

DIM-M2S-519 Integrated safety and restraint systems

Syllabus

1. Definition of active and passive safety. Integrated safety.
2. Desirable kinematics of the adult occupant attending to its biomechanical characteristics
3. Seat belt and airbags: introduction, types, components, regulation, desired performance.
4. The THOR dummy and the Hybrid III
5. Application of human body models to the development of restraint systems
6. Advanced restraint systems and pre-crash activation
7. Influence of occupant position and characteristics in restraint performance
8. Child restraint systems and the particularities of pediatric passengers
9. Other passive safety systems: helmets, infrastructure