

National Training Fund Summary of Stationary Training Materials

Courses (75 hours each):

Basic Boiler Operation

The Basic Boiler Operation Course covers all aspects of operation and maintenance of low and high-pressure boilers.

HVACR 1

The HVACR 1 course is designed to prepare the stationary engineer to identify, troubleshoot, service, and repair all refrigeration and air conditioning systems.

HVACR 2

Part two of the refrigeration and air conditioning course continues to train stationary engineers the practical applications and troubleshooting information for heating, refrigeration, and air conditioning.

Indoor Air Quality Solutions

This course specifically designed for the stationary engineers and covers the vast issues of IAQ in commercial buildings and how to handle the everyday problems, how to prevent and solve IAQ problems effectively, how to work with building management and owners in developing an IAQ maintenance and tracking program, and explains the latest IAQ concerns such as mold and radon mitigation; litigation.

Basic HVAC Controls

This course covers pneumatic and direct digital controls, HVAC fundamentals, energy sources, control principles, BAS and EMS systems.

Basic Electricity

The Basic Electricity course addresses all facets of electricity, enabling the stationary engineer to comprehend schematic diagrams, understand the practical and theoretical application of electricity, and utilize the National Electrical Code (NEC).

HVAC Advanced Testing and Balancing

Develops air and hydronic balancing skills and familiarizes the stationary engineer with the proper tools, instruments, and common methods of air and water movement.

Energy Conservation

The International Union of Operating Engineer's Energy conservation course is designed to achieve a significant reduction in energy use in commercial and industrial buildings by teaching a step-by-step method, which allows for the progression of on-the-job energy conservation activities. By assignments, the stationary engineer will build a portfolio on their facility and apply the knowledge they have learned to the facility as a Certified Energy Specialist.

Seminars:

Chief Engineer – Leadership & Development Seminars (30+ hours)

The Leadership and Development Seminars are designed for chief engineers or engineers training to make the transition to chief engineer. This series of ten seminars will provide the prospective or current chief engineer with the necessary administrative and personnel skills to handle the day-to-day leadership challenge associated with this position. The ten seminars are: Recommended Skills levels Planning and Time Management Budget Preparation Computer Applications Record Keeping Benefits of an Internal Work Force Reports and Presentations Health and safety Human Relations Energy Conservation.

Resume Writing for Stationary Engineers (3 hours)

The seminar covers the creation of a resume in great detail. To add value to the course and to offer flexibility to the users, we have included the sections entitled Cover Letter, Writing Tips, and Interviewing. Also included are many practical examples, which may be used as guidelines.

Bearing Training (11 hours)

Bearings are an integral part of every mechanical system that stationary engineers maintain and repair. Proper installation and maintenance of bearings helps reduce premature failures and prevents operational interruptions. Included in this course are installation procedures, maintenance, and failure analysis of bearings

Basic Plumbing (33 hours)

This course is designed to be used as a basic plumbing class for maintenance workers and apprentices, but would also serve as an upgrading class for journey level engineers.

Commercial Food Service Equipment Repair (30 hours)

The course addresses maintenance and repair of food service equipment in commercial food kitchens that exist in bakeries, hotels, and commercial sized cafeterias.

CFC Seminar (40 hours)

The IUOE CFC training course is based on Section 608 of the EPA Clean Air Act Regulations. Course content covers the regulations, certification types, a review of safety procedures, and includes a review of refrigeration and air conditioning and components.

Mission Critical Seminar (54 hours)

Mission critical facilities are otherwise known as data or computer centers that are expected to function without interruption to prevent data loss (i.e. banking, financial, and telecommunications). They are growing in number in North America and this trend will escalate as technology advances.

Some of the subjects covered in this module are; emergency or standby generators, Automatic Transfer Switches (ATS), fuel handling and storage, Uninterrupted Power Supplies (UPS), and fire protection. There are very few, if any, facilities that do not address these subjects today and components of this course can be used for training stationary engineers in all industries.

Introduction to Boiler Seminar (4 hours)

This seminar is an overview of what is currently contained in the Basic Boiler module. While there may be many useful applications for this seminar within your training programs, it is only intended to be used as an overview and not in place of the 75-hour Basic Boiler module.