



School District

Manufacturing Production Technician

HS & Web Address

Minimum HS Graduation Requirements		PROGRAM OF STUDY MATRIX TEMPLATE: MIDDLE - HIGH SCHOOL – POSTSECONDARY					CTE Pathway Requirements	
	Grade	English	Math	Science	Social Studies	Additional Required Courses	Career & Technical Courses	Other Required or Elective Courses
Student Success Plans outlining career goals should be utilized through the advisement process.								
<b>Middle School</b>	<b>7</b>	ELA 7	Math 7	Science 7	Social Studies 7		Introduction to Technology Education	Electives
	<b>8</b>	ELA 8	Math 8	Science 8	Social Studies 8		Inventions & Innovations of Technology Education	Electives
<b>Secondary</b>	<b>9</b>	ELA 9	Algebra I	NGSS Aligned Physical/Integrated Science	Civics/Geography	World Language I		This matrix represents a <i>sample</i> program of study. The LEA's program of study <u>must</u> be reflective of <u>local/state</u> high school graduation requirements and college entrance requirements. This matrix should be reflective of the school's <u>course sequence</u> and requirements.
	<b>10</b>	ELA 10	Algebra II	NGSS Aligned Biology	Economics/Personal Finance	World Language II		
	<b>11</b>	ELA 11	Geometry	NGSS Aligned Chemistry	US History	Physical Education (≥1 Credit)	MSS 100 - Principles of Manufacturing AND MSS111 – Electrical Systems and Controls	
	<b>12</b>	ELA 12	Pre-Calculus or Statistics	NGSS Aligned Physics		Health Education (≥ 0.5 Credit)	MSS112 – Fluid Power AND MSS113 – Electro-Mechanical Systems	
<b>Postsecondary</b>	<b>13</b>	The Department of Education has negotiated articulation agreements with Delaware Technical Community College's Mechanical Engineering Technology and Electromechanical Engineering programs.						All programs of study should meet the students' career goals with regard to required degrees and/or certifications. Required courses will vary by PS institution.
	<b>14</b>							
	<b>15</b>	Continue courses in the area of specialization.						
	<b>16</b>							



Additional Learning Opportunities			
Early Career Opportunities:	Early College Opportunities:	Industry Recognized Certifications/Licenses:	Student Organization:
<input checked="" type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Other: <u>Other Early Career Opportunities</u>  The Manufacturing Logistics Technician program of study provides students with work-based learning experiences or Craftsmanship Placements upon successful completion of the MSS100 - Principles of Manufacturing and MSS101 - Manufacturing Quality, Safety, and Practices courses.	<input type="checkbox"/> Dual Enrollment <input type="checkbox"/> Advanced Placement <input checked="" type="checkbox"/> Articulated Credit <u>Delaware Technical Community College:</u> ELM130 – Industrial Electricity - 3 credits ELM205 - Mechanisms & Design - 3 credits ELC243 – Program Logic Controllers - 4 credits OR ELC125 – Electrical Circuits I - 3 credits ELC243 – Program Logic Controllers - 4 credits OR MET115 – Mechanical Eng Tech - 3 credits ELC248 – Electro-Mechanical Sys - 4 credits <input type="checkbox"/> Pre-Apprenticeship <input type="checkbox"/> Other: <u>Other Early College Opportunities</u>	<input checked="" type="checkbox"/> Manufacturing Skill Standards Council, Certified Production Technician (CPT) <input checked="" type="checkbox"/> American Heart Association First Aid CPR/AED Certification <input checked="" type="checkbox"/> American Society for Quality Lean Green Belt Certification <input checked="" type="checkbox"/> Occupational Safety and Health Administration - 10-Hour Construction Safety Certification <input checked="" type="checkbox"/> Occupational Safety and Health Administration - 3 Hour Safety Refresher Certification <input checked="" type="checkbox"/> Delaware Technical Community College Certification	<input type="checkbox"/> <u>TSA - Technology Student Association</u> OR <input type="checkbox"/> <u>SkillsUSA</u>

Sample Careers By Educational Level			
Employment Opportunities (Upon Completion of HS Pathway)	Technical Training or Associate Degree	Bachelor's Degree	Master's Degree or Above
	Electrical Equipment Installer/Repairer Industrial Electronic Installer/Repairer/Manager Industrial Machinery Mechanic Industrial Maintenance Electrician Industrial Maintenance Technician/Mechanic Job/Fixture Designer Maintenance Repairer Automated Manufacturing Technician Calibration Technician Electromechanical Equipment Assembler	Quality Engineer Logistical Engineer Design Engineer Electronics Engineer Engineering and Related Technologist Industrial Engineer Labor Relations Manager Manufacturing Engineer Manufacturing Technologist Mechanical Engineer	

\*May require higher education depending on job responsibilities.

Feeder Middle School(s):

**Colleges/Universities and Articulated Credit Agreements:**

Articulation agreements/Memorandums of Understanding:

Delaware Technical Community College – ELM130, ELM205, ELC243, ELC125, MET115, ELC248

LEA Additional Graduation Requirements: