

JATC Journeyman & Technician Continuing Education Fall / Winter / Spring 2017 – 2018

Advanced Conduit & Residential Wiring Practices

Price: \$75.00

| Course# | Semester | Sessions | Night | Time | Instructor | Dates |
|---------|----------|----------|-----------|-----------|------------|----------------------|
| 2565 | Spring | 4 | Wednesday | 4:30-8:10 | TBD | 5/9, 5/16, 5/23, 6/6 |

This 16 hour course will review the various methods for bending conduit, including EMT and Ridged, utilizing hand benders and Chicago benders and an introduction to 881 Green Lee bender. Classes will also review advanced circuitry including 3 way and 4 way switching.

Boston Hot Work Safety Certificate Program

Price: \$25.00 (cert fee)

| Course # | Semester | Sessions | Day | Time | Instructor(s) | Dates |
|----------|----------|----------|-----------|-----------|---------------|-------|
| 2569 | Fall | 1 | Monday | 4:30-7:30 | Bob Adjarian | 10/23 |
| 2572 | Winter | 1 | Monday | 4:30-7:30 | Bob Adjarian | 12/11 |
| 2573 | Spring | 1 | Monday | 4:30-7:30 | Bob Adjarian | 2/12 |
| 2574 | Spring | 1 | Wednesday | 4:30-7:30 | Bob Adjarian | 3/28 |

The Boston Fire Department (BFD) in partnership with the NFPA has developed curriculum that will help construction workers and all persons engaged in hot work operations, describe the various types of hot work; identify common fuel and ignition sources; cite relevant standards, regulations and ordinances that are applicable to hot work; define the duties and responsibilities of each person on the hot work team, and ensure that workers can read and understand hot work permits. NOTE: \$25.00 fee is for Certification Card

Per BFD Fire Prevention Code article 8, all persons conducting hot work will be required to have completed this training.

Computers and Networking

Price: \$25.00

| Course # | Semester | Sessions | Day | Time | Instructor | Dates |
|----------|----------|----------|----------|-----------|------------|-------|
| 2575 | Fall | 1 | Saturday | 8:00-2:30 | TBD | 10/28 |
| 2576 | Spring | 1 | Saturday | 8:00-2:30 | TBD | 5/5 |

This course is a hands-on approach for being connected to the Internet in both personal and business applications. A review of the latest technology for connecting to the Internet using computers, tablets, smart phones and a look at the latest personal assistants, such as *Google Home* and *Amazon's Echo*. Learn what it means to be "hosted in the cloud" and how to setup and use "apps" such as *Dropbox* and *iCloud*, while demonstrating how to remain secure and protect your devices, data and personal information. In addition, each student will learn how to set up and configure IP addresses, install and secure devices on a network such home automation and security systems. Also every student will learn how to accurately configure and safely access a WiFi network from home and on the road, as well as troubleshoot and recover from a failure of a device or loss of Internet access.

Confined Spaces 1926 Standard**Price: No charge**

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|----------|-----------|------------|-------|
| 2577 | Fall | 1 | Saturday | 8:00-2:30 | TBD | 11/4 |
| 2578 | Spring | 1 | Saturday | 8:00-2:30 | TBD | 5/5 |

This 6 hour session will review the OSHA 1926 Standard for Confined Spaces.

Controls & PLC Concepts – Part A**Price: \$130.00 (textbook)**

| Course # | Semester | Sessions | Day | Time | Instructor(s) | Dates |
|----------|----------|----------|-----------|-----------|---------------|-------------------------|
| 2579 | Fall | 4 | Wednesday | 4:30-8:10 | TBD | 10/18, 10/25, 11/1,11/8 |

This is an introductory course to motor control concepts and the focus will be on symbols, diagrams, sequence of operation and introduction to magnetic motor control starters. The motor control simulator lab at building 170 and the motor control shop at building 194 shall be utilized for hands on training and the module proficiency testing for principles learned. Prerequisite for the course; basic understanding of motor controls and wiring diagrams.

PLC Textbook costs \$130.00 and can be utilized for Part A, B & C.

Controls & PLC Concepts – Part B**Price: No Charge**

| Course # | Semester | Sessions | Day | Time | Instructor(s) | Dates |
|----------|----------|----------|-----------|-----------|---------------|-------------------------|
| 2580 | Fall | 4 | Wednesday | 4:30-8:10 | TBD | 11/29, 12/6,12/13,12/20 |
| 2581 | Winter | 4 | Wednesday | 4:30-8:10 | TBD | 2/7, 2/14, 2/28, 3/7 |

This course is a continuance of Part A and will focus on PLC programming symbols, electrical principles, systems and hardware. The PLC classroom/shop at building 194 will be utilized for hands on training and the module proficiency testing for principles learned.

Prerequisite for this course; Controls & PLC Concepts Part A (which includes book)

Controls & PLC Concepts – Part C**Price: No Charge**

| Course # | Semester | Sessions | Day | Time | Instructor(s) | Dates |
|----------|----------|----------|-----------|-----------|---------------|-----------------------|
| 2582 | Spring | 4 | Wednesday | 4:30-8:10 | TBD | 1/10, 1/17,1/24, 1/31 |
| 2583 | Spring | 4 | Wednesday | 4:30-8:10 | TBD | 4/11, 4/25, 5/2, 5/9 |

This course is a continuance of Part B and will focus on plc concepts, plc programming instructions, system interfacing, system maintenance and troubleshooting plc hardware. The plc classroom/shop at building 194 will be utilized for hands on training and the module proficiency testing for principles learned.

Prerequisite for this course; Controls & PLC Concepts Part B.

CPR/AED FIRST AID**Price: \$20.00**

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|----------|-----------|------------|-------|
| 2584 | Fall | 1 | Saturday | 8:00-2:30 | TBD | 10/28 |
| 2585 | Fall | 1 | Saturday | 8:00-2:30 | TBD | 12/2 |
| 2586 | Winter | 1 | Saturday | 8:00-2:30 | TBD | 2/24 |
| 2587 | Spring | 1 | Saturday | 8:00-2:30 | TBD | 3/24 |
| 2588 | Spring | 1 | Saturday | 8:00-2:30 | TBD | 4/28 |

This 6 hour session introduces students to techniques of cardiopulmonary resuscitation (CPR), operation and maintenance of automated external defibrillator (AED) and other rescue techniques. Two year Certification Card is issued to each participant. Completion of this course will satisfy the Code Update 6 Hour "related" requirement.

Fire Alarms**Price: \$85.00**

| Course # | Semester | Sessions | Night | Time | Instructor | Dates |
|----------|----------|----------|-----------|-----------|------------|----------------------|
| 2589 | Spring | 4 | Wednesday | 4:30-8:10 | R. Maguire | 3/7, 3/14, 3/28, 4/4 |

This 16 hour course is designed to help Inside Wiremen understand the operation of basic electronic fire alarm systems and how to install, check out, trouble-shoot and maintain them. In addition, the various components and circuits of fire alarm systems will be covered.

Fluke Copper & Fiber-Testing & Inspection**Price: \$40.00**

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|---------|-------------|--------------|-----------|
| 2590 | Spring | 2 | Tuesday | 4:30 - 8:10 | Don Prescott | 3/27, 4/3 |

This course will provide a review of the existing DTX copper and fiber test equipment as well as an introduction to the new DSX copper and fiber test equipment. Topics will include Set up of each tester including *CertiFiber Pro* and *OptiFiber Pro*, Testing with the equipment, troubleshooting copper and fiber links and a review of the *Linkware* software application.

Hoisting & Rigging**Price: No charge**

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|----------|-----------|---------------|----------|
| 2591 | Spring | 2 | Saturday | 7:30-4:00 | Steve Collins | 4/7,4/14 |
| 2592 | Spring | 2 | Saturday | 7:30-4:00 | Steve Collins | 5/5,5/12 |

This 16 hour course will provides instruction on the inspection, maintenance and safe operation of rigging devices when handling materials lifted with cranes, heavy equipment, boom lifts, truck cranes, shop hoists or other hoisting equipment, as well as preparation for the Massachusetts Hoisting License exam.

Home Theater & Audio Visual Basics

Price: \$25.00

| Course # | Semester | Sessions | Day | Time | Instructor | Dates |
|----------|----------|----------|----------|-----------|--------------|-------|
| 2593 | Winter | 1 | Saturday | 8:00-2:30 | Tom Spellman | 2/10 |
| 2594 | Spring | 1 | Saturday | 8:00-2:30 | Tom Spellman | 4/7 |

This 6 hour course will introduce the student to basic Audio and Video systems for Residential and Commercial equipment. Topics covered include; Video Display Technologies related to Image size and HD resolution, Distributed Sound associated with Home Theater Components, Speakers and Cable.

Master Exam Preparation

Price: \$175.00

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|-------------|----------|----------|------------|-------------|---|
| 2595 | Fall/Winter | 10 | Saturday | 8:00-12:00 | Mike Norris | 10/28,11/4,11/18,12/2,12/9, 12/16,1/13,1/20,1/27,2/3 |
| 2596 | Fall/Winter | 10 | Monday | 4:30-8:10 | Jim Fahey | 10/23,10/30,11/6,11/13,11/27, 12/4,12/11,12/18,1/8 ,1/15 |

This 40 hour course is designed to help prepare Journeymen for the Massachusetts Master License examination and will provide a thorough and comprehensive review of the application process, questions from sample tests and calculations required for the examination. *Please note that this course does not cover all of the required 150 hours of education necessary to apply for the exam. Code Book / Mass Amendments are not included in cost.*

Master Exam Preparation (condensed)

Price: \$175.00

| Course# | Semester | Sessions | Night | Time | Instructor | Dates |
|---------|----------|----------|--------|-----------|-------------|-------------------------|
| 2598 | Spring | 5 | Monday | 4:30-8:10 | Mike Norris | 5/21,6/4,6/11,6/18,6/25 |

This 20 hour course is a condensed version of our original Master Prep course. The focus will be on code-ology, code calculations, and the Business portion of the Master's Exam. A review of the application process and sample questions will be provided. *Please note that this course does not cover all of the required 150 hours of education necessary to apply for the exam. Code Book / Mass Amendments are not included in cost.*

Master Exam Preparation – Business Section Only

Price: \$75.00

| Course # | Semester | Sessions | Night | Time | Instructor | Dates |
|----------|-------------|----------|----------|------------|-------------|-----------------|
| 2599 | Fall/Winter | 3 | Saturday | 8:00-12:00 | Mike Norris | 1/20,1/27,2/3 |
| 2600 | Fall/Winter | 3 | Monday | 4:30-8:10 | Jim Fahey | 12/18,1/8 ,1/15 |

This 12 hour course is designed to help prepare Journeymen for the *Business Section* of the Massachusetts Master License examination. *Please note this section of the Master Exam Prep Class will only be covering the specific "business section" of the examination.*

NASCLA Contractors Guide to Business, Law and Project Management is included in cost.

Medium Voltage Splicing

Price: \$125.00

| Course # | Semester | Sessions | Night | Time | Instructor | Dates |
|----------|----------|----------|-----------|-----------|-------------------|-------------------|
| 2602 | Spring | 4 | Wednesday | 4:30-7:30 | Brendan O'Connell | 4/11,4/25,5/2,5/9 |

This 12 hour Medium Voltage Splicing training is a balance of theory/lecture, hands-on installation training and cable handling techniques. Participants will each install a splice or termination. A review at the end of the class ensures that all the important topics have been covered and understood.

NFPA 70E Awareness**Price: No Charge**

| Course # | Semester | Sessions | Day | Time | Instructor | Dates |
|----------|----------|----------|----------|-----------|------------|-------|
| 2603 | Winter | 1 | Saturday | 8:00-2:30 | TBD | 12/2 |
| 2604 | Winter | 1 | Saturday | 8:00-2:30 | TBD | 3/24 |
| 2609 | Spring | 1 | Saturday | 8:00-2:30 | TBD | 5/12 |

This 6 hour course will assist those in our industry to better understand the number of hazards associated with working on or near energized electrical equipment and circuits, the manner and conditions under which such work may be performed. The training will provide safety related work practice requirements of OSHA.

NFPA 72 - Review of the 2016 Edition**Price: \$100.00**

| Course # | Semester | Sessions | Day | Time | Instructor | Dates |
|----------|----------|----------|--------|-----------|-------------|----------|
| 2610 | Spring | 2 | Monday | 4:30-7:30 | Doug Whalen | 5/7,5/14 |

This 6 hour course will provide an introduction to the 2016 NFPA-72 Fire Alarm and Signaling Code. Its main focus will be commercial building installations, maintenance, testing and best practices. Changes from the 2013 edition will be also be reviewed. *The 2016 NFPA-72 edition is included in the cost of the course.*

OSHA 10**Price: No Charge**

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|----------|-----------|------------|-----------|
| 2611 | Winter | 2 | Saturday | 8:00-1:30 | TBD | 12/2,12/9 |
| 2612 | Spring | 2 | Saturday | 8:00-1:30 | TBD | 5/12,5/19 |

This 10 hour course will cover the requirements for the OSHA 10 certification.

Note: OSHA 10 classes cannot be made up - you must attend all classes in cycle to get credit.

OSHA 30**Price: No Charge**

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|----------|-----------|------------|----------------------|
| 2613 | Fall | 4 | Saturday | 8:00-4:00 | TBD | 11/4,11/18,12/2,12/9 |
| 2614 | Spring | 4 | Saturday | 8:00-4:00 | TBD | 4/28,5/5,5/12,5/19 |

This 30 hour course will cover the requirements for the OSHA 30 certification.

Note: OSHA 30 classes cannot be made up - you must attend all classes in cycle to get credit.

Rail and Transit Signal Orientation**Price: \$25.00**

| Course# | Semester | Sessions | Day | Time | Instructors | Dates |
|---------|----------|----------|-----------|-------------|--------------------------------|------------------------------|
| 2615 | Fall | 5 | Wednesday | 4:30 - 8:10 | F. Burnett & L. Butterfield | 11/1,11/8,11/15, 11/29, 12/6 |

The purpose of this course is to assist the participant in demonstrating proper safety procedures and gaining an overview the functions of switches and their associated components.

Storm Service Restoration Training for Electricians

Price: \$45.00

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|----------|-----------|------------|-------|
| 2616 | Spring | 1 | Saturday | 8:00-4:30 | TBD | 3/3 |

Storm Service Restoration Training is offered to inside wiremen who after major storms will be conducting restoration activities alongside outdoor overhead line crews. Course objectives: demonstrate how to wear, inspect, and test PPE, describe the procedure for handling downed wire, conduct satisfactory job briefs, explain step and touch potential, identify secondary wires and distinguish them from other types of wire, test lines and corrected determine if they are energized and conduct meter checks.

System Tech License Test Prep

Price: \$50.00

| Course# | Semester | Sessions | Night | Time | Instructor(s) | Dates |
|---------|----------|----------|-----------|-----------|---------------|-------------------------|
| 2617 | Winter | 5 | Wednesday | 4:30-8:10 | Various | 1/10,1/17,1/24,1/31,2/7 |

This 20 hour course will prepare students to take the Massachusetts System Technician license (also referred to as "D" license) exam. Topics include; using the National Electrical Code, wiring methods, low voltage systems and controls, fire warning and security systems, testing and inspections, fiber, data, communications and wiring systems. A review of Massachusetts General Laws and Regulations pertaining to the electrical wiring and Massachusetts Electrical Code and Amendments. Please note that this course does not cover all of the required 300 hours of education necessary to apply for the exam. **Books are not included in cost**

***If you have any of the following books you are not required to purchase another for course:**

NEC 2017 CODE \$80.00

NFPA 72 Fire Alarm CODE 2013 Edition \$75.00

Massachusetts Amendments \$5.00

2015 System Contractor & Technician Exam Prep Guide \$20.00

Telecom Estimating & Leadership Concepts

Price: \$45.00

| Course# | Semester | Sessions | Night | Time | Instructor | Dates |
|---------|----------|----------|--------|-----------|-------------|-----------------------------|
| 2618 | Fall | 5 | Monday | 4:30-7:30 | Randy Silva | 11/6,11/13,11/27,12/4,12/11 |

This 15 hour course is a review of the basic elements of telecom estimating, the concepts of managing the materials and manpower for telecom projects, using a small commercial project recently bid and completed in the Boston area. Students will learn the concept of material take-offs and labor.

Wireless Networks II

Price: \$45.00

| Course# | Semester | Sessions | Day | Time | Instructor | Dates |
|---------|----------|----------|----------|-----------|-------------|-------|
| 2619 | Spring | 1 | Saturday | 8:00-2:30 | T. Hennessy | 3/3 |

This 6 hour course will review the evolution of wireless technology, network architecture and fundamentals. Network components, design, methods and testing and analysis will be reviewed. A basic home WLAN will be created, named and deployed. Performance testing of the WLAN will be demonstrated using multiple PC'S and the adverse effects of improper antenna placement and architectural interference will be demonstrated and reviewed. A wireless mapping survey will also be conducted using heat mapping technology.