



Name: \_\_\_\_\_

Grade: \_\_\_\_\_

Parent Signature: \_\_\_\_\_



## Materials & Manufacturing Pathway

### Career Pathway Plan of Study for ► Learners ► Parents ► Counselors ► Teachers/Faculty

This Career Pathway Plan of Study (based on the Engineering and Technology Pathway of the Science, Technology, Engineering and Mathematics Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. \*This Plan of Study, used for learners at Ponaganset High School is customized with course titles and appropriate high school graduation requirements as well as career pathway requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts (4 credits)	Math (4 credits = 3 + 1 math-related)	Science (3 credits; 3 lab sciences for 4 year college)	Social Studies/ Sciences (3 credits)	Physical Education/Health (2 credits = 0.5 x 4 years)	Other	Scheduling Notes	SAMPLE Occupations Relating to This Pathway
<b>Interest Inventory Administered and Plan of Study Initiated for all Learners</b>									
<b>GRADUATION REQUIREMENTS</b>	9	English 9 CP/H <b>OR</b> Humanities English CP/H (1 credit)	Algebra I CP <b>OR</b> Alg II CP/H (1 credit)	Biology CP/H (1 credit)	Topics in Social Studies CP/H or other SS elective (1 credit)	Physical Education/Health 9/10 (0.5 credit)	Spanish I or Chinese I (1 credit) Required for 4 yr. college students		<ul style="list-style-type: none"> <li>► Architect</li> <li>► Building Code Official</li> <li>► Building Designer</li> <li>► Civil Engineer</li> <li>► Code Official</li> <li>► Cost Estimator</li> <li>► Drafter</li> <li>► Electrical Engineer</li> <li>► Electronic Engineer</li> <li>► Environmental Designer</li> <li>► Environmental Engineer</li> <li>► Fire Prevention and Protection Engineer</li> <li>► Industrial Engineer</li> <li>► Interior Designer</li> <li>► Landscape Architect</li> <li>► Materials Engineer</li> <li>► Mechanical Engineer</li> <li>► Regional and Urban Planner</li> <li>► Safety Director</li> <li>► Specification Writer</li> <li>► Structural Engineer</li> <li>► Surveying and Mapping Technician</li> </ul>
	10	English 10 CP/H (1 credit)	Geometry CP/H <b>OR</b> Algebra II CP (1 credit)	Physical Science CP/H (1 credit)	U.S. History CP/H/EEP/AP (1 credit)	Physical Education/Health 9/10 (0.5 credit)	Spanish II or Chinese II (1 credit) Required for 4 yr. college students		
	11	English 11 CP/H <b>OR</b> Language (1 credit)      AP	Algebra II CP <b>OR</b> PreCalc CP/H <b>OR</b> Stats (1 credit)	Chemistry <b>OR</b> Physics CP/H (1 credit)	Twentieth Century CP/H or other SS elective (1 credit)	Physical Education/Health 11/12 or Strength Training (0.5 credit)	Spanish III or Chinese III (1 credit) Recommended for many 4 yr. college students		
	<b>College Placement Assessments-Academic/Career Advisement Provided</b>								
<b>CAREER RELATED ELECTIVES</b>	12	English 12 CP/H <b>OR</b> AP Literature (1 credit)	PreCalculus, Principles of Stats, AP Statistics, Personal Finance, AP Calculus or math-related course	AP Biology / AP Chemistry / AP Physics / AP Environmental (1 credit)	Elective: Economics, US/Global Affairs, Sociology, etc.	Physical Education/Health 11/12 or Strength Training (0.5 credit)	Spanish IV H/EEP or Chinese IV (1 credit) Recommended for some 4 yr. college students		
	<b>PLAN OF STUDY: Additional Career Related Course Selections</b>						<b>TOTAL CREDITS</b>	<b>SCHEDULING REMINDERS</b>	
		<b>Manufacturing Concentration</b>	<b>Construction Management Concentration</b>						
<b>CAREER RELATED ELECTIVES</b>	9	Material Processing (1 credit)	Material Processing (1 credit)	Mandatory for the pathway.			Fine Art elective (0.5 credits)	<p>*All plans of study need to meet learner's career goals and pathway requirements.</p> <p>*All course selections should meet required annual credit maximum.</p> <p>*All course requests are utilized to build the master schedule for the following school year.</p> <p>*Please be sure to select the appropriate courses at the time of registration.</p> <p>*Participation in Skills USA and appropriate work-based learning activities support and reinforce classroom and laboratory learning is recommended for all students.</p>	
	10	Introduction to Fabrication (1 credit)	Introduction to Construction (1 credit)	Mandatory for the pathway.					
	11	Introduction to Manufacturing (1 credit)	Introduction to Construction Management (1 credit)	Mandatory for the pathway.					
	12	Advanced Manufacturing <b>OR</b> PLTW Engineering Design & Development-Honors (1 credit each)	PLTW Engineering Design & Development-Honors <b>OR</b> Plans, Codes & Site Work (1 credit each)	Must take a minimum of 3 years of manufacturing courses - 4 is recommended.	<b>RECOMMENDED COURSES:</b> Math for Industry; Alg II with Financial Applications; College Writing.				