# **SECTION HEADING**

# **RNEW 1110: Low & High Pressure Boiler Systems**

## **Description**

Boiler Systems covers fuel combustion principles, steam boiler types and their components. Students will gain an understanding of the equipment, its operation and maintenance to ensure safe and efficient procedures that are in line with regulations and codes.

#### **Credits**

#### **Prerequisite**

None

## Corequisite

None

## **Topics to be Covered**

- 1. Boiler fittings
- 2. Feedwater systems
- 3. Steam systems
- 4. Fuel systems
- 5. Draft systems
- 6. Boiler water treatment
- 7. Boiler operations procedures
- 8. Hot water heating systems
- 9. Cooling systems
- 10. Boiler operation safety
- 11. Boiler licensing

### **Learning Outcomes**

- 1. Describe the operating principles and functions of boiler fittings.
- 2. Identify feedwater system accessories and describe their functions.
- 3. Identify steam system accessories and describe their functions.
- 4. Identify fuel system accessories and describe their functions.
- 5. Describe draft and draft systems used in boiler operation.
- 6. Describe boiler water conditions that can affect boiler operation and efficiency.
- 7. Identify routine procedures commonly followed when taking over a shift.
- 8. Identify safety practices and procedures for boiler fittings, systems and operations.

## **Credit Details**

Lecture: 1

Lab: 0

OJT: 0

MnTC Goal Area(s): None