



2022-23

Journeyman Upgrade and Continuing Education Course Catalog



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)			

	<u>Course Code</u>	<u>Course Title</u>	<u>Day</u>	<u>Times</u>
1				
2				
3				
4				
5				

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.

JOINT APPRENTICESHIP COMMITTEE

LOCAL UNION NO. 5 INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS
and

PITTSBURGH DIVISION OF WESTERN PENNSYLVANIA CHAPTER, NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION
5 HOT METAL STREET - SUITE 100
PITTSBURGH PENNSYLVANIA 15203-2356



412/432-1145
Fax 412/431-4614

When calling from area
code 412, 724 & 814, you
may use toll-free number
877-708-JATC (5282)

August 2022

Dear Member,

It is hard to believe that 2022 is coming to a close so soon. It seems as though the summer just started, and it's nearly September already. With October rapidly approaching, the JATC is preparing for another year of classes for all of our members. Please consider attending one or more of the offered courses during our 2022-23 sessions.

There have been a few changes to the program since the 2021-22 school year. Construction of our Programmable Logic Control Lab has finished and a class of 5th year apprentices has already completed the course. Check **Course Code 19A** for more information. Those that have completed the class are already looking for even more instruction, so take advantage of this offering that begins on November 5th 2022. More offerings could be made available as needed.

Development of a practical Transformer class and lab is finished and is ready for its first class. The class is practical because we have multiple dry type transformers for you to practice with that all have a safe low voltage on the primary side. In addition to working with transformer terminations, the class will address grounding and overcurrent protection. A good bit of work has been invested in this lab and we think it will be beneficial for all members. This class will begin on March 4th 2023; see **Course Code 20A** for more information.

Development and construction of an Energy Storage and Micro-gridding lab experience is underway and should be completed in early 2023. This new course is being offered in May as part of our continuous effort to improve our member's continuing education experience.

Every member should consider the following classes for you own personal safety and the security that brings for your families:

- 70E Electrical Safety Related Work Practices
- OSHA 10Hr Awareness Course
- OSHA 30Hr Awareness Course
- First Aid/CPR/Defibrillation

New class offerings that started last year have seen significant participation and received high marks for content. The Electrical Vehicle Charging Systems class has been really successful and the Fire Alarm class with its accompanying lab experience is continuously growing. Members should strongly consider one of these courses when choosing a class this year.

Members that prefer taking upgrade or continuing education classes at the Clearfield facility can find classes that will be offered near the back of this booklet (blue pages). Of course those individuals should feel free to select any class that's offered in Pittsburgh as well.

As always, the JATC is trying its best to develop relevant and informative classes to keep all of the membership as up to date and employable as possible. Please take every opportunity to attend one or more of the classes offered.

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 2022-23.

Respectfully Yours,



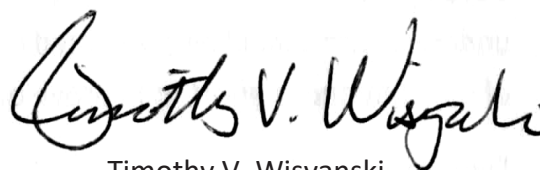
Paul L. Reinert

Director of Training



Ronald D. Ewing

Assistant Director of Training



Timothy V. Wisyanski

Assistant Director of Training

Mailing Address

**Joint Apprenticeship and Training
5 Hot Metal Street
Suite 100
Pittsburgh, Pennsylvania 15203**

Phone Number

412-432-1145

Fax Number

412-431-4614

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:

Come to work on time, fit for duty and ready to work.

Obey recognized customer and employer rules.

Demonstrate zero tolerance for alcohol and substance abuse.

Exercise proper safety, health and sanitation practices.

Own up to '8 for 8' and be on the job unless otherwise allowed or authorized to leave.

Follow safe, reasonable and legitimate management directives.

Encourage respect for the customer's rights and property, as well as for others on the job.

Exercise the skills and abilities of the trade.

Care for tools and equipment provided by the employer.

Eliminate waste and other forms of property destruction, including graffiti.

Limit lunch and break times to allocated periods; adhere to established start and quit times.

Leave inappropriate behavior to those of lesser knowledge.

Employ the proper tools for the job and maintain personal tool responsibilities.

do Not solicit funds or sell merchandise without the Business Manager's approval.

Curtail idle time or pursuit of personal business during work hours, including cell phone use.

Expel 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.



Have you completed the IBEW Local Union #5 Residential Wireman Apprenticeship? If you have, this program is for you.

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		
Conduit Bending		
Fire Alarm		
First Aid / CPR / Defibrillation		
Motor Controls		
OSHA 10 Hour		
70E Safety Related Work Practices		

Were you recently organized into the IBEW Local Union #5 as a Residential Wireman? If you were, this program is for you.

**Organized 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		
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		
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)		
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		
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. This course is highly recommended for those who have entered the industry through organization. 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 7 th 2023 – March 11 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	60 Hours
Class Size Min/Max:	5/15
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 4 th 2023– February 11 th 2023
Day(s):	Saturdays
Times(s):	8:00am – 3:00pm
Approximate Classroom Time:	12 Hours
Class Size Min/Max;	4/8
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 (2020), 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

2020 National Electric Code Tabs (Available from Amazon)

Date(s):	March 25 th 2023 – May 6 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	40 hours
Class Size Min/Max:	5/15
Course Code:	3A

Course Description and Times

Course Title / Code

Blueprint Reading / 4A

Course Description

This is an extensive blueprint reading course covering Basic Blueprint Reading Skills, Residential, Commercial and Industrial Blueprint Reading. The Commercial Blueprint Reading segment actually uses parts of the blueprint set from our own three building IBEW Local Union #5 campus.

Pre-requisites

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Highlighters

Pencils

Straight Edge (Ruler)

Date(s):	October 1 st 2022 – November 5 th 2022
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	5/15
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 the BIM program is up and running. 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 5 th 2022 – December 3 rd 2022
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	24 Hours
Class Size Min/Max:	4/8
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 recently organized members who have not been exposed to as conduit work.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Hand Tools

Safety Glasses

Gloves

Date(s):	January 14 th 2023 – February 18 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max	5/10
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 those who have entered the industry through organization.

Pre-requisites:

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Highlighters

Straight Edge (Ruler)

Date(s):	October 1 st 2022 – December 10 th 2022
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	60 Hours
Class Size Min/Max:	5/15
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 try to address issues that are often overlooked that could potentially be fatal if not dealt with properly. The goals we would like to achieve in this course 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 17A)

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Date(s):	March 11 th 2023– April 29 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	40 Hours
Class Size Min/Max:	5/15
Course Code:	8A

Course Description and Times

Course Title / Code

Electrical Vehicle Charging Systems (EVCS-17) Based on 2017 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 when the class filled and as needed! Please call and reserve your seat now! The past year saw tremendous interest and the class was conduct 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):	6:00pm – 9:00pm
Approximate Classroom Time:	18 Hours
Class Size Min/Max:	5/12
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):	May 13 th 2023 – May 27 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	24 Hours
Class Size Min/Max:	4/8
Course Code:	10A

Course Description and Times

Course Title / Code

Fire Alarm / 11A

Course Description

The newly installed 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 this new lab and we hope our members take advantage of the hands-on class.

Pre-requisites

Positive Attitude

Required Classroom Materials:

None

Date(s):	October 4 th 2022 – November 10 th 2022
Day(s):	Tuesdays and Thursdays
Time(s):	6:00pm – 9:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	4/8
Course Code:	10A

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 3 rd 2022 – December 10 th 2022
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	10 Hours
Class Size Min/Max:	5/10
Course Code:	11A

Course Description and Times

Course Title / Code

ICRA (Infection Control Risk Assessment) / 13A

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):	December 17 th 2022
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	8 Hours
Class Size Min/Max	5/15
Course Code	12A

Course Description and Times

Course Title / Code

Instrumentation and Calibration – Part A / 14A & 14B

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 1st 2022 – January 7 th 2023
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	70 Hours
Class Size Min/Max:	4/10
Course Code:	13A

Date(s):	February 11 th 2023 – May 6 th 2023
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	70 Hours
Class Size Min/Max	4/10
Course Code	13B

Course Description and Times

Course Title / Code

Instrumentation and Calibration – Part B / 15A & 15B

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 14A & 14B)**

Successful Completion of EPRI Part A Exam

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Calculator

Date(s)	October 15 th 2022 – November 19 th 2022
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	40 Hours
Class Size Min/Max	4/10
Course Code:	14A

Date(s):	March 4 th 2023 – April 29 th 2023
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	40 Hours
Class Size Min/Max:	4/10
Course Code:	14B

Course Description and Times

Course Title / Code

Motor Controls / 16A

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 14 th 2023 – February 11 th 2023
Day(s)	Saturdays
Time(s)	8:00am – 3:00pm
Approximate Classroom Time:	48 Hours
Class Size Min/Max	5/12
Course Code	15A

Course Description and Times

Course Title / Code

OSHA 10 Hour Awareness Course / 17A

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):	November 12 th 2022 – November 19 th 2022
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	10 Hours
Class Size Min/Max:	5/15
Course Code:	16A

Course Description and Times

Course Title / Code

OSHA 30 Hour Awareness Course / 18A

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):	January 7 th 2023 – February 4 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	30 Hours
Class Size Min/Max:	5/15
Course Code:	17A

Course Description and Times

Course Title / Code

Programmable Logic Control (PLC) / 19A

Course Description

This new program has seen great success in the apprenticeship program, and we are now offering it to journeymen and upgrade candidates in November of this year. The class is an introduction to Programmable Logic Controllers and includes information on entry level programming and field terminations.

Pre-requisites

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Highlighters

Calculator

Date(s):	November 5 th 2022 – December 17 th 2022
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	5-10
Course Code:	18A

Course Description and Times

Course Title / Code

Transformers / 20A

Course Description

This new 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 4 th 2023 – March 11 th 2023
Day(s):	Saturdays
Time(s):	8:00am – 3:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	5-10
Course Code:	19A

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. Unfortunately, OSHA 10Hr Awareness and OSHA 30Hr Awareness are still offered only at the Pittsburgh facility. This issue should be resolved for our next course offering booklet.

Course Description and Times

Course Title / Code

Blueprint Reading / C1

Course Description

This is an extensive blueprint reading course covering Basic Blueprint Reading Skills, Residential, Commercial and Industrial Blueprint Reading. The Commercial Blueprint Reading segment actually uses parts of the blueprint set from our own three building IBEW Local Union #5 campus.

Pre-requisites

Basic Computer Skills

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Highlighters

Pencils

Straight Edge (Ruler)

Date(s):	October 4 th 2022 – November 1 st 2022
Day(s):	Tuesday - Thursday
Time(s):	6:00pm-9:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	5/15
Course Code:	C1

Course Description and Times

Course Title / Code

Conduit Bending / C2

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 recently organized members who have not been exposed to as conduit work.

Pre-requisites:

Positive Attitude

Required Classroom Materials:

Notebook

Pencils

Hand Tools

Safety Glasses

Gloves

Date(s):	January 3 rd 2023 – January 31 st 2023
Day(s):	Tuesday - Thursday
Time(s):	6:00pm – 9:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max	5/10
Course Code	C2

Course Description and Times

Course Title / Code

70E Electrical Safety Related Work Practices / C3

Course Description

There are several different factors that must be considered when discussing electrical safety. This course will try to address issues that are often overlooked that could potentially be fatal if not dealt with properly. The goals we would like to achieve in this course 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 17A)

Positive Attitude

Required Classroom Materials:

Calculator

Notebook

Pencils

Date(s):	November 8 th 2022 – December 6 th 2022
Day(s):	Tuesday - Thursday
Time(s):	6:00pm – 9:00pm
Approximate Classroom Time:	40 Hours
Class Size Min/Max:	5/15
Course Code:	C3

Course Description and Times

Course Title / Code

Fire Alarm / C4

Course Description

The newly installed 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 this new lab and we hope our members take advantage of the hands-on class.

Pre-requisites

Positive

Required Classroom Materials:

None

Date(s):	April 4 th 2023 – May 2 nd 2023
Day(s):	Tuesday - Thursday
Time(s):	6:00pm – 9:00pm
Approximate Classroom Time:	36 Hours
Class Size Min/Max:	4/8
Course Code:	C4

Course Description and Times

Course Title / Code

First Aid / CPR / Defibrillation / C5

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 13 th 2022 – December 20 th 2022
Day(s):	Tuesday - Thursday
Time(s):	6:00pm – 9:00pm
Approximate Classroom Time:	10 Hours
Class Size Min/Max:	5/10
Course Code:	C5

Course Description and Times

Course Title / Code

Motor Controls / C6

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):	TBD
Day(s)	TBD
Time(s)	TBD
Approximate Classroom Time:	48 Hours
Class Size Min/Max	5/12
Course Code	C6

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)			

	<u>Course Code</u>	<u>Course Title</u>	<u>Day</u>	<u>Times</u>
1				
2				
3				
4				
5				

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.

