General Chemistry II							
	14		Ordinary Differential Equations	General Physics II and Lab	1 Approved Science elective	Art History	World History		Programming Fundamentals I	Lifestyles Assessment	Statics
		Analytic Geometry and Calculus III	General Physics II Lab		European Civilization			Technical Communications	Applied Dynamics	Lifestyles Management	