



# Engineering & Industrial Technology: Precision Machining Technology CTE Program 48.0501

| CIP 48.0501   | Grade 9   | Grade 10   | Grade 11   | Grade 12   |
|---|---|--|--|--|
|   | <b>Exploratory Courses</b>  | <b>Introductory Courses</b>                      | <b>Career &amp; Technical Education Courses</b>  |  |
| <b>Technical Courses</b><br><br><b>Grades 11-12</b><br><br>6.0 credits<br>720 hours   | <b>Exploratory Precision Machining (.25)</b>                        | <b>Introduction to Precision Machining (.5)</b>  | <b>Precision Machining Level 1 (3.0)</b>   | <b>Precision Machining Level 2 (3.0)</b>   |
| <b>Academic Courses</b>   |   |  |  |  |
| <b>English</b>  | English 9 or Honors 1   | English 10 or Honors 2                           | English 11 or College Prep or Honors 3   | Fantasy Fiction or ENG 111/Biography or AP English                               |
| <b>Mathematics</b>  | Algebra, Academic Algebra 1 or Geometry Honors                      | Algebra 2, Academic Geometry or Honors Algebra 2 | Trig/Pre-Calc Honors or Statistics or SAT Math   | Unified Algebra & Trig or Financial Algebra for Business Application or Calculus |
| <b>Science</b>  | Environmental Science 1 & Earth & Space or Biology 9                | Biology or Chemistry                             | Physics  | Chemistry or Environmental & Astronomy   |
| <b>Social Studies</b>   | US History  | World History                                    | American Government & Social Studies Elective (0.5)  | Social Studies Elective (1.0)  |
| <b>Required Courses</b>   | Comp. Applications (.5)<br>Health 9 (.5)<br>Physical Education (.5) | Physical Education (.5)                          | Personal Finance (.5)<br>Physical Education (.5)   | Physical Education (.5)  |
| <b>Electives</b>  | +2.25 credits   | +3.0 credits                                     | Not Available  | +0.5 credits   |
| <b>Articulation Agreement Credit Opportunities</b>  |   |  | <b>Advanced Placement Credits</b>  | <b>Dual Enrollment Credits</b>   |
| Butler County Community College (9.0)<br>Delaware County Community College (10.0)<br>Johnson College (9.0)<br>Luzerne County Community College (12.0)<br>Pennsylvania College of Technology (6.0)<br>Reading Area Community College (12.0)<br>Thaddeus Stevens College of Technology (11.0)<br>Westmoreland County Community College (12.0) |   |  | AP Calculus<br>AP Chemistry<br>AP European History<br>AP English<br>AP Environmental Science<br>AP Statistics<br>AP US History | MATH123<br>ENGL111<br>CHEM100  |
| <b>Scheduling Notes:</b><br><br>    |   |  | <b>Work-Based Learning Programs</b>  |  |
|   |   |  |  | Cooperative Education (4.0)  |
|   |   |  | CTE Experience/Internship (4.0)  | CTE Experience/Internship (4.0)  |
|   |   |  | <b>CTE Industry Credentials &amp; Certifications</b>   |  |
|   |   |  | OSHA 10-Hour General Industry  | NIMS Machining Level I   |
|   |   |  | <b>Grade 11</b>  | <b>Grade 12</b>  |