

# Career Pathway: Engineering

## Plan of Study: Manufacturing Focus



**Diploma:** Lakeland Leading EDGE Core 40 with Academic Honors and Technical Honors

**Career Goal:** Tool & Diemaker, Industrial Machines Mechanic, Welder, Design Engineer, Mechanical Engineer, Manufacturing Technician, Safety Engineer

High School	Grade	English/ Language Arts	Math	Science	Social Studies	Other Required Courses	Additional Recommended Courses	Career Pathway Career & Technical Courses
	9	English 9	Geometry (or Algebra I)	Biology I	Geography	PE I and PE II Media Communications Foreign Language I		PLTW Introduction to Engineering Design (Dual Credit)
	10	English 10	Algebra II Honors (or Geometry)	Chemistry	World History	Foreign Language II Fine Arts Course		Introduction to Advanced Manufacturing and Logistics (Dual Credit)
	11	AP Language & Composition or other English Course	Pre-Calculus or other math course	Biology II	US History / Government	Foreign Language III Fine Arts Course	Physics Business Law and Ethics	PLTW Computer Integrated Manufacturing (Dual Credit)
College Placement Assessments (SAT, ACT, etc.) and Academic Career Advisement								
12	AP Literature & Composition or other English Course	Probability & Statistics or other math course		Economics	Community Service Senior Project	Professional Career Internship IMPACT Institute - Machine Trades, Welding		Advanced Manufacturing I (Dual Credit)

### Occupations Relating to This Career Pathway

Occupations requiring postsecondary education			Bachelor Degree Required	
▶ Assembler	▶ Industrial Machines Mech.	▶ Logistician	▶ Design Engineer	▶ Materials Engineer
▶ Tool & Diemaker	▶ Pattern and Model Maker	▶ Welder	▶ Environmental Engineer	▶ Mechanical Engineer
▶ Foundry Worker	▶ Labor Relations Manager	▶ Traffic Manager	▶ Industrial Engineer	▶ Production Manager
▶ Freight, Stock and Material Mover	▶ Manufacturing Technician	▶ Inspector	▶ Safety Engineer	
▶ Health and Safety Representative	▶ Quality Control Technician		▶ Electronic Engineer	