

Indiana College and Career Pathway Plan – State Model

Cluster: Manufacturing

Career Pathway: Engineering/Engineering Technology

Core 40 with Honors High School Graduation Plan*

*This is a SAMPLE plan for schools to use in planning. Course sequences and grade level in which courses are offered may vary according to local policies, practices and resources.

Students should enroll in Indiana Career Explorer, complete interest inventories, and investigate careers in clusters & pathways prior to or during the time they create their individual Pathway Plans.

SECONDARY	Grade	English/ Language Arts	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway	
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	**Introduction to Engineering Design	Preparing for College & Careers;	Digital Citizenship; Personal Financial Responsibility	
	10	English 10	Geometry	Chemistry	Geography/History of the World or World History/Civilization	**Principles of Engineering		Fine Arts	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History	**Choose 1 to 3 of the following courses: Civil Engineering & Architecture; Computer Integrated Manufacturing; Digital Electronics; Biotechnical Engineering; Aerospace Engineering			World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics	Engineering Design and Development			World Language

State specified Pathway Assessments: ECAs from National PLTW

Industry Recognized Certification: Autodesk Inventor Certified User, Autodesk Inventor Certified Associate, Autodesk Inventor Certified Professional

Postsecondary Courses Aligned for Potential Dual Credit**

**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

Ivy Tech	Vincennes University
<ul style="list-style-type: none"> • ADMF 103 – Graphic Communications for Manufacturing OR • DESN 102 - Technical Graphics • ADMF 115 Materials & Processes for Manufacturing • ADMF 113 – Electrical & Processes for Manufacturing • ADMF 116 – Automation & Robotics in Manufacturing I • DESN 105 – Architectural Design I 	<ul style="list-style-type: none"> ▪ ELEC 130 - Digital Logic I ▪ CIMT 125/ 125L - Intro to Robotics/ Automation with Lab ▪ ARCH 221 - Advanced Architectural Software Applications