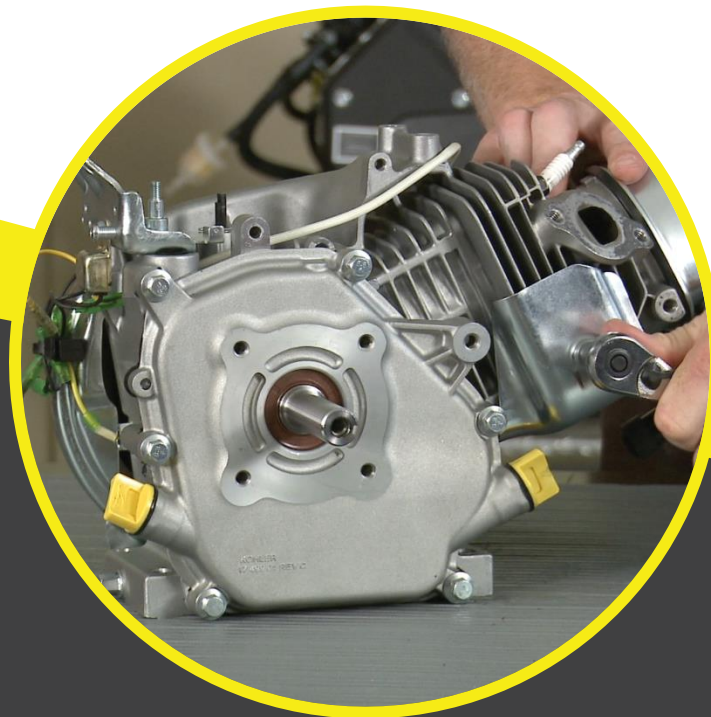




EQUIPMENT & ENGINE TRAINING COUNCIL

Principles of Small Engine Technology

CERTIFICATION



CERTIFICATION BLUEPRINT

CERTIFICATION EXAM OVERVIEW

The EETC Principles of Small Engine Technology Certification confirms that individuals have the essential knowledge and skills for the outdoor power equipment industry. The certification exam, hosted on the iCEV Testing Platform, consists of 100 questions. It evaluates understanding of engine components, disassembly and assembly procedures, and troubleshooting, repair, and maintenance procedures. The exam must be proctored in a controlled environment. Proctoring guidelines can be found at www.icevonline.com/proctoring-guidelines.

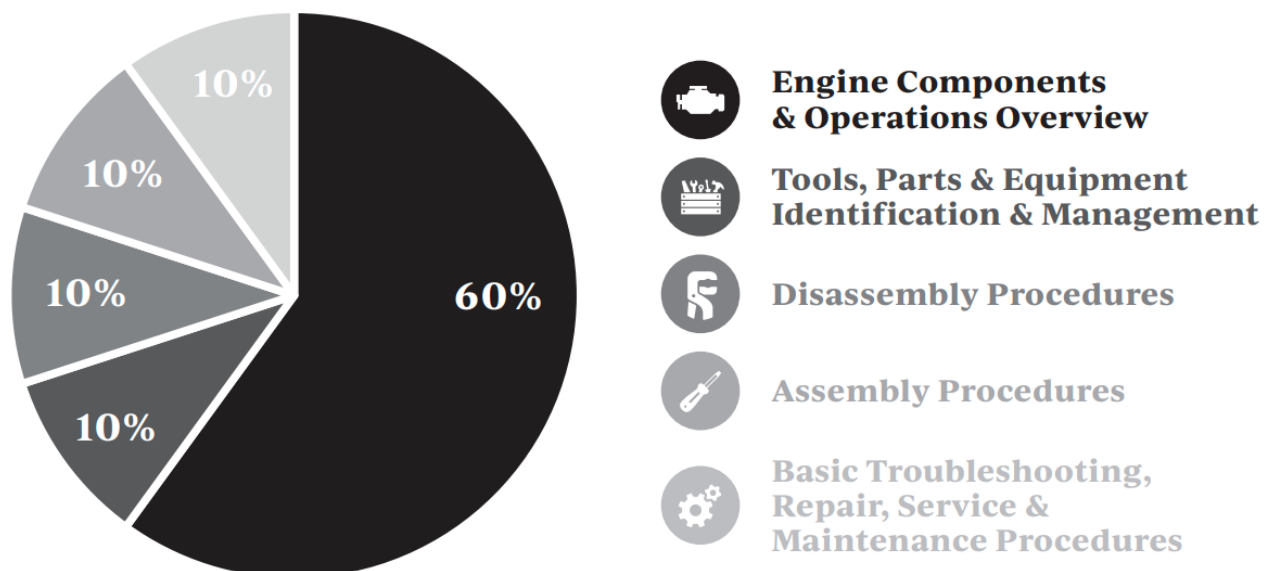
More information about the certification and testing platform can be found at <https://www.icevonline.com/small-engines>.

ABOUT THE EQUIPMENT & ENGINE TRAINING COUNCIL

The Equipment & Engine Training Council (EETC) is a non-profit association addressing the critical shortage of service technicians through its school accreditation and EETC technician certification programs. Membership is made up of industry professionals from manufacturers, distributors, dealers, educational institutions and associations.

Learn more at: <https://www.eetc.org/PrinciplesofSmallEngineTechnology>.

INDUSTRY STANDARDS OVERVIEW



LEARNING OBJECTIVES & INDUSTRY STANDARDS

1. Engine Components & Operations Overview

- 1.1 Four-Stroke Engine: Overview
 - 1.1.1 To understand four-stroke engine operation
 - 1.1.2 To define normal combustion
- 1.2 Four-Stroke Engine: Components & Operation
 - 1.2.1 To understand the purpose of various four-stroke engine components
 - 1.2.2. To determine the purpose and types of cooling systems in four-stroke engines
 - 1.2.3 To understand the uses and importance of engine oil
 - 1.2.4 To analyze lubrication systems in four-stroke engines
- 1.3 Four-Stroke Engine: Fuel System
 - 1.3.1 To understand proper use of fuel and analyze various types of fuel
 - 1.3.2. To examine carburetors and carburetor functions
 - 1.3.3 To assess fuel delivery methods
 - 1.3.4 To discuss engine management
- 1.4 Four-Stroke Engine: Emissions System
 - 1.4.1 To understand various emission standards in small engines
 - 1.4.2. To learn about engine servicing and warranty pertaining to emissions standards
- 1.5 Four-Stroke Engine: Electrical System
 - 1.5.1 To understand various types of electrical ignition
 - 1.5.2. To analyze components and component functions of ignition systems
 - 1.5.3 To examine spark plugs and spark plug functions
 - 1.5.4 To discuss engine charging and starting systems
- 1.6 Four-Stroke Engine: Governor Systems
 - 1.6.1 To understand mechanical governor function
 - 1.6.2. To understand electronic governor function
- 1.7 Four-Stroke Engine: Servicing & Troubleshooting
 - 1.7.1 To understand the importance of servicing engine systems
 - 1.7.2. To acquire knowledge on various maintenance procedures
 - 1.7.3 To learn about troubleshooting procedures

2. Tools, Parts & Equipment Identification & Management

2.1 Small Engine Tools, Parts & Equipment: Identification & Operation

- 2.1.1 To understand the selection and identification of standard tools and equipment common to engine technology
- 2.1.2 To know the procedures for following operating instructions and safety procedures of specialized tools and equipment
- 2.1.3 To obtain knowledge on setting up and adjusting tools and equipment
- 2.1.4 To learn how to properly maintain and store tools and equipment
- 2.1.5 To understand inventory methods

3. Disassembly Procedures

3.1 Small Gas Engine: Disassembly Procedures

- 3.1.1 To learn how to properly disassemble a small gas engine
- 3.1.2 To learn and understand all parts of a small gas engine
- 3.1.3 To understand real world uses of a small gas engine
- 3.1.4 To efficiently work as a team to complete the assignments in the classroom

4. Assembly Procedures

4.1 Small Gas Engine: Assembly Procedures

- 4.1.1 To learn how to properly assemble a small gas engine
- 4.1.2 To learn and understand all parts of a small gas engine
- 4.1.3 To learn the importance of torque sequence and gap setting on key components during the assembly process
- 4.1.4 To efficiently work as a team to complete the assignments in the classroom

5. Basic Troubleshooting, Repair Service & Maintenance Procedures

5.1 Small Engine Technology: Troubleshooting, Repair, Service & Maintenance

- 5.1.1 To learn how to properly assemble a small gas engine
- 5.1.2 To learn and understand all parts of a small gas engine
- 5.1.3 To learn the importance of torque sequence and gap setting on key components during the assembly process
- 5.1.4 To efficiently work as a team to complete the assignments in the classroom