



# Gas Turbines and Combined Cycle

## Table of Contents:

- 1. Industrial Gas Turbines**  
(Describe the construction and operation of a simple gas turbine.)
- 2. Gas Turbine Principles and Design**  
(Explain common designs, major components, operating principles, and arrangements for industrial gas turbines.)
- 3. Gas Turbine Design and Auxiliaries**  
(Explain the design and components of a gas turbine and related auxiliaries.)
- 4. Gas Turbine Auxiliaries and Operation**  
(Describe the support auxiliaries for a gas turbine and explain common operational, control and maintenance procedures.)
- 5. Introduction to Cogeneration**  
(Define cogeneration and describe typical cogeneration installations.)
- 6. Cogeneration Systems and Operation**  
(Explain cogeneration and describe common configurations, components and applications.)
- 7. Lubrication and Bearings**  
(Describe the importance of lubrication and the principles concerned with lubrication, and the methods for simple care and maintenance of bearings and their related lubrication systems.)