

# **Program Planning Tool**

#### Program Title: CIP 47.0699 MOTORCYCLE, MARINE & SMALL ENGINE TECHNOLOGY

Student Name:

This document has been designed as a tool to facilitate student placement decisions and provides important information about the program. The chart on the reverse side is designed to assist in the identification of necessary skills, present educational levels, and supports, if any, that are needed to foster program success.

### **Program Completion Requirements**

#### A successful student will...

- Secondary Academic Course Requirements: The PA Dept. of Education's focus is to ensure every student is college and career ready, therefore all students are recommended to follow a college prep sequence of academic classes. Courses such as applied math or general science are not appropriate for this program. PDE's goal is to have all students perform at the competent or advanced level on the Keystone Exams and Program of Study end-of-program assessment (NOCTI).
- Complete an Occupational Competency Assessment (i.e. NOCTI end-of -program exam) and score at the "competent" or "advanced" level. This end-of -program exam will cover the full scope of the program of study curriculum and includes (1) multiple choice test
  (2) performance test consisting of occupational related tasks scored & evaluated by industry judges.
- Earn a minimum of one industry recognized certification. Students will be encouraged and expected to earn all recognized industry certifications that make up the scope of the curriculum. Accommodations are not permitted for industry certifications. These include: PA State Motorcycle Safety Inspection certification, Outdoor Power Equipment Technician Certification, and S/P2.
- Complete the approved program curriculum and earn a minimum of one RMCTC Job Title aligned with the student's career objective. Job titles are identified on the program task list, aligned with local workforce needs and high priority employment occupations, and annually reviewed and approved by the program's occupational advisory committee.
- Successful completion of Keystone Exams as determined by sending school district.
- Maintain a 95% attendance rate or better.
- Transition on to a post-secondary institution, military or related fulltime employment aligned to their CTC program of study.

## Instructional Process/Specifications

#### A successful student will...

- Perform a wide variety of tasks in a laboratory environment with equipment consistent with industry standards. Up 25 students are assigned to work "independently" and in "small teams". Students progress through using learning guides in a self-directed manner. Working in the laboratory, students will be required to use hand tools, power tools, measuring instruments, hydraulic lifts, welding equipment, chemicals, heavy equipment, and cutting tools.
- Students will be required to properly handle and dispose of hazardous waste materials. The laboratory simulates a real working environment therefore students will be exposed to the noise levels, dust, debris, and fumes associated with the profession. Students must be alert and aware of the surroundings at all times as equipment moves in and out of the laboratory. This requires self-discipline and strict adherence to rules to ensure safety of self and others.
- Participate in classroom theory and laboratory applications for generally 2 ½ hours each day; students will spend 40% of their time in classroom theory and 60% of their time doing laboratory applications and live work.
- Complete written and performance tests. Students will be evaluated weekly on occupational skill performance using rubrics. In addition, students will be evaluated daily on work ethics. Progress is measured by test performance, task completion and work ethic.
- Participate in Career & Technical Student Organizations including SkillsUSA and/or National Technical Honor Society.
- Participate in a paid or unpaid work based learning related to the Program of Study (cooperative education, clinical internship, and/or job shadowing).
- Read and study textbooks and technical manuals. Most textbooks are written at a 10th to 11th grade reading level and most technical manuals are written at a higher level and are accessed on line.
- Complete homework on time. Homework typically involves chapter or workbook assignments, on line research assignments and writing assignments.
- Purchase appropriate work and safety attire, tools, and equipment. Following is an estimated breakdown of costs: UNIFORM: \$100



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CTE Requirements	Present Educational Ability/Level	Support Needs
<b>Program Completion</b> – Strong self-determination skills and understanding of personal strengths and weaknesses. Ability to meet industry established standards of performance, complete the program of study without curriculum modifications, and earn industry certifications without testing accommodations.		
<b>Reading and Language Arts Level</b> - Text and manuals written on a 10 <sup>th</sup> – 11 <sup>th</sup> grade reading level. Proficient on end-of-course exam (Keystone). Must have ability to read and comprehend technical content, service manuals and interpret schematics. NOCTI Assessment & Industry Certification Exams require a proficiency in English language skills.		
<b>Math Level</b> - At grade level and proficient on end-of-course exam (Keystone). Knowledge of arithmetic, algebra, geometry and their applications. Must have ability to apply weights and measures, metric system, fractions, decimals and percentages. Ability also needed to estimate and measure sizes, distances, and quantities; and determine time, costs, resources, and materials needed to perform a work activity.		
<b>Aptitude</b> – Problem solving/diagnostic skills; aptitude for mechanical, electrical, electronic, computer technology, technical drawings and diagrams. Oral comprehension and expression, active listening, analytical thinking, attention to detail, deductive and inductive reasoning.		
<b>Safety &amp; Physical</b> - Manual dexterity; fine motor skills; hand-eye-body coordination; frequent standing bending and lifting required. Multi-limb coordination, arm-hand steadiness, and extent flexibility (the ability to bend, stretch, twist or reach with body, arms and/or legs). Trunk strength and ability to lift 50 lbs. High degree of self-discipline and focus needed for safety around moving equipment, hand tools, power tools and other equipment found in the industry.		
<b>Interpersonal/ Social</b> - Ability to relate well to customers and coworkers; ability to work independently and as a team member; self-discipline a must due to safety issues; listening to what people are saying and understanding the points being made.		
<b>Other Occupational/Program Considerations</b> - Ability to work independently and read and follow directions. Stamina needed to stand for long periods of time. Good attention to detail. Environment with several sensory inputs, dust and fumes, loud and sometime startling noises, ongoing background noise, moving people and vehicles.		