Program Information & Skill Alignment Chart for:
Power Sport Technology – CIP Code 47.0699
Brownstown Campus

Form to be submitted to IU 13 with PIF

Program Description	• Diagnose, maintain, and repair a wide range of outdoor power equipment ranging from lawn and garden tractors to motorcycles and ATV's • Train to use the same advanced diagnostic and repair equipment as a master technician uses to troubleshoot complex systems. • Work on many outdoor power equipment and recreational vehicles in a rapidly changing industry using a full systems approach.	
Program Information (costs, certifications, uniform)	Textbooks- (Provided to Students): • Motorcycles Fundamentals, Service, Repair (Ed. 2) -Digital Uniforms- • Students will be need to have 2 or more charcoal gray program shirts and work pants (details on school website) along with work boots **Program Opportunities/Certifications** • EETC: Small Engine Technician Certification • OSHA- 10 hour Automotive • Briggs & Stratton Small Engine Certification • Honda EW-1 Engines Certification	
Program Outline & Pathways	State Program of Study Task Outline • Workplace Safety • Basic Electrical Principals & Circuit Testing • Cooling Systems • Fuel Systems • Exhaust Systems • Measuring & Trade Related Mathematics • Hand and Power Tools • Fasteners • Welding, Heating & Cutting • 2 Stroke Cycle Engine • 4 Stroke Cycle Engine • Engine Failure Analysis • Starting Systems • Ignition Systems • Charging Systems • Lubrication Systems • Governor Systems • Brake Systems • Clutch & Drive System • Parts Management, Invoicing & • Recordkeeping	Careers Pathways: Post-Secondary and Continuing Education Options • Equipment Rental & Sales • Lawn & Garden Equipment Technician • Lawn & Garden Parts Salesperson • Lawn & Garden Service Writer • Motorboat Mechanics & Service Tech • Motorcycle & Recreational Vehicle Parts • Salesperson • Motorcycle & Recreational Vehicle Service • Motorcycle & Recreational Vehicle Technician • Small Engine Technician • Mechanics supervisor

	• Wheels & Chassis Service	
Other Information *Include Articulation Agreements*	• Student to teacher ratio is 22:1 <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.	

Student Name: _____ District: _____

Skill Alignment Chart for:

Power Sport Technology – CIP Code: 47.0699

Educational and Physical Attributes	Program Expectations	Present Education Level and Current Supports
Program Safety / Physical Considerations	• A focus on safety around moving equipment, • hand tools, power tools, and other equipment • found in the industry • Ability to diagnose the source of a problem • quickly and accurately • Ability to work independently, read and follow • directions • Good hand/eye coordination • Stamina to sit, stand or kneel for extended periods • Some work in unusual positions is necessary	
Action/Need:		
Program Environment Indoor/outdoor Dust/dirt/fume/noise etc. Layout of room – theory/lab	• The classroom is separated from the lab with a wall including windows in the top half. • The lab is climate-controlled • Some work outside is necessary • There are often multiple pieces of equipment running creating a noisy environment. • Dust and fumes will be present during some times	
Action/Need:		

Typical level of support	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. 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.	
Action/Need:		
Reading / ELA Levels: *Examples:*	• Textbook is written on a grade 12+ level • Service manuals and other technical resources used in the program require an ability to use industry specific vocabulary • The ability to read and comprehend instructions is crucial.	
Action/Need:		
Writing Levels: *Examples*	• The ability to communicate in writing for the purpose of explaining what needs to be done (estimates) or what has been done (invoices). • The need to write a procedure for troubleshooting a malfunction is common.	
Action/Need:		
Math Levels: *Examples:* Sort the following diameters wheel studs from smallest to	• Use principles of algebra to apply Ohm's law to the diagnosis of electrical issues • Frequent use of both fractions and decimals	

largest for organization in the parts room: 1/2 7/16 5/16 5/8 9/3 **Ohm's Law: E = I x R** E = Voltage I = Current (Amps) R = Resistance (Ohms) E (volts) = I x R I (amps) = E ÷ R R (ohms) = E ÷ I Using the formulas above, what should the amperage flow be for a 12-volt circuit having 54 ohms of resistance?	• Conversion of fractions to decimals an vice versa • Ability to measure parts in units as small as .0001" • Use the measurements to determine clearance between or interference of mating parts.	
Action/Need:		
Theory time	• Typical day includes 1.5 to 2 hours of theory, this can change due to material being covered, equipment issues or other factors.	
Action/Need:		
Homework *Amount per night*	• 1 to 2 chapters in the textbook will be covered each week, these may include homework assignments. • Average 2 to 3 hours per week • Preparation for certification tests may be necessary outside of class	
Action/Need:		
Lab Time *Guided vs Independent Work*	An average day includes four hours of work time in the lab. 25% of this time is used for demonstration and guided practice and the remainder is used to practice individual skills.	

Action/Need:		
Tests *NOCTI testing – Y/N* *Frequency of tests/quizzes*	• NOCTI Pre-test (written only) • NOCTI Post-test (written and hands-on) • Tests and quizzes are part of the weekly textbook portion of the class. • 40 to 50 task evaluations per marking period	
Action/Need:		
Behavioral Expectations *Executive Function* *Organizational skills*	• Ability to work both independently and with a team of classmates • Attention to detail is extremely important • Good attendance • Good communication skills • Maintain respectful relationships with all others within the program and school • The ability to maintain mental focus when also working physically is necessary	
Action/Need:		
Other *Technology skills specific to the program.* *Additional skills that are valuable for program success.*	• Ability to use school issued laptop to access online service and repair information • Ability to navigate Canvas Learning Management System for some theory assignments and class schedules. • Having a driver's license is not necessary for completion of the program but will aid in finding employment in this field.	

Action/Need:		

*District Representative Signature*_____ *Date* _____