

Journeyman Upgrade and Continuing Education Course Catalog 2023-24

August 7th 2023

Dear Member,

For over 20 years your JATC has been publishing this course catalog. Looking back at past issues from so long ago reveals that the class offerings have become more numerous and of course more challenging. Twenty years ago, no one would have imagined that our membership would be rotating through **Instrumentation and Calibration** or **Electrical Vehicle Charging** classes.

If you have any free time and you haven't visited your JATC in a few years, you should, and see for yourself the progress that has been made over the past two decades. There are bold, innovative and challenging classes offered in our **Telecommunications Lab** where we are also preparing an **Energy Storage and Micro-Gridding** lab experience; The **Instrumentation Lab** has been molded to better suit our needs as those classes have progressed over the years; The Computer Lab of old has been re-made into a **Programmable Logic Control** and **Transformer** lab experience; Another showpiece is our newly developed **Building Automation** and **Fire Alarm Labs**; Even the **Motor Control** lab has been re-invented with new equipment; And new conduit benders from different manufacturers have populated the **Conduit Lab**.

Our satellite school in Clearfield County has seen an addition and remodel that has renewed the interest of our members in that area. New labs in the Clearfield facility have allowed your JATC to offer almost all of the continuing education courses at that satellite location. It's hard to keep up with all of the improvements over the years and there are several other ideas in the works for the future.

Your JATC will always have an interest in Occupational Safety and we encourage everyone to make a commitment to an OSHA-10 or 30 hour class. NFPA 70E, Codeology and First Aid / CPR / AED should also be considered when making your selections.

In addition to the safety class recommendations, we would like to highlight the **Building Information Modeling (BIM) class**. This class took several years to launch but has seen rapid growth in the last two years. Two new instructors have been added to our core group and it has made a significant difference in the class. All instructors have taken and passed a hands on course conducted by Trimble, a leading manufacturer of robotic equipment, and our additional instructors have field experience using the equipment. Your JATC has purchased the most up to

date equipment for this class and we encourage everyone to take advantage of this offering. Please check **Course Code 5A** for more information.

New this year we have a Grounding and Bonding class that focuses on Article 250 of the 2023 National Electric Code; Fusion Splicing and Tele-data Hands-On have both been re-added this year after a one year break in the 2022-23 catalog.

If you have any questions or suggestions, please feel free to contact us during regular business hours. We will make every effort to accommodate your needs and concerns. Registration forms can be mailed, faxed or dropped off in person. The address and fax number has been included in this booklet for your convenience.

The staff of the JATC would like to wish all of our members and their extended families a happy, healthy and prosperous 2023-24.

Respectfully Yours,

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CODE OF EXCELLENCE IBEW

The Code of Excellence is a program designed to bring out the best in our construction members and demonstrate to our customers that IBEW members:

- **Perform the highest quality and quantity of work**
- **Utilize their skills and abilities to the maximum**
- **Exercise safe and productive work practices**

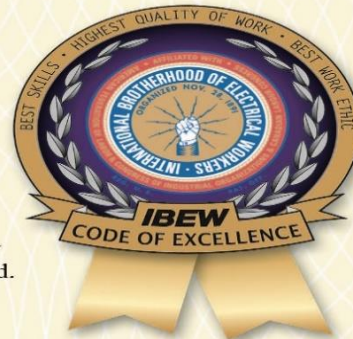
The Code of Excellence is not only about an IBEW job built right the first time, on schedule and under budget; it is also about pride in IBEW membership and craftsmanship and leaving a lasting impression of quality workmanship with the customer... thus, prompting him to again employ the IBEW on future projects. The Code of Excellence program is also a means to build and project positive attitudes about who we are and the work we do... on and off the job.

Local Union training with respect to the Code of Excellence program may be facilitated by an International Representative but, regardless of delivery method or by whom, the Code of Excellence program training is to convey a strong message that IBEW construction members will:

- C**ome to work on time, fit for duty and ready to work.
- O**bey recognized customer and employer rules.
- D**emonstrate zero tolerance for alcohol and substance abuse.
- E**xercise proper safety, health and sanitation practices.
- O**wn up to '8 for 8' and be on the job unless otherwise allowed or authorized to leave.
- F**ollow safe, reasonable and legitimate management directives.
- E**ncourage respect for the customer's rights and property, as well as for others on the job.
- E**xercise the skills and abilities of the trade.
- C**are for tools and equipment provided by the employer.
- E**liminate waste and other forms of property destruction, including graffiti.
- L**imit lunch and break times to allocated periods; adhere to established start and quit times.
- L**eave inappropriate behavior to those of lesser knowledge.
- E**mploy the proper tools for the job and maintain personal tool responsibilities.
- N**ot solicit funds or sell merchandise without the Business Manager's approval.
- C**urtail idle time or pursuit of personal business during work hours, including cell phone use.
- E**xpel job disruptions and refuse to engage in slowdowns or activities designed to extend the job or create overtime or any other conduct that cast the IBEW in a bad light.

As with Stewards, IBEW members employed in management/supervision must have knowledge of the Code of Excellence program principles, its relationship to IBEW organizing and overall membership responsibilities to the Brotherhood. Yet, more importantly, members in these roles need to know how effectively managing their jobs will be a corresponding obligation to the Code of Excellence program. IBEW 'rank and file' members honoring the Code of Excellence program will rightfully have similar expectations of Brothers and Sisters in management/supervision, with these being in the areas of:

- Management responsibilities to the collective bargaining agreement.
- Total acceptance of supervisory positions and related responsibilities.
- Communication and cooperation with the job Steward.
- Employee encouragement but, if necessary, fair and consistent discipline.
- Job safety, health and sanitation needs or requirements.
- Ample job layout/directions to minimize down time and maximize employee productivity.
- Availability and timely delivery of necessary materials.
- Proper number and type of tools and equipment to ensure job progress.
- Maintenance and upkeep of tools and equipment.
- Storage and protection of employer and employee tools and equipment.
- Employ adequate number of employees to perform efficiently or, conversely, limit number of employees to the work at hand.



Residential Wireman to Journeyman Wireman Upgrade Program of Studies

Members Who Completed the IBEW Local Union #5 Residential Wireman Apprenticeship Need to Complete the Following Courses before Becoming a Journeyman Wireman:

Course Title	Completion Date	Comments
Basic Tele-Data (Hands-on)		
Blueprint Reading		
Building Information Modeling (BIM)		
Conduit Bending		
Fire Alarm		
First Aid / CPR / Defibrillation		
Motor Controls		
OSHA 10 Hour		
70E Safety Related Work Practices		

Residential Wireman to Journeyman Wireman Upgrade Program of Studies

Members Who Were Organized into the IBEW Local Union #5 as a Residential Wireman Need to Complete the Following Courses Before Becoming a Journeyman Wireman:

Course Title	Completion Date	Comments
AC Theory		
Applied Codeology		
Basic Tele-Data (Hands-on)		
Blueprint Reading		
Building Information Modeling (BIM)		
Conduit Bending		
DC Theory		
Fire Alarm		
First Aid / CPR / Defibrillation		
Motor Controls		
OSHA 10 Hour		
Welding		
70E Safety Related Work Practices		

Telecommunications Installer Program of Studies

Telecommunications Installer to Telecommunications Technician Program

Course Title	Completion Date	Comments
Basic Tele-Data (Hands-on)		
Conduit Bending		
First Aid / CPR / Defibrillation		
Fusion Splicing I		
Fusion Splicing II		
ICRA		
OSHA 10 Hour		

Telecommunications Installer to Journeyman Wireman Program

Course Title	Completion Date	Comments
AC Theory		
Applied Codeology		
Building Information Modeling (BIM)		
Blueprint Reading		
Conduit Bending		
DC Theory		
Fire Alarm		
First Aid / CPR / Defibrillation		
Motor Control		
OSHA 10 Hour		
Welding		
70E Safety Related Work Practices		

Telecommunications Technician to Journeyman Wireman Program

Telecommunications Technician Minimum Requirement Courses

Course Title	Completion Date	Comments
Basic Tele-Data (Hands-on)		
Building Information Modeling (BIM)		
Conduit Bending		
First Aid / CPR / Defibrillation		
Fusion Splicing I		
Fusion Splicing II		
ICRA		
OSHA 10 Hour		

Telecommunications Technician to Journeyman Wireman Program

Course Title	Completion Date	Comments
AC Theory		
Applied Codeology		
Building Information Modeling (BIM)		
Blueprint Reading		
Conduit Bending		
DC Theory		
Fire Alarm		
First Aid / CPR / Defibrillation		
Motor Control		
OSHA 10 Hour		
Welding		
70E Safety Related Work Practices		

Your Course Description and Schedule Packet

Course Description and Times

Course Title / Code

AC Theory / 1A

Course Description

This is a very insightful class about AC Theory and the many different factors that affect it, including: inductance, capacitance, resistance, and overall impedance. Members who are seeking to upgrade their classification need DC Theory first. Please refer to course titled '**DC Theory**' for more information concerning DC Theory.

Pre-requisite:

DC Theory (Course Code 7A)

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Straight Edge (Ruler)

Note Paper

Highlighters

Pencils

Date(s):	January 6 th 2024 – March 9 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	60 Hours
Class Size Min/Max:	8/20
Course Code:	1A

Course Description and Times

Course Title / Code

Access Control / 2A

Course Description

This is a non-certification course introducing the fundamentals of access control wiring practices and hardware, along with troubleshooting. Programming, software, and technology behind the scenes will be demonstrated and discussed. Upon completion, participants will have a basic understanding of installation and termination techniques related to access control systems.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Calculator

Notepaper

Highlighters

Pencils

Date(s):	February 10 th 2024 – February 17 th 2024
Day(s):	Saturdays
Times(s):	8:00am – 3:00pm
Approximate Classroom Time:	12 Hours
Class Size Min/Max;	8/8
Course Code:	2A

Course Description and Times

Course Title / Code

Applied Codeology / 3A

Course Description

Use of the National Electric Code can be frustrating when you are unfamiliar with the layout of the document. This course will show you the 'Plan, Build, Use' method for better use and understanding of the Codebook. This easy to use method should make you much more comfortable using the NEC. Since this is a code change year (2023), the class may discuss a few of the more Significant Code Changes that have been implemented. Additionally we hope to introduce methods for important Code Calculations. The addition of a Significant Changes module and an Introduction to Code Calculations alone should make this class a must see.

Pre-requisites:

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Highlighters

Pencils

2023 National Electric Code Tabs

Date(s):	January 6 th 2024 – February 17 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	40 hours
Class Size Min/Max:	8/15
Course Code:	3A

Course Description and Times

Course Title / Code

Blueprint Reading (Instruction Drawings) / 4A

Course Description

Today's construction projects are defined to a large degree of accuracy through the use of drawings long before the project begins. The ability to read and accurately interpret them is one of the most important skills for Electrical Workers. **Construction Drawings** is a broad term that encompasses two and three dimensional drawings, as well as 360-degree images and three dimensional renderings. These drawings can be manipulated by the construction worker to obtain a better understanding of the intent for the project. This is a completely re-worked course that will more accurately address the needs of today's Electrical Worker.

Pre-requisites

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Highlighters

Pencils

Straight Edge (Ruler)

Date(s):	October 14 th 2023 – November 18 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	8/15
Course Code:	4A

Course Description and Times

Course Title / Code

Building Information Modeling (BIM) / 5A

Course Description

The JATC has recently purchased a Trimble Robotic Total Station (RTS), and after a short introductory information session, the class will be nearly all hands on. Covered information will include:

- Proper assembly and setup of all equipment.
- Linking the Trimble tablet and its software with the RTS.
- Importing CAD files, locating and opening jobs for layout and creating new jobs.
- Measuring distances, layout points and collect points.
- Create job reports.

(Additional classes will be scheduled as needed. If the class fills to 8 members we may stagger the hands on portion).

Pre-requisites

Basic Computer Skills

Positive Attitude

Required Classroom Materials

Notebook

Pencils

Highlighters

Date(s):	November 4 th 2023 – November 18 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	24 Hours
Class Size Min/Max:	8/8
Course Code:	5A

Course Description and Times

Course Title / Code

Conduit Bending / 6A

Course Description

This is a hands-on course that uses all of the latest conduit tools. This could be an excellent review for journeyman as well as a great class for our members who have not been exposed to conduit work.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Hand Tools

Safety Glasses

Gloves

Date(s):	January 20 th 2024-February 24 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max	8/10
Course Code	6A

Course Description and Times

Course Title / Code

DC Theory / 7A

Course Description

The course will start with Ohm's Law and continue through simple series circuits. From there it will move through parallel and combination circuits. This is truly the base for all electrical theory. The course is highly recommended for all members.

Pre-requisites:

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Highlighters

Straight Edge (Ruler)

Date(s):	October 7 th 2023 – December 16 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	60 Hours
Class Size Min/Max:	8/20
Course Code:	7A

Course Description and Times

Course Title / Code

70E Electrical Safety Related Work Practices / 8A

Course Description

There are several different factors that must be considered when discussing electrical safety. This course will address issues that are often overlooked that could potentially be fatal if not dealt with properly. The goals include the following:

- Increased awareness by identifying electrical hazards.
- Achieve a better understanding of the NFPA 70E publication.
- Realize all of the protective equipment available to us, as well as understanding the proper use of protective equipment.
- Learn how to develop an electrically safe work condition.

This course could be scheduled for additional times as needed.

Pre-requisites:

Basic Computer Skills

OSHA 10 Hour is recommended (Course Code 20A)

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Date(s):	February 3 rd 2024 – March 9 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	8/15
Course Code:	8A

Course Description and Times

Course Title / Code

Electrical Vehicle Charging Systems (EVCS-17) Based on 2020 NEC / 9A

Course Description

The Electric Vehicle Charging Systems course serves as an instructional primer for the Electric Vehicle Infrastructure Training Program (EVITP) Certification Exam. The course provides an introduction of charging products and associated equipment on the market today. Electrical Workers completing this training go to work with the ability to implement best practices in areas such as charging station equipment, infrastructure site assessment, load calculation, installation, commissioning, and troubleshooting. Through an agreement with EVITP, their certification exam is provided at the conclusion of this course. ***This course will be held when minimum class size is met. Please call and reserve your seat now! The past year saw tremendous interest and the class was conducted several times.***

Pre-requisites:

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Date(s):	Will Be Held When Class is Filled
Day(s):	Tuesdays and Thursdays
Time(s):	5:30pm – 9:00pm
Approximate Classroom Time:	18 Hours
Class Size Min/Max:	8/12
Course Code:	9A

Course Description and Times

Course Title / Code

Energy Storage and Micro-Gridding (ESAM) 10A

Course Description

Participants will gain greater understanding of energy management using our new lab. This lab is capable of demonstrating common energy storage solutions for work and home. The lab is also able to simulate a micro-grid or stand-alone system. Topics covered include: NEC code compliance, battery safety and energy management.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Date(s):	March 9 th 2024 – March 23 rd 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	24 Hours
Class Size Min/Max:	8/8
Course Code:	10A

Course Description and Times

Course Title / Code

Fire Alarm / 11A

Course Description

The Fire Alarm Lab at your JATC offers practical **hands-on** experience with popular brand name equipment like ***Silent Knight*** and ***Fire Lite***. In addition to working with new control panels, each station has new Flow and Tamper equipment, horn-strobe assemblies, pull stations, smoke detectors, heat detectors, and much more. In fact, this summer we are adding Voice Evacuation and Fire Phone Panels. Each student will install wire, terminate devices and program their own system. Designed to take the mystery out of a fire alarm system. Countless hours were devoted to developing this lab with the hope our members take advantage of the hands-on experience.

Pre-requisites

Positive Attitude

Required Classroom Materials:

None

Date(s):	October 9 th 2023 – November 16 th 2023
Day(s):	Tuesdays and Thursdays
Time(s):	6:00pm – 9:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	8/8
Course Code:	11A

Course Description and Times

Course Title / Code

First Aid / CPR / Defibrillation / 12A

Course Description

The time spent in this class will definitely offset the helpless feeling incurred when a family member, friend or co-worker is in need. This is a Coyne First Aid / CPR class. Completion cards will be issued for use at jobsites and employers that may require it. This course is for adult CPR only, not for children.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Date(s):	December 9 th 2023 – December 16 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	10 Hours
Class Size Min/Max:	8/10
Course Code:	12A

Course Description and Times

Course Title / Code

Fusion Splicing I / 13A-13B

Course Description

This course features advanced hands-on fiber optic splicing procedures and techniques. Fusion splicing is the act of joining two optical fibers end to end using heat and is accomplished with a Fusion Splicing Machine. The object of this course is to address fusion splicing specialization and familiarize the student with fiber optic preparation and management, stripping, cleaning, and cleaving techniques.

Prerequisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Date(s):	October 7 th 2023 – October 21 st 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	24 Hours
Class Size Min/Max:	8/10
Course Code:	13A

Date(s):	March 2 nd 2024 – March 16 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	24 Hours
Class Size Min/Max:	8/10
Course Code:	13B

Course Description and Times

Course Title / Code

Fusion Splicing II / 14A

Course Description

This course continues the Fusion Splicing I techniques, to include breakout and prep of higher strand count fiber cables. It also introduces fiber splice tray organization, and OTDR testing. Finally, multiple types of fiber optic connectorization techniques commonly used in industry will be discussed and demonstrated. A prerequisite to this course is Fusion Splicing I.

Prerequisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Date(s):	November 4 th 2023 – November 11 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	16 Hours
Class Size Min/Max:	8/10
Course Code:	14A

Course Description and Times

Course Title / Code

Grounding and Bonding / 15A-15B

Course Description

This is a new course offering that will address any of your concerns with Grounding and Bonding. The course is intended to simplify the rules of grounding and bonding. Concentration is upon application of Article 250 of the National Electrical Code 2023.

Prerequisites:

Positive Attitude

Required Classroom Materials:

2023 NEC

Notebook

Pencils

Highlighters

Date(s):	April 6 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	6 Hours
Class Size Min/Max:	8/10
Course Code:	15A

Date(s):	April 20 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	6 Hours
Class Size Min/Max:	8/10
Course Code:	15B

Course Description and Times

Course Title / Code

ICRA (Infection Control Risk Assessment) / 16A

Course Description

This is an infection control safety awareness course developed and maintained by UPMC. As of November of 2012, all construction tradesmen working in a UPMC facility must have completed this course. Reserve your spot now for early compliance. Remember, those that have not completed the course are not eligible to work on a UPMC jobsite. If the dates listed below fill to capacity, others will be scheduled as needed.

Pre-requisites:

Positive Attitude

Required Classroom materials:

Pencils

Notebook

Date(s):	October 21 st 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	8 Hours
Class Size Min/Max	8/15
Course Code	16A

Course Description and Times

Course Title / Code

Instrumentation and Calibration – Part A / 17A & 17B

Course Description

This course is designed to familiarize a potential technician with various electrical and mechanical devices utilized in automated process control systems. These devices measure changes in process variables such as pressure, level, flow and temperature and convert the sensed reading to an electrical input signal to a controller. Upon completion you should be familiar with industry terminology, documentation and calibration procedures, various test instrument and process control instruments.

Upon completion of the course you may be eligible to take the EPRI (Electrical Power Research Institute) Part A qualification exam.

Please be aware that this course requires a major commitment from you. There is 70 hours of classroom work scheduled with additional study/review time and homework.

Pre-requisites:

DC Theory (Course Code 7A)

AC Theory (Course Code 1A)

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Calculator

Date(s)	October 14 th 2023 – December 16 th 2023
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	70 Hours
Class Size Min/Max:	8/10
Course Code:	17A

Date(s):	February 10 th 2024 – April 20 th 2024
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	70 Hours
Class Size Min/Max	8/10
Course Code	17B

Course Description and Times

Course Title / Code

Instrumentation and Calibration – Part B / 18A & 18B

Course Description

After successfully completing the Instrumentation and Calibration – Part A course (Course Code 16A & 16B) and passing the EPRI Part A exam, you will be eligible to take the EPRI Part B exam. This class is designed to prepare you for that test by covering fundamental calibration procedures utilizing various test instruments as well as virtual testing labs.

This course requires a major commitment from you. The scheduled classroom time is 40 hours with additional study/review time and homework. Please be aware that your EPRI Part A certificate expires after three years without your Part B certificate. Additionally, the Part B certificate expires every three years. Members who need to re-certify before your three year certificate expires should seriously consider taking this course prior to your re-testing.

Pre-requisites:

**Instrumentation and Calibration Part A
(Course Code 16A & 16B)**

Successful Completion of EPRI Part A Exam

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Calculator

Date(s)	October 14 th 2023 – December 2 nd 2023
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	40 Hours
Class Size Min/Max	8/10
Course Code:	18A

Date(s):	March 9 th 2024 – April 20 th 2024
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	40 Hours
Class Size Min/Max:	8/10
Course Code:	18B

Course Description and Times

Course Title / Code

Motor Controls / 19A

Course Description

This course provides a foundation for motor control theory. Participants will develop ladder diagrams demonstrating common motor control functions such as; hand-off-auto controls, forward and reversing controls, and timing circuits. The participant will also have the opportunity to demonstrate their hands on skills in our newly updated motor control lab. Classes are sized so that everyone has their own project bucket and remote motor station.

Pre-requisites:

DC Theory (Course Code 7A)

AC Theory (Course Code 1A)

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Calculator

Hand Tools

Safety Glasses

Gloves

Date(s):	January 6 th 2024 – February 24 th 2024
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	48 Hours
Class Size Min/Max	8/12
Course Code	19A

Course Description and Times

Course Title / Code

OSHA 10 Hour Awareness Course / 20A

Course Description

This course deals with the most important part of our industry, your safety. This is a 10-hour course that will be kept as industry specific as possible. Topics may include; Electrical Safety, Ladders, Stairways, Personal Protective Equipment, Lockout Tag-Out and Fall Protection. ***Many jobsites, contractors and customers are now requiring at least an OSHA-10 hour completion card issued within the past 3 years. Please consider this class for upgrade purposes. More classes will be added as necessary.***

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Date(s):	January 27 th 2024 – February 3 rd 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	10 Hours
Class Size Min/Max:	8/25
Course Code:	20A

Course Description and Times

Course Title / Code

OSHA 30 Hour Awareness Course / 21A

Course Description

This course requires 30 hours of training. It is a more comprehensive course for all members, especially those that may be Safety Directors, Project Managers, or Foreman who may need advanced training required by some projects.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Date(s):	December 2 nd 2023 – January 13 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	30 Hours
Class Size Min/Max:	8/25
Course Code:	21A

Course Description and Times

Course Title / Code

Programmable Logic Control (PLC) / 22A

Course Description

Your JATC has completed a new Programmable Logic Control (PLC) lab experience that will challenge its participants to learn about the advantages and applications of the PLC. This will include the installation, wiring and basics of programming the Allen Bradley Logix line of PLC utilizing the Studio 5000 programming software.

Pre-requisites

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Calculator

Date(s):	January 13 th 2024 – January 20 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	12 Hours
Class Size Min/Max:	8/10
Course Code:	22A

Course Description and Times

Course Title / Code

Tele-Data Basics / 23A

Course Description

The JATC is once again offering a short, hands on course geared towards the Residential Wireman upgrading to the Journeyman Wireman classification. During this course, you will learn the skills necessary to terminate Co-Axial, Fiber Optic, and Twisted Pair cabling with a minimal amount of theory behind the processes. While this is geared towards the RW to JW classification change, all members are invited and encouraged to take this course.

Prerequisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Date(s):	January 13 th 2024 – January 27 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	24 Hours
Class Size Min/Max:	8/10
Course Code:	23A

Course Description and Times

Course Title / Code

Transformers / 24A

Course Description

This program will use a transformer trainer to review your knowledge of the Delta and Wye connections, step-up vs. step-down, single winding and dual winding high/low configurations. Once the review is completed we will move to a more realistic dry type transformer and practice landing the primary and secondary sides while discussing neutral connections and proper grounding. If you have every experienced any confusion about transformers this class was designed for you.

Pre-requisites:

AC Theory (Course Code 1A)

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Calculator

Date(s):	March 2 nd 2024 – March 9 th 2024
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	12 Hours
Class Size Min/Max:	8/10
Course Code:	24A

For Our Members Attending the Clearfield Facility

Please feel free to select from the following courses that will be offered at the Clearfield site. When enough interest is expressed, the members will be contacted and a start date will be decided on. When filling out your registration form, simply note the course code and title on the form.

Course Description and Times

Course Title / Code

Tele-Data Basics / C1

Course Description

The JATC is once again offering a short, hands on course geared towards the Residential Wireman upgrading to the Journeyman Wireman classification. During this course, you will learn the skills necessary to terminate Co-Axial, Fiber Optic, and Twisted Pair cabling with a minimal amount of theory behind the processes. While this is geared towards the RW to JW classification change, all members are invited and encouraged to take this course.

Prerequisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	32 Hours
Class Size Min/Max:	8/10
Course Code:	C1

Course Description and Times

Course Title / Code

Blueprint Reading (Instruction Drawings) / C2

Course Description

Today's construction projects are defined to a large degree of accuracy through the use of drawings long before the project begins. The ability to read and accurately interpret them is one of the most important skills for Electrical Workers. **Construction Drawings** is a broad term that encompasses two and three dimensional drawings, as well as 360-degree images and three dimensional renderings. These drawings can be manipulated by the construction worker to obtain a better understanding of the intent for the project. This is a completely re-worked course that will more accurately address the needs of today's Electrical Worker.

Pre-requisites

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Highlighters

Pencils

Straight Edge (Ruler)

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	8/15
Course Code:	C2

Course Description and Times

Course Title / Code

Conduit Bending / C3

Course Description

This is a hands-on course that uses all of the latest conduit tools. This could be an excellent review for journeyman as well as a great class for our members who have not been exposed to conduit work.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Hand Tools

Safety Glasses

Gloves

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	36 Hours
Class Size Min/Max	8/10
Course Code	C3

Course Description and Times

Course Title / Code

70E Electrical Safety Related Work Practices / C4

Course Description

There are several different factors that must be considered when discussing electrical safety. This course will address issues that are often overlooked that could potentially be fatal if not dealt with properly. The goals will include the following:

- Increased awareness by identifying electrical hazards.
- Achieve a better understanding of the NFPA 70E publication.
- Realize all of the protective equipment available to us, as well as understanding the proper use of protective equipment.
- Learn how to develop an electrically safe work condition.

Pre-requisites:

Basic Computer Skills

OSHA 10 Hour is recommended

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	40 Hours
Class Size Min/Max:	8/15
Course Code:	C4

Course Description and Times

Course Title / Code

Electrical Vehicle Charging Systems (EVCS-17) Based on 2017 NEC / C5

Course Description

The Electric Vehicle Charging Systems course serves as an instructional primer for the Electric Vehicle Infrastructure Training Program (EVITP) Certification Exam. The course provides an introduction of charging products and associated equipment on the market today. Electrical Workers completing this training go to work with the ability to implement best practices in areas such as charging station equipment, infrastructure site assessment, load calculation, installation, commissioning, and troubleshooting. Through an agreement with EVITP, their certification exam is provided at the conclusion of this course. ***This course will be held when the minimum class size is met! Please call and reserve your seat now! The past year saw tremendous interest and the class was conducted several times.***

Pre-requisites:

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	18 Hours
Class Size Min/Max:	8/12
Course Code:	C5

Course Description and Times

Course Title / Code

Fire Alarm / C6

Course Description

The Fire Alarm Lab at your JATC offers practical **hands-on** experience with popular brand name equipment like *Silent Knight* and *Fire Lite*. In addition to working with new control panels, each station has new Flow and Tamper equipment, horn-strobe assemblies, pull stations, smoke detectors, heat detectors, and much more. Each student will install wire, terminate devices and program their own system. Designed to take the mystery out of a fire alarm system. Countless hours were devoted to this lab with the hope our members take advantage of the hands-on experience.

Pre-requisites

Positive Attitude

Required Classroom Materials:

None

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	8/8
Course Code:	C6

Course Description and Times

Course Title / Code

First Aid / CPR / Defibrillation / C7

Course Description

The time spent in this class will definitely offset the helpless feeling incurred when a family member, friend or co-worker is in need. This is a Coyne First Aid / CPR class. Completion cards will be issued for use at jobsites and employers that may require it. This course is for adult CPR only, not for children.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	10 Hours
Class Size Min/Max:	8/10
Course Code:	C7

Course Description and Times

Course Title / Code

Fusion Splicing / C8

Course Description

This course features advanced hands-on fiber optic splicing procedures and techniques. Fusion splicing is the act of joining two optical fibers end to end using heat and is accomplished with a Fusion Splicing Machine. This course will address the following: Fiber optic preparation including breakout of high strand count cables, management, stripping, cleaning, and cleaving techniques, tray organization, and OTDR testing.

Pre-requisites:

Positive Attitude

Required Classroom materials:

Pencils

Notebook

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	8 Hours
Class Size Min/Max	8/15
Course Code	C8

Course Description and Times

Course Title / Code

ICRA (Infection Control Risk Assessment) / C9

Course Description

This is an infection control safety awareness course developed and maintained by UPMC. As of November of 2012, all construction tradesmen working in a UPMC facility must have completed this course. Reserve your spot now for early compliance. Remember, those that have not completed the course are not eligible to work on a UPMC jobsite.

Pre-requisites:

Positive Attitude

Required Classroom materials:

Pencils

Notebook

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	8 Hours
Class Size Min/Max	8/15
Course Code	C9

Course Description and Times

Course Title / Code

Motor Controls / C10

Course Description

This course provides a foundation for motor control theory. Participants will develop ladder diagrams demonstrating common motor control functions such as; hand-off-auto controls, forward and reversing controls, and timing circuits. The participant will also have the opportunity to demonstrate their hands on skills in our newly installed motor control lab.

Pre-requisites:

DC Theory

AC Theory

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Calculator

Hand Tools

Safety Glasses

Gloves

Date(s):	Will Be Held When Class Is Filled
Day(s)	TBD
Time(s)	TBD
Approximate Classroom Time:	48 Hours
Class Size Min/Max	8/12
Course Code	C10

Course Description and Times

Course Title / Code

OSHA 10 Hour Awareness Course / C11

Course Description

This course deals with the most important part of our industry, your safety. This is a 10-hour course that will be kept as industry specific as possible. Topics may include; Electrical Safety, Ladders, Stairways, Personal Protective Equipment, Lockout Tag-Out and Fall Protection. ***Many jobsites, contractors and customers are now requiring at least an OSHA-10 hour completion card issued within the past 3 years. Please consider this class for upgrade purposes. More classes will be added as necessary.***

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	10 Hours
Class Size Min/Max:	8/25
Course Code:	C11

Course Description and Times

Course Title / Code

OSHA 30 Hour Awareness Course / C12

Course Description

This course requires 30 hours of training. It is a more comprehensive course for all members, especially those that may be Safety Directors, Project Managers, or Foreman who may need advanced training required by some projects.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Date(s):	Will Be Held When Class Is Filled
Day(s):	TBD
Time(s):	TBD
Approximate Classroom Time:	30 Hours
Class Size Min/Max:	8/25
Course Code:	C12

Registration Form

Please Print Neatly

(Last Name) (First Name) (MI) (Classification)

(Street Name) (State) (City) (Zip)

(Card Number) (S.S. Number) (Daytime Ph. #) (Evening Ph. #)

(E-mail Address) (Local Union #)

	<u>Course Code</u>	<u>Course Title</u>	<u>Day</u>	<u>Times</u>
1				
2				
3				
4				

Carefully Review this checklist before completing this form.

- 1. Make sure that the phone numbers you supply are correct.**
- 2. In the event that you move please notify the apprenticeship as soon as possible with address and phone number changes.**
- 3. Please make sure that you can attend the class that you sign up for. Review the calendars and make sure that the dates that you select do not conflict with other important dates.**
- 4. Please make sure that the classes you select do not conflict with each other.**
- 5. Please pay attention to the necessary pre-requisites and try not to register for classes out of order.**
- 6. Leave some time between classes. Remember that the listed times required are approximate and may be slightly longer or shorter.**