

**Program Information & Skill Alignment Chart for:**  
**Computer Networking & Security – CIP Code 11.0901**  
**Brownstown Campus**

***Form to be submitted to IU 13 with PIF***

<b>Program Description</b>	<ul style="list-style-type: none"> <li>• Build, upgrade, maintain, and repair desktop computers</li> <li>• Design, install, and troubleshoot computer network servers and devices</li> <li>• Perform custom work for clients: individuals, schools, and businesses</li> </ul>	
<b>Program Information (costs, certification s, uniform)</b>	<p><u>Textbooks-</u> (Provided to Students)</p> <ul style="list-style-type: none"> <li>• Electronic Textbooks are used in this program.</li> </ul> <p><u>Uniforms-</u></p> <ul style="list-style-type: none"> <li>• <b>\$60</b> approx. Students need to purchase more than 1 shirt/pants to comply with uniform cleanliness standards.</li> </ul> <p><u>Program Opportunities/Certifications</u></p> <ul style="list-style-type: none"> <li>• Cooperative Education</li> <li>• Dual Enrollment</li> <li>• Post-secondary Credit Articulation</li> <li>• OSHA</li> <li>• CompTIA A+ (2 tests)</li> <li>• CompTIA Network+</li> </ul>	
<b>Program Outline &amp; Pathways</b>	<p><u>State Program of Study Task Outline</u></p> <ul style="list-style-type: none"> <li>• Personal and Environmental Safety</li> <li>• IT Fundamentals</li> <li>• Internet Applications</li> <li>• Computer Hardware</li> <li>• Troubleshooting, Repair &amp; Maintenance</li> <li>• Operating Systems &amp; Software</li> <li>• Networking</li> <li>• Security</li> <li>• Communication &amp; Professionalism</li> </ul>	<p><u>Careers Pathways:</u></p> <ul style="list-style-type: none"> <li>• Computer Consultative Salesperson, PS</li> <li>• Computer User Support Specialist, PS</li> <li>• Electrical &amp; Electronic Engineering Technician, AD</li> <li>• Field Service Technician, AD</li> <li>• Industry Technician for PC Support, AD</li> <li>• Network Administrator, PS</li> <li>• Repair Bench Technician, AD</li> <li>• Server Technician, AD</li> </ul> <p>*PS- Post Secondary, AD – Associate Degree</p>
<b>Other Information</b> <i>Include Articulation Agreements</i>	<ul style="list-style-type: none"> <li>• Student to teacher ratio is 25:1</li> </ul> <p><u>SOAR Articulation</u>  SOAR is a Pennsylvania Department of Education (PDE) program which enables high school students who successfully complete a PDE approved career and technical program to earn college credits. The number of credits available varies by school, program and from one school year to another. Please discuss these options with your counselor.</p>	

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

***Skill Alignment Chart for:  
Computer Networking/Security  
– CIP Code: 11.0901***

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 work independently</li> <li>• Excellent self-discipline to focus for extended periods</li> <li>• Good eye/hand coordination</li> <li>• Stamina (Ability to focus on the workstation for extended periods.</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>• Indoor</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>	
Action/Need:		

<b>Reading / ELA Levels:</b> <i>Examples:</i>	Reading: Students must be able to read and interpret detailed instructions for computer repair and networking tasks. They should be able to follow multi-step directions from written and online resources independently.	
Action/Need:		
<b>Writing Levels:</b> <i>Examples</i>	Students will be expected to write clear and concise notes during lectures and labs, as well as document repair procedures and troubleshooting steps. They should also be able to communicate professionally via email to clients and instructors.	
Action/Need:		
<b>Math Levels:</b> <i>Examples</i>	Students should have a basic understanding of number systems, including binary, hexadecimal, and base 10. They will need to apply these concepts to understand IP addressing, subnetting, and data representation within computer systems.	
Action/Need:		
<b>Science Levels:</b> <i>For Medical programs and PSA</i>		
Action/Need:		
<b>Theory time</b>	The beginning of the year is heavy in theory with increasing lab work and decreasing theory as the year progresses.	
Action/Need:		

<b>Homework</b> <i>Amount per night</i>	<ul style="list-style-type: none"> <li>• NA</li> </ul>	
Action/Need:		
<b>Lab Time</b> <i>Guided vs Independent Work</i>	Labs start out with more guidance in the beginning of the school year and progress to more independent.	
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</li> <li>• weekly tests and quizzes.</li> </ul>	
Action/Need:		
<b>Behavioral Expectations</b> <i>Executive Function</i> <i>Organizational skills</i>	<ul style="list-style-type: none"> <li>• Executive Function: Students are expected to demonstrate strong executive function skills, including the ability to manage their time, plan and prioritize tasks, and work independently without constant supervision. The program requires a high degree of self-discipline to stay focused for extended periods, especially during lab work.</li> <li>• Organizational Skills: Students should be detail-oriented and have the ability to organize their work area and keep track of small components and tools. This is critical for successful troubleshooting, repair, and maintenance tasks</li> </ul>	
Action/Need:		

<p><b>Other</b>  <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>• Competent PC user (Not Expert)</li> <li>• Logical/Critical thinking capabilities</li> <li>• Detail oriented</li> <li>• Excellent social skills for working with customers</li> </ul>	
<p>Action/Need:</p>		

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