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PROGRAM CONCENTRATION: Architecture, Construction,
Communication, Transportation
CAREER PATHWAY: Marine Engine Technology
COURSE TITLE: Marine Engine Technology Internship
(MTI)

The Marine Engine Technology Internship is designed to allow students to experience the workplace in Marine Engine Technology. This course will help students gain interpersonal skills related to the work place including team participation, strong work ethics, mentoring, client and customer service, and the ability to work in culturally diverse environments. Mastery of these standards through project-based learning and leadership development activities of Skills USA will help prepare students with a competitive edge for the Marine Engine Technology industry.

Work Place Skills

ACT-MTI-1. Students will demonstrate initiative in the workplace. Students will:

- a. Discuss the importance and appropriateness of initiative in the workplace.
- b. Observe how others take initiative in the workplace and/or classroom.
- c. Discuss situations where initiative was observed.
- d. Demonstrate initiative in the work environment.

ACT-MTI-2. Students will implement interpersonal skills while interacting with colleagues in the workplace. Students will:

- a. Discuss how interpersonal skills are used in the workplace.
- b. Show appropriate communication skills when dealing with others.
- c. Analyze situations of appropriate and inappropriate interactions with colleagues.
- d. Use interpersonal skills in the workplace.

ACT-MTI-3. Students will demonstrate dependability as an employability trait in the workplace. Students will:

- a. Discuss the importance of dependability to workplace success.
- b. Observe how dependability affects the work environment.
- c. Show dependability as a worker.

ACT-MTI-4. Students will use specified industrial processes throughout the internship experience. Students will:

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- a. Observe individual responsibilities in the workplace.
- b. Complete assigned tasks during the internship experience.

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Technical Skills

ACT-MTI-5. Students will demonstrate and apply Marine Engine Technology knowledge and skills as related to the workplace. Students will:

- a. Demonstrate the use of technology to locate, evaluate, and collect information from a variety of resources.
- b. Evaluate resources and technical innovations based on the appropriateness for specific tasks at the workplace.

Academic Standards:

ELA12W3 The student uses research and technology to support writing. The student

- a. *Uses supporting evidence from multiple sources to develop the main ideas within the body of a researched essay, a composition, or a technical document.*

National Academic Standard:

LA074 The technician composes complete and accurate paragraphs that include information regarding symptoms, diagnosis results, and appropriate details when preparing warranty claims and information for inclusion on work orders.

MA229 The technician can identify the specific cause of the described problem by generating conclusions based on known symptoms related to the problem.

SC007 The technician develops and maintains an understanding of all federal, state, and local rules and regulations regarding environmental issues related to the work of the automobile technician. The technician uses such things as government impact statements, media information, and general knowledge of pollution and waste management to correctly use and dispose of products that result from the performance of a repair task.

ACT-MTI-6. Students analyze the impact of the Marine Engine Technology workplace as it relates to local, state, national, and global economies. Students will:

- a. Develop and maintain an understanding of all federal, state, and local rules and regulations regarding environmental issues related to the work of the marine engine workplace.
- b. Apply information gathered from government impact statements, media information, and general knowledge of pollution and waste management to correctly use and dispose of products that result from the performance of a repair task.
- c. Explain legislation, regulations, and public policy affecting the Marine Engine Technology industry.
- d. Describe how security and inventory control strategies, laws and regulations, and worksite policies and procedures affect loss prevention and profit.

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Academic Standards:

SSEMI3 The student will explain how markets, prices, and competition influence economic behavior.

- a. *Identify and illustrate on a graph factors that cause changes in market supply and demand.*

National Academic Standards:

SC007 The technician develops and maintains an understanding of all federal, state, and local rules and regulations regarding environmental issues related to the work of the automobile technician. The technician uses such things as government impact statements, media information, and general knowledge of pollution and waste management to correctly use and dispose of products that result from the performance of a repair task.

ACT-MTI-7. Students will demonstrate integration of academic and career learning. Students will:

- a. Demonstrate strategies for identifying, formulating, and solving technical problems.
- b. Apply techniques, skills, and knowledge necessary to use and maintain technological products and systems.

Academic Standards:

ELAALRC4 The student establishes a context for information by reading across subject areas.

- a. *Explores life experiences related to subject area content.*
- b. *Discusses in both writing and speaking how certain words and concepts relate to multiple subjects.*
- c. *Determines strategies for finding content and contextual meaning for unfamiliar words or concepts.*

MM4P4. Students will make connections among mathematical ideas and to other disciplines.

- a. *Recognize and use connections among mathematical ideas.*
- b. *Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.*
- c. *Recognize and apply mathematics in contexts outside of mathematics.*

SCSh3. Students will identify and investigate problems scientifically.

- a. *Suggest reasonable hypotheses for identified problems.*
- b. *Develop procedures for solving scientific problems.*
- c. *Collect, organize and record appropriate data.*
- d. *Graphically compare and analyze data points and/or summary statistics.*

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- e. *Develop reasonable conclusions based on data collected.*
- f. *Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.*

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National Academic Standards:

LA074 The technician composes complete and accurate paragraphs that include information regarding symptoms, diagnosis results, and appropriate details when preparing warranty claims and information for inclusion on work orders.

MA229 The technician can identify the specific cause of the described problem by generating conclusions based on known symptoms related to the problem.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- a. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- b. Discussing books

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- Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- c. Building vocabulary knowledge
- Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- d. Establishing context
- Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

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CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.