



Milford High School - Nashua Community College/Machine Tool

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 for Machine Tool	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)	<ul style="list-style-type: none"> ▶ Welder ▶ Instrument Maker ▶ 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> Welding (E)	
	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> Welding (E) <u>CIM-Comp. Int. Manufacturing (E)</u> <u>Engineering Design OR</u> <u>Advanced Engineering (E)</u> Programming Fundamentals (E)	
	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> Welding (E) <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	Introduction to Computers	N/A	N/A	Freshman Seminar General Elective: Group E General Elective: Group B	<u>MACHINE TOOL PROCESS AND THEORY I</u> Manufacturing Processes MTP & Theory II Technical Drawing Principals of Numerical Control	<p>Notes: <u>Running Start College Credit available thru courses in Bold, Underlined & in Italics.</u></p> <p>Min of Algebra I, Algebra II/ Trig. Recommended.</p> <p>Physics and Computer recommended in HS</p> <p>Completers of the Machining program can be excused from MTTM 111 at NCC.</p> <p>Senior Students recommended to purchase a basic machinist tool kit approx. \$600-800.</p>
	14					General Elective Group B General Elective Group C General Elective Group D General Elective Group F or G	Advanced MTP & Theory I Computer Aided Manufacturing Advanced MTP & Theory II	