

Program Information & Skill Alignment Chart for:

**Introduction to Transportation – CIP 47.0604**

**Brownstown/Mount Joy/Willow Street Campus**

Form to be submitted to IU 13 with PIF

<b>Program Description</b>	<ul style="list-style-type: none"> <li>• Develop the skills to diagnose and troubleshoot today's hi-tech vehicles and equipment.</li> <li>• Explore and experience the operating systems and repair procedures for a wide range of vehicles.</li> <li>• Interact with trade professionals from the transportation industry.</li> </ul>	
<b>Program Information (costs, certification s, uniform)</b>	<p>Textbooks- (Provided to Students)  <b>Uniforms/Tools-</b>  <b>\$100 approx.</b> Students need to purchase more than 2 Maroon Shirt/Dark Blue Pants to comply with uniform cleanliness standards. Suggested pants would be Dickies or Carhartt. Hard Toed shoes (no sneakers or open toed footwear).  The school will provide all tools required for the completion of the technical program.</p> <p><u>Program Opportunities/Certifications</u></p>	
<b>Program Outline &amp; Pathways</b>	<p><u>Approved Task Outline</u></p> <ul style="list-style-type: none"> <li>• Orientation</li> <li>• Tools Used in Transportation Industry</li> <li>• Using &amp; Understanding Measurement</li> <li>• Fasteners, Threading, and Gaskets</li> <li>• Engine Mechanical</li> <li>• Fuel Systems</li> <li>• Electrical Systems</li> <li>• Drive Systems &amp; Transmissions</li> <li>• Cooling System</li> <li>• Tires</li> <li>• Brakes</li> <li>• Suspension</li> <li>• Preventative Maintenance &amp; Repair</li> </ul>	<p><u>Careers Pathways:</u></p> <ul style="list-style-type: none"> <li>• Auto Mechanic</li> <li>• Collision Repair Worker</li> <li>• Diesel Mechanic</li> <li>• Heavy Equipment Operator/Mechanic</li> <li>• Parts Salesperson</li> <li>• RV Mechanic</li> <li>• Small Engine Mechanic</li> </ul> <p>This introduction course helps to guide students to a full day program in the transportation field during the following school year.</p>
<b>Other Information</b> <i>Include Articulation Agreements</i>	<p>Student to teacher ratio is 20:1.</p> <ul style="list-style-type: none"> <li>• Ability to follow oral and written communications.</li> <li>• Ability to collaborate with a team to complete projects.</li> <li>• Able to work with fractions, decimals, weights, and measures</li> <li>• Basic computer skills</li> <li>• Good attendance</li> <li>• Good oral and written communication skills</li> </ul>	

**Student Name:** \_\_\_\_\_ **District:** \_\_\_\_\_

***Skill Alignment Chart for:  
Introduction to Transportation***

Educational and Physical Attributes	Program Expectations	Present Education Level and Current Supports
<b>Program Safety / Physical Considerations</b>	<ul style="list-style-type: none"> <li>• Ability to focus on safety when moving around equipment, hand tools and other automotive equipment found in this industry.</li> <li>• Good eye/hand coordination specifically as it relates to the use of a variety of tools, equipment and measuring devices.</li> <li>• Ability to follow directions, work independently</li> <li>• Ability to stand for long periods of time.</li> <li>• Ability to focus and work in small tight areas for extended periods of time</li> <li>• Ability to follow flow charts and diagnostic charts to solve problems.</li> <li>• Good hand and upper body strength</li> </ul>	
Action/Need:		
<b>Program Environment</b> Indoor/outdoor Dust/dirt/fume/noise etc. Layout of room – theory/lab	<ul style="list-style-type: none"> <li>• High amount of dust, dirt, fumes, and noise. This can be distracting for some of the student body.</li> <li>• Lab area mirrors industry. Tasks are assigned and with instructor support are practiced. Tasks are to be completed to industry standards.</li> </ul>	
Action/Need:		
<b>Typical level of support</b>	<p>At CTC, we have itinerant IU13 support teachers and paraeducators. In the itinerant model, the support teachers have multiple programs and provide check-ins during the day. The itinerant model does not include co-taught classes where teachers are in classes for extended periods of time. IU13 paraeducators also support several teachers, spreading out their day between multiple programs.</p>	

	<p>The learning center is available at scheduled times for testing accommodations, study/instructional groups, and work completion support. Since time there takes away from lab time, students are encouraged to use it strategically.</p>	
<p>Action/Need:</p>		
<p><b>Reading / ELA Levels:</b>  <i>Examples:</i></p>	<ul style="list-style-type: none"> <li>• 9<sup>th</sup> grade technical reading</li> <li>• Explain main ideas and draw accurate conclusions after reading text</li> <li>• Learn and apply content specific symbols correctly</li> <li>• Read and be able to apply diagnostic and schematic data to solve problems</li> <li>• Comprehend written text, tables, and charts to diagnose and repair problems.</li> <li>• Summarize information from multiple sources</li> <li>• Follow complex multi-step procedures independently to solve problems</li> </ul>	
<p>Action/Need:</p>		
<p><b>Writing Levels:</b>  <i>Examples</i></p>	<ul style="list-style-type: none"> <li>• 9<sup>th</sup> grade technical writing</li> </ul>	
<p>Action/Need:</p>		
<p><b>Math Levels:</b>  <i>Examples</i>  What are the cubic inches of displacement of a single cylinder with a 3.5" bore and 4.5" stroke; what is the total engine displacement if the engine has 8 cylinders</p>	<ul style="list-style-type: none"> <li>• Operations with whole numbers and decimals</li> <li>• Fraction calculations</li> <li>• Fluency in rational numbers, operations, whole numbers, decimals, fractions, percentages, ratios</li> <li>• Proficient use of a measuring to the 1/16.</li> <li>• Basic algebra</li> </ul>	
<p>Action/Need:</p>		

<b>Theory time</b>	<ul style="list-style-type: none"> <li>45 Minutes per day with student breaks for practice of information taught</li> </ul>	
Action/Need:		
<b>Homework</b> <i>Amount per night</i>	<ul style="list-style-type: none"> <li>Approximately 1 -2 hours per week</li> </ul>	
Action/Need:		
<b>Lab Time</b> <i>Guided vs Independent Work</i>	<ul style="list-style-type: none"> <li>20% Guided</li> <li>80% Independent work with assistance when needed from instructor</li> </ul>	
Action/Need:		
<b>Tests</b> <i>NOCTI testing – Y/N</i> <i>Frequency of tests/quizzes</i>	<ul style="list-style-type: none"> <li>NOCTI- NO</li> <li>5-7 Tests/Quizzes per marking period</li> <li>Frequent evaluation of hands-on skills</li> </ul>	
Action/Need:		

<p><b>Behavioral Expectations</b></p> <p><i>Executive Function</i></p> <p><i>Organizational skills</i></p>	<ul style="list-style-type: none"> <li>• Grade level organization</li> <li>• Ability to work independently and safely</li> <li>• Ability to work as a team, both as a leader and subordinate</li> <li>• Ability to work/concentrate in noisy, distracting environment</li> <li>• Ability to multi-task on many different tasks at the same time</li> <li>• Willingness to learn and apply new concepts</li> <li>• Highly motivated to succeed.</li> </ul>	
<p>Action/Need:</p>		
<p><b>Other</b></p> <p><i>Technology skills specific to the program.</i></p> <p><i>Additional skills that are valuable for program success.</i></p>	<ul style="list-style-type: none"> <li>• Use various types of technology to access service and diagnostic information</li> <li>• Ability to use basic industry tools</li> <li>• Ability to use battery charging/testing tools and equipment</li> <li>• Ability to use Digital volt ohm meter or multimeter</li> <li>• A driver's license is not necessary to complete this class but it will be a huge asset when seeking employment</li> </ul>	
<p>Action/Need:</p>		

*District Representative Signature* \_\_\_\_\_ *Date* \_\_\_\_\_