

## **COURSE CONTENTS**

1. Fundamentals of Internal combustion engine and perspective of Automotive Fuel Quality and Emissions
2. Advanced Alternative engine concepts for improvement in efficiencies
3. Advance Exhaust treatment systems in vehicles ( BS IV and BS VI) for reduction of emissions
4. Current and new generation CNG and LPG engine/vehicle design and developments
5. Fundamentals of Electric and Hybrid power train and their role in reduction of on-road emissions and fuel consumption
6. Real world driving emissions: A review of the worldwide activity and its applicability in Indian context
7. New Generation engine oils for advance I C Engines
8. Engine performance and emission measurements on transient, steady state engine dynamometer
9. Indian vehicle population/roads infrastructure and its correlation with ambient air quality