Program of Instruction
Course Syllabus

Course Title: New Car Technology

Course Duration: 4 hours

Program: Firefighting

Course Description: This course introduces students to new technologies not encountered in the past that can impact rescue efforts. Topics covered include hybrid or electric driven vehicles, alternative fuel systems, dangerous drive train components, hazardous mechanical and hydraulic systems, plus more. Rescue challenges associated with air bags and their deployment and detonation systems, pre-tension systems and other passive restraint devices throughout the passenger compartment are also discussed. Methods of construction, vehicle body components and their materials of construction offer challenges not found at accident scenes in the past. The course is a recommended follow-up class to the Basic Auto Extrication course.

Course Requirements and/or Recommendations: These can be divided into three categories: those completed prior to arriving in class (Pre-Course Work), those completed during class, such as homework assignments and quizzes (Course Work), and requirements completed after class but prior to receiving a certificate of completion. (Post-Course Work)

Summary of Directions
Pre-Course Work: None
Course Work: Attend and participate 100% of the course.
Post-Course Work: None

Course Policies:

Attendance Policy: IFSI requires students to attend (100%) or make up all course content that leads to certification. Students are expected to attend on time and to remain in class for the duration of the course. Students MUST COMPLETE all portions of a certification course, both classroom and practical, to be eligible to receive their certification.

If a student misses any portion of class with an accumulated absence of 20% or less of scheduled class time, it will be the student’s responsibility to arrange the make-up of the missed course content with the instructor(s) or program manager. The student must make up the specific course content that s/he missed, not just the hours. Make-ups are limited to 20% of scheduled class time. Make-ups must
be documented on the class roster. If a student’s absence is greater than 20% refer to “True Emergences” section of the IFSI Examination Policy.

**Safety Policy:** Students shall understand and follow all instructions pertaining to operational safety, as stated by instructors or as written in course materials. Instructors and students shall be mindful of safety at all times. Conduct judged to be unsafe shall be grounds for dismissal from the course.

**Academic Integrity Policy:** IFSI has the responsibility for maintaining academic integrity so as to protect the quality of the education provided through its courses, and to protect those who depend upon our integrity. It is the responsibility of the student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Any violation of the code of conduct is grounds for immediate dismissal from the course.

**American Disabilities Act:** As guaranteed in the Vocational Rehabilitation Act and in the American Disabilities Act, if any student needs special accommodations they are to notify their instructor and provide documentation as soon as possible so arrangements can be made to provide for the student’s needs. If arrangements cannot be made at the class site, the student will test at an alternative time and place where the special accommodations can be made.

**Course Content:**

**Module 1: New Car Technology**

**Terminal Learning Objectives:**
At the conclusion of this module, the student will identify classifications and structures of automobiles, sport utility vehicles (SUV’s), hybrid, and electric cars and associated hazards of each.

**Reference List:**


*NFPA 1006, Standard for Rescue Technician Professional Qualifications,* Chapters 5, 10, 19, 2013 Edition


*Vehicle Extrication, Levels I and II: Principles and Practice,* David A. Sweet, Jones & Bartlett, 2012

## Course Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Module 1: New Car Technology</td>
<td>4 hours</td>
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