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**IMPORTANT INFORMATION
FOR THE 2008 NTI!!**

**On-line Registration is here. You can register on-line at
<https://nti.njafc.org>**

**Plus you can track NTI Technical
Course enrollment at www.njafc.org**

2008 National Training Institute

The National Joint Apprenticeship and Training Committee's National Training Institute (NTI), an annual week of training, held at the University of Tennessee in Knoxville, offers a variety of educational and training opportunities to meet the rapidly changing demands of the electrical industry. The NTI is divided into several different functions, all taking place simultaneously: Professional Education Classes ("I Group"), Technical Training Classes ("T Group"), Outstanding Apprentice Graduate Program ("A Group") and a special series of seminars for JATC Members and Training Directors ("C Group" and "SC Group") that take place throughout the week at different locations at and around the University of Tennessee. Please join us for the 2008 19th Annual National Training Institute.

New to NTI for 2008:

- ***NJATC and NECA Announce New "EC Group" at NTI***

For the past 18 years, the NJATC has conducted the electrical industry's finest National Training Institute (NTI) at the University of Tennessee in Knoxville, TN. Over the years, NTI has grown to become a reliable source for the finest instructor development program and technical training courses in the electrical industry.

The NJATC and NECA are proud to announce that at this year's NTI, a new "EC Group" (Electrical Contractor) will be added to the program offerings. The "EC Group" is a separate NTI group designed especially for electrical contractors and their key personnel. The special group will be offered classes and presentations that deal specifically with business development opportunities in the electrical industry. Many of the presentations and course offerings will be offered by the award-winning NJATC Training Partners.

According to NJATC Executive Director Michael Callanan, this joint effort between the NJATC and NECA addresses a critical void that has been overlooked for too long. "For years we focused exclusively on technical training," says Callanan. "The new "EC Group" will enable us to present business development issues, along with the technical training. NJATC Training Partners will continue to offer the necessary technical training classes for our industry's trainers but will also provide additional presentations designed specifically for our NECA contractors and their staff." The NJATC will work with NECA National and the Management Education Institute to prepare a meeting agenda that is guaranteed to address significant business development opportunities for our contractors.

The 19th Annual NTI will begin on Saturday, August 2, 2008 with the annual NTI Trade Show featuring over 100 of our industry's Training Partners. The Trade Show concludes on Sunday morning and the Opening Ceremony and Welcoming Reception begin on Sunday evening. "EC Group" participants are encouraged to arrive on Saturday for the Trade Show. The "EC Group" Opening presentation will begin on Sunday, August 3, 2008 at 12:30 p.m. and conclude at 4:45 p.m. on Tuesday, August 5, 2008.

Registration information and a more detailed list of the "EC Group" presentations and agenda will be mailed to all NECA contractors by April 15, 2008. **Contractors will register for the "EC Group" through NECA's website (www.necanet.org).** **Contractors should not use the NJATC site to register for this new group.** Please mark your calendar and plan to be in attendance at the 19th Annual NTI.

- ***C-Group Presentation Delivery – No More Binders***

Say Good-Bye to the 4" Binder. We know this will disappoint those who enjoyed the exercise that came with that binder. All presentations will be delivered electronically. You will need a Laptop computer if you want to view copies of presentations. If you do not have a laptop the NJATC will have rentals available for approximately \$170.00 for the week.

How to Register... ON-LINE

This year, the NJATC is proud to continue to provide an easier way to register for the National Training Institute. We have created an on-line registration system that will allow instant registration in an easy fashion. The following instructions are here to provide an overview of this system. If you have any questions about using this system, please contact Tim Strickland or Melissa Parsly directly at 865-380-9044.

On-line registration is divided into two roles: a “Sponsor” and a “Student”. A Sponsor is the Training Director, or Administrator that is approving and paying for a registration. A Student is the individual attending the Institute. A Sponsor may also attend the Institute by submitting a registration as well.

Due to the nature of registration, it is required that a Sponsor be the primary contact for the NJATC. We have set the Registration System up so that a Sponsor must log on and manage their Students. The Sponsor adds each student they wish to send to the Institute to the Registration System. Once a Student has been added to a Sponsor’s record, either the Sponsor or the Student can go through the Registration Process.

Once a Student has been registered, either by the Student or by the Sponsor, they must then be approved by the Sponsor. After each student has been approved, the Sponsor may then pay for the registration. Options for payment online are via Credit Card or if you have an account with the NJATC you may choose NET 30 Terms.

Sponsor

If you registered for NTI last year, please use the same username and password. If you need a username and password please contact the NJATC to obtain one. You can contact Tim Strickland (tims@njatc.org) or Melissa Parsly (melissap@njatc.org) by email or phone at 865-380-9044. Once you have your username and password, open your internet browser and go to <https://nti.njatc.org>. There, you will be presented with a logon screen to enter your username and password.

The first time you logon to the Registration System, you will be presented with your contact information. It is vital that you check this information for accuracy, because this is the information we will use to contact you. Use of the email address is important as we send notifications via email.

After you have verified and saved the contact information, you will be taken to the Sponsor Management Console. This is where you will Add, Edit, Register, Approve, and Pay for each Student. At first you will see a table with just yourself in the Student Table. You are listed here so that you may also register for the Institute along with your Students.

The first order of business is to add the students. You will need their First Name, Last Name and Gender. Simply click the “Add New” button on the bottom right of the table and fill in at least the required information and submit. Once all of the Students have been added to the console, you may either register each Student yourself, or give the username and password generated for each Student to that individual so that they may register themselves. If you choose to register them, simply click the “Register” button next to a Student to begin the process.

(See Student Section for detailed instructions on the registration process.)

After a Student has registered, you will be notified by email to go approve the registration. You may click the “Approve” button and see all of the registration information for that Student. At the bottom of the screen is a “Yes” or “No” button to approve the registration. Please note that once a registration is approved it cannot be modified. A registration must be approved to be paid. If you want to change a class or housing for a participant please contact the NJATC.

Finally, after you have approved all of the Students in the console or at any point you decide to pay for some of the Students, add a check into the selection box for each Student to be paid. Now select the “Pay” button on the bottom left of the console. You will be given a summary of everyone’s registration cost and given the two options to pay.

After all Students have been paid for, your registration is complete.

Student

As a student you must have a Sponsor create your username and password prior to attempting to register. Once your Sponsor has provided this information, open your internet browser and go to <https://nti.njatc.org> to register. After you have submitted your registration you may login at any time to see the status and get a summary of your registration.

Registration Steps:

1. Logon at <https://nti.njatc.org>
2. Completely enter your Personal Information, Experience, and History. (click next)
3. Select any Current Titles. (click next)
4. If you have any guests attending, click the “Add” button to add all guests. (click next)
5. Choose the desired GROUP from the dropdown list. (click next)

GROUPS

“**I Group**” is for those participants registering for instructor training. There are four years of instructor training groups. If you are an instructor and have never attended the National Training Institute or have no professional education experience, you **MUST** register as a 1st Year “I Group” participant. All other “I Groups” are taken in consecutive order. For example, 1st & 2nd Year “I Group” is the prerequisite for 3rd Year “I Group”. There is an advanced professional education course which is also considered a part of “I Group”. This course may only be taken one time and is available to any NTI participant who has completed all four years of the Instructor Training Program. Course 52 is recommended for NTI Graduates. Course 52 will be offered in the morning only.

3rd Year, 4th Year and Advanced Standing “I Group” participants will need to register for one (1) 100 Level Technical Course.

“T Group” is for those participants who will be taking technical training courses ONLY. There are many different technical courses offered at NTI. You can select two (2) 100 Level (half day) Courses OR one (1) 200 Level (all day) Course for the standard NTI registration fee. Any participant can register for 300 Level Technical Courses which are offered before NTI and do not interfere with other training classes. **There will be an additional fee for the 300 Level courses.** You will find a comprehensive description of all technical training opportunities beginning on page 17.

“C Group” is for JATC Committee Members, Local Union and Chapter Officers, and all Training Directors. The format for “C Group” is a combination of general session presentations and small group breakout sessions where you choose your own area of interest. This year’s “C Group” program should be the most comprehensive meeting of apprenticeship and training matters ever offered. Every JATC should be represented by management and labor and no Training Director should miss NTI - particularly the “C Group” sessions.

* **SPECIAL NOTE:** Committee Members or Training Directors who want to attend some C-Group sessions and a 100 Level Technical Course may do so. To do so you must register as a “C Group” participant. In the Housing Drop-down Menu you will pick your housing selection that included a 100 Level Technical Session. By choosing this option, you WILL miss some “C Group” presentations. You will be required to add \$175.00 to your “C Group” fee in order to register for a Technical Course.

“SC Group” is an abbreviated part of “C Group”. “SC Group” participants can attend the Trade Show and the Welcome Reception on Sunday and “C Group” sessions on Monday and Tuesday. As another option “SC Group” participants can attend sessions on Thursday and Friday and attend the Thursday night Graduation Ceremony and the Dinner and Concert which follow. “SC Group” is intended for those individuals who cannot attend the entire week of NTI, but still recognize the importance of the “C Group” seminars and sessions.

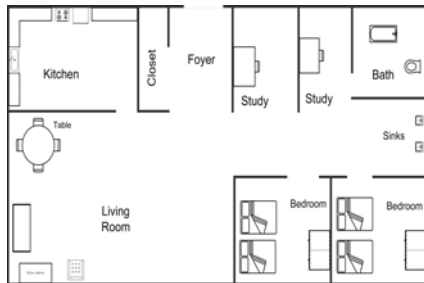
“EC Group” is two and a half days of presentations and seminars. The NJATC and NECA are proud to announce that at this year’s NTI, a new “EC Group” (Electrical Contractor) will be added to the program offerings. The “EC Group” is a separate NTI group designed especially for electrical contractors and their key personnel. The special group will be offered classes and presentations that deal specifically with business development opportunities in the electrical industry. Many of the presentations and course offerings will be offered by award-winning NJATC Training Partners. “EC Group” participants can attend the Trade Show and attend the Welcome Reception on Sunday. “EC Group” sessions will be Sunday afternoon and all day Monday and Tuesday. **Registration for this group is done through NECA’s website (www.necanet.org).**

“A Group” is a program for Outstanding Apprentice Graduates. This is an opportunity for JATCs to send their Outstanding Apprentice Graduates to the NTI as a reward for their exceptional work. “A Group” will gain exposure to new technologies of the trade. There will be several times throughout the week that the “A Group” will be recognized for their accomplishments. The format for the “A Group” is a morning session exclusively for this group and then an afternoon special technical training session chosen by the NJATC.

6. Choose a Housing Option from the dropdown list.

Determine if you will be registering as an ON-CAMPUS participant or an OFF-CAMPUS participant. If you are registering as an **ON-CAMPUS** participant, the NJATC will place you in the University of Tennessee’s Andy Holt Apartments. All University housing is for two participants per unit. If you have a preference for a roommate, you must indicate this when you register on-line. This individual must also indicate you as their choice of a roommate when they register. If no roommate preference is given, the NJATC will select a roommate for you. There are no private rooms for ON-CAMPUS participants. Please review the apartment floor plan below. You will notice that there are two bedrooms per apartment. Each individual will have their own bedroom and share bathroom facilities with their roommate. If you will be traveling with family members and registering as an ON-CAMPUS participant, each individual must register as ON-CAMPUS and pay the necessary fees. All ON-CAMPUS participants traveling with family members will also be housed at the Andy Holt Apartments.

ON-CAMPUS University of Tennessee Housing



Andy Holt Apartment Unit –
Participants traveling with family
members or 2 individuals will stay in unit
shown.

All participants registering as **OFF-CAMPUS** are responsible for making their OWN housing arrangements. For participants wishing to stay OFF-CAMPUS, the hotels below have agreed to provide a special NTI discounted room rate. **Please note all arrangements for OFF-CAMPUS lodging must be made directly by the participant with the hotel.** The NJATC has negotiated these special room rates for you. Room availability may be limited, so we suggest that you make your reservations early. In past years, hotels have filled up far in advance.

NTI Recommended OFF-CAMPUS Housing

(Shuttle service will transport participants from the hotels listed below)

The Knoxville Hilton
501 W. Church Street
Knoxville, TN 37902
Rate: \$100.00
All Rooms
800.445.8667
Group Code: NJ8
Must Reserve by 7/1/08

Holiday Inn Select Downtown
525 Henley Street
Knoxville, TN 37902
Rate: \$101.00
All Rooms
800.465.4329
Group Code: NJT
Must Reserve by 7/17/08

Crowne Plaza Hotel
401 Summit Hill
Knoxville, TN 37902
Rate: \$108.00
All Rooms
800.227.6963
Group Code: JAT
Must Reserve by 7/1/08

Reserved for
“C Group”, “SC Group”, “EC Group” and All JATC Committee Members

The Marriott Hotel
500 Hill Ave. SE
Knoxville, TN 37915
Rate: \$107.00 Single
\$117.00 Double
\$ 10.00 for each additional person per night
800.228.9290
Phone in Group Code: NJATC 2008
Web: www.marriott.com
Internet Group Code: NJANJAA

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7. Choose any activities you and your guests would like to attend. (click next)
 8. Review the “Class Diagram and Description.” (click next)
 9. Based on your Group, select any classes you wish to attend. (click next) (repeat for multiple class options)
 10. Review your registration.
 11. Print the page for your records. (or save the PDF by clicking the PDF logo)
 12. Click “Submit.”

Once you submit your registration, an email is sent to your Sponsor letting them know you have completed your registration. They must then logon and “Approve” and “Pay” for your registration. At any time you may log-in and view your status. Until a registration is approved you may re-register. Once a registration is approved, you may no longer edit the registration.

We recommend viewing your summary on a regular basis in case a class has been cancelled. If a class is cancelled, it would be removed from your registration summary. At this time you should contact your sponsor to ensure a replacement is chosen.

I-Group Reminders:

PORTFOLIO Assignments

All First, Second, and Third Year I-Group Participants from 2007 were given a portfolio assignment during the week of NTI. Each Instructor should be continually working on their portfolio throughout the year. Each Instructor can download the assignment from the NJATC website at www.njatc.org under the NTI tab. All NTI Instructors **MUST** remember to bring their portfolio back to NTI 2008. There will be a portfolio session on Sunday 8/3 at 10:00.

Pre-NTI Assignments

All Second, Third, and Fourth Year I-Group Participants **MUST** complete an assignment before arriving to NTI 2008. Each Instructor can download the assignment from the NJATC website at www.njatc.org under the NTI tab. Your NTI Professor will be referring to these assignments on the first day of class. Please come prepared. You do not want to start off your NTI week being behind. This is not the same as the Portfolio Assignments.

NTI FEE STRUCTURE

This is the fee schedule for this year’s National Training Institute. Below you will find a chart outlining participant registration fees which should help in determining the amount due for your registration. This will be calculated automatically when you register On-line:

Housing	Participant Group	2008 COST	HOUSING LOCATION	INCLUDED IN FEE
ON-CAMPUS	“I Group” “T Group” “A Group”	\$725.00 prior to June 20 \$825.00 June 21– July 22 \$975.00 after July 22	UT Dormitories	Housing, Trade Show, Welcome Reception, NTI Participant Gifts, 5 Lunches, Morning and Afternoon Breaks, Graduation Ceremony and Completion Party. Professional Education Training and/or Technical Course.
OFF-CAMPUS	“I Group” “T Group” “A Group”	\$550.00 prior to June 20 \$650.00 June 21- July 22 \$800.00 after July 22	Participant’s Choice	Trade Show, Welcome Reception, NTI Participant Gifts, 5 Lunches, Morning and Afternoon Breaks, Graduation Ceremony and Completion Party. Professional Education Training and/or Technical Course.
ON-CAMPUS	“C Group” Participant (No Technical)	\$550.00 prior to June 20 \$650.00 June 21- July 22 \$800.00 after July 22	UT Dormitories	Housing, Trade Show, Welcome Reception, NTI Participant Gifts, 5 Lunches, Morning and Afternoon Breaks, Graduation Ceremony and Completion Party.
Additional C-Group Options: If you wish to take a Technical Course add \$175.00 to the Appropriate Fee. If you need to rent a Laptop add an additional \$170.00 to the appropriate fee.				
OFF-CAMPUS	“C Group” Participant (No Technical)	\$375.00 prior to June 20 \$475.00 June 21- July 22 \$625.00 after July 22	Marriott <i>(Recommended)</i>	Trade Show, Welcome Reception, NTI Participant Gifts, 5 Lunches, Morning and Afternoon Breaks, Graduation Ceremony and Completion Party.
Additional C-Group Options: If you wish to take a Technical Course add \$175.00 to the Appropriate Fee. If you need to rent a Laptop add an additional \$170.00 to the appropriate fee.				
OFF-CAMPUS	“EC or SC Group” Participant	\$250.00 prior to June 20 \$350.00 June 21 July 22 \$500.00 after July 22	Marriott <i>(Recommended)</i>	Trade Show, Welcome Reception, NTI Participant Gifts, 2 Lunches, and Morning and Afternoon Breaks.
ON-CAMPUS	Spouse	\$275.00 prior to June 20 \$375.00 June 21- July 22 \$525.00 after July 22	UT Dormitories	Housing, Trade Show, Welcome Reception, NTI Family Gifts, Graduation Ceremony and Completion Party. NO BREAKS OR LUNCHESES PROVIDED.
ON-CAMPUS	Adult or Guest (16 and up)	\$275.00 prior to June 20 \$375.00 June 21 - July 22 \$525.00 after July 22	UT Dormitories	Housing, Trade Show, Welcome Reception, NTI Family Gifts, Graduation Ceremony and Completion Party. NO BREAKS OR LUNCHESES PROVIDED.
ON-CAMPUS	Child (5-15 Years)	\$175.00 prior to June 20 \$275.00 June 21 - July 22 \$425.00 after July 22	UT Dormitories	Housing, Trade Show, Welcome Reception, NTI Family Gifts, Graduation Ceremony and Completion Party. NO BREAKS OR LUNCHESES PROVIDED.
OFF-CAMPUS	Spouse, Child Adult or Guest (All Guest)	\$100.00 prior to June 20 \$200.00 June 21 - July 22 \$250.00 after July 22	Participant’s Choice	Trade Show, Welcome Reception, NTI Family Gifts, Graduation Ceremony and Completion Party. NO BREAKS OR LUNCHESES PROVIDED.

MEALS

There will be a light breakfast available to all registered participants upon arrival at their morning classes. Presidential Court, located by the dormitories, will be open for breakfast and lunch for interested parties for a small fee. **NOTE: THERE ARE NO BREAKFASTS OR LUNCHESES SCHEDULED FOR FAMILY PARTICIPANTS!** The only evening meals provided by the NJATC for NTI participants will be the Sunday evening Welcome Reception and the Thursday evening Graduation Party. All other evening meals will be on your own.

PROFESSIONAL EDUCATION COURSE DESCRIPTIONS

FIRST YEAR (“I Group”)

Course # 10: PRINCIPLES OF LEARNING

How people learn, remember, and apply related theory. Basic principles of learning. Kinds, definition, nature, effect, reinforcement, habit formation, transfer of learning, use of senses, retention, and motivation of the learner. Emphasis will be placed on establishing student/instructor relationships and developing an effective learning environment for adult learners.

Course # 11: ELEMENTS OF TRADE TEACHING

Nature of trade education and the trade teaching process. Goals of NJATC and trade teaching. Uniqueness of trade education, apprenticeship, and trade instructors. Nature of the subject matter taught, how it is identified, skills, knowledge, and attitudes. Process of teaching related trade subjects: establishing lesson objectives, preparing to teach, presenting new content, providing for application and practice, evaluation of learning and teaching. Managing the learning environment. Role of the related trade instructor and characteristics of good trade instructors.

SECOND YEAR (“I Group”)

Course # 20: PLANNING AND PRESENTING RELATED INFORMATION

Process of teaching related lessons with the emphasis being placed on application and putting theory into practice. Developing competency-based lesson plans using NJATC curriculum materials. Planning lessons that use the senses so learners will retain and use related information. Workshop in planning and presenting information lessons.

Course # 21: USING INSTRUCTIONAL TECHNOLOGY

Overview of training aids available through NJATC. Review of the teaching process and use of audio and visual materials to aid in retention of related information. Emphasis is placed on computer applications in developing training material and its use in presenting related information. Workshop in the preparation and use of audio and visual training aids.

THIRD YEAR (“I Group”)

Course # 30: PERFORMANCE EVALUATION

Justification and review of using performance-based evaluations. Relationship between job analysis, teaching, and evaluation. Principles and practices of developing written and performance tests. Developing performance standards based on trade practices. Making observations while using checklists. Workshop in test construction.

Course # 32: TEACHING AND MANAGING IN A TECHNICAL LABORATORY

This third year course builds on information presented in the first and second year courses in which participants gained knowledge about the teaching and learning process. The focus of this course is on preparing instructors to establish a laboratory learning environment and an instructional program where apprentices can develop essential knowledge and skills required to

competently perform selected electrical tasks in a simulated work environment. Information will be presented on the major topics of: laboratory learning environments, learning approaches used in technical laboratories, preparing for instruction in technical laboratories, delivering laboratory instruction, managing laboratory learning, managing student behavior, and maintaining a safe and efficient laboratory.

FOURTH YEAR (“I Group”)

Course # 42: CREATING AN ACTIVE LEARNING ENVIRONMENT

This course takes the instructor deeper into the instructional design processes that make training more successful. Students will learn to apply adult learning principles to the NJATC curriculum. Students will also learn about the instructional design effective instructional strategies for a variety of training situations. Special emphasis will be placed on the design and use of “Active Learning Strategies” in both the classroom and laboratory settings.

Course # 41: DISCUSSION METHODS

A planned discussion led by a trained discussion group leader can be an extremely effective tool for instructing or teaching others how to perform a given set of tasks. However, discussions also can be very useful tools for: gathering data and information; problem-solving; testing comprehension; setting policy and strategy; and of course, changing opinions and individual points of view.

Facilitating or leading a planned discussion touches many skill domains, including: group dynamics; team building; interpersonal communications; active listening; and presentation methods. From the outset, it is important to note that leading an effective discussion involves preparation and advanced planning. For example, initial topic selection and handling is critical to a successful discussion and quite often, requires detailed research into the background of the topic. Another key component of a successful discussion involves preparing solid, thought-provoking questions. Effective discussion leaders recognize the importance of preparing themselves to ask good questions; not only as a means of encouraging group interaction, but also as a tool for keeping the discussion moving and on track.

The intent of this course is to equip all participants with a solid working knowledge of discussion leadership methods and techniques. This course is highly experiential and interactive. In particular, all participants will have multiple opportunities to practice leading discussion groups, as well as functioning as a discussion group participant. Professional educators for this course will focus on instructing participants in the finer points of discussion leadership, but just as important, demonstrate and model these methods and techniques.

ADVANCED PROFESSIONAL EDUCATION TRAINING (“I Group”)

Course # 52: SPECIAL TOPICS IN TRAINING

This Seminar is divided into six (6) specific topic areas, all of which relate to the professionalism and expertise of the trade/skill based educator. The five general topics covered for this class are:

1. Introduce Course and Change Model
2. Managing Change
3. Conflict Management

4. Special Needs Learners
5. Active Training Programs
6. Contemporary Instructional Issues

A typical session begins with an instructor-led discussion of the topic and culminates with student-led case study resolution, practical exercise, seminar type discussion or other evidence of learner skill and ability.

“I Group” participants, except 1st and 2nd Year, must sign-up for a 100 Level Technical Course.

MASTER INSTRUCTOR & TECHNICAL COURSE DESCRIPTIONS

The following are descriptions of the Technical Courses being offered at the 2008 National Training Institute. Participants enrolled in Instructor Training (“I Group”), except 1st and 2nd Year “I Group” participants, **MUST** select a 100 Level Course in addition to their regular Professional Education classes. All “I Group” participants may register for a 300 Level Course as long as it is not conducted from August 3 through August 8.

In 2007, an important shift occurred in the way we provide technical training at our National Training Institute (NTI). While not intended to diminish the importance of technical training, the NJATC believed this directional change was necessary and timely. All of the “I Group” technical training at NTI will be directly related to the curriculum and coursework that our JATC instructors teach. For example, rather than taking a general fire alarm technical class, our instructors will now take “Teaching the NJATC Fire Alarm Installation Course.” Instead of taking a general NEC[®] Code or Safety class, our instructors will now take “Teaching the NJATC Applied Codeology Course” or “Teaching the NJATC Electrical Safety-Related Work Practices – Based on NFPA 70E[®] Course.”

These courses address the relevant technical aspects of the material and, most importantly, utilize the same textbooks and workbooks our instructors teach from and are designed to ensure that the instructor is fully familiar with the learning objectives of each lesson. There is a special emphasis placed upon teaching the “best practices” and other instructor exercises that can be employed to ensure that the learning objectives of the class are sufficiently conveyed.

In addition to this change, in 2007 we also introduced a new NJATC Master Instructor Certification Program. The purpose of the Master Instructor Certification Program (MICP) is to recognize those JATC instructors who have demonstrated a superior technological mastery of specific subject material and have completed the National Training Institute’s Four Year Professional Education program. Several Master Instructor Certifications will be available encompassing all four of our National Apprenticeship curriculums. For those instructors who have previously completed their Professional Education Program, they only need additional coursework in the specific area of their intended certification(s). Technical classes needed to meet the certification requirements can be taken at either NTI, or any of the NJATC Regional or Host classes. It is the NJATC’s sincere hope that collectively, these progressive changes will help ensure that our instructors will be better prepared and more comfortable with the course material they teach in their local JATCs.

Any IBEW member, signatory contractor, or their employee may register for any technical training course.

Technical Training Only Participants (“T Group”) can select either one (1) 200 Level classes or any two (2) 100 Level classes. All “T Group” participants are eligible to enroll in 300 Level classes. Please be sure that any course you select, you have met any prerequisite listed. **NOTE: IF YOU ARE SIGNING UP FOR A COURSE WITH A PREREQUISITE, A COPY OF THE CERTIFICATE FROM THE PREREQUISITE COURSE ALONG WITH YOUR NTI REGISTRATION CONFIRMATION, MUST BE FAXED TO Melissa Parsly at 865/380-9795.** Also, be sure to look at both the course description and the table to verify the exact days that a course is being offered since courses may end at different times throughout the week. *Please note there are several classes that begin on Saturday or Sunday.*

WHAT IS A...

100 LEVEL COURSE?

A 100 Level Course is a course that lasts from 12 - 24 hours. Most 100 Level courses last 16 hours and are offered in four-hour increments Monday, Tuesday, Thursday and Friday. These classes are offered both in the morning and afternoon. When you register for one of these courses, you will be scheduled in either the morning or afternoon session depending on the other class that you are scheduled for. Individuals attending the NTI for technical training only may register for two (2) 100 Level Technical Courses. Individuals registering for **Instructor Training (“I Group”)** or **Advanced Professional Education** MUST register for one (1) 100 Level Course, **except 1st and 2nd Year “I Group” participants.** This 100 Level Course is included in your NTI registration fee. Those attending as **Outstanding Apprentice Graduates (“A Group”)** will be assigned their technical training course and DO NOT select a technical training course.

200 LEVEL COURSE?

A 200 Level Course is a course that lasts from 32-36 hours and is offered Monday through Friday. Individuals registering for 200 Level Courses will only be able to attend that particular course during the NTI week. The only Participants that may register for a 200 Level Course are those participants registered for Technical Training ONLY (“T Group”). “I Group”, “A Group”, and “C Group” **CANNOT** register for a 200 Level Class.

300 LEVEL COURSE?

A 300 Level Course is a Technical Training Course that can last from 4-24 hours. These classes are offered at various times over a two-week period. These courses are offered before and after the week of NTI. Any IBEW member, signatory contractor or their employee may register for any 300 Level Technical Training Course. When registering for any 300 Level Course, be sure to review the course description and table carefully to assure that you have met any prerequisites listed and that there are no time conflicts with any other training that you may be taking. **ALL 300 LEVEL CLASSES HAVE A FEE. ANYONE ENROLLING IN A 300 LEVEL TECHNICAL CLASS MUST PAY THE ASSOCIATED TECHNICAL COURSE FEE IN ADDITION TO THEIR REGULAR NTI REGISTRATION FEE, EXCEPT:** Any participant taking a 300 Level Course that ends prior to Sunday, August 3rd and will not be attending any other NTI event except the Trade Show (You CAN attend the NTI Trade Show at no additional charge), can register as OFF-CAMPUS and pay only the fee associated with the 300 Level Course of their choosing. These participants, attending ONLY a 300 Level Course, DO NOT have to pay the OFF-CAMPUS registration fee, UNLESS they plan to attend the Welcome Reception or any other NTI event other than the Trade Show.

Master Instructor Courses

Third and Fourth Year “I Group” and Advanced Professional Education participants must register for ONE 100 Level Master Instructor Course. “T Group” participants may register for TWO 100 Level courses or ONE 200 Level course.

Course Title	Course #	Days & Hours	Min.	Max.
INSIDE MASTER INSTRUCTOR 100 LEVEL COURSES				
Conduit Fabrication, How to Teach NJATC	T-103	M T R F (16 Hours)	5	20
Hazardous Locations based on the 2008 NEC® TTT	T-107	M T R F (16 Hours)	15	35
Instrumentation and Calibration Basics-Using the Fluke-744 Hart Calibrator	T-109	M T R F (16 Hours)	12	18
Traffic Signal Curriculum – 2 nd Year, How to Teach NJATC	T-125	M T R F (16 Hours)	8	16
INSIDE MASTER INSTRUCTOR 200 LEVEL COURSES				
AC Theory I, How to Teach NJATC	T-201	M T R F (32 Hours)	5	30
AC Theory II, How to Teach NJATC	T-203	M T R F (32 Hours)	5	30
Code Calculations Course, How to Teach NJATC	T-207	M T R F (32 Hours)	15	35
DC Theory, How to Teach NJATC	T-209	M T R F (32 Hours)	5	30
Digital Electronics, How to Teach NJATC	T-211	M T R F (32 Hours)	5	20
Electrical Safety-Related Work Practices based on 70E, How to Teach	T-213	M T R F (32 Hours)	15	50
Fire Alarm Systems Introduction (Hands-On), How to Teach NJATC	T-215	M T R F (32 Hours)	10	32
Instrumentation, How to Teach the NJATC (Fundamentals of)	T-217	M - F (36 Hours)	6	12
(Overcurrent Protection) Codes & Practices 3, How to Teach NJATC	T-225	M T R F (32 Hours)	15	35
Photovoltaic Systems, How to Teach the NJATC Course (Installing)	T-219	M T R F (32 Hours)	8	16
Semiconductors Course, How to Teach NJATC	T-231	M T R F (32 Hours)	5	20
Transformers Course, How to Teach NJATC	T-233	M T R F (32 Hours)	5	30
OUTSIDE LINE MASTER INSTRUCTOR 100 LEVEL COURSES				
Outside Curriculum – 1 st Year Safety/OSHA, How to Teach NJATC	T-113	M T R F (16 Hours)	8	16
Outside Curriculum - AC/DC Theory, How to Teach NJATC	T-111	M T R F (16 Hours)	8	16
Rigging Curriculum, How to Teach NJATC	T-121	M T R F (16 Hours)	8	16
Traffic Signal Curriculum – 2 nd Year, How to Teach NJATC	T-125	M T R F (16 Hours)	8	16
Transformer Applications and Connections, How to Teach NJATC	T-127	M T R F (16 Hours)	8	16
TELECOMMUNICATIONS MASTER INSTRUCTOR 100 LEVEL COURSES				
CCTV Course, How to Teach NJATC Installer/Technician	T-101	Sa M T R F (24Hrs)	6	16
Fiber Optic Certification Course, How to Teach NJATC	T-105	Sa M T R F (24Hrs)	8	16
Telephony, How to Teach NJATC Installer/Technician	T-123	Sa M T R F (24Hrs)	6	14

Master Instructor Courses

Third and Fourth Year “I Group” and Advanced Professional Education participants must register for ONE 100 Level Master Instructor Course. “T Group” participants may register for TWO 100 Level courses or ONE 200 Level course.

Course Title	Course #	Days & Hours	Min.	Max.
TELECOMMUNICATIONS MASTER INSTRUCTOR 200 LEVEL COURSES				
Audio Technology Course, How to Teach NJATC Installer/Technician	T-205	M T R F (32 Hours)	6	16
Local Area Networks Course, How to Teach the NJATC	T-221	M T R F (32 Hours)	6	14
Security Systems Course, How to Teach NJATC Installer/Technician	T-229	M T R F (32 Hours)	6	12
RESIDENTIAL MASTER INSTRUCTOR 100 LEVEL COURSES				
Conduit Fabrication, How to Teach NJATC	T-103	M T R F (16 Hours)	5	20
Residential Fire Alarms and Security Systems Lessons, How to Teach the	T-117	M T R F (16 Hours)	5	20
Residential Code Lessons, How to Teach NJATC	T-115	M T R F (16 Hours)	5	20
Residential Wiring Practices Lessons, How to Teach NJATC	T-119	M T R F (16 Hours)	5	20
RESIDENTIAL MASTER INSTRUCTOR 200 LEVEL COURSES				
AC Theory I, How to Teach NJATC	T-201	M T R F (32 Hours)	5	30
Residential Advanced Technology Lessons, How to Teach NJATC	T-227	M T R F (32 Hours)	5	12

“T Group” Technical Courses (Additional)

“T Group” Participants may register for TWO 100 Level courses or ONE 200 Level course selected from the Master Instructor courses or any of the following Technical courses.

Course Title	Course #	Days & Hours	Min.	Max.
CABLE SPLICING & FAULT LOCATING 100 LEVEL COURSES				
Cable Testing & Fault Locating	T-139	M T R F (16 Hours)	6	12
Introduction to Cable Splicing (NJATC)	T-137	M T R F (16 Hours)	5	12
The Technology of Medium & High Voltage Cable Splicing & Terminations	T-141	M T R F (16 Hours)	6	24
CABLE SPLICING & FAULT LOCATING 200 LEVEL COURSES				
Cable Splicing – Module IV	T-239	M - F (36 Hours)	5	10
SAFETY 100 LEVEL COURSES				
First Aid/CPR & AED TTT	T-149	M T R F (16 Hours)	6	20
Hazardous Locations based on the 2008 NEC® TTT	T-107	M T R F (16 Hours)	15	35
SAFETY 200 LEVEL COURSES				
OSHA 500	T-223	M – F (36 Hours)	15	35

Technical Courses (Additional)

T Group participants may register for TWO 100 Level courses or ONE 200 Level course selected from the Master Instructor courses or any of the following Technical courses.

Course Title	Course #	Days & Hours	Min.	Max.
VOICE, DATA AND VIDEO 100 LEVEL COURSES				
AMP ACT I – Installing Premises Cabling Systems	T-129	M T R F (16 Hours)	6	18
AMP ACT II – Certifying and Troubleshooting Premises Cabling Systems	T-131	M T R F (16 Hours)	5	12
Datacom Cabling Test and Certification TTT (Fluke Network)	T-143	M T R F (16 Hours)	6	18
Fiber Optic Communication Network Design	T-147	M T R F (16 Hours)	6	16
VOICE, DATA AND VIDEO 200 LEVEL COURSES				
AMP ACT I – Installing Premises Cabling Systems TTT *	T-235	M - F (36 Hours)	3	9
Fiber Optic Installation – Hands-On Training for Instructors	T-241	M T R F (32 Hours)	6	30
TS LAN 500 Hands On Fiber Optic Training Course for Local Area	T-243	M - F (36 Hours)	6	12
NECA & TRAINING PARTNER SPONSORED 100 LEVEL COURSES				
Arc Welding Principles, Processes, and Applications (Lincoln Electric)	T-133	M T R F (16 Hours)	5	10
AutoCAD LT 2008 Level I (Ronald A. Williams, Ltd)	T-135	M T R F (16 Hours)	10	20
Distributed Power Systems	T-145	M T R F (16 Hours)	10	30
Test Instruments	T-151	M T R F (16 Hours)	10	30
Understanding and Applying AC Drives	T-153	M T R F (16 Hours)	12	20
Video Production and Multi-Media Presentations	T-155	M T R F (16 Hours)	5	TBD
NECA & TRAINING PARTNER SPONSORED 200 LEVEL COURSES				
Basic Estimating of Electrical Construction (NECA-MEI)	T-237	M T R F (32 Hours)	8	20

300 Level Courses

These special courses are available to All Groups (Be sure to check times for conflicts.) The Registration Fee for these courses are NOT included in your normal NTI Registration Fee. The special fee for a 300 Level course is in addition to your NTI Registration.

Course #	Course Title	Days & Hours	Min./Max.	Normal Price	NTI Special Price
T-301	OSHA 502*	7/31-8/2 (20 Hrs)	15/35	\$395.00	\$350.00
T-303	Coyne Instructor Trainer Refresher*	8/2 Sa (8 Hours)	3/20	\$220.00	\$110.00
T-305	Coyne Pediatric Basic Life Support*	8/3 Su (4 Hours)	3/20	\$220.00	\$110.00
T-307	PowerPoint for Instructional Use*	8/1-8/2 (12 Hours)	15/200	N/A	\$225.00
T-309	AMP ACT I Instructor Update	8/2 Sa (8 Hours)	3/12	N/A	\$195.00
T-311	Craft Certification Performance Evaluation Training	7/31-8/1 (16 Hrs)	10/20	\$150.00	\$125.00
T-313	Craft Certification Performance Evaluation Training	8/9-8/10 (16 Hrs)	10/20	\$150.00	\$125.00

* Prerequisite applies. See Course Description for additional information.

If you are registering for a class that has a prerequisite, the NJATC must have a copy of your applicable completion certificate before you can register for the higher level class.
**Be sure to FAX a copy of your completion certificate for any required course work to:
 Melissa Parsly at 865-380-9795.**

100 LEVEL COURSES

(All 100 Level Courses are 16 Hours unless specified)

- T101 CCTV Course, How to Teach the NJATC Installer/Technician**
PREREQUISITES: NONE **LENGTH: 24 Hours**
This course is designed to prepare students to teach Lessons 1 through 22 of the NJATC Installer/Technician CCTV Curriculum, using the associated NJATC workbook, text, assorted classroom instructional aids and selected lab equipment where required to illustrate and demonstrate specific CCTV systems applications. Topics covered in this course will include basic terminology and definitions, video technology, lenses and optics, camera types and characteristics, signal transmission methods, monitors and displays, recording methods, switchers and multiplexers, video motion detectors, camera mountings and housings, PTZ mechanisms, lighting characteristics, remote monitoring and control, Lessons 15 through 22 are technician level lessons and will be lightly covered to introduce the topics. At the conclusion of this training, it is intended that students will be ready to teach the NJATC Installer/Technician CCTV Curriculum. *Please note this course starts on Saturday for all students, then it will split into AM and PM sessions, M,T, R,F. If you sign up for this course, you must be in attendance on Saturday.*
- T103 Conduit Fabrication, How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 16 HOURS**
The Conduit Fabrication course uses the new 2008 NJATC Conduit Bending and Fabrication text. The class will provide a comprehensive overview of conduit bending and fabrication procedures along with instructional delivery methods. All of the Conduit workbook lessons will be reviewed along with the lab manual exercises. The class will utilize the new NJATC conduit trainer so that the instructor can become familiar with its design and purpose. Also covered in the course is the functionality of the Course Presentation Software. This software allows the instructor to cover the lessons in a presentation format with a multimedia projector. All conduit lessons will be reviewed in this manner.
- T105 Fiber Optic Certification Course, How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 24 HOURS**
This course provides the knowledge and hands-on skills to design, install, test, and certify fiber optic networks the right way using the NJATC Fiber Optic Certification text and workbook. Included are the latest training on standards and technology including ATM & Gigabit Ethernet. This course includes over 50% hands-on training with OTDRs, Power Meters/Light Sources, Microscopes and Continuity Checkers. The hands-on training includes connectorization, cabling handling, splicing and safety. Upon completion of this course, the attendee will be familiar with the installation, design, maintenance and operation of fiber optic systems. *Please note this course starts on Saturday for all students, then it will split into AM and PM sessions, M,T,R,F. If you sign up for this course, you must be in attendance on Saturday.*
- T107 Hazardous Locations based on 2008 NEC[®] Train-the-Trainer**
PREREQUISITES: NONE **LENGTH: 16 HOURS**
This seminar covers the requirements for electrical installations in hazardous (classified) locations. It is primarily based on the provisions set forth in the National Electrical Code (current edition). The material has been developed in the interest of promoting greater understanding and increasing electrical safety for systems in hazardous (classified) locations. This material is ideal for self-study and is also an excellent multimedia program for public presentations and forums. Fundamentals and critical requirements for electrical wiring in hazardous (classified) locations are explained in easily understood language. Hundreds of new and revised color illustrations and photos exemplify the proper use and application of electrical requirements in these locations. *Participants must bring a copy of the 2008 NEC.*
- T109 Instrumentation and Calibration Basics –Using the Fluke-744 Hart Calibrator, How to Teach**
PREREQUISITES: NONE **LENGTH: 16 HOURS**
This hands-on training course will introduce JATC instructors to the Fluke-744 Process Calibrator utilized in the current NJATC Fundamentals of Instrumentation curriculum. Instructors will learn the elements of calibration and maintenance of temperature and pressure transmitters. In addition, instructors will participate

in hands-on classroom exercises that reinforce many of the key Fluke-744 functions and will learn extended functions including limit switch testing, indicator calibration, and advanced documenting features.

T111 Outside Curriculum – AC/DC Theory, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

Teaching the Outside curriculum and not comfortable with the AC and DC theory lessons? This course is for you. This course will review basic theory concepts and how to present them to your students in an easy to understand format. First and Second Year theory lessons will be reviewed and discussed. This course will be taught by an Outside Industry instructor.

T113 Outside Curriculum – 1st Year Safety/OSHA Lessons, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

Safety plays an important part of the Outside Line Construction Industry and is also an important part of the NJATC curriculum. This course will cover the safety and OSHA lessons that are part of the new Outside Line Construction Curriculum and help you as an instructor emphasize the importance of understanding and following all safety rules and regulations. There are many lessons throughout the three-year program, and this course will focus on those lessons presented in the new First Year material. Lesson topics reviewed are: Safety Awareness – On the Job; Safety Meetings; Tail-Board Discussions; First Aid, Safety, and Health; Understanding Electricity; Electrical Hazard Awareness; Energized and Non-Energized Parts; Rubber Gloves and Sleeves, Care and Use; Protective Line Devices, Care and Use; and, Introduction to OSHA.

T115 Residential Code Lessons, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

This train-the-trainer course is offered to introduce local JATC instructors to the proper methods used for teaching the National Electrical Code[®] in residential applications using the NJATC Residential Curriculum and assorted classroom instructional aids. This course concentrates on teaching basic residential code issues using the NEC[®] and the Electrical Systems textbook, accompanied by the 25 lessons in the Residential Code-2 Workbook, which are customarily taught in the Second and Third Years of a Residential Apprenticeship Program as companion lessons to the Residential Wiring Practices lessons. Topics will include specific NEC[®] issues and requirements related to wiring materials and methods, services, calculations, special installations and overcurrent protection.

T117 Residential Fire Alarms and Security Systems Lessons, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

Teaching the NJATC Residential Fire Alarms and Security Systems Lessons train-the-trainer course is offered to introduce Local JATC Instructors to the proper methods used for teaching Residential Fire Alarm and Security Systems using the NJATC Curriculum and assorted classroom instructional aids, all built around the NJATC's Guide to Residential Fire Alarm and Carbon Monoxide Systems and Heathkit's Security, Access Control and Surveillance textbooks. This course concentrates on teaching Residential Fire Alarm and Security Systems using both textbooks, accompanied by the 6 apprentice Fire Alarm Lessons and 6 apprentice and 4 optional or Journeyman Security Systems lessons found in the Third Year of the Residential Curriculum. Topics will range from Residential Fire Alarm and Security System basics, including carbon monoxide warning equipment, to advanced systems like Closed Circuit Television Surveillance Systems and Residential Access Control Systems.

T119 Residential Wiring Practices Lessons, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

This train-the-trainer course is offered to introduce local JATC instructors to the proper methods used for teaching residential wiring using the NJATC Residential Curriculum and assorted classroom instructional aids. This course concentrates on teaching residential wiring using the Electrical Wiring Residential textbook, accompanied by the 24 lessons found in the NJATC Residential Wiring Practices Workbook, which are customarily taught in the Second and Third Years of a Residential Apprenticeship Program as companion lessons to the Residential Code-2 lessons. Topics will include general and specific residential installation practices, including device wiring methods, circuit interrupters, lighting and receptacle branch circuits for specific areas of typical dwelling units, fire alarm and security systems, swimming pools and

spas, service entrance equipment, home automation systems, standby power systems, overcurrent protection, special purpose outlets, and television and telephone systems.

T121 Rigging Curriculum, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

This course will provide the student with an explanation and practical application of rigging vectors and how they are used in the new Outside Line Construction Curriculum. The use of vectors to analyze rigging situations as in the NJATC Outside Lineman course will be covered in detail. You will learn to use vectors to analyze and predict the load tension on structures and equipment of various rigging techniques used in the Outside Line Construction Industry and discuss the rigging hardware/equipment that is used in the First Year Outside/Traffic Signal Curriculum.

T123 Telephony, How to Teach the NJATC Installer/Technician

PREREQUISITES: NONE

LENGTH: 24 HOURS

This course is designed to prepare students to teach Lessons 1 through 14 of the NJATC Installer/Technician Telephony Curriculum, using the associated NJATC workbook, text, assorted classroom instructional aids and selected lab equipment where required to illustrate and demonstrate specific telephony systems applications. Topics covered in this course will include basic terminology and definitions, understanding a telephone system, basic circuitry and wiring, signal types, ISDN, Electronic Key and PBX systems. At the conclusion of this training, it is intended that students will be ready to teach the NJATC Installer/Technician Telephony Curriculum. *Please note this course starts on Saturday for all students, then it will split into AM and PM sessions, M,T, R,F. If you sign up for this course, you must be in attendance on Saturday.*

T125 Traffic Signal Curriculum – 2nd Year, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

This course is designed to help those instructors teaching the new NJATC Traffic Signal curriculum. Whether you are a foreman on a traffic signal project or have never set foot on a traffic signal job, this course will help prepare you to teach the NJATC's new Traffic Signal Curriculum. Focus of this class will be on the First Year job information lessons. These lessons will be covered in detail with plenty of interaction between the instructor and students. Questions on how to best present this material will be answered. This class will be conducted by the individual who wrote most of the lessons, offering a keen insight into the curriculum.

T127 Transformer Applications and Connections, How to Teach the NJATC

PREREQUISITES: NONE

LENGTH: 16 HOURS

This 16-Hour course will teach Linemen and apprentice Linemen what they need to know in order to perform their job effectively. Even though the class is primarily focused on the outside industry, anyone with an interest in teaching transformer theory will benefit from this class. Students will receive an introduction to transformers and its parts and functions and will have the opportunity to build a small transformer in class. Included will be simplified electricity which covers magnetism, AC and DC circuits and electron theory, transformer operation and electrical systems. Also included will be transformer connections, delta, wye, rotation, troubleshooting and floating neutral. Safety tips will be a critical portion of this course. **There will be a final test at the end of the week.**

T129 AMP ACT I – Installing Premises Cabling Systems

PREREQUISITES: NONE

LENGTH: 16 HOURS

This course offers a unique opportunity for Journeymen and apprentices to learn the latest connecting techniques for both copper and fiber premises/network cabling. The course includes an overview of cabling systems, the ANSI/EIA/TIA and ISO/IEC industry standards, cable system administration and documentation, and **actual hands-on termination** exercises for UTP, STP and Fiber cable. This course is approximately **85% hands-on** and is taught using a systems approach instruction method where the students build and test cable assemblies and then learn how the cable assemblies are utilized in a complete cabling system. UTP and STP hands-on termination exercises include assembling CAT 6 UTP and CAT 6 STP links. Optical Fiber hands-on termination exercises include terminating the following connectors: Epoxy SC, ST LightCrimp XTC no epoxy / polish, CORELINK mechanical splice, MTRJ (a small form factor connector),

LightCrimp Plus SC no epoxy / no polish and the LightCrimp Plus LC (a small form factor connector). Tooling will be provided for classroom purposes and each student will receive a course manual and a connector assembly kit for the hands-on section of the course. **Successful completion of the course and course examination will designate the student as an AMP NETCONNECT Registered Installer.** *This course also qualifies the student to receive 14 BICSI CECs towards the renewal of the BICSI Installer or RCDD certification.*

T131 AMP ACT II – Certifying and Troubleshooting Premises Cabling Systems

PREREQUISITES: NONE

LENGTH: 16 HOURS

This course features approximately **75% hands-on training** with the appropriate tools and test equipment. Students will obtain the experience necessary to certify and document UTP/copper and fiber optic cable plants. **Each student will also obtain the experience of troubleshooting common problems with installed premise cable plants.** Students receive a course manual that contains extensive documentation including course notes, copies of the presentation slides, certification exercises, troubleshooting exercises and network system parameter charts. This is a unique opportunity for Journeyman and apprentices to learn how to certify the performance of an installed cable plant and to learn how to troubleshoot them if they do not perform as expected. Successful completion of this course and course examination will designate the student as an **AMP NETCONNECT Registered Certifier and Troubleshooter.** *This course also qualifies the student to receive 14 BICSI CECs toward the BICSI Installer or RCDD certification.*

T133 Arc Welding Principles, Processes, and Applications (Lincoln Electric)

PREREQUISITES: NONE

LENGTH: 16 HOURS

This 16-hour course will provide the necessary information, lesson materials, and demonstration skills for a practical welding program at your Training Center. Safety, stick welding, TIG welding, MIG welding, and Flux-cored welding will be presented with the emphasis on how to present and demonstrate these topics in your own program. A selection of presentation mediums: transparencies, slides, videos, books, and printed handouts will be utilized to present the classroom information. Welding demonstrations and safety practices will be demonstrated for each process. Over half of the class time will be hands-on practice with instruction. Certification requirements will also be addressed.

T135 AutoCAD LT 2008 Level I (Ronald A. Williams, Ltd)

PREREQUISITES: PROFICIENT USE OF WINDOWS

LENGTH: 16 HOURS

This hands-on course is designed to enable the user to effectively use the basic AutoCAD LT functions. Upon completion, you will be familiar with the 2D features of LT, be able to identify its power and limitations, confidently create, edit, manipulate, and dimension CAD drawings. Familiarity with Windows 2000 operating systems is recommended. Topics include: file commands, display commands, CAD tools and set-up, basic drawing commands, editing commands, layers and CAD construction techniques. This is a good course for instructors, Journeymen, and contractors who work with blueprints and need to be skilled in computer aided drafting techniques.

T137 Introduction to Cable Splicing (NJATC)

PREREQUISITES: NONE

LENGTH: 16 HOURS

This is an introductory course into medium voltage Cable Splicing. This course will provide instruction on the different types of cable, specialty tools and materials used in medium to high voltage work (typically 2,000 - 35,000 volts). Cable end preparation is covered and general safety practices will be discussed. This is a hands-on course and all participants will construct hand taped 5-kV and/or 15-kV straight splices and terminations.

T139 Cable Testing & Fault Locating

PREREQUISITES: NONE

LENGTH: 16 HOURS

This course will use a variety of test equipment to test medium-voltage power cables, forecast remaining service-life of the cable and evaluate the cable's condition. Insulation testing of power cable and motors will be reviewed. AC and DC test methods will be covered, including VLF (very low frequency). Beginning with a brief review of power cable construction, students will conduct field tests of underground cables to locate faults using thumpers, hipots, megommeters and TDRs (radar). Ground resistance testing including factors

influencing ground resistance, basic test methods for earth resistance, and how to select proper ground test equipment are also a part of this course.

T141 The Technology of Medium & High Voltage Cable Splicing & Terminations

PREREQUISITES: NONE

LENGTH: 16 HOURS

This course will provide the student with a complete understanding of this technology. The Student will gain a thorough knowledge of the theory and applications of medium voltage termination and splicing of both heat shrink and cold-applied technology. The topics covered will be cable theory, stress in cables, stress at end of cable when shield is removed when terminating, hands-on installation of materials, why cables are spliced and more. There will be various hands-on exercises and periodic tests to determine comprehension level.

T143 Datacom Cabling Test and Certification *Train-the-Trainer* (Fluke Network)

PREREQUISITES: NONE

LENGTH: 16 HOURS

This 16-hour course will help the low voltage trainer effectively deliver the following: Understanding the current TIA 568-B certification standards for copper and fiber, proper testing of copper and fiber cabling systems with a cable tester and OTDR, increasing field productivity by mastering advanced tester diagnostics. This course includes extensive hands-on testing of copper and fiber links with some of the most common certification test tools in the industry, including the DTX Cable Analyzer and OptiFiber OTDR. At the end of the course, the attendees will take a certification exam and receive Certified Cabling Test Technician (CCTT) certificates from Fluke Networks. In addition, a copy of the class content will be provided on CD for each trainer to utilize in his local low voltage program.

T145 Distributed Power Systems

PREREQUISITES: NONE

LENGTH: 16 HOURS

The purpose of this course is to objectively compare solar and renewable power systems with fuel-based distributed power systems. This will be accomplished by: a) providing students with a fundamental understanding of the different systems designs, principles of operation, and applications; b) comparing performance, economic and environmental data, including the benefits of combined heat and power systems; c) assessing the relative strengths, weaknesses and marketability of each type of system; and, d) examining the potential of renewable hydrogen as a replacement for fossil fuels. Data will be presented for reciprocating engines, combustion turbines, microturbines, wind turbines, photovoltaic systems and various types of fuel cells. The workshop will identify technical and economic gaps that need to be addressed by competing energy technology suppliers. It should also help energy planners and decision makers in comparing, evaluating and selecting the distributed power systems that best meet their needs.

T147 Fiber Optic Communication Network Design

PREREQUISITES: BASIC KNOWLEDGE IN FIBER OPTICS & INSTALLATION

LENGTH: 16 HOURS

This 16-hour course is for instructors who currently teach fiber optics or plan to do so in the future. It will provide an education in fiber optic design practices to prepare them for designing fiber optic networks themselves or teaching a program to others using the FOA-developed curriculum which will be provided to each student. The course will consist of classroom presentations and case study examples of network design processes.

T149 First Aid/CPR & AED TTT

PREREQUISITES: NONE

LENGTH: 16 HOURS

This course prepares the student to teach a basic CPR/First Aid training class. After completion of this course, the student will be certified to teach a First Aid/CPR course that has been officially accepted by the U.S. Department of Labor - Occupational Safety and Health Administration (OSHA). This course will cover the essential steps of CPR and basic First Aid procedures for the following: wounds/bleeding, shock, fractures, burns, eye injuries, seizures, drug overdoses, temperature related problems, and many other job related emergencies.

T151 Test Instruments**PREREQUISITES: NONE****LENGTH: 16 HOURS**

This hands-on training course will introduce JATC instructors to a variety of test instruments, their application, functionality, and various troubleshooting techniques. Instructors will learn new techniques and hone exiting knowledge using test instruments on equipment that is covered in the NJATC *Test Instrument Book* and *Test Instruments Applications Manual*. Common test instrument activities will be blended with practical applications and instructional tips to provide a fun, enjoyable skill-building experience. All participants will take home many ideas for teaching test instruments using the latest equipment and curriculum material.

T153 Understanding and Applying AC Drives**PREREQUISITES: NONE****LENGTH: 16 HOURS**

This course teaches the student an overview of AC Drives from basic principles of operation and set-up to a variety of Drives packaging and application possibilities with hands-on labs to experience programming via keypad or PC. Drives issues with motors, load types, braking and noise will be discussed. Drives communications using Ethernet will be discussed and Bluetooth Communications will be demonstrated. PowerPoint presentations along with motor demo cases and a number of different model Drives will be used to teach the function and features commonly used in Drive applications. Students are encouraged to bring their own laptops to use. This is an ideal course for instructors who teach motor control to the apprentice or Journeymen, or anyone who works with AC Variable Speed Drive Equipment.

T155 Video Production and Multi-Media Presentations**PREREQUISITES: NONE****LENGTH: 16 HOURS**

Video can serve as a powerful instructional media to increase interest and training effectiveness. This presentation will provide an overview of fundamental video production procedures and techniques used for developing video clips. Procedures will be demonstrated using a digital video camera, standard desktop computer, and popular software. An emphasis throughout the presentation will be on tips and techniques for producing professional quality video for use in a typical training program lesson. Hands-on activities will include video clip and inserting into a PowerPoint® presentation.

200 LEVEL COURSES**T201 AC Theory I Course, How to Teach the NJATC****PREREQUISITES: NONE****LENGTH: 32 HOURS**

This course uses the NJATC *AC Theory* text. AC Theory is the core of the electrical construction world and all electricians must have a complete understanding of the subject. AC theory is required before the student can study courses such as instrumentation, transformers, etc. Due to the large amount of information, the course is broken down into two courses. This course will provide instructional techniques for the basic topics of AC Theory. Also covered in the course is the functionality of the Course Presentation Software. This software allows the instructor to cover the lessons in a presentation format with a multimedia projector. All AC Theory lessons will be reviewed in this manner.

T203 AC Theory II Course, How to Teach the NJATC**PREREQUISITES: NONE****LENGTH: 32 HOURS**

This course uses the NJATC *AC Theory* text. AC Theory is the core of the electrical construction world and all electricians must have a complete understanding of the subject. AC theory is required before the student can study courses such as instrumentation, transformers, etc. Due to the large amount of information, the course is broken down into two courses. This course will provide instructional techniques for the basic topics of AC Theory. Also covered in the course is the functionality of the Course Presentation Software. This software allows the instructor to cover the lessons in a presentation format with a multimedia projector. All AC Theory lessons will be reviewed in this manner.

- T205 Audio Technology Course, How to Teach the NJATC Installer/Technician**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
This is a combined course designed to prepare students to teach Lessons 1 through 9 of the NJATC Installer/Technician Paging and Voice Evacuation Systems Curriculum and Lessons 1 through 14 of the NJATC Installer/Technician Sound Reinforcement Curriculum using the associated NJATC workbook, text, assorted classroom instructional aids and selected lab equipment where required to illustrate and demonstrate specific paging and sound reinforcement applications. Topics covered in this course from paging will include basic terminology and definitions, introduction to distributed sound systems, constant voltage and self amplified systems, mixers, and amplifiers, telephone and VoIP interface devices, speaker and horn installation, design and layout, applicable NEC requirements and sound masking. The sound reinforcement portion will expand on the role of sound system reinforcement and include topics on how sound is measured, sound indoors and outdoors, how to read and interpret specifications, microphones, amps, preamps, mixing consoles, loudspeakers, signal processing equipment, cabling, test equipment, and an overview of MIDI and sound synchronization. At the conclusion of this training, it is intended that students will be ready to teach both the NJATC Installer/Technician Paging and Voice Evacuation Systems Curriculum and the NJATC Installer/Technician Sound Reinforcement Curriculum.
- T207 Code Calculations Course, How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
The object of this course is to gain a more complete understanding of the NEC by preparing and using detailed calculations in accordance with the 2008 National Electrical Code. Specific training methods used in presenting the NEC material will be stressed during the presentations. The course will showcase the new 2008 NJATC textbook and Instructors Guide for the NJATC Code Calculations based on the 2008 NEC.
Note: A battery-operated scientific calculator, notebook, writing material and highlighter is recommended. Participants must bring a copy of the 2008 NEC®.
- T209 DC Theory Course, How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
This course uses the new NJATC *DC Theory* textbook. This class is designed to help instructors understand DC Theory and to gather instructional delivery methods. DC Theory is arguably one of the most important subjects an apprentice will study throughout the apprenticeship and is also theory that is used on a daily basis. This course will provide the instructor with the knowledge to present DC Theory thoroughly in the classroom. The course will cover each lesson and all lab experiments associated with the lesson. Also covered in the course is the functionality of the Course Presentation Software. This software allows the instructor to cover the lessons in a presentation format with a multimedia projector. All DC Theory lessons will be reviewed in this manner. This course will also cover the NJATC errata process and will explain how to use additional tools on the NJATC website.
- T211 Digital Electronics Course, How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
This course uses the NJATC textbook on *Digital Electronics*. The book includes real-world examples along with detailed theory. This class is designed to help instructors understand Digital Electronics and to gather instructional delivery methods. Today, Digital Electronics is replacing nearly everything that use to be based on analog electronics. This course will provide the instructor with the knowledge to present Semiconductors thoroughly in the classroom. Also covered in the course is the functionality of the Course Presentation Software. This software allows the instructor to cover the lessons in a presentation format with a multimedia projector. All Digital Electronics lessons will be reviewed in this manner.
- T213 Electrical Safety-Related Work Practices Based on 70E, How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
More and more programs and contractors are reporting an increasing trend of customers and project managers requiring 70E training for electrical workers. This course is intended for instructors teaching the NJATC's Electrical Safety-Related Work Practices based on 70E curriculum, Third Year Inside instructors, those looking to master the NJATC's safety-related curriculum, as well as those looking for a greater understanding of a wide range of electrical safety-related topics. The course will cover key concepts

contained in the *NJATC's Electrical Safety-Related Work Practices based on 70E* textbook and associated curriculum and the manner in which these lessons should be covered with students. Although not provided, the PowerPoint® CD (S444CD) and NJATC Course Presentation Software (A3CDK) will be demonstrated and used as part of this course.

Participants must bring a copy of the 2004 edition of NFPA 70E with them.

- T215 Fire Alarm Systems Introduction (Hands-On), How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
This course is intended to prepare students to instruct NJATC Fire Alarm Systems Startup. The course is designed to closely follow NECA 305 and prepare students/instructors for field installation. At the conclusion of this training, it is intended that students have knowledge of installation, basic troubleshooting and programming of fire alarm controls and field devices.
- T217 Fundamentals of Instrumentation Course, How to Teach the NJATC**
PREREQUISITES: UNDERSTANDING & KNOWLEDGE OF THE FLUKE 744 **LENGTH: 36 HOURS**
This course format includes classroom instruction and a high level of participant-interactive exercises. Exercises involve the complete step-by-step process of the progressions needed to complete the installation and calibration of measurement devices to applicable standards utilized in the Instrument and Controls (I&C) field of work. Classroom participation includes lesson objectives intended to develop the participant's working knowledge of measurement and control concepts, measurement devices, and control fundamentals. Interactive computer based training (CBT) aids, PowerPoint® presentations, and lesson plans are presented to the participant as instructional aids for classroom participation in their respective Training Center. This course will present the 2nd edition of the NJATC textbook, *The Fundamentals of Instrumentation* with additional subject matter.
- T219 Installing Photovoltaic Systems Course, How to Teach the NJATC**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
This 32-hour course is intended for instructors teaching the NJATC course Installing Photovoltaic Systems, and provides an overview of curriculum materials including course textbook, student workbook, lab manual, instructor guide and presentation materials. The course format includes classroom instruction and hands-on interactive exercises, as well as methods to evaluate course instruction and student learning objectives. Lesson plans in the workbook parallel chapters in the text, and cover fundamentals of PV systems and equipment, and code-compliant installation requirements. Sample lab exercises cover variations on equipment and procedures that are used to meet learning objectives. Emphasis is also placed on how to achieve National Instructor and Practitioner Certification in the field.
- T221 Local Area Networks Course, How to Teach the NJATC Installer/Technician**
PREREQUISITES: NONE **LENGTH: 32 HOURS**
This course is designed to prepare students to teach Lessons 1 through 30 of the NJATC Installer/Technician Local Area Networks Curriculum, using the associated NJATC workbook, text, assorted classroom instructional aids and selected lab equipment where required to illustrate and demonstrate specific telephony systems applications. Topics covered in this course will include basic terminology and definitions, Ethernet basics, OSI model, networking PCs, security, network operating systems, legacy and new technologies and topologies, TCP/IP, IP addressing, protocols, DSL, wireless, RAID and basic troubleshooting. At the conclusion of this training, it is intended that students will be ready to teach the NJATC Installer/Technician Local Area Networks Curriculum.
- T223 OSHA 500**
PREREQUISITES: OSHA 30 HR CONSTRUCTION CARD OR EQUIVALENT **LENGTH: 36 HOURS**
More and more programs and contractors are reporting an increasing trend of customers and project managers requiring OSHA cards to work on projects. This course prepares and authorizes instructors to conduct OSHA 10-Hour or OSHA 30-Hour construction courses and issue OSHA 10-Hour or OSHA 30-Hour cards to their students. During the comprehensive coverage of the material, including OSHA's requirements for course content, instructor-friendly audio-visual material and NJATC-developed curriculum and lesson plans are featured.

T225 (Overcurrent Protection) Codes & Practices-3 Course, How to Teach the NJATC**PREREQUISITES: NONE****LENGTH: 32 HOURS**

This course is intended for instructors teaching Code and Practices-3, Third Year Inside instructors, those looking to master the NJATC's Code-related curriculum, as well as those looking for a greater understanding of a wide range of overcurrent protection-related topics. The course will cover key overcurrent protection and electrical safety concepts contained in Code and Practices-3 and the manner in which these lessons should be covered with students. Key topics include overcurrents, overload, short circuits, protective devices, current limitation, component protection, conductor protection, motor circuit protection, transformer protection, selective coordination, electrical safety and much more. In addition, although not provided, the Overcurrent PowerPoint® CD (J233CD) and NJATC Course Presentation Software (A3CDK) will be demonstrated and used as part of this course.

Participants must bring a copy of the 2008 NEC®.

T227 Residential Advanced Technology Lessons, How to Teach the NJATC**PREREQUISITES: NONE****LENGTH: 32 HOURS**

This course is offered to introduce local JATC instructors to the proper methods used for teaching advanced residential systems using the NJATC curriculum, assorted classroom instructional aids and selected lab equipment where required to illustrate and demonstrate specific advanced residential systems applications. This course concentrates on teaching Residential Advanced Technology Systems using Heathkit's® series of Residential Advanced Technology Systems textbooks (*Residential Cabling Technologies, Residential Audio and Video Systems, Security, Access Control and Surveillance, Automating and Integrating Residential Systems*) accompanied by the 29 lessons found in the NJATC Residential Advanced Technology Workbook. These are the advanced residential technology lessons that are customarily taught in the Third Year of a Residential or Installer/Technician Apprenticeship Program.

T229 Security Systems Course, How to Teach the NJATC Installer/Technician**PREREQUISITES: NONE****LENGTH: 32 HOURS**

This course is designed to prepare students to teach Lessons 1 through 15 of the NJATC Installer/Technician Security Systems Curriculum, using the associated NJATC workbook, text, assorted classroom instructional aids and selected lab equipment where required to illustrate and demonstrate specific security and access control systems applications. Topics covered in this course will include basic terminology and definitions, security systems overview, magnetic contacts, motion sensing, glass break sensors, control panels and key pads, security system design, introduction to access control; access cards, codes and biometrics; doors, gates, turnstiles and their locking mechanisms; sensor technology, computers and communication and EAC system design. At the conclusion of this training, it is intended that students will be ready to teach the NJATC Installer/Technician Security Curriculum.

T231 Semiconductors Course, How to Teach the NJATC**PREREQUISITES: NONE****LENGTH: 32 HOURS**

This course uses the NJATC *Semiconductors* text. This class is designed to help instructors understand Semiconductors and to gather instructional delivery methods. Today, semiconductor electronics is the backbone in nearly every electronic device we use. This course will provide the instructor with the knowledge to present Semiconductors thoroughly in the classroom. Also covered in the course is the functionality of the Course Presentation Software. This software allows the instructor to cover the lessons in a presentation format with a multimedia projector. All Semiconductor lessons will be reviewed in this manner.

T233 Transformers Course, How to Teach the NJATC**PREREQUISITES: NONE****LENGTH: 32 HOURS**

The Transformer course uses the NJATC *Transformers Principles and Applications* text. This text and new workbook will enter the curriculum in 2008. This course provides a comprehensive overview of transformer operations, maintenance, installation, and troubleshooting. All curriculum lessons will be reviewed along with the supplemental CD that is included with the text. Instruction delivery methods and techniques will also be covered. Topics from the book includes: Transformer Connections, Harmonics, Power Generation/Distribution, Reactors, Isolation Transformers, Autotransformers, Buck-Boost Transformers,

Maintenance, and Troubleshooting. Also covered in the course is the functionality of the Course Presentation Software. This software allows the instructor to cover the lessons in a presentation format with a multimedia projector. All Transformer lessons will be reviewed in this manner.

T235 AMP ACT I (AN AMP ACTSM COURSE) *Train-the-Trainer (TYCO)*

PREREQUISITES: AMP ACT I

LENGTH: 36 HOURS

This course covers termination and installation practices according to the TIA/EIA Standards, cable pulling and handling, installation issues such as rough in of closets, boxes and outlets, administration issues such as documentation and labeling. Students will receive information on tooling requirements and student materials required to facilitate the course at their local JATC Training Center. Each TTT student will receive a student course manual, an instructor manual with lesson plans and all of the visual aids (overhead slides) required to conduct the course.

T237 Basic Estimating of Electrical Construction (NECA-MEI)

PREREQUISITES: NONE

LENGTH: 32 HOURS

This course is intensive classroom instruction in the fundamentals of estimating electrical construction. It is for those with little or no experience in estimating or those seasoned estimators looking to sharpen their skills. Materials include textbook, *Manual of Labor Units*, reference books, sample drawings, and specification and worksheets for each student. This course is a must for those who find themselves frustrated by the current bid market and continue to question their efforts in compiling a “competitive” bid. The principles taught will help you eliminate careless mistakes which cost your company its very existence. **Note: The following items are necessary and should be brought by each attendee of this course: one engineer scale, one architect scale, rotameter with 1/4" and 1/8" scale, counter, calculator, and a set of colored pencils or highlighters.**

T239 Cable Splicing – Module IV

PREREQUISITES: NONE

LENGTH: 36 HOURS

Module IV covers termination and splice kits. The course presents information on 11 different types of cable splices and termination kits used in the field today. Heat shrink, cold shrink, gel products and molded products are used and studied. 3M and Raychem are the manufacturers materials used in these lessons.

T241 Fiber Optic Installation – Hands On Training for Instructors

PREREQUISITES: NONE

LENGTH: 32 HOURS

This 32-hour course is for instructors who currently teach fiber optics or plan to do so in the future. It will provide an education in fiber optic installation practices as well as extensive labs to develop skills in installation practices and better understand how to teach them. It will also prepare them for the FOA CFOT certification exam and certification as an FOA instructor. The focus will be on preparation for teaching apprenticeship or Journeyman classes using the complete FOA curriculum they receive as part of the course or any other curriculum they choose.

T243 TSLAN 500 Hands-On Fiber Optic Training Course for Local Area Networks

PREREQUISITES: NONE

LENGTH: 36 HOURS

This is a five-day hands-on course that prepares craftsmen for all aspects of fiber optic cable installation in a local area network environment. Both multimode and single-mode fiber types are covered. Cable placement, fusion and mechanical splicing, cable termination (connector installation and pigtail splicing), and acceptance testing are taught with extensive hands-on practice. Students build, test, and troubleshoot complete single-mode and multimode systems in this class. Also covered is the use of equipment, hardware and procedures pertaining to building distributed and campus applications.

300 LEVEL COURSES

- T301 OSHA 502**
PREREQUISITES: OSHA 500 **COST: \$ 300.00**
DATES: 7/31 – 8/2/08 **LENGTH: 20 HOURS**
 This course is for anyone who holds a current OSHA 500 authorization and wants to meet their upgrade requirement. In addition to now including Disaster Response content, this course emphasizes the recent changes to OSHA 29 CFR Part 1926 Construction Standards and updates on OSHA policies and procedures. **Participants must hold a current OSHA 500 card to take this class.**
- T303 Coyne Instructor Trainer Refresher** **(Coyne First Aid)**
PREREQUISITES: CPR/First Aid **COST: \$110.00**
DATES: 8/2 **LENGTH: 8 Hours**
 The all new course materials incorporate the latest International Guidelines for Cardiopulmonary Resuscitation, public access defibrillation, and our new teaching methodology. The first aid section has also been updated. Due to these extensive improvements, all instructor trainers who have not yet been updated in the new protocols are encouraged to attend.
- T305 Coyne Pediatric Basic Life Support** **(Coyne First Aid)**
PREREQUISITES: CPR/First Aid **COST: \$110.00**
DATES: 8/3 (8-12 noon) **LENGTH: 4 Hours**
 This course is directed towards providing basic life support to children (infants - 12 years of age). This course takes approximately 4 hours and is a continuation of the CPR/First Aid training provided by Coyne First Aid. Every program should have a trainer qualified to teach pediatric basic life support.
- T307 PowerPoint® for Instructional Use**
PREREQUISITES: BASIC COMPUTER KNOWLEDGE **COST: \$225.00**
DATES: 8/1 & 8/2 **LENGTH: 12 HOURS**
 This course is for individuals who have basic computer knowledge, but need to sharpen PowerPoint skills for instructional use. PowerPoint® can help you organize, powerfully illustrate, and professionally deliver your ideas. This course will explore the usefulness and techniques of PowerPoint® in the instructional setting. Some of the course components are working with templates, multi-media, office suite, using toolbars, automations and styles, and how to build an interactive presentation.
- T309 AMP ACTSM I – Installing Premises Cabling Systems Instructor Update (TYCO)**
PREREQUISITES: AMP ACTSM I Train-the-Trainer **COST: \$195.00**
Dates: 8/2 (1 day class) **LENGTH: 8 Hours**
 This course is for all AMP ACTSM I instructors that have not taught the course in the past year. The instructor is brought up to date on the entire course lesson plan. Instructors receive a new instructor's manual, lesson plan, a set of the course slides on a CD, and many helpful hints on how to make their instruction just as effective and informative as possible. This is an 8-hour, one-day class.
- T311 & T313 Craft Certification Performance Evaluation Training**
PREREQUISITES: NONE **COST: \$150.00**
(T311) Dates: 7/31 (1:00 p.m. – 5:00 p.m.) – 8/1 (8:00 a.m. – 5:00 p.m.) **LENGTH: 12 Hours**
(T313) Dates: 8/9 (8:00 a.m. – 5:00 p.m.) – 8/10 (8:00 a.m. – 12:00 p.m.)
 This 1-½—Day/12-Hour Training will prepare individuals to perform the Craft Certification Incremental (Level 1-5) Performance Evaluations, as well as the 4-Hour (Level 6) Performance Evaluation. Hands-On Evaluations are used to evaluate an individual's skills in electrical system layout and installation. The course focuses on the processes necessary to perform a satisfactory performance evaluation and will provide certification to individuals who need to perform these evaluations. After completing this course, the only additional step an individual will need to be able to conduct evaluations will be to document their Certification Booth through the submission of the Booth Verification Form and submission of specific digital documentation photographs of their completed booth(s). This Class is NOT for administering the written Craft Certification Exams.

GRADUATION CEREMONY

MEMBERS OF THE 2008 GRADUATING class are required to wear **appropriate attire** to the Graduation Ceremony (coat and tie for the men, semi-formal for the women). A coat and tie will be provided for the yearbook picture at registration. Please Remember - **NO COAT, TIE, DARK SOCKS, AND DRESS SHOES AT GRADUATION---NO DIPLOMA!**

PHOTO SESSIONS

ONLY GRADUATING PARTICIPANTS of the Institute are to have their individual picture taken.

ALL OTHER PARTICIPANTS will have their pictures taken in their individual groups.

GROUP PHOTO

We will take the group photo, including family members, at the Knoxville Civic Auditorium on Sunday evening 8/3/08 during the Opening Ceremony. Buses will start transporting participants from the class areas and hotels at 5:00 p.m. to the Knoxville Civic Auditorium.

2008 NTI Tours and Activities

Monday, August 4

A Shopper's Paradise (Day Trip for Family)

Enjoy a fun-filled day of shopping in the outlets of Sevierville! The Tanger Five Oaks Outlet Mall will provide you with all the shops and bargains you could dream of. You will be provided with coupons and a full listing of the hundreds of stores in the outlet, but don't forget to wear comfortable shoes. Enjoy lunch in the several restaurants and cafes located throughout the outlet mall area.

Depart: 9:00 a.m.

Return to Campus: 4:00 p.m.

Meal: on own

www.seviervillemall.com/stores/fiveoaks/stores.htm

\$14.00/person

Minimum: 10 People

Maximum: Unlimited

Tennessee Smokies Baseball (Evening Trip available for ALL Participants)

Share in the excitement of professional baseball as the Tennessee Smokies, Class AA affiliate of the Chicago Cubs, take on the Carolina MudCats, the AA affiliate of the Florida Marlins, at the Smokies Park. A night at the ballpark is sure to provide a relaxing evening with baseball, beer, hot dogs, and great fellowship with your Union brothers.

Buses depart from Andy Holt Apartments at 6:15 pm and return at approximately 10:30 pm.

Depart: 6:15 p.m.

Return to Campus: 10:30 p.m.

Meal: dinner on your own, ballpark has concessions

www.smokiesbaseball.com

\$20.00/person

Minimum: 10 People

Maximum: Unlimited

Dixie Stampede (Evening Trip available for ALL Participants)

Prepare to be dazzled by the extravagant Dixie Stampede! With 32 horses, riding ostriches, beautiful Southern belles, valiant heroes, trick riders and dozens of other performers, its easy to get caught up in the excitement of the Old South, especially in the hilarious north-south rivalry! You will be served a delicious meal that's as big as the show itself while seated in the huge 35,000 square foot indoor arena. Dinner has never been this much fun!

Depart: 6:30 p.m.

Return to Campus: 11:00 p.m.

Meal: snacks provided on bus, meal provided during show at 8:30 p.m.

www.dixiestampede.com/pigeonforge

\$38.00 adults (12+)

\$30.00 children

Tuesday, August 5

Genealogical Workshop “Researching Your Family History: Genealogy on the Internet” (Day Trip for Family)

George K. Schweitzer, PhD, ScD will be presenting this informative and interesting course about ways to uncover your history and find out more about your family's past! This workshop will be held at the East Tennessee Historical Society Center, participants will use an individual computer to learn to explore the seven major genealogical sites.

Depart: 10:30 a.m.

Return to Campus: 3:00 p.m.

Meal: there will be a one-hour break in the workshop for lunch on your own downtown

www.east-tennessee-history.org

\$10.00/person

Minimum: 5 People

Maximum: 23 People - registration is limited to 23 people (due to classroom size)

Tennessee Smokies Baseball (Evening Trip available for ALL Participants)

Share in the excitement of professional baseball as the Tennessee Smokies, Class AA affiliate of the Chicago Cubs, take on the Carolina MudCats, the AA affiliate of the Florida Marlins, at the Smokies Park. A night at the ballpark is sure to provide a relaxing evening with baseball, beer, hot dogs, and great fellowship with your Union brothers. Buses depart from Andy Holt Apartments at 6:15 pm and return at approximately 10:30 pm.

Depart: 6:15 p.m.

Return to Campus: 10:30 p.m.

Meal: dinner on your own, ballpark has concessions

www.smokiesbaseball.com

\$20.00/person

Minimum: 10 People

Maximum: Unlimited

Star of Knoxville Riverboat Cruise (Evening Trip available for ALL Participants)

Take pleasure in an evening cruise aboard the Star of Knoxville! Enjoy a delicious dinner on board this authentic stern wheel riverboat as the beautiful lights of Knoxville gently pass by. A cash bar is available. Don't miss the boat – it begins boarding at 6:30 pm and departs the dock promptly at 7:00 pm.

Depart: 6:15 p.m.

Return to Campus: 9:30 p.m.

Meal: meal provided during cruise

www.tnriverboat.com

\$45.00/person

Minimum: No Minimum

Maximum: 200 People

Wednesday, August 6

Gatlinburg (Day Trip available for ALL Participants)

Gatlinburg, nestled in the heart of the Smokies, is a tourist's delight! You're sure to be amazed at Ripley's Believe It or Not, Ripley's Aquarium, or the Guinness World Records Museum. You can see views of the Smokies found nowhere else from atop the Space Needle or the Sky Lift. If you like to shop, interesting specialty stores, galleries, and arts and crafts shops provide a unique shopping experience. Restaurants offering hundreds of food choices and atmospheres, from fast food to sedate and cozy, await your visit. Gatlinburg's system of free Trolleys will allow you to experience the town with relative ease and our Motorcoaches to Knoxville will be located at the main Trolley terminal in the center of town. All of our Motorcoaches will depart for the return trip to Knoxville from Gatlinburg's main Trolley terminal at the Ripley's Aquarium at the times listed.

Depart: 12:30 p.m. **Return to Campus:** 8:15, 11:30 p.m.

Meal: snacks provided on bus, lunch and dinner on own

www.gatlinburg.com

\$19.00/person

Minimum: 10 People

Maximum: Unlimited

Pigeon Forge (Day Trip available for ALL Participants)

Action Packed Pigeon Forge has an activity for everyone. From one of the nation's only wind tunnels available for indoor skydiving, to the go-cart motor tracks, along with the many musical and comedy shows performed in the theaters. There are dozens of restaurants offering many kinds of dining choices. Then of course there are the factory outlet stores which Pigeon Forge is best known, all located within three different outlet malls around town. The Pigeon Forge Trolley have a twenty-five cent fare and travel to all points of the town. All of our Motorcoaches will depart for the return trip to Knoxville from Pigeon Forge's main Trolley terminal at Patriot Park at the times listed.

Depart: 12:30 p.m. **Return to Campus:** 8:15, 11:30 p.m.

Meal: snacks provided on bus, lunch and dinner on own

www.mypigeonforge.com

\$19.00/person

Minimum: 10 People

Maximum: Unlimited

Dolly's Splash Country (Day Trip available for ALL Participants)

Twist your way down a turbo slide, relax along a lazy river, or just soak up the rays at Dolly's Splash Country. There's something for everyone in the 25-acre water park, from Mountain Scream to Mountain Waves, Wild River Falls to Little Creek Falls and everything else in between. Be sure to wear your bathing suit and prepare to get soaked!

Depart: 12:30 p.m. **Return to Campus:** 7:15 p.m.

Meal: on own (onsite restaurants)

www.dollywoodssplashcountry.com

\$46.00 (12+)

\$40.00 children (4 to 11)

Dollywood (Day Trip available for ALL Participants)

Dolly Parton's theme park brings to life the fun and folklore of the Smoky Mountains! With over 30 exciting rides and attractions, over 40 performances daily, dozens of master craft showcases, plus over 250,000 flowers and the natural beauty of the Smokies, you are guaranteed a unique and satisfying experience. There is definitely something special for everybody and always something new to discover!

Depart: 12:30 p.m.

Return to Campus: 8:15 p.m.

Meal: a \$8 meal voucher for inside Dollywood is included, dinner is on own

www.dollywood.com

\$59.00 (12+)

\$51.00 children (4 to 11)

Thursday, August 7**West Town Mall (Day Trip for Family)**

West Town Mall is admired for its 1,334,000 square feet of shopping paradise, with five major department store anchors and 150 total stores, 36 which are exclusive to the Knoxville market. Patrons drive for miles to make West Town Mall their destination for a premium and successful day of shopping. Enjoy retail therapy, pamper yourself and take in a movie all in one day. Numerous hair and nail salons and cosmetic studios allow customers to escape from life's stressful situations. West Town's nine-screen stadium seating theatre features state-of-the-art Dolby digital sound and displays Hollywood's latest releases in style. Satisfy your hunger and curb your sweet tooth at our full service restaurant, Ruby Tuesday, or over 20 different specialty cuisines in the Mall Food Court.

Depart: 9:30 a.m.

Return to Campus: 3:00 p.m.

Meal: lunch on own

<http://www.simon.com/mall/default.aspx?ID=202>

\$14.00/person

Minimum: 10 People

Maximum: Unlimited

NTI Graduation will be at 6:00 p.m. at the Knoxville Civic Auditorium with Dinner and a Concert to follow (indoors) at the Knoxville Coliseum. (More information to follow.)

**Technical Course
cancellations will be
on June 20th if minimum
enrollment has not been met.**