Gas Turbine - 6, 7, 9, B, E, F Class Maintenance

Course Outline – Open Enrollment
Course Description
This course offers a firm understanding of the basic maintenance requirements of all types of GE heavy duty gas turbines and their auxiliary support systems. This course does not include any discussions of generators. The course is designed for those persons with none or limited knowledge of gas turbines.

The course is held at a GE Energy Learning Center training facility. All locations have turbine equipment available to view that enhances the learning experience beyond the classroom lectures and discussions.

This course is intended for personnel that are unfamiliar with or have limited knowledge of GE gas turbine maintenance. Is also for those who may work in affiliated industries and wish to gain an understanding of the routine maintenance requirements of GE heavy duty gas turbines.

Duration
5 Days

Target Audience
- Supervisors
- Mechanical Maintenance

Prerequisites
- Instruction is given in English; therefore, a reasonable ability to read and understand spoken English is required
- Reasonable computer skills

Class Size
Maximum number of students: 15

Learning Objectives
This course will provide basic knowledge on the following:

- Gives participants an understanding of basic gas turbine component construction and maintenance procedures, participants receive a fundamental knowledge of auxiliary systems function and preventative maintenance giving them the confidence needed to approach maintenance activities
- Basics of gas turbine operating cycle
- Review of gas turbine major components, equipment arrangements and associated maintenance requirements of each section of the turbine.
- Turbine operations and the effect on maintenance intervals
- Purpose, function and routine preventative maintenance of the various turbine support systems such as the lubricating oil, hydraulic, variable inlet guide vanes and fuels
- A review of standard practices, tooling and parts needed to successfully conduct inspections
- How to source information in the GE Gas Turbine Service Manual

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Course Content

INTRODUCTION
A. Instructor background
B. Participant background
C. Course schedule

LESSON 1
A. Introduction
B. Basic Gas Turbine Operating Cycle and Performance Characteristics
C. Gas Turbine Major Components and Construction

LESSON 2
A. Navigating GE Service Manuals
B. Standard Practices
C. Borescope Inspections
D. Combustion Inspections

LESSON 3
A. Hot Gas Path Inspections
B. Major Inspections

LESSON 4
A. Gas Turbine Auxiliary Systems – Function and Routine Preventative Maintenance

LESSON 5
A. Operating and Maintenance Considerations
B. Review
### Revisions

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