

Automobile Mechanics & Engine Design Course Content(45 Days)

1. Introduction

2. Basics of aerodynamics and vehicle dynamics

3. Chassis Design

4. Types of chassis

5. Strut bars

6. Steering and types of steering mechanism

7. Suspension Unit

8. Types of suspensions

9. Basic properties:

- Weight Transfer
- Jacking Forces
- Camber
- Caster Angle
- Spring Rate
- Travel
- Ball Joint
- Steering Knuckles

10. Braking Unit

11. Anti-lock braking system

12. Brake Actuators

13. Transmission system

14. Types of Transmission system

15. Differential and Types of differential

16. Tyres and Traction Control

17. IC Engines

- Valve Timing
- Engine balancing
- Turbocharger and Supercharger

18. Fuel supply system

19. Designing Using Software- Basics of AutoCAD & CATIA V5

20. Advance Technologies

Automobile Mechanics & Engine Design Training Kit

- 1x Engine Design CD
- Handbook of AUTOMOBILE ENGINE MECHANICS 1st Edition By Pradeep K. Sharma