

Engineering, Manufacturing, Industrial Trades & Technology (EMITT)

Pathway: Engineering

Description: Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Grade	English	Math	Science	Social Studies	PE/ Health	General Electives	Pathway Electives	Occupations Relating to This Pathway
9	English 9	Algebra I Hon Geometry	Biology	World History	PE 9	Fine Arts CTE Foreign Languages Academic	Freshman Seminar & Semester Elective#	<ul style="list-style-type: none"> ▶ Aerospace Engineer ▶ Agricultural Engineer ▶ Analytical Chemist ▶ Anthropologist ▶ Architectural Engineer ▶ Astrophysicist ▶ Biomedical Engineer ▶ CAD Technician ▶ Civil Engineer ▶ Computer Programmer ▶ Ecologist ▶ Electrical Engineer ▶ Geologist ▶ Geothermal Engineer ▶ Math Teacher ▶ Mathematician ▶ Mechanical Engineer ▶ Metallurgist ▶ Quality Engineering ▶ Robotics Engineer ▶ Software Engineer ▶ Statistician ▶ Structural Engineer ▶ Survey Technician ▶ Systems Engineer
10	English 10	Geometry Hon Geo Algebra II Coll Algebra	Chemistry	Elective	PE10/ Health	Fine Arts CTE Foreign Languages Academic	Intro to Industrial Technology & Engineering Principles of Aero. Science & Unmanned Aircraft Systems	
11	English 11	Algebra II Coll Algebra Trigonometry Pre-Calculus Math Topics	Physics	US History	PE Elective	Fine Arts CTE Foreign Languages Academic	AP Statistics AP Physics AP Chemistry Programming (to be added in 14- 15)	
12	English 12	Elective (AP Calc Highly Recommended)	Elective (AP Physics Highly Recommended)	Econ-Gov	PE Elective	Fine Arts CTE Foreign Languages Academic	AP Calculus AP Physics AP Chemistry Introduction to Circuits & Statics (to be added in 14- 15) RVC- Intro to Engineering, Engineering Graphics	
<p>Recommended General Electives: #Exploring Engineering (Highly Recommended) Orientation to Drafting Engineering Graphics Internship</p>								
<p>Educational Opportunities after High School: RVC- A- Electronic Engineering Technology, Sustainable Energy Systems, Building Construction, Manufacturing Engineering Technology RC- B Mathematics, Physics, Computer Science, Industrial and Systems Engineering, Mathematical Sciences NIU-B Electrical Engineering, Mechanical Engineering-Advanced Computing and Simulation, Mechatronics, Sustainable Engineering, Physics-Applied, Physics, Industrial and System Engineering, Computer Sciences, Engineering and Engineering Technology, Mathematical Sciences</p>								

*Articulation/Dual Credit agreement with RVC is pending.

RVC: Rock Valley College

RC: Rockford College

NIU: Northern Illinois University

RAS: Rasmussen College

A: Associates Degree (2-year degree)

B: Bachelor's Degree (4-year degree)

M: Master's Degree (6-year degree)