



Milford High School – Manchester Community College/Advanced Manufacturing Associates Degree

Career Pathway Plan of Study

Courses listed within this plan are only recommended coursework and should be individualized to meet your educational and career goals.

Bold – Prerequisite for College Success
 Black – High School Requirement

BOLD, UNDERLINED & ITALICS–
 Transcribed Dual Enrollment Credit

	Grade	English/ Language Arts	Math	Science	Social Studies /Sciences	Other Required Courses ® Recommended Electives (E)	*Career and Technical Courses and/or Degree Major Courses	SAMPLE Occupations Relating to This Pathway
S E C O N D A R Y	9	English 9	Algebra I	Physical Science OR Biology (H)	American Studies 9	Wellness I (R) World Lang. (E)	Wood Tech (E) Intro to Engineering (E) Computer Studies (E)	Electromechanical Technicians Instrument Maker Mechatronics Technician Machinist Test Technician Tool Maker Die Maker Layout Specialist Part Programmer CNC Machinist Supervisor Floor Manager Mechanical Engineer/Technician Inspector Machine Tool Designer Process Planner
	10	English 10	Select two: Algebra I Geometry Algebra II (Recommended)	Chemistry OR Biology	American Studies 10	Fine Arts (R) World Lang. (E)	Precision Machining Advanced Precision Machining <u>Engineering Design (E)</u> <u>Programming Fundamentals (E)</u>	
	11	English 11	Algebra II OR <u>Prob. & Statistics</u> Practical Trig. OR Advanced Trig. (Recommended)	Physics OR Conceptual Physics OR Chemistry	Modern World Studies	Wellness II (R) Extended Learning Opportunity – Work Study/Coop Ed. (E)	<u>Precision Machining**</u> <u>Advanced Precision Machining</u> <u>CIM-Comp. Int. Manufacturing** (E)</u> <u>Engineering Design ** OR</u> <u>Advanced Engineering** (E)</u>	
	12	English 12	Advanced Trig. OR Pre-Calculus	Physics OR AP Physics	Social Studies Elective	<u>College Composition (E)</u> Career Focus Internship (E) OR Extended Learning Opportunity – Work Study/Coop Ed. (E)	<u>Advanced Machining</u> <u>CIM-Comp. Int. Manufacturing** (E)</u> <u>Advanced Engineering** (E)</u>	
		<u>Associates Degree</u>						
P O S T S E C O N D A R Y	13	College Composition	College Algebra with Trigonometry Pre-Calculus	College Physics I	N/A	College Success Seminar	Reading & Interpreting Engineering Drawings Electrical Fundamentals/Motor Controls & PLC** Manufacturing Processes Basic Machining Skills	<u>Running Start College Credit available thru courses in Bold, Underlined & in Italics.</u> Min of Algebra I, Algebra II/ Trig. Recommended. Physics and Computer recommended in HS ** - These courses maybe combined to achieve the Mechatronics Certificate at Manchester Community College
	14			College Physics II	Social Science Elective	Foreign Lang./Humanities/Fine Arts Elective Business Elective	Manufacturing Systems I** Manufacturing Systems II Material Science CAD/CAM for Manufacturing Statics & Strengths of Materials Advanced Manufacturing Capstone	