MTS 120 Revised: Spring 2017

Virginia Western Community College MTS 120 Introduction to Motorsports Technology

Prerequisites

None

Course Description

Introduces the student to a survey of the Motorsports Industry. Explores the student to a broad overview of the industry, terminology and technology associated with developing a competition racecar

Semester Credits: 3 Lecture Hours: 3 Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:

None

Other Required Materials:

1. While there are safety glasses in the lab for your use, it is highly recommended that students provide their own.

Course Outcomes

At the completion of this course, the student should be able to:

- Students will demonstrate an awareness of job skills and tasks needed for the Motorsports Industry
- Students will examine technical and production skills required of workers within an industry/organization
- Students will examine aspects of planning within an industry/organization
- Students will examine technical and production skills required of workers within an industry/organization
- Students will demonstrate how to safely use and handle hand and power tools needed in the Motorsports Industry including: horizontal saw, band saw, cold-cut saw, bead roller, tubing bender, English wheel, sheet metal break, hydraulic shear.
- Students will demonstrate the safe and appropriate use of automotive machine shop equipment
- Students will identify the types of motorsport

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- Students will identify auto body safety procedures
- Students will identify rules, regulations, and technical specifications in the motorsports field

Topical Description

- 1. Workplace Readiness Skills
 - Personal Qualities and People Skills
 - Professional Knowledge and Skills
 - Technology Knowledge and Skills
- 2. Examining All Aspects of an Industry
- 3. Applying Safety Practices
- 4. Interpreting Drawing and Welding Symbols
- 5. Using Tools
- 6. Demonstrating Gas Metal Arc Welding (GMAW, GMAW-S)
- 7. Demonstrating Plasma Arc Cutting (PAC)
- 8. Applying Tools for Fabrication
- 9. Assembling the Vehicle
- 10. Ensuring Motorsports Safety
- 11. Identifying and Assembling High-Performance Parts
- 12. Exploring the Motorsports Technology Industry

Notes to Instructors

None