

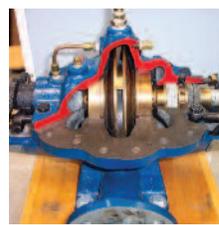


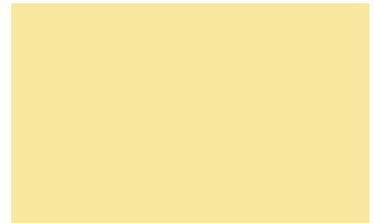
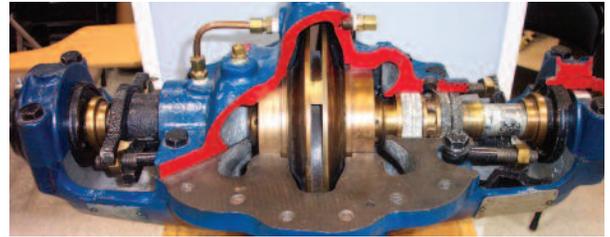
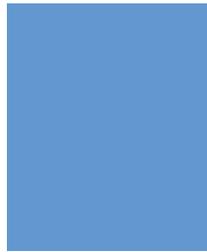
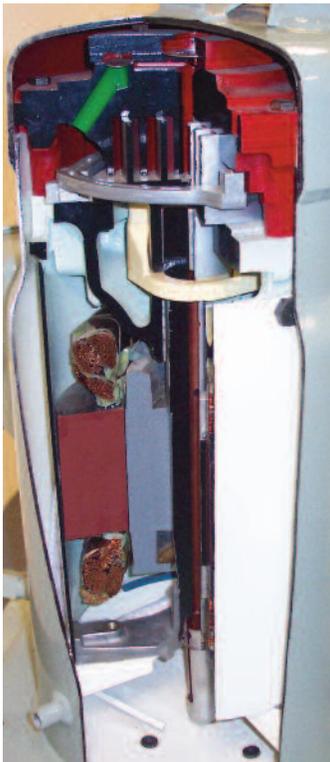
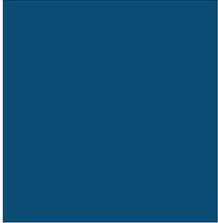
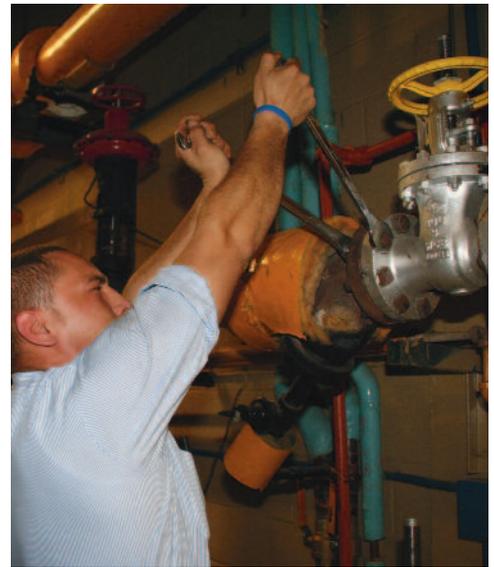
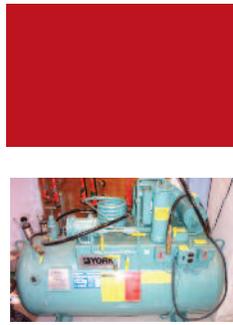
TRAINING FUND OF THE I.U.O.E. LOCAL UNION 94-94A-94B-AFL-CIO

Training Program



Building Careers _____
_____ **Training for the Future** _____





**TRAINING FUND OF THE
INTERNATIONAL UNION OF OPERATING ENGINEERS
LOCAL UNION NO. 94-94A-94B**

331 WEST 44TH STREET
NEW YORK CITY, NY 10036
212-956-4854
FAX 212-397-4498

TRAINING PROGRAM

TRAINING CENTER
HOWARD STYLES / ROBERT FANTINE
TRAINING DIRECTORS

TRAINING FUND OF THE I.U.O.E. LOCAL UNION 94-94A-94B-AFL-CIO

TRAINING OBJECTIVES AND INTENT

The design and goal of Local 94's training program is to provide the necessary

Tools and information to our members to meet the increasing demands of today's Real Estate Industry. The technical abilities and the mechanical/electrical skill, sets needed to address problems such as air quality, environmental control, Electrical power systems and computer controlled buildings is what our Training Program is designed to provide. In addition our program should provide a strong engineering foundation for each individual. Upon completion the trainee will be a skilled professional able to operate their sites in a manner Local 94 can be proud of. Another goal of the program is to give our members the training levels to aid and expedite their opportunities for the highest advancement in their field.

Through program accreditation by, and a cooperative study alliance with the Building Owners and Manager's Institute (BOMI), graduates of Local 94's Training Center are eligible to receive BOMI certification as Systems Maintenance Technician (SMT). Through further study with BOMI,



graduates of the Training Center may train for BOMI certification as Systems Maintenance Administrator (SMA).

Graduates of Local 94's Training Program who complete the Energy

Conservation Course and the Mechanical Drafting Course will be awarded 15 college credits toward an Associate in Applied Science (AAS) degree in Environmental Control Technology from New York City College of Technology (NYCCT). This AAS can be applied to a Bachelor of Technology degree in Facilities Management from NYCCT.

Each of our courses including our core courses has Local 94 certificates associated with them. In order to receive a certificate of completion for a course a trainee must attend for the required hours and obtain a 70% minimum score on the final exam. If the trainee obtains 80% or better on final exam, the certificate will read Cum Laude; if 90% or better the certificate will read Magna Cum Laude.

By virtue of the available training, graduates of the Training center may also qualify for the professional certificates that are shown.

Local 94 Qualifying Courses

- **Building Operator Certification Level I & II** (BOC)
- **Category 7G Cooling Tower Water Treatment License** (DEC)
- **Universal Technician Certification** (EPA)
- **Fire Safety/Emergency Action Plan Director Certificate of Fitness** (FDNY)
- **Refrigerating System Operating Engineer Certificate of Qualification** (FDNY)
- **Sprinkler S-12 Certificate of Fitness** (FDNY)
- **Standpipe S-13 Certificate of Fitness** (FDNY)
- **Air Compressor Certificate of Fitness A-35** (FDNY)
- **OSHA 10 Hour General Industry Course** (OSHA)

I.U.O.E Certificate

- **HVACR-1**
- **HVACR-2**
- **Basic Electricity**
- **Basic HVAC Controls**
- **Indoor Air Quality**
- **Energy Conservation**
- **Mission Critical Seminar**
- **Chief Engineer Training**
- **Basic Boiler**

BRIEF HISTORY OF LOCAL 94's TRAINING PROGRAMS

The required portion of the Training Program became mandatory as of April 1986. Prior to this, refrigeration, air conditioning, and pneumatic control courses were taught to the employees of contributing employers on a voluntary basis.

The first session of the core program started in June of 1986. The voluntary format resumed with four (4) full classes beginning in October 1986.

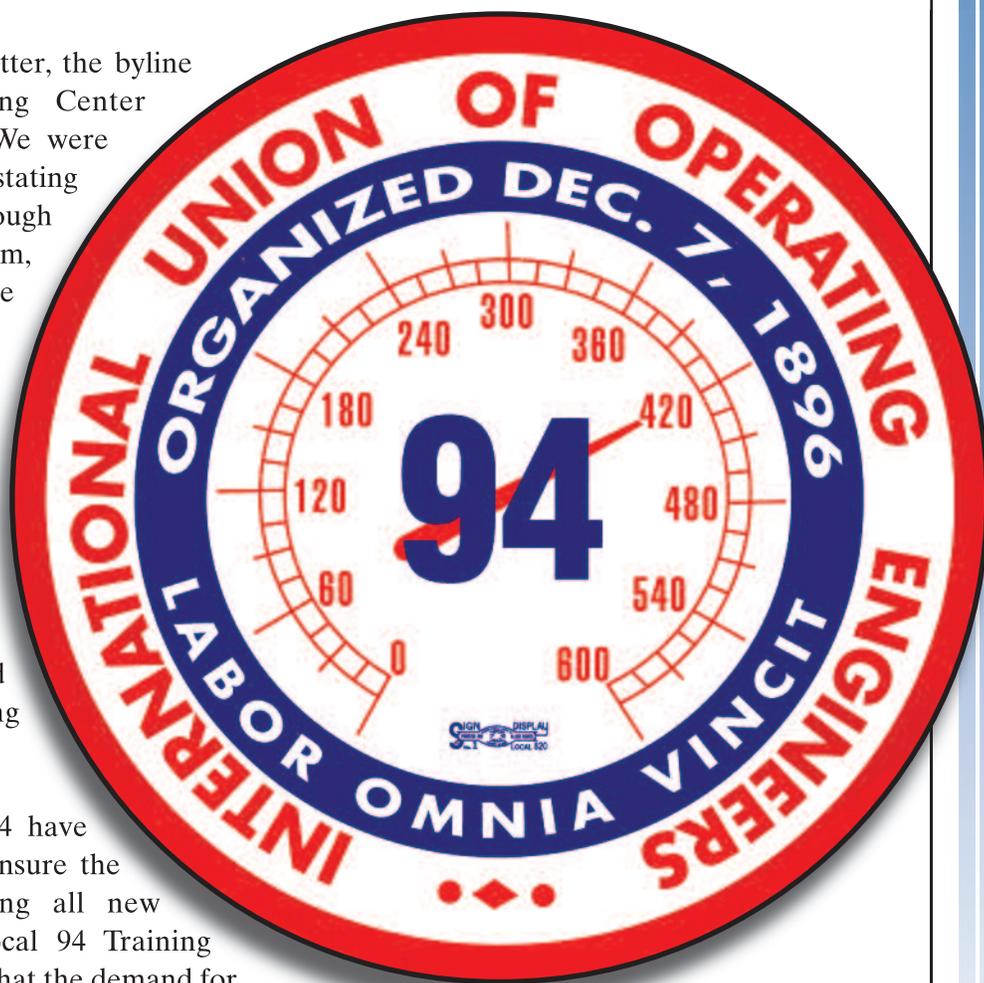
In the April 1989 Newsletter, the byline read "Local 94 Training Center Graduates First Class". We were pleased to feel proud in stating at that time that, "Although not an Apprentice program, members new and old alike have, in general, found the program to be rewarding and worth the time and effort".

In that same newsletter, Business Representative Tom Costello entered an article that more or less sums up the intent and purpose of the Training Programs:

"The officers of Local 94 have elected to take steps to insure the union's future by having all new members attend the Local 94 Training Program. Due to the fact that the demand for

a/c package unit mechanics is very high, we are asking that all veteran members increase their knowledge of such equipment by either attending 94's special training courses or through outside courses. The key to our success is knowledge and continuing education".

Effective January 1, 1993, the Mandatory portion of the Training Program was extended to 360 hours of training.



COURSE DURATION

Courses operate on a Spring and Fall Semester basis. Each unit consists of 60 hours and spans a five- (5) month period. Classes meet for three (3) hours, once a week, for twenty weeks.

ATTENDANCE

A trained mind is an essential and valuable asset in any profession. It is even more important with the technology changes that impact our industry. In order to receive training you must attend a sufficient amount of classes. The maximum allowable absenteeism is: 10% of the total sessions.

Based on this 10% formula you can only miss two of the twenty sessions. If you miss more than two classes you will be placed on the default list. (Note: a third missed session can only be excused by a doctor's note, your immediate supervisor's written explanation or death in your family). Solely the Training Director will approve this excuse. Students who have exceeded the two-session limit will be marked as incomplete at the end of the class.

The default student can take the final test, but can only receive a certificate for satisfactory completion regardless of the mark obtained on the final exam. A student who does not attend at least 14 sessions (42 hours) of classes will have to repeat that entire unit next term (no exceptions). Additionally a student can only advance one class with an

incomplete attached from a prior class. In no case will a student advance with more than one incomplete class.

A student with more than one incomplete class will be terminated from the Training Program and therefore from their employment as per Article 7 paragraph C, page 24 of the 1998 Engineer's Agreement. Any student who misses either six sessions in a row or ten sessions from a class will also be subject to termination. Of course any circumstances such as an extended illness or injury, family problems or other major calamities may qualify as an excuse, if the Training Program had been properly notified. We at the Training Center would like to assist you as best we can and do not wish to place anyone on the default list and certainly do not wish to terminate anyone.

If you have questions, please contact Ms. Lucy Del Valle at the Student Services and. You may call (212) 956-4854 (Mon. through Fri. – 8:00 a.m., to 4:00 p.m.).

MAKE-UPS

A student can make up a session by attending that exact same session at another time and or date. The student is expected to check the class schedules to see if there are any viable alternate sessions available. If a student is aware that he or she will miss a future session, the student should make arrangements to make up that session. Each make up

session must be accompanied by a make up slip for verification of attendance. Incomplete students must sign an attendance default agreement and choose by calendar the lessons, which need to be made up (examples are included in your hand out).

EXAM GRADES AND CERTIFICATES

While a failing grade will not cause termination, you should keep in mind that your future advancement in the industry will be adversely affected if you do not obtain a certificate of completion from the training program for each course and for graduation.

We are presently issuing a certificate for each of our courses based upon adequate attendance and final examination mark as previously delineated. We, at Local 94 Training Program will also issue a certificate of exemplary attendance to each student who attends all 20 sessions. Many New York City certificates will also be available as you progress through the Training Program. Upon completion of the six core courses each student will be issued a Graduation Certificate based on your cumulative grade average.

In addition certificates from the International Union of Operating Engineers are available for Unit 3 through Unit 5 of the core courses. Many of the volunteer courses have certificates associated with them.

Local 94's College Program

The CUNY Murphy Institute, NYCCT and Local 94 developed this program to offer you a great opportunity to advance your skills and enhance your career possibilities with professional credentials and expertise

Pathways to High Performance Careers is an exciting program offered by IUOE Local 94 and the City University of New York, the Murphy Institute for Worker Education and New York City College of Technology.

Now, you can link your Local 94 training to degree programs that allow you to acquire the skills necessary for career advancement in the latest building and technical environments. Members of Local 94 who complete the core program training, the Energy Conservation Course and the Mechanical Drawing Course can:

- Be awarded 15 credits toward an Associate in Applied Science (AAS) degree in Environmental Control Technology from New York City College of Technology (NYCCT)
- Apply the associate degree (AAS) credits toward a Bachelor of Technology degree in Facilities Management at NYCCT.
- Receive tuition reimbursement for up to 30 credits upon completion of either the Associate in Environmental Control Technology or the Bachelor of Technology in Facilities Management.

COLLEGE PROGRAMS

Associate in Applied Science in Environmental Control Technology

Environmental Control Technology is the study of the science, equipment and systems that are essential to creating and maintaining a comfortable indoor environment. New York City Technical College provides the theory, design and practical laboratory courses that enable their graduates to secure a substantial skill upgrade while continuing their professional growth.

Bachelor of Technology in Facilities Management Technology

The Bachelor's Degree in Facilities Management adds the financial, management, legal and additional technical skills that are required to enable our graduates to function very effectively as facilities managers. The transition from the associate's to the bachelor's program is seamless with no loss of credit.

BOMI CERTIFICATION

As of July 17, 1990, BOMI extended their accreditation to our program, and Award credits towards their SMT (Systems Maintenance Technician) and SMA (Systems Maintenance Administration) Certificates to people who complete compatible Local 94 courses.

SMT

The following requirements are in effect:

- Maintain adequate attendance, and
- Achieve a minimum final exam grade of not less than 70% in all of the six units.
- Complete EC and IAQ courses

SMA

The following requirements are in effect:

- Complete SMT requirements
- Complete BOMI 6,7&8

TRAINING (REVIEW) COMMITTEE

Disagreements occur in the best of families; in keeping with the finest traditions of unionization: the Board of Trustees established a Grievance Committee. The Training (Grievance) Review Committee consists of a representative of the Realty Advisory Board, and Business Representative Tom Costello (alternate is Tom Hart) – representing Local 94.

This committee's responsibilities include reviewing all rules and regulations of the Training Program, making recommendations to the Board of Trustees on any changes and hear any grievances from both instructors and students. All program related difficulties or misgivings – should be brought to the attention of the Training Director before being presented as a grievance to the Review Committee.

BOARD OF TRUSTEES

The Training program was officially established by the Board of Trustees to provide Local 94 members with a means of obtaining education. The education provided by the Training Program is separate and distinct from any educational programs or seminars you may attend privately. This program is specific to our needs.

The Training Fund is governed by the Board of Trustees. Half of the Trustees represent the employees and half represent the participating employers. The Board of Trustees reviews all financial matters pertaining to the Training Fund. Additionally, Training content and policy. The basic agreement as to the Training Program can solely be amended by the Board of Trustees.

UNION TRUSTEES

Kuba J. Brown – Chairman of the Board
Thomas F. Costello
Thomas Hart
John W. Kramer
Raymond Macco

EMPLOYER TRUSTEES

Howard Rothschild – Chairman of the Board
Chi K. Chu
John Griffin
Nicholas Lanzillotto
John J. Whalen

FUND ADMINISTRATOR

William Faranda

TRAINING DIRECTORS

Howard Styles
Robert Fantine

TRAINING STAFF

Lucy Del Valle – Student Services
James Kelly – Instructor (full time)

ADVISORY COMMITTEE

Tom Aloï - Hines
John Bowen Jr. - Forrest City
Joe Carini – Jones Lang LaSalle
Chi K. Chu - Silverstein
Patrick Connell – Jones Lang LaSalle
Vincent Curcio - Grubb & Ellis
Frank DeNicola – Fisher Brothers
Richard Fernandez – SL Green
Robert Ferrante – Brookfield Properties
Rocco Ferrigno – CitiGroup
Frank Guidice - Jones Lang LaSalle
Tom Hill – Boston Properties
Dominick Kang – Millennium Partners
Nicholas Lanzillotto – Related Management
Daniel Pugliese - Hines
Kenneth Savelli – Park Tower Management LTD
Jerome Silecchia – ABM
Joseph Sobanko - ABM
Steven Sonitis – Vornado
Zach Stern - Elemco
Robert Sweeney - Cushman & Wakefield
Joseph Szabo – TishmanSpeyer
Lou Trimboli – CB Richard Ellis
Ralph Urizzo – LL Holding

LOCAL 94's TRAINING CENTER

CORE PROGRAM FORMAT

UNIT 1	Introduction to Commercial Office Buildings
UNIT 2	Valves, Pumps and Heating Equipment
UNIT 3	Basic Refrigeration
UNIT 3B	Commercial and Industrial Refrigeration
UNIT 4	Fundamentals of Applied Electricity
UNIT 5	Controls and Control Strategies

LOCAL 94's TRAINING CENTER

ELECTIVE ENROLLMENT PROGRAM FORMAT

UNIT 3C	Refrigerating System Operating Engineer Course	Tuition Fee: \$300.00
UNIT 3R	Universal Technication Certification	Tuition Fee: \$50.00
EC	Energy Conservation (SMT)	Tuition Fee \$150.00
IAQ	Indoor AirQuality (SMT)	Tuition Fee: \$150.00
UNIT 6	BOMI SMA 6: Building Design and Maintenance	Tuition Fee: \$300.00
UNIT 7	BOMI SMA 7: Administration	Tuition Fee: \$300.00
UNIT 8	BOMI SMA 8: Environmental Health and Safety Issues	Tuition Fee: \$300.00
GB	Green Building	
FSD	Fire Safety Director	
EAP	Emergency Action Plan Director	
PU	Package Unit (hands on) Course	
CS	Critical Systems	
CE	Chief Engineer	
UNIT 2B	Water Treatment and Pesticide Applicator Certification	
OSHA	OSHA General Industry Course	
MD	Mechanical Drafting	
LPB	Low Pressure Boiler Course	
DDC/BMS	Advanced Direct Digital Control/Building Management Systems	

Unit 1

MANDATORY COURSE OF STUDY

INTRODUCTION TO COMMERCIAL OFFICE BUILDINGS

UNIT OUTLINE: This unit is designed to develop specific technical competence along with a foundation of practical skills. Emphasis is placed on a complete understanding of what makes up Commercial Office Buildings. Students will be able to understand their role in the normal operation of a Commercial Office Building. Students will also be introduced to the different functions required to operate a Commercial Office Building, i.e., air systems, water systems and all

facets of life safety. In addition, Students well versed in major building equipment, i.e., water tanks and cooling towers. After completing Unit 1, the student will have increased his/her knowledge and value to the Commercial Real Estate Industry.

The Students should also be able to obtain a New York City Standpipe and Sprinkler as well as an Air Compressor Certificate of Fitness.



Unit 2

MANDATORY COURSE OF STUDY

INTRODUCTION TO VALVES, PUMPS AND HEATING EQUIPMENT



steam heating systems including maintenance of hot water and steam equipment, such as steam traps.

Hands-On Lab Sessions will account for a large portion the class hours. Lab sessions are designed to develop the Students understanding of, valves, pumps and heating systems. Students will become familiar with varied building equipment and their maintenance procedures including preventive maintenance requirements.

UNIT OUTLINE: This unit is designed to continue the Student's mechanical and engineering development. Unit 2 introduces the student to various heating systems. This Unit of study proceeds into a complete array of valves and pumps and their functions within an Engine Room. Students will learn the different types of pumps and their particular functions. Students will be able to identify the individual parts that make-up a pump and, as part of the hands-on lab, be able to disassemble a pump and completely rebuild it. Unit 2 will also cover hot water and

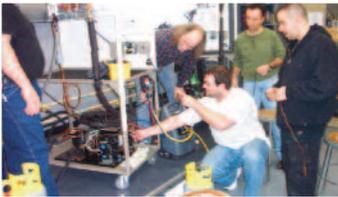
Students, upon successful completion of Unit 2, will be able to perform specialized maintenance within their buildings. They will have increased their value to their Employer by their knowledge of different equipment in their facility and how to prevent costly breakdowns.



Unit 3A

MANDATORY COURSE OF STUDY

INTRODUCTION TO BASIC REFRIGERATION



UNIT OUTLINE:

This Unit is designed to build an understanding of the refrigeration cycle, its environmental responsibilities and the varied applications. The refrigeration cycle and each component of the mechanical refrigeration system will be covered in detail as to operation, maintenance and troubleshooting. Safety factors, tools and functions of refrigeration systems will also be a focus of this Unit.

Materials for Unit 3A include an approved International textbook. Theory and hands-on lab

sessions which include our internal package unit trainers will be combined to best present basic refrigeration. Your Instructor will demonstrate methods of using refrigeration tools, equipment and special devices. You will perform actual refrigeration tasks as well as soldering and brazing assignments.

Students will have established the groundwork upon which to begin to attain their New York City Refrigeration License and Universal Certificate for Refrigerant handling.

Unit 3B

MANDATORY COURSE OF STUDY

INTRODUCTION TO COMMERCIAL AND INDUSTRIAL REFRIGERATION

UNIT OUTLINE: The intention of this Unit is to further your education in the refrigeration field. As part of Unit 3B, we will be studying the larger systems. We will look at the different types of systems, the many methods of controlling them and how they interface with your building operations. Unit 3B will address chilled water systems, as well as the drive mechanisms for these types of machines. All of the accessory items such as the cooling towers and air handlers will be detailed as to operation and maintenance.

We will present the steam turbine as a drive for centrifugal machines and address the operation and maintenance requirements for the steam turbine. We will additionally address the absorption systems and their applications.

We will look at different types of chilled water systems and their applications and operations. Your troubleshooting skills will increase with the knowledge you will gain throughout this Unit. We will also do

three field trips to familiarize you with the different types of chillers and the other major equipment which make up Unit 3B.



Unit 4

MANDATORY COURSE OF STUDY

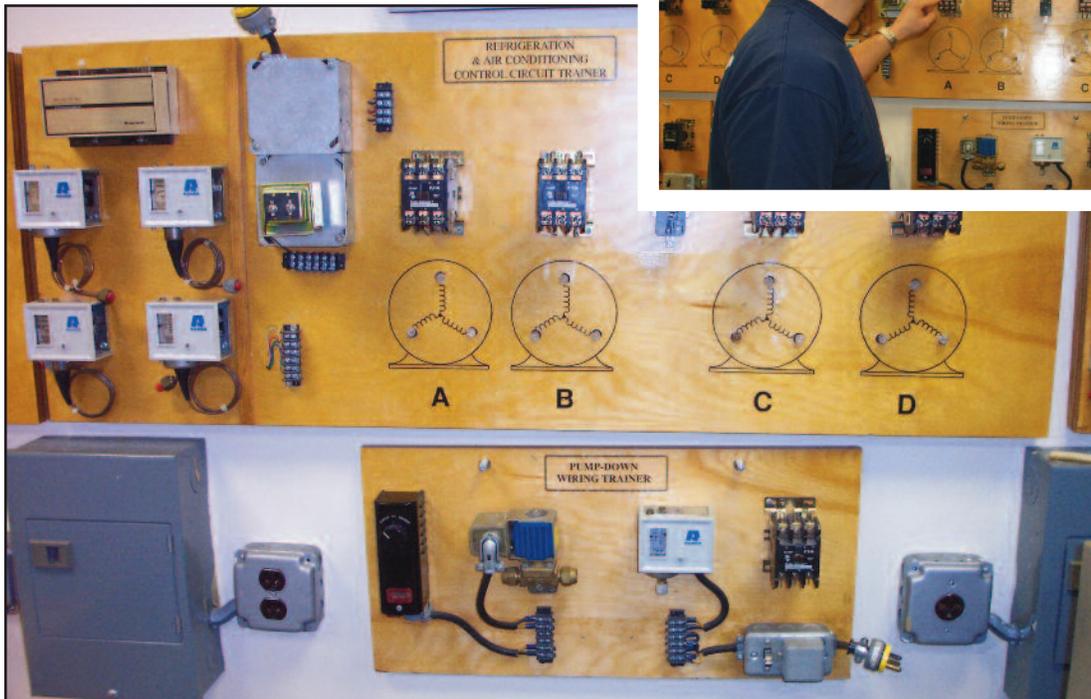
FUNDAMENTALS OF APPLIED ELECTRICITY FOR BUILDING EQUIPMENT OPERATORS

UNIT OUTLINE: This Unit is designed to develop specific technical competence along with a foundation of practical skills. Emphasis is placed on schematic reading and troubleshooting. Hands-On lab sessions will account for a large portion of the class hours. Lab sessions are designed to develop comprehension of individual component functions, wiring and interaction of components within a circuit.

The controls and circuitry studied in this Unit are coordinated with the equipment and systems involved in previous Units. Emphasis is placed on the controls and circuitry found

on today's highly automated packaged air conditioning units.

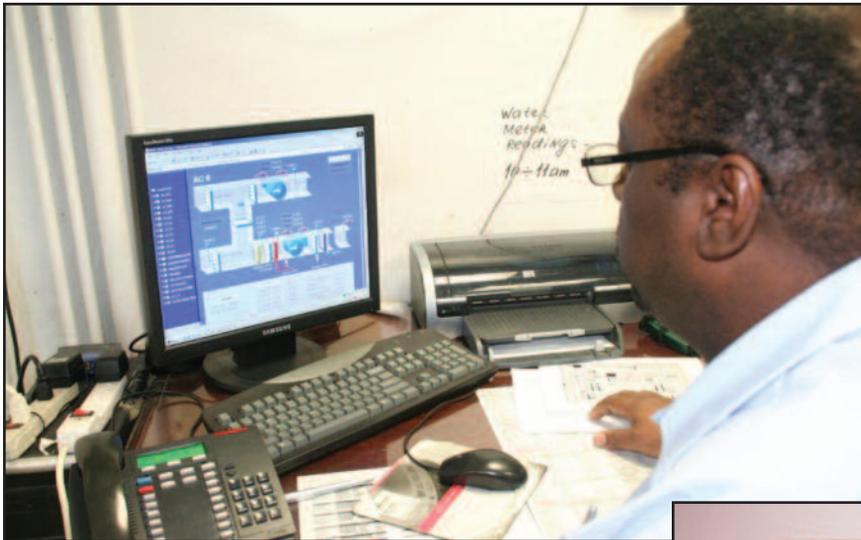
Students will be able to follow manufacturers' instructions thereby performing preventive maintenance and simple motor replacement. Students will also be able to operate, install, service and troubleshoot/diagnose electrical controls and circuits. Specialized training equipment is available for hands-on experience, which duplicates on-the-job situations.



Unit 5

MANDATORY COURSE OF STUDY

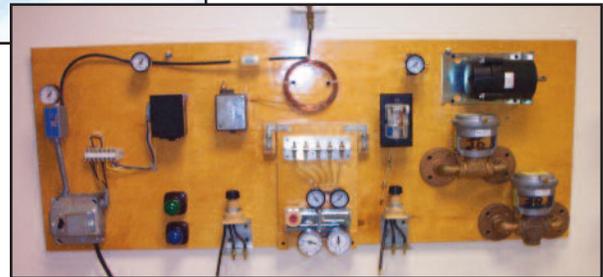
CONTROLS AND CONTROL STRATEGIES



UNIT OUTLINE: This unit is designed to provide the student with the basic control theory and then continue on to the most intricate control strategies. The student will have obtained a control foundation, in both PNEUMATIC and DDC controls. Knowledge learned in Unit 4 will aid the student for this unit.

Through knowledge of the text, the student can develop an in-depth understanding of the varied pneumatic and other control system applications for HVAC air handlers and associated equipment. Both aged and modern designs, using different manufacturer controls, are studied and worked with during hands-on sessions.

This course introduces the student to building



automation systems and their applications. The main focus of this course is an application of theory designed to help the student develop hands-on skills to work on a typical pneumatically or DDC controlled systems at his/her workplace. The course will develop calibration, as well as troubleshooting skills with pneumatic systems and DDC systems.

Unit 3C

VOLUNTARY COURSE OF STUDY

REFRIGERATING SYSTEM OPERATING ENGINEER CERTIFICATE OF QUALIFICATION COURSE

UNIT OUTLINE: This unit will prepare students for both the written and practical examinations administered by the City of New York

All subjects pertaining to safety and professional operation of large tonnage refrigeration equipment will be covered. Refrigeration principles, NYC codes and all topics related to refrigeration are studied.

Refrigeration components, refrigerants, systems, and codes, are discussed in detail. Mathematics

required for the testing will also be part of this course.

Specific preparation for the exams is accomplished by a comprehensive review of all material and extensive use of visual aids.

The student who has paid for this course can attend the written and/or practical sessions until he or she passes the New York City examination at no additional cost.



Unit 3R

VOLUNTARY COURSE OF STUDY

UNIVERSAL TECHNICIAN CERTIFICATION COURSE



UNIT OUTLINE: This unit will prepare students to qualify for certification as refrigerant handling and recycling technicians. Students will be introduced to the concepts of recovery, recycling, reclamation and proper refrigerant handling.

Students will be prepared to take a four-part examination, which may result in either Universal Certification of, one or more of the following:

- Type I - Small Appliance
- Type II - High/Very High Pressure
- Type III - Low Pressure Appliance

Successful candidates with the appropriate type of certification will be authorized to purchase refrigerants and service sealed refrigeration systems. This certification is a prerequisite to obtaining your Refrigerating System Operating Engineer Certificate of Qualification.

VOLUNTARY COURSE OF STUDY

ENERGY CONSERVATION

UNIT OUTLINE: With this state-of-the-art training, Local 94 is poised to be part of the solution to reduce the inefficient use of energy resources and to effect a corresponding reduction of environmental emissions and dependency on foreign oil. Individuals who complete this extensive training will lay the foundation for other courses such as the green building course.

Energy saving opportunities will be the foundation for optimizing all types of facilities. The ultimate goal of the energy conservation program is to produce effective energy principles, which can be applied to the student's facility.

The profitability to be derived from this program will be related directly to the existing

performance of the facility and the level to which an individual employer wishes to implement these cost-saving measures.

Local 94 engineers, with their intense training and specialized skills, are already some of the most significant contributors to cost-effective, safe and efficient use. The course teaches energy calculations, metering and monitoring, lighting, automation systems, steam, HVAC systems, audits and energy bills. Our unique, comprehensive energy conservation training course will assist public and private sector employers improve their bottom line.

This course will apply towards your SMT Certificate and college credits



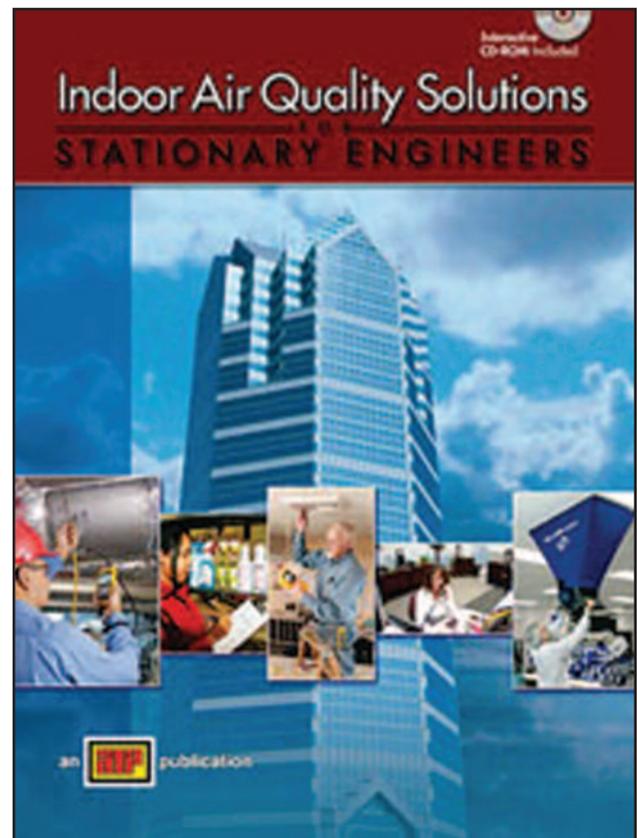
VOLUNTARY COURSE OF STUDY INDOOR AIR QUALITY

UNIT OUTLINE: The IAQ course teaches about health concerns, contaminants and safety. The course will teach the techniques required for preventing and mitigating most IAQ problems. These techniques center on how to operate an effective preventive maintenance program that includes regular visual inspections and a schedule for periodic air sampling. You will also learn how to troubleshoot heating, ventilating, and air conditioning problems. This course teaches IAQ concerns and their usual causes. The necessary skills to perform different tasks to identify and mitigate the most common IAQ problems will be taught. Measurement of HVAC systems to a higher standard, beyond the traditional standards will also be taught. The student will learn how to provide thermal and air quality through this intense training.

Water system balancing, building commissioning, preventive maintenance and homeland security are among the topics in this course of study. This course will give you a new perspective on

how to appreciate air quality and better enable you to prevent and correct indoor air quality problems.

This course will apply towards your SMT Certificate



Unit 6-7-8

VOLUNTARY COURSE OF STUDY

BOMI

UNIT 6 BUILDING DESIGN AND MAINTENANCE

This course will help the student to become familiar with maintenance procedures and equipment, preventive maintenance, as well as construction documents. In this course, the student will cover the characteristics, uses, and properties of common building materials, as well as building regulations, codes, and standards. The student will learn to compare building system components and to identify appropriate inspection and maintenance techniques. The student will develop the knowledge to establish procedures and standards for monitoring building operations and preventive maintenance.

The student learns to read and use construction documents, studying from a textbook that features a set of drawings and an architect's pocket scale. The information that accompanies this course features illustrations and resources, such as governmental and industry websites, this course can help you operate and maintain a sound, safe building.

BOMI SMT Certification is prerequisite for this course of study. This course will also apply towards your SMA Certificate.

UNIT 7 ADMINISTRATION If you are a chief engineer with a staff that reports to you, or are working toward this goal, you need to develop the variety of skills related to managing people and time.

This course focuses on leadership skills, oral communication techniques, motivational and team-building strategies, and participation in training programs.

Through this course, you will develop many skills needed by leaders in maintenance environment, including the ability to plan, organize, schedule, del-

egate, budget, monitor, inspect, document, and write. Some of the major topics in the course are prioritizing, resource development, resource management, and time management.

The skills you can take away from this course are communication, prioritizing, and the knowledge and confidence to solve problems and make decisions that will result in a safer workplace.

BOMI SMT Certification is prerequisite for this course of study. This course will also apply towards your SMA Certificate.

UNIT 8 ENVIRONMENTAL HEALTH AND SAFETY ISSUES Protecting the environment with green initiatives and promoting worker health and safety such as OSHA regulations are issues at the center stage of today's property industry.



This course provides the student with an overview of the environmental health and safety

considerations in building operations. The student will learn to develop and manage proactive environmental/occupational health and safety measures in their facilities, comply with regulatory standards and guidelines governing facility health and safety issues, and assess when to obtain technical assistance.

BOMI SMT Certification is prerequisite for this course of study. This course will also apply towards your SMA Certificate.

VOLUNTARY COURSE OF STUDY

GREEN BUILDING COURSE

UNIT OUTLINE: This course teaches the sustainable development in the commercial building industry also referred to as “green”. This “green” buildings course is designed to produce high performance buildings. The course teaches students how to be environmental responsible, energy efficient, and create healthier places to work.

The course will aid the student in energy star measures as well as LEED certification. You can also earn a Respected Credential in Building Operations.

Building Operator Certification (BOC) is a hands-on training and certification program covering building operation and maintenance for building operators. It offers an in-depth look at the best ways to manage a facility, from the latest technologies to trade tips. As a participant, you can improve job skills, access tools to more

efficiently run facilities and achieve measurable energy savings. With thousands of BOC graduates nationwide, this rapidly growing program provides an expansive network of peers and a highly regarded credential.



THE TRAINING FUND

Operating engineers are responsible for the operation, maintenance, renovation and repair of HVAC systems and all other mechanical systems within a building. An effective operating engineer is constantly at work to ensure their building operates smoothly and efficiently.

Now more than ever before, operating engineers must be prepared to effectively deal with real issues such as energy reduction, critical systems, environmental control, electrical power systems and building automation systems.

For over 25 years, new members of Local 94 have been required to complete core program courses that ensure a high degree of technical skill sets. Local 94 members work in over 770 of New York's buildings and over 6,000 have taken our courses.

We offer courses that are provided by vendors that will target specific areas such as the locksmith course provided by Ingersoll Rand.

The program is accredited by Building Owners and Manager's Institute (BOMI), the Fire Department of NYC (FDNY) and NYS Department of Environmental Conservation (DEC).

But it doesn't end there.

Members also qualify for a number of professional certificates and can even earn college credit and advance their careers. Highly skilled and better trained employees can cut costs, build careers, improve safety and prepare to meet the challenges of the future.

"The course content and hands-on approach rivals that of any technical school. This union school has helped me grow as an Engineer."

Brett Ferry



Gene Milman

"The Training Fund program has given me valuable knowledge that I apply every day as an Operating engineer. I learn something useful in every class and I am now better able to complete my boss's assignments in a professional, timely and efficient manner"

ESD

VOLUNTARY COURSE OF STUDY

FIRE SAFETY DIRECTOR

UNIT OUTLINE: In accordance with local law 5, the fire safety director course is designed to familiarize the student of fire safety in commercial office buildings. Local law 41 and 58 are also covered as it relates to the fire



safety director. Class E systems are covered along with flame proofing, elevators, fire safety plans and fire drills. This course provides the information needed to pass the fire dept. written and on site exam.

EAP

VOLUNTARY COURSE OF STUDY

EMERGENCY ACTION PLAN DIRECTOR

UNIT OUTLINE: In accordance with local law 26, the EAP course is designed to familiarize the student with an emergency action plan for NYC. This course covers evacuation concepts, emergency response operations, building communica-

tions, ventilation options, elevator operations, threat analysis, terrorism, natural disasters and how the emergency action plan is prepared. This course prepares the student for the written and on-site exam.

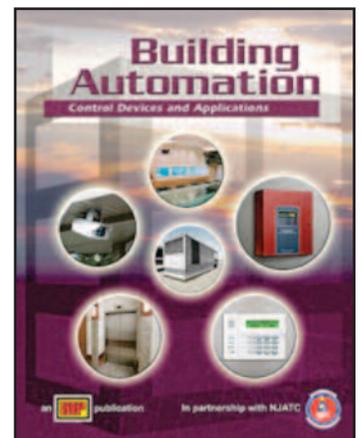
DDC/BMS

VOLUNTARY COURSE OF STUDY

Advanced DDC/BMS Course

UNIT OUTLINE: Unit 5 lays down the foundation of control technology. Buildings not only should be energy efficient, they also should be “smart”, that is why we implemented an advanced Direct Digital Controls and Building Management System course. This course will reflect the type of systems used in modern buildings. The word automated buildings is also called smart buildings. The DDC/BMS course will teach students the latest technology in building management systems. The student will be able to make the connection from energy

management to control technology. The student will learn how to be both efficient and smart in building operations. Lab sessions are part of the course. The student should be able to implement what he/she learned from the classroom to the jobsite.

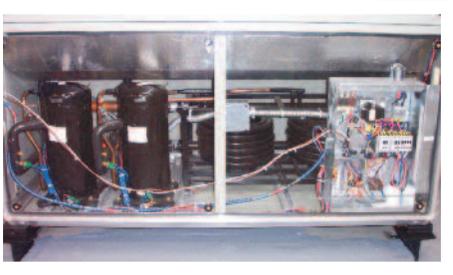


VOLUNTARY COURSE OF STUDY

PACKAGE UNIT (HANDS ON TRAINING)

UNIT OUTLINE: This is a short 5 week course designed to upgrade student's skills in specific areas such as:

- Leak Testing
- Evacuation
- Recovery
- Charging



VOLUNTARY COURSE OF STUDY

CRITICAL SYSTEMS

UNIT OUTLINE: This course is a comprehensive study of how to maintain a facility which has



critical systems such as data centers.

In this modern day of technology and complexity, data is transferred continually. This information is critical and important. This course is designed to equip the student with the fundamental skills to ensure critical equipment is kept on-line in the event of any type of power failure. The course teaches about electrical systems, standby generators, automatic and static transfer switches, power quality, UPS systems, data center cooling, and fire protection systems.

VOLUNTARY COURSE OF STUDY

CHIEF ENGINEER COURSE

UNIT OUTLINE: This course is designed for the assistant Chief Engineer and the Chief Engineer specifically. This course is also for the individual who is preparing to become a chief engineer.

The course will deal with the concerns of health and safety issues, human relations, record keeping,



reports and presentations, budget preparation and planning and time management. It will also address the use and benefits of computers to a Chief Engineer, touch upon energy conservation and aid the Chief in developing his/her inter-personal skills.

The successful student will be better prepared to meet the pressure and stress related to being a Chief Engineer. After completing this course the Chief Engineer should be better prepared to take the next step, and become a facility manager.

A certificate from the International Union of Operating Engineers is available upon successful completion of this course.

UNIT 2B

VOLUNTARY COURSE OF STUDY

WATER TREATMENT; PESTICIDE APPLICATOR CERTIFICATION

UNIT OUTLINE: Commercial facilities require cooling towers for various types of equipment for cooling. Cooling towers require a large amount of water to function. Untreated water may contain microbiological organisms such as algae. Biocides are a type of pesticide used to control microorganisms. When biocides are used it will require special training so that when applied it will not endanger the applicator, co-workers or the environment.

If algae, slime-forming bacteria or fungi are allowed to remain in cooling towers, it will cause

reduced efficiency and shorted the life of the air conditioning equipment. This course trains students on how to properly apply micro-biocides to cooling tower water. Certification is required for application in New York State. The course prepares the student for the state certification.

The course helps students identify problems common to cooling towers, identify common pest, and provide methods of application for specific problems, special safety precautions, equipment maintenance, and operation.

OSHA

VOLUNTARY COURSE OF STUDY

OSHA GENERAL INDUSTRY COURSE

UNIT OUTLINE: This safety course provides workers a variety of training on OSHA General Industry Standards that is applicable to the worker's safety and health.

The course includes electrical safety, fall protection,

protective equipment, materials handling, power tools, and confined space safety. The OSHA course is short course that can be delivered as frequent as needed. Students that successfully complete the 10 hour course will receive a certificate from OSHA.

MD

VOLUNTARY COURSE OF STUDY

MECHANICAL DRAFTING

UNIT OUTLINE: This drawing course will familiarize the student with various types of graphical engineering sets of diagrams.

A drafting course designed to train students to read graphically in HVAC field. They learn to letter, draw line work, and use drafting instru-

ments and standard HVAC representations, draw orthographic and isometric projections of HVAC equipment. The student also learns to work with architectural and structural plans to lay out HVAC systems.

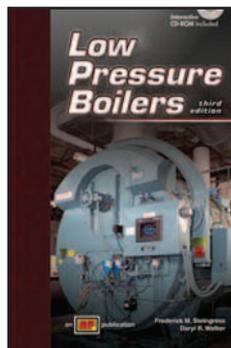
This course can be applied to college credits

LPB

VOLUNTARY COURSE OF STUDY

HIGH EFFICIENCY LOW PRESSURE BOILERS

UNIT OUTLINE: This course provides information on the safe and efficient operation of low pressure boilers. This course is designed for individuals who have low pressure boilers in their facility. This course covers boiler classifications, pressure controls, pump principles, tanks, heating systems, safety and relief valves, and electrical safety.



Energy efficiency and environmental issues are emphasized throughout the course. Leadership in Energy and Environmental Design (LEED) principles are used as a guideline in this course.

International Union of Operating Engineers

Local 94, 94A, 94B

Training Program

Unless specifically noted, the policies below apply to the mandatory and voluntary training programs unless otherwise specified by the Training Center.

REGISTRATION DEADLINE:

The registration deadline is one week prior to the beginning date of the course. Pre-enrollment forms are mailed to students prior to enrollment. If you do not receive notice at least three working days prior to class, call (212) 956-4854

COURSE CANCELLATION:

The Training Center reserves the right to cancel any course or modify the schedule. This includes cancellation of any class after the course has begun.

CERTIFICATES:

Certificates for successful completion are issued to eligible students in most courses. For students in Units 1-5 certificates will be issued only to students who have met requirements within the 20 week span of the course. Students that are incomplete will not be issued a certificate after making up class the following semester.

CELL PHONES, READING AND SLEEPING:

Students who are carrying a cellular phone must turn them off or put on silent feature before entering class. In addition, students also must refrain from leaving the classroom during the class session for telephone conversations. Reading any material other than the class material (newspapers) is not permitted in the classroom. Sleeping in the classroom is not an acceptable practice.

CLASS MEETINGS & ATTENDANCE:

Unless you are notified otherwise, all courses will start according to the schedules listed for that semester.

Students are expected to attend their scheduled classes and be on time. An instructor will deduct time for lateness or leaving early. Deductions will be in 30 minute increments. If a student is 30 minutes late he could receive 2.5 hours instead of the 3 hour requirement. Excessive lateness will not be tolerated. Successful completion requires 90% attendance in most courses and an overall passing grade.

STUDENT BEHAVIOR

Students are expected to behave in a professional manner while attending the Training Center. There is no smoking within the building as it is a smoke free environment. Please treat fellow students and instructors, as you would like to be treated. Any misconduct incidents will be reviewed on an individual basis and could lead to disciplinary action, even termination.

**TRAINING FUND OF THE INTERNATIONAL UNION OF OPERATING ENGINEERS
LOCAL UNION NO. 94-94A-94B**

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TRAINING PROGRAM

