Colorado CTE

Facility & Mobile Equipment Maintenance (2015): Grades 9, 10, 11, 12, Higher Education

Adopted 2015

Understand and perform facility and mobile equipment maintenance, service and repair in the transportation industry. This includes, but is not limited to, motor vehicles, rail systems, marine applications, and outdoor power equipment. FEMP.01

01. Develop and manage preventative maintenance plans and systems to keep facility and mobile equipment inventory in operation. FEMP.01.01

a. Develop preventive maintenance plans and systems to meet business and equipment manufacturer requirements. FEMP.01.01.A

b. Apply strategies used to monitor and evaluate the performance of maintenance plans and systems. FEMP.01.01.B

02. Assess, maintain, and improve system performance in order to keep facilities and equipment running at an optimum level of performance. FEMP.01.02

a. Develop and execute repair plans based upon an assessment of the facility/equipment inventory. FEMP.01.02.A

b. Develop plans for improving facilities/equipment/system performance. FEMP.01.02.B

c. Execute repair plans for facilities and mobile equipment. FEMP.01.02.C

d. Understand the value and necessity of practicing personal and occupational safety and protecting the environment by using materials and processes in accordance with manufacturer and industry standards. FEMP.01.02.D

e. Understand the safe and appropriate use of tools, equipment and work process. FEMP.01.02.E

f. Understand scientific principles in relation to chemical, mechanical and physical functions for various engine and vehicle systems. FEMP.01.02.F

g. Perform and document maintenance procedures in accordance with the recommendations of the manufacturer. FEMP.01.02.G

h. Understand the application, operation, maintenance, and diagnosis of engines, including but not limited to two- and four-stroke and supporting subsystems. FEMP.01.02.H

i. Understand mechanical and electrical components in relation to industry and manufacturer standards. FEMP.01.02.I

Skip to main content

j. Perform and document repair procedures in accordance with manufacturer recommendations and industry standards. FEMP.01.02.J

k. Demonstrate the effective use of computer based equipment to control electromechanical devices commonly used in diagnostic analysis. FEMP.01.02.K

l. Use technical vocabulary, technical reports and manuals, electronic systems and related technical data resources to determine repairs and estimates. FEMP.01.02.L

m. Understand structural and non-structural analysis and damage repair. FEMP.01.02.M

n. Understand the concepts, principles and practices of painting and refinishing various variables. FEMP.01.02.N

o. Understand performance (fuel system) Engine Repair. FEMP.01.02.O

p. Utilized in Engine Rebuilding, Brake System. FEMP.01.02.P

q. Applies to all areas of Automotive Service & Diagnosis. FEMP.01.02.Q

r. Utilized in all areas of Automotive. FEMP.01.02.R

s. Utilized in Electrical Course. FEMP.01.02.S

t. Utilized in Starting Systems Alternators. FEMP.01.02.T

u. Demonstrate in Automotive Classes and Labs including training for Skills USA. FEMP.01.02.U

v. Utilized in all areas of automotive; especially when documenting service information on repair orders. FEMP.01.02.V

---

03. Assess, maintain, and improve system performance in collision repair and refinishing including but not limited to body and frame straightening, estimating, painting, and refinishing a variety of motorized vehicles. FEMP.01.03

a. Understand the value and necessity of practicing personal and occupational safety and environmental effects of collision repair and refinishing practices. FEMP.01.03.A

b. Understand the safe and appropriate use of tools, equipment and work process. FEMP.01.03.B

c. Apply measurement systems and the mathematical functions necessary to perform required fabrication, maintenance and operation procedures. FEMP.01.03.C

d. Understand scientific principles in relation to chemical, mechanical, and physical functions and in relation to industry and manufacturer standards. FEMP.01.03.D

e. Perform and document repair procedures in accordance with manufacturer recommendations and industry standards. FEMP.01.03.E

f. Understand structural and non-structural analysis and damage repair. FEMP.01.03.F

g. Understand mechanical and electrical components in relation to industry and manufacturer standards. FEMP.01.03.G

Skip to main content

h. Understand the concepts, principles, and practices of painting and refinishing. FEMP.01.03.H