



**Creating Tomorrow's
Lineman Apprentice**



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Mission

American Lineman Institute will be a collaborative learning institution that will prepare its students for entrance into a journeyman lineman apprentice program.

Role in a Successful Career

Pre-apprenticeship training is a great way for participants to:

- Explore and learn about the Journeyman Lineman career
- Qualify to meet the minimum standards for selection to a Registered Apprenticeship program
- Benefit from classroom and technology-based training
- Get a start on career-specific training with viable career pathway opportunities
- Build your knowledge and work-readiness skills employers desire
- Advance into a Registered Apprenticeship program





Administration

Michael Merrell, Jr.

President

After graduating from Cornell University with a degree in Mechanical & Aerospace Engineering, Michael Merrell worked for the US Navy as a DoD civilian as well as for the US Air Force as a contractor. He then entered the commercial world and worked for Tyco Electronics in their California manufacturing plants. Michael then returned to Cornell University where he earned an MBA with a focus on operations and general management. After a couple years doing consulting work and a short stint as COO of a healthcare organization, Michael joined the outside electrical field in 2013. He has been with American Lineman Institute since its inception.

Rebecca “Bec” Reigns

Executive Director

With over fifteen years of experience in the construction training field, Bec Reigns manages the everyday operations of the American Lineman Institute. Bec started her training career as an Apprentice Instructor for the Joint Apprenticeship Training Council where she was responsible for developing curriculum, managing community involvement projects, and hands-on skill development. She has worked her way up in the training arena while simultaneously building her field experience. In 2008, Bec became the training director for the NM Finishing Trades Institute where she supervised the instructors as well as the administrative personnel. She joined American Lineman Institute shortly after its inception.

Joseph Bizzell

Director of Training and Safety

After graduating from high school, Joseph Bizzell joined the US Navy and served as a Submarine Diver. After serving his country, Joe returned to New Mexico where he worked in outside power in his family’s business. After five years working in the industry with his family, Joe started his own company focusing on underground power distribution where he managed the everyday operations. After selling his company, he returned to his family’s business where he worked for five years. At the end of that stint, Joe founded another company in the outside power construction field – this time focused on overhead and underground power distribution and transmission. Joe has also served 8 years on the New Mexico State Apprenticeship Council. He has been with American Lineman Institute since its inception.



Instructors

Every instructor at American Lineman Institute has extensive experience both working in the field and in the training arena. Every instructor has been chosen specifically because of their knowledge, attitude, experience, training ability, and willingness to help the students. All instructors have extensive experience in distribution, transmission, and substation construction, maintenance, and repair. They have worked with investor-owned utilities, cooperatives, and large private customers to provide quality service.

Rodney Garcia

36 Years in the Lineman Field

- IBEW Member since 1984
- NCCCO Crane Certification
- Hazardous Materials and MSDS Trained
- Confined Workspace Certified
- Bare-Hand Certified, Extra High Voltage
- Safety Representative Trained

Allan Jameson

45 Years in the Lineman Field

- IBEW Member since 1973
- Specialized in Substation Construction
- Certified Welder
- Bare-Hand Certified
- CPR / First Aid Instructor
- Developed Man Hole Rescue Procedures

Robert Branchal

34 Years in the Lineman Field

- Apprentice Instructor
- Continuing Education Instructor
- Quality Control Specialist
- Safety Certified Consultant
- Oversaw crew visits for Apprentices

Jack Gonzalez

27 Years in the Lineman Field

- NJATC Apprentice Instructor
- OSHA 10 T&D Instructor
- NIT Instructor Trained
- Coyne CPR / First Aid Instructor



Objective

American Lineman Institute is built with one goal in mind: to create graduates who are ready to enter a certified apprenticeship training program. Our graduates will have the skills and knowledge to succeed in an apprenticeship program and then continue on to a long and rewarding career as a journeyman lineman.

Successful graduates will be able to

1. Understand how electrical distribution and transmission systems work
2. Identify and follow safe work practices
3. Demonstrate hands-on skills that are required for a journeyman lineman apprentice
4. Show a can-do attitude that will help them work with others
5. Effectively interview and join an apprenticeship program

Completion Criteria

To complete the program at American Lineman Institute, students will have to excel in their coursework, field skills, overall attitude, and attendance. In addition, they must have a Class A CDL with an Airbrake Endorsement.

Coursework

Students must maintain an average score of at least 70% in all courses

Field Skills

Students must show that they are competent in all required field skills. Competency will be judged based on the instructors opinion and will be signed-off when completed.

Overall Attitude

All students are expected to show a positive attitude throughout their training program. Students who show a poor attitude will need to meet with the Executive Director to determine their suitability for this program and career field.

Attendance

Students who are absent for more than five days will be dismissed from the program. Excused absences are extremely rare and are at the discretion of the Executive Director. Any student with an excused absence must show that they have adequately mastered the missed lesson within one week of the absence. Lateness will also not be tolerated. Less than fifteen minutes late will count as ½ of an absence; any later than 15 minutes will count as an absence. If there are issues with attendance or tardiness, attendance may be taken more than once per day at the discretion of the instructor.



If a student has specific issues that are causing excessive absences, they will be required to discuss a leave of absence with the Executive Director. No leave of absence is guaranteed and will be granted at the discretion of the Executive Director.

Class A CDL

Each student must show proof prior to graduation that they have obtained a Class A CDL with an Airbrake Endorsement. The student must provide the original and a copy of the license to their instructor to earn the instructors sign-off. The copy will be kept in the student's file while the original will be returned to the student.

Grading System

Coursework

90% -100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
59% & Below	F

Field Skills

All Field Skills are assessed on a Pass / Fail basis. A student must achieve a Pass on all field skills in order to graduate.

Overall Attitude

A positive attitude is expected of all students; any student who continually has attitude issues will speak with the Executive Director to see if there is a solution. If no solution is found and the student cannot correct their attitude, that student will not graduate.

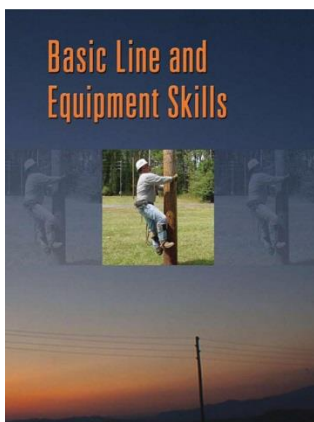
Tests and Assignments

Tests will be performed at the end of each course. Students who will miss an exam must make arrangements with their instructor prior to the missed exam and must complete the make-up exam no more than 3 days after the scheduled exam. Assignments that are turned in late will not be accepted and will count as a zero.

Coursework

The classroom courses are intended to introduce students to the basics of electrical line work. They are also intended to prepare the students for further instruction in each field at the next stage.

Basic Line and Equipment Skills



Basic Line and Equipment Skills assumes the reader has no background in line work, and introduces the knowledge and skills required to become a power lineman. Students who complete this material will acquire basic technical and climbing skills and be qualified for further training by an electric utility or contractor. Or they might learn that line work is not what they want as a career. The book covers basic electricity, truck tools, materials used in overhead distribution, wires and wire sizes, ropes and rigging, transformers, fuses, cover-up, grounding, minimum approach distances, and digger-derrick truck operations. The course combines classroom training with field work: climbing poles and working with trucks.

OSHA 10 Transmission and Distribution

This OSHA-accredited course provides an overview of OSHA construction safety regulations, with an emphasis on OSHA regulations for electric generation, transmission, and distribution equipment and systems (1910.269 and 1926 Subpart V). The OSHA 10-hour course is intended for line workers and supervisory employees. Students who complete this course receive an official OSHA card featuring the Partnership logo.

Coyne First Aid

The Coyne BLS / First Aid Training Course has been officially accepted for more than 25 years by the U.S. Department of Labor - Occupational Safety and Health Administration and Mine Safety and Health Administration. Coyne First Aid is the only first aid program recognized by most apprenticeship programs. A basic education in the fundamentals of both Basic Life Support and First Aid while following the same priorities of care as the advanced courses.

Coyne CPR

The Coyne CPR Training Course has been officially accepted for more than 25 years by the U.S. Department of Labor - Occupational Safety and Health Administration and Mine Safety and Health Administration. Coyne CPR is the only CPR program recognized by most apprenticeship programs. A basic education in the fundamentals of CPR while following the same priorities of care as the advanced courses.

Introduction to Transmission and Distribution Systems

Introduction to T&D Systems gives an overview of how transmission and distribution systems deliver power from power plants to customers. It describes the major components of a typical transmission and distribution system, and how electricity flows through these components on its journey from the power plant to the customer.

Safety in Transmission and Distribution Maintenance



Safety in T&D Maintenance covers basic safety considerations involved in performing maintenance work on transmission and distribution systems. Specific electrical shock hazards and how to avoid them are discussed. It describes hazards that may be encountered in overhead, underground, and substation and switchyard maintenance work.

Bucket Trucks

Bucket Trucks 1 explains the major parts of a bucket truck, safety features commonly found on bucket trucks, and some pre-use inspections that can be made on a bucket truck. Covers the major parts and types of bucket trucks, the boom controls, some of the common safety features and overrides.

Bucket Trucks 2 explains basic techniques that can be used to operate a bucket truck safely and efficiently. Procedures for setting up and operating a bucket truck at three typical job sites are described. Reviews the basic parts of a bucket truck. Shows how to use the bucket controls to operate the booms. Covers the set up and operation of a bucket truck at a job site.

Setting and Replacing Poles



Setting and Replacing Poles demonstrates how to set a new pole, and two methods of manual replacement of an existing pole. The most common method of setting a pole using power equipment is demonstrated first. Because power equipment may not always be available or may not be able to reach the job site, two manual methods of replacing poles are also demonstrated. Covers how to set a pole using a derrick, how to set a pole in a hole adjacent to an existing pole by rigging off the existing pole, and how to replace a pole with a new pole in the same hole.

Climbing Poles

Climbing Poles helps beginning linemen develop the skills needed to safely climb poles. It shows how to fit and maintain climbing tools. Describes the proper protective clothing to wear while climbing. Shows what to look for before you climb, and how to plan a climb. Describes fall arrest systems and how they work. Shows how to climb up, over objects, and down wood poles, steel poles and lattice structures.

Working on Distribution Poles

Working on Distribution Poles explains the basic principles involved in working safely on distribution. It gives examples of how to accomplish the following jobs: replace secondary conductors, use a temporary crossarm, move energized conductors, and install dead-ends. Covers how to plan a job that requires climbing, how to work and maneuver near energized conductors, and how to install some types of material and equipment.

Transformer Connections

Transformer Connections 1 explains the common types of overhead transformers and how they are connected. Covers both single-phase and three-phase connections, with emphasis on three-phase connections. Some theory, mostly practical examples. How to make single-phase transformer connections, how to make three-phase connections in wye-wye and delta-delta configurations, and how to verify that a replacement transformer is the right one.

Transformer Connections 2 explains how common types of overhead transformers can be connected together. Covers both single-phase and three-phase transformers, with emphasis on three-phase connections of three single-phase transformers. Presents connection theory using phasor diagrams and demonstrates how each of the connections is made.

Transmission Line Installation



Transmission Line Installation describes and demonstrates an approach to installing a transmission line. This work is not a routine part of a lineman's job in many locations, but an understanding of the basic approach is useful to individuals who are responsible for maintaining lines. Covers how to plan and set up an installation job. Explains the purpose of guard structures and how to set them up. Describes how to pull conductors into place with proper sag, and how to clip the conductors permanently to insulators.

Safety in Underground Line Maintenance



Safety in Underground Line Maintenance identifies some of the hazards found in and around underground work areas. Explains methods used to provide a safe work environment. Describes the use of personal safety equipment and identify the safety considerations involved in a typical vault emergency.

Career Planning and Strategies

Career Planning and Strategies will prepare students to navigate their lineman career. We will cover interviewing strategies, union vs. non-union careers, the different types of employers (investor owned utilities, cooperatives, contractors, etc.), and the realities of the career ahead of them (in-town work vs. travel work, storm work, etc.). In addition to career-specific topics, we will also cover basic personal finance and interpersonal skills.

Optional Course: Applied Math

This course is designed for students who struggle with math and need extra help in this topic. This course will provide the foundation needed for both entrance exams and the day-to-day field work where math is required.



Field Skills

American Lineman Institute believes strongly in hands-on training. We do our best to cover a topic and then put that knowledge to work with hands-on exercises in the laboratory or in our pole yard.

Field skills are evaluated by the course instructors, and all students must pass all field skill evaluations in order to graduate. Field skills are graded in the following manner:

Needs Improvement: Student has not shown that they can adequately perform the skills / tasks necessary for that topic. Further work and re-test is required.

Satisfactory: Student has shown that they can perform the skills / tasks necessary for that topic without correction or instructor guidance. The student has not mastered the skill by any means, but the instructor is confident the student can perform the skills / tasks in the field.

Honors: Student has shown that they can perform the skills / tasks necessary for that topic at a high level. The student has not necessarily mastered the skill, but the student can perform the skill / task repeatedly without errors and in an efficient, clean manner.

For each classroom topic, there will be one or more field skills that the students will learn and be evaluated on. For example, for the pole climbing course, the student will need to:

- Correctly don their safety equipment and climbing spurs
- Correctly install their safety equipment on the pole to be climbed
- Scale the pole in a clean, safe manner
- Maneuver around obstacles on the pole safely
- Make a complete circle around the top of the pole safely
- Descend in a clean, safe manner
- Demonstrate the pole top rescue procedure



Commercial Driver's License

All students are required to have a Class A CDL with an Airbrake Endorsement prior to graduation. Any students that already meet this requirement can provide a copy of their CDL along with the original. The original will be returned, and the copy will be kept in the student's file.

For any students that don't already have a CDL, American Lineman Institute has a relationship with a CDL Training Provider that is located close to our training facility. American Lineman Institute reserves training spots and testing spots with this provider for our students. Prior to graduation, the students must enroll with this training provider (or another accredited training provider), finish their training, and successfully pass the state-sponsored CDL testing requirements. After finishing the testing requirements and receiving their CDL, all students must provide a copy of their CDL along with the original. The original will be returned, and the copy will be kept in the student's file.



Class Officers

In the fourth week of each term, we will hold elections for the Student Body President and Student Body Vice-President. To run, each candidate must turn in an essay that is 200 – 500 words explaining why they would like to have the position and what they will do to uphold our high standards. The top two vote getters will be the President and Vice-President, respectively.

The President and Vice-President are expected to be a main conduit between the instructors and students. Any concerns that a student has can be brought forward through their class officers. Additionally, the class officers will be expected to assist in project planning, community involvement, and campus improvement initiatives.

Being elected can be a distinguishing factor on a student's resume and could potentially be the tie breaker with another candidate. The dedication and leadership required for these positions show potential employers that the student is ready and willing to maximize their potential.



Policies

Tuition Refund Policy

Date of Withdrawal	Percent Refunded
On 1st day of class	100% Refunded
After 1st day, within 10%	90% Refunded
After 10%, within 25%	50% Refunded
After 25%, within 50%	25% Refunded
After 50%	0% Refunded

\$200 of the tuition is considered an application fee and will not be refunded.

After tools have been distributed and used, the cost of the tools will not be refunded. The tools will belong to the student once they have been used.

In the event that a session must be cancelled, all students will receive a full refund (including the application fee). ALI is not responsible for any other costs incurred.

Campus Rules

- Dress Code
 - Shirts – American Lineman Institute provides all students with three long-sleeved safety shirts. Students are required to wear these long-sleeved shirts at all times when at the institute. Shirts will be tucked in at all times. American Lineman Institute provided shirts are not to be worn when at bars or other social events where alcohol is served.
 - Pants – All students must wear pants that are sturdy and free from holes / tears / other defects. Pants will have a sturdy belt that keeps the pants from slipping down.
 - Hats – Students are not permitted to wear hats of any kind while in the classroom. Students are allowed to wear warm hats (beanies) under their hard hat is desired when in the field.
 - Personal Appearance – All students are expected to be well-groomed and professional in appearance. Any facial hair must be cleanly trimmed. Hair must be combed or cleanly maintained.
- Code of Conduct – All students are required to act in a professional manner while at American Lineman Institute. If a student cannot conduct themselves in a professional manner, they may be terminated from the school. Following are examples that could lead to termination (this is not an exhaustive list):
 - Violating any policies laid out in the ALI Policy Handbook
 - Cheating of any kind
 - Any behavior that puts other students, staff, or property in danger
 - Using or possessing illegal substances (either on-campus or at another location)



- Being under the influence of any intoxicating substance while on-campus or during school hours
 - Vandalism of any school property or property that belongs to other students
 - Theft of any school property or property that belongs to other students
 - Fighting or engaging in harassment of staff or other students
- Student areas are expected to be clean at the end of every day
- All tools and equipment will be properly stored at the end of every day
- All personal items will be stored in the designated areas
- Food and drink are not allowed in classrooms
- Cell Phones are not allowed during classroom or other instructional time; cell phones may be used between classes and during breaks. Any student that has a cell phone that repeatedly disrupts class will no longer be allowed to bring a cell phone with them during instructional time.
- Laptop computers or other electronic devices are only allowed during classroom or other instructional time if they are directly related to the topic and approved by the instructor