

Course Overview:

This course will provide an understanding of the physics of combustion and will discuss practical applications that use combustion for energy conversion and propulsion. Emphasis will be given to applying the fundamental concepts to understand the design and operation of combustion devices. After taking this course, students will be able to understand how combustion systems are designed and operated to maximize efficiency and reduce environmental impact

Course Objective:

- Familiarize the participants with different types of compressors and turbine.
- Learn the importance of lubrication and its methods to compressors
- Learn the appropriate methodology of machinery troubleshooting.

Course Outline:

- Thermodynamics And Thermochemistry
- Property Relations, First Law Of Thermodynamics, Combustion Stoichiometry
- Characteristics Of Fuels
- Combustion In Gasoline And Diesel Engines
- Fuel Injection
- Gas Turbine Combustion
- Fixed- And Fluidized- Bed Combustion
- Gasification Of Solid Fuels

Who Should Attend:

Mechanical, operation, and maintenance engineers, technicians who are engaged in or intend to be familiar with rotating equipment systems and their problems are targeted. Also senior staff should update and refresh their knowledge by attending this course.

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation