

Apprenticeship & Trade Careers in Northwest Indiana

2020-2021

What is an apprenticeship/trade career?

The United States Department of Labor Office of Apprenticeship defines Registered Apprenticeship as a “unique, flexible training system which combines job related technical instruction with structured on-the-job learning experiences”. Most apprentices begin employment day one, with incremental wage increases as they advance and become more proficient on the job. Construction apprenticeship programs range from 2 – 5 years in length.

Similar to a college internship or residency, success is realized through hard work and perseverance. Advancement is achieved through demonstrated proficiencies in both academic and field performance. Most apprentice training courses are tuition free. Once the apprenticeship period is completed and the student passes all of the required coursework, he or she will have the technical skills necessary to be recognized as a master craft professional. Most students will even receive a college degree upon successful completion of the apprenticeship program.

The work of a skilled construction professional is often physically demanding. Apprentices and trade professionals can expect to do a sizable amount of lifting, climbing, and crouching. Working in confined spaces, extreme heat, sub-freezing temperatures, or working at excessive heights is typical for a construction professional. Every apprenticeship program thoroughly trains students in safety and accident prevention. In fact, Northwest Indiana's professional construction industry has nearly 15 times fewer accidents than the national rate according to a 2014 study.

Apprenticeship programs are not for everyone. Admittance into an apprenticeship can be difficult, applicants must be determined. Only select individuals who demonstrate the special blend of both academic and mechanical aptitude will qualify. Only the best applicants are accepted! (Source: <http://webuildnwi.com/trade-careers.html>)

All information in this guide is taken, with permission, from webuildnwi.com. It is highly recommended to visit that site and contact individual unions with questions about their apprenticeship training options. We will make every effort to update this annually, but it's always best to go directly to the source for updates and deadlines.

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Boilermaker

Who Are We?

The professional instructors at the Boilermaker training center educates and trains future Boilermakers, by exposing apprentices to a variety of training that produce a safe, highly skilled and productive work-force. Boilermaker work demands a high degree of technical skill, constant attention to safety, a dedication to excellence, a willingness to study and complete on-the-job training, and an ability to travel from job site to job site to maintain employment. Today's field construction Boilermaker apprentice is involved in more than just the construction of boilers. Apprentices are a vital part of construction project teams that erect pressure vessel assemblies and fabricate metal plate. You could be involved in the installation of a giant superheater section in a large utility boiler, the erection of a 2000,000 - barrel water storage tank, or construction of components at power generating stations. The owner community and contractors that employ our members rely on the Boilermakers National Apprenticeship Program to produce the needed Boilermaker crafts-persons that will possess the skills needed to perform the work in the safest and most productive manner possible.

What is a Boilermaker?

The name "boilermaker" can be misleading. While boilermakers do build, install, and repair boilers, they also install and repair large repositories that are used to hold and process liquids, chemicals, oil, and various other products. Other things boilermakers may work on are blast furnaces, air pollution equipment, smoke stacks, storage and process tanks, fireboxes, water treatment plants, and hydroelectric power generation turbines. The professional Boilermaker assembles, erects, and maintains these systems using hoisting, rigging, welding equipment, tools and hardware as required by drawings, specifications and the applicable codes and standards. They work throughout the commercial and industrial sector of the Power Generation, Pollution Control, Petro-Chemical, Steel, Pulp & Paper, Ship Repair, Mining, and other related industries.

How Can I Prepare?

Successful Boilermakers usually have solid math and problem-solving skills, high mechanical aptitude, good manual dexterity and a tolerance for working in cramped spaces. Boilermakers need to be in good physical shape to

Apprenticeship Length:	4 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	Boilermakers Local 374 Hobart, IN 46342 Phone: 219-845-1000 www.local374.org
Application Period:	Applications are distributed on the: First Friday of January, April, July and October from 10:00 a.m. to Noon (local time)
Application Cost:	No cost.

Bricklayer

Who Are We?

The professional Bricklayers apprenticeship and training system is widely recognized for producing highly skilled craftworkers. All apprentices accepted into the program receive hands-on and in class training on both classic and state-of-the-art techniques and materials. Students start the program learning proper techniques on placing with more complex projects such as radius walls, arches, and the use of a variety of materials and patterns.

What is a Bricklayer?

A Bricklayer lays brick, stone, structural tile, marble, granite, concrete block, structural tile, terra cotta, terrazzo, and any other masonry materials to build or repair walls, partitions, fireplaces, sewers, and other structures. They put together the masonry materials with mortar using the trowel, chisel, jointer, brick hammer for cutting bricks and power brick cutting saws. Bricklayers also install firebrick linings in industrial furnaces. The Bricklayer's technique is to spread the bottom and side of each unit with mortar and position it by hand, cutting off excess mortar and later trimming it to achieve a neat appearance. Work is kept level by use of a tightly stretched line and must be checked frequently for level and plumb. Bricklayers often work from scaffolding and sometimes work at heights exceeding 100 feet above ground level. Much of the work is outdoors and generally depends on suitable weather conditions. The work is active and often strenuous, including crouching and heavy lifting.

How Can I Prepare?

To prepare for the Bricklayer apprenticeship program, it is recommended that applicants take as many courses as possible in shop, science, English, mathematics, blueprint reading, and mechanical drawing.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	Bricklayers Local 4 Apprenticeship & Training Program 940 North Broad Street Griffith, IN 46319 Phone: 219-405-6470 Email: bac4apprenticeship@gmail.com
Application Period:	Applications accepted year round. Apply at: www.bac4training.com
Application Cost:	No cost.

Carpenter

Who Are We?

Training is what gives the carpenters and our signatory contractors their strong competitive advantage. The Carpenters International Training Fund (CITF) is the driving force that makes our world-renowned training system possible.

The CITF and its affiliated training programs invest more than \$200 million a year to develop and deliver training for UBC members. Through a network of more than 200 training centers across North America and 2,500 full-time instructors, UBC members can learn today's in-demand skills at little or no out-of-pocket expense.

Our curriculum is developed at the International Training Center in Las Vegas with input from contractors; industry experts; and product and equipment manufacturers. It provides apprentices and journeymen with the skills to be the safest and most productive workers on the jobsite.

Through UBC skills training, members are able to hone their craft and enhance their knowledge—creating new opportunities for them and making their employers more competitive.

What is a Carpenter?

Carpenters are vital to almost every facet of the construction industry. They must have expertise in a wide variety of skills that are needed in commercial construction as well as in residential building and structural maintenance. On residential sites, carpenters crib basements, build house frameworks, walls, roofs and exterior finishes, and install doors, windows, flooring, cabinets, stairs, handrails, paneling, molding and ceiling tiles. At commercial, industrial, and heavy highway construction locations, carpenters are responsible for building concrete forms, scaffolding, bridges, trestles, tunnels, shelters, towers and other structures. Those who work in maintenance may repair and remodel existing structures of all kinds.

Carpentry is an obvious choice for those who are good at working with their hands and using hand and power tools. However, modern carpentry demands both manual skills and the ability to read drawings, sketches and plans for building information. Carpenters need to work accurately, be able to estimate the cost of jobs, and determine and order the materials needed for the job. Effective communication skills are also essential since carpenters work with other crafts, engineers, customers, and other related individuals on a daily basis.

How Can I Prepare?

To prepare for entry into the carpenter apprenticeship program, applicants should take as many course as possible in the following areas of study: general mathematics (addition, subtraction, multiplication and division), algebra, geometry, drafting, building and construction, English composition, communication skills, and the ability to read and comprehend construction drawings.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	IKORCC Joint Apprenticeship Training Center 1565 East 70th Court Merrillville, IN 46410 Phone: 219-947-8848 https://www.ikorcc.com/
Application Period:	Apply online anytime at: https://ikorcctraining.com/ Items Applicants Must Upload: High School Transcripts or GED Test Scores; Government Issued Photo Identification; 1 Page Resume
Application Cost:	No cost.

Cement Mason

Who Are We?

Current and future demand for skilled Cement Masons necessitates an apprenticeship program that takes into consideration practices of one of the world's oldest trades, along with instruction in new techniques, applications, technologies, and materials. The northwest Indiana Cement Mason and Plasterer's Apprenticeship Program supports a world-class curriculum of instruction and on-the-job training for dozens of apprentices annually. Our professional Cement Mason's skills are honed with the most comprehensive apprenticeship training program in the industry.

What is a Cement Mason?

Cement Masons work with concrete, plaster, and epoxy. These skilled trade professionals often work in niche markets which are essential to maintaining the variety and quality of construction projects throughout northwest Indiana. Concrete and its related products are all around you and are often taken for granted. It is the foundation of your home or office, it is used to make the sidewalks and roads that transport you, and it lends its strength and versatility to build piers, abutments, bridge decks, dams, and power plants to light your way. Since most of the work is done outdoors, working conditions are governed by the weather. The work is active and strenuous with most of the work done on the ground or floor level. The Cement Mason's knowledge of materials is essential to the quality of work. They must know the working conditions for various cement and concrete mixes. Because of the effect that ambient temperatures and humidity have on curing the cement, the skilled mason must recognize what is chemically occurring in the cement mixture so that defects can be prevented.

Thousands of years after its refinement as a building material, plaster still provides durable interior and exterior walls, it decorates our shopping malls and amusement parks, and it provides fire resistance and durability in our offices and schools. Cement Masons apply plaster and produces a finished surface according to blueprints and architect's specifications using specific hand tools and portable power tools. Skilled Masons spread plaster over lath or masonry base using a trowel and smooths the material with darbies and floats to attain uniform thickness. Masons also apply a variety of other surfaces such as stucco exterior insulation finish systems (EIFS), marblecrete, and gunite for swimming pools.

How Can I Prepare?

Successful Cement Masons need to be in great physical shape to perform the duties of the trade. It is suggested students have a fundamental understanding of high school math, basic algebra, and chemistry. The ability to estimate and compute area measurements quickly and accurately is recommended. Written and verbal communication skills are also essential in the trade.

Apprenticeship Length:	8 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree.
Local Apprenticeship Opportunities:	Plasterer & Cement Masons Local 692 https://plcmlocal692.org <u>Area #'s 165 & 406</u> 9200 Louisiana Street Merrillville, IN 46410 Phone: 219-718-4905 <u>Area # 488</u> 1586 Weller Avenue LaPorte, IN 46350 Phone: 219-868-5089
Application Period:	Inquire by phone.
Application Cost:	No cost.

Construction Teamsters

Who Are We?

We are only of only four construction driving apprenticeship programs in the United States. Our training center is equipped with all most recent technology that today's professional drivers need to be safe and efficient.

What is a Construction Teamster?

It is difficult to pin down exactly what a Construction Teamster does because they do so much. They are tasked with getting people and materials from Point A to Point B safely and efficiently. Teamsters operate vehicles such as belly dumps, end dumps, articulating end-dumps, rock buggies, mixer trucks, water trucks, boom trucks, crew bus, forklifts, fuel trucks, and other kinds of vehicles used in the construction of industrial and commercial facilities, dams, airports, highways, and roads. Teamsters can also work in the sand, gravel, cement, and asphalt industries.

How Can I Prepare?

It is absolutely critical that applicants have a clean driving history. Individuals who already possess a commercial driver's license (CDL) are preferable. Applicants should have a solid foundation of math and english. Written and verbal communication skills are essential.

Apprenticeship Length:	2 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree
Local Apprenticeship Opportunities:	Teamsters Local 142 Training Center 9050 Mississippi Street Merrillville, IN 46410 Phone: 219-756-1422

Electrician

Who Are We?

The Professional Electrical Training Centers provide apprenticeship opportunities for individuals seeking a career in either the Electrical (Inside wireman) or Voice, Data, Video (Installer-Technician) industries. Nationally Certified Instructors utilizing our state-of-the-art educational institutions prepare individuals for careers in current, emerging and future technologies. Our mission is to develop the most highly trained, dedicated electrical professionals in the country.

What is an Inside Wireman?

Trained Journeyman Inside Wiremen perform service, installation and maintenance for a wide variety of residential, commercial, municipal, utility and industrial environments including family homes, commercial office buildings, powerhouses, retail stores, hospitals, schools, manufacturing plants, petrochemical refining, water treatment facilities and heavy industrial production.

Types of work involved in these projects include the installation of equipment, conduit, wire, cabling and controls for power, lighting, distribution, metering, grounding, building automation, energy management, solar, wind, emergency and UPS systems. Other work includes field engineering, instrumentation, supervision, safety, QA/QC, estimating and project management.

What is an Installer-Technician?

Trained Installer-Technicians perform service, installation and maintenance work for many of the same customers as Inside Wireman (homes, office buildings, hospitals, schools and factories). However, Installer-Technicians specialize in the low voltage marketplace.

Types of work for these customers include the installation of low-voltage cabling, equipment and supports for voice, data and video systems used in telephony, security, sound, fire alarm, nurse call systems, networking, CCTV, building system management. Other skills include supervision, design, programming, start-up and commissioning, safety, estimating and project management.

How Can I Prepare?

Acceptance into the program is very competitive. To prepare applicants for the rigors of apprenticeship the following areas of study are suggested - secondary and or post-secondary algebra, geometry, trigonometry, chemistry, physics, technical writing, economics, business management, computer sciences.

Apprenticeship Length:	5 years	
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program	
Local Apprenticeship Opportunities:	Lake County Electrical Training Center 7200 Mississippi Street, Suite 100 Merrillville, IN 46410 Phone: 219-845-3454 www.697jafc.org	LaPorte County Electrical Training Center 301 East 8th Street Michigan City, IN 46360 Phone: 219-879-1090 www.ibewlocal581.org/Apprentice
Application Period:	Apply online anytime at: www.apply697.com	Applications are accepted daily from 8:30 a.m. - 4:30 p.m.
Application Cost:	\$40	\$80

Glazier

Who Are We?

The professional Glazier apprenticeship training program emphasizes on-the-job training and classroom instruction to gain the experience necessary to become a qualified journey-level worker versed in the theory and practice of the occupation.

What is a Glazier?

The Glazing industry is comprised of many facets and applications of construction technology. Glaziers cut, install and replace all types of glass related products in commercial and residential window, storefront, skylight, architectural panel and curtain wall systems. They are proficient in the installation of all types of aluminum and glass doors, understand the intricacies of waterproofing and flashing, as well as the ability to perform quality custom shower door and mirror work. Glaziers are benefiting from an increasing demand for environmentally conscious "green" construction, which often features energy-efficient glass products like double-paned windows that reduce heat loss.

The Journey-level Glazier possesses an understanding of math and layout skills, an ability to read shop drawings and blueprints and is trained to feel comfortable with a builder's level, laser level or the use of today's most sophisticated power tools to perform their work. Naturally the Glazier is safely at home in or on most scaffoldings, aerial stages, lifts and platforms.

How Can I Prepare?

Apprentice candidates should have a strong foundation of math and design. Applicants should try and take as many courses in math, science, shop, and mechanical drawing as they can. They should also be able to read and interpret construction blueprints. The growing use of computers in glass layout requires glaziers to be familiar with computers and computer-aided drafting programs.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree
Local Apprenticeship Opportunities:	Glaziers Local 1165 6501 Massachusetts Avenue Indianapolis, IN 46226 Phone: 317-542-7617

Heat and Frost Insulator

Who Are We?

The greater Illinois and Indiana Heat & Frost Insulators proud history dates back to the late 1800s, and has since produced a countless number of trained professionals who are the best in the business. This success comes from its members, who receive cutting-edge training and guidance, and who understand how important their work is to our society. The experience and expertise of the Heat & Frost Insulators is without comparison and the numbers speak for themselves. Last year, 1,000 active members worked at over 10,000 industrial, commercial and residential job sites.

Members of the Heat & Frost Insulators receive a combination of on-the-job training and classroom instruction that is unmatched in the industry. Each professional spends a minimum of four years in the classroom, studying math, blueprint interpretation, application techniques, pattern layout, workplace safety and supervision. They have are also committed to continuing education, and train an average of 125 journey-level workers each year on the latest techniques and standards.

What is a Heat and Frost Insulator?

Heat and Frost Insulators work with commercial and industrial insulation. They install insulation and soundproofing for heating, ventilation, steam generation, process piping and plumbing systems, remove hazardous waste, and firestopping. Heat and Frost Insulators are responsible for installing the materials that control and maintain the temperature of buildings and mechanical equipment. They work with adhesives, staples or tape to secure insulation to walls and structures, or use machines to blow insulation directly into spaces. A variety of machinery and power tools are constantly used. They also remove asbestos and lead from old buildings prior to renovation or demolition. Heat and Frost Insulators use vacuums and scrapers and have to work carefully to remove the asbestos during abatement. Work is conducted in commercial buildings, refineries, ships, industrial plants and private residences in all kinds of indoor and outdoor climates.

The working conditions tend to be in and around dust. The minute particles from insulation materials, especially when blown, can irritate the eyes, skin and respiratory system. Removing cancer-causing asbestos insulation is a hazardous task. To protect from the dangers of asbestos and irritants, workers follow strict safety guidelines, take decontamination showers, keep work areas well ventilated and wear protective suits, masks and respirators.

How Can I Prepare?

Acceptance into the Heat & Frost Insulator apprenticeship program is highly competitive. The apprenticeship selection committee will look at your educational background, physical and mental capabilities and previous work experience. To prepare for entry into the apprenticeship program, applicants should hone their knowledge in the following areas of study: general mathematics (addition, subtraction, multiplication and division), communication skills, and reading and writing skills.

Apprenticeship Length:	5 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree.
Local Apprenticeship Opportunities:	Heat & Frost Insulators - Local 17 JATC 18520 Spring Creek Drive Tinley Park, IL 60477 Phone: 708-468-8000 www.local17insulators.com
Application Period:	Call 708-468-8000
Application Cost:	\$25

Ironworker

Who Are We?

The mission of Ironworkers Apprenticeship and Training Department is to ensure that our professional ironworkers have the skills, knowledge, and training necessary to be safe on the jobsite, competitive in the workplace, and satisfied in their careers.

We accomplish that mission by providing training and training materials, leadership, and accreditation in order to uphold our craft values and the principles of service and professionalism.

What is an Ironworker?

Did you know that the Golden Gate Bridge was built by ironworkers? What about the testing and building facilities for the Stealth Fighter and Space Shuttle or the famous "Gateway to the West" - the St. Louis Arch? How about the Oil Sands Plant Expansion in Alberta? That's right - ironworkers erected those buildings too. Think about it. Nearly every structure you can think of - schools, sports stadiums, shopping malls, hospitals, bridges, office and industrial buildings - all required the skills of trained ironworkers.

If there were no ironworkers, cities like New York, Chicago, Quebec and Los Angeles would look very different than they do today - no skyscrapers, no bridges, no office buildings. Transportation would be radically different too. How would the millions of commuters every day get to work without the bridges built by - you guessed it - ironworkers. Without ironworkers to erect the skeleton of a structure, no other trade would be able to install their work. That's why ironworkers are the most respected tradesperson in the construction industry.

Ironworking has many sectors. Each sector involves challenging and difficult work, often on tall structures at high elevations. Ironworkers must be willing to work as a team. They must be able to meet rigid standards and deadlines. They must have a good sense of balance and be alert to potential danger to themselves and others. The apprenticeship program includes comprehensive safety training.

When you're an ironworker, the sky is the limit. The possibilities of training, earning, providing, advancing, building are endless. There is no limit to what ironworkers can do!

How Can I Prepare?

Acceptance into the Ironworker Apprenticeship Training Program is highly competitive. We are only looking for the best of the best and therefore, all applicants are screened thoroughly. The skilled Ironworker must be in great physical condition to perform the work of the trade. Applicants should concentrate their educational studies in the following areas: general mathematics (fractions, addition, subtraction, multiplication, and division), algebra, geometry, mechanical drawing, communication skills, and reading and writing skills. Applicants who have welding experience often receive more consideration.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	Ironworker's Joint Apprenticeship Training Center 890 East 25 th Avenue Lake Station, IN 46405 Phone: 219-962-7675 www.ironworkers895.com
Application Period:	The first two full weeks in January, each year Monday – Friday from 9 a.m. to 12 p.m. (noon) Items Applicants Must Upload: Birth Certificate Copy; Official/Sealed copy of high school transcripts or GED/HSE test scores; Valid driver's license; \$10.00 filing fee (subject to change)

Laborer

Who Are We?

The Indiana Laborer's Training Center offers more than 50 different construction courses that registered apprentices can take to hone their skills. Classes provide valuable instruction in areas such as hazardous materials remediation, remote tunneling, safety, concrete work, and an array of building construction skills. All laborer apprentices must work 4000 on-the-job hours and must take over 430 hours of classroom instruction to successfully complete the apprenticeship program.

What is a Laborer?

Construction laborers are at the forefront of the construction industry. Laborers are highly skilled workers who complete a variety of different tasks involving physical labor at construction sites. Laborers operate hand and power tools of all types including air hammers, concrete vibrators, power grinders, demolition saws, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. Laborers assist other crafts, clean and prepare construction sites, set explosives for demolition, dig trenches, set braces to support the sides of excavations, strip forms, sink wellpoints, lay drain and sewer tiles, flag traffic, and thousands of other construction related tasks.

How Can I Prepare?

Key educational requirements that make an ideal Laborer include proficiency in mathematics, mechanical drawing, blueprint reading, and welding. Laborer must have excellent communication skills and business writing skills.

Apprenticeship Length:	3 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree.
Local Apprenticeship Opportunities:	Laborers Local 41 550 Superior Avenue Munster, IN 46321 Phone: 219-924-7922 http://laborers41.com/ Laborers Local 81 3502 Enterprise Avenue Valparaiso, IN 46388 Phone: 219-462-8165 www.liunalocal.org/local81
Application Period:	Applications are accepted yearly during May 4 - May 8.
Application Cost:	\$40

Millwright

Who Are We?

Millwrights are known throughout the United States as being the best trained and most well prepared for any project. The Millwright Training Center's goals are to provide quality training that includes both classroom and hands-on shop lessons which ensure that our members are the best in their craft. Our state-of-the-art training facility gives apprentices access to modern equipment and tools upon which to hone their craft.

What is a Millwright?

Millwrights are construction professionals who work primarily with machinery and equipment requiring precision. Millwrights install, maintain, diagnose, and repair equipment such as compressors, pumps, conveyors, gas and steam turbines, monorails, and extruders.

"Precision" is the standard work product of professional Millwrights. These members consistently participate in training and skill-enhancement classes to become experts in the use of tools and instruments that they must master. A keen eye for the perfect fit is a primary asset for millwrights, having to sometimes work with specifications requiring tolerances to a thousandth of an inch.

Millwrights can be found performing mission-critical work at coal, gas, nuclear, and alternative-energy power plants. Their skills are also vital in industries as diverse as automotive, aerospace, food processing, lumber, pulp and paper, material handling, mining, petrochemical, steel and alloys, pharmaceuticals, and mechanical construction.

How Can I Prepare?

To prepare for the Millwright apprenticeship program, individuals should take classes in basic and advanced mathematics, drafting and mechanical drawing, metal or industrial shop, and any construction courses which familiarize you with construction technology. These classes will help you develop the dexterity and practical thinking skills you will need as an apprentice Millwright.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	IKORCC Joint Apprenticeship Training Center 760 N. Union Street Hobart, IN 46342 Phone: 219-947-8848 https://www.ikorcc.com/
Application Period:	Applications are accepted daily during the following times: 8 am - 11 am & 1 pm - 3 pm
Application Cost:	No cost.

Operating Engineer

Who Are We?

Our professional Operating Engineer training programs are second to none. We have over one-thousand instructors, hundreds of facilities, classrooms, shops, and labs, and thousands of acres throughout the United States and Canada where apprentices and journey-level members hone or advance their skills. Our members have access to training on virtually every topic heavy equipment operators and stationary engineers need to become their very best.

Our local apprenticeship and journey-level training center is situated on 300-plus acres in Wilmington, IL, about 50 miles south of Chicago. The center boasts 342,000 square feet of space housing an indoor training area, almost 200 pieces of heavy equipment, 30 classrooms, construction material testing lab, state of the art welding facility, equipment simulator lab, a 200-seat auditorium, and much more. Instructors are available to members six days a week, Monday through Saturday, except holidays. The indoor training arena is large enough to allow 18 plus pieces of equipment to operate simultaneously. Also, we are proud partners with OSHA to have established an alliance to advance health and safety training.

What is an Operating Engineer?

Operating Engineers cover a variety of job classifications in industries such as highway construction, building construction, mining, toll ways, municipalities, tunnels, slag, landscaping, power plants, refineries, railroads, quarries, plants that produce rock, sand and gravel, logging, utility work such as gas, water and sewer excavation.

Whether working as heavy equipment operators, heavy equipment mechanics, or surveyors, Operating Engineers are the highly skilled persons who are found on any project using construction equipment. "Heavy Equipment" is the blanket term for numerous types of machines. Cranes, bulldozers, front-end loaders, rollers, backhoes, graders, dredges, hoists, drills, pumps and compressors are just some of the equipment utilized by Operating Engineers. In most cases, if it can push, pull, pump or lift material, rolls on tires or crawls on tracks like a tank, it falls under the jurisdiction of the professional Operating Engineers. Although everyone has their favorite type of machinery to operate, Operating Engineers are masters of a large variety of equipment. This versatility keeps you employable since employers' needs vary from project to project.

Being a construction equipment operator can be a rewarding career. It requires good hand-eye coordination and a high level of physical stamina. Working outdoors is one of the advantages of being an operator, but the work is sometimes hazardous and the equipment is very noisy. Almost all of the work performed by Operating Engineers, including some of the mechanics work, takes place outdoors, in all kinds of weather and conditions. You can expect to be cold in the winter, hot in the summer, and dirty, greasy, muddy, and dusty in between.

How Can I Prepare?

Successful Operators usually have solid math and problem-solving skills, high mechanical aptitude, good manual dexterity. It is suggested students have a fundamental understanding of physics and algebra. Written and verbal communication skills are also essential.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree.
Local Apprenticeship Opportunities:	Local 150 Operating Engineers Apprenticeship Training Center 19800 West Arsenal Rd Wilmington, IL 60481-8256 Phone: 815-722-8201 http://www.asiplocal150.org
Application Period:	Applications are accepted every November. Link to Open Application Schedule for 2019
Application Cost:	\$25

Painter

Who Are We?

Thorough training of apprentices and comprehensive upgrade training for member journey workers in world-class education programs give the Painters the advantage when it comes to furnishing our employing contractors with the best finishing-trades workforce available throughout Northwest Indiana. Our local, state-of-the-art training facilities provides cutting edge training programs that are truly second to none.

What is a Painter?

Everywhere you look you can see the work done by painters. Paint serves two important purposes, to beautify surfaces, and to protect surfaces from exposure to weather and corrosive elements.

Employment opportunities in this industry range from high-end decorating and wall covering applications to commercial work such as shopping malls, hotels and office buildings as well as industrial jobs on nuclear power plants, refineries and bridges. The constant development of new materials, high tech application techniques and increased safety and environmental concerns make the painting trade a challenging and rewarding career.

Painters must know how to mix paints and to prepare the surfaces of buildings and other structures and then apply paint, stain, lacquers, varnishes, and other similar materials to these surfaces. They are able to choose the right paint or finish for the surface to be covered by taking into account durability, ease of handling, method of application and customer desires. However, painting isn't all they do; members of the finishing trades also work with drywall finishing and various wall coverings among other things.

How Can I Prepare?

Successful Painters need to be in great physical shape to perform the duties of the trade. It is suggested applicants have a fundamental understanding of advanced math and chemistry. The ability to estimate and compute area measurements quickly and accurately is recommended. Written and verbal communication skills are also essential in the trade.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	NW Indiana Painters Joint Apprenticeship Training Center 8864 Minnesota Street Merrillville, IN 46410 Phone: 219-945-0956
Application Period:	Applications are accepted daily.
Application Cost:	No cost.

Pile Driver

Who Are We?

Pile Driving professionals are trained to approach every project with productivity and safety as the primary goal. Training is done in both classroom and hands-on settings at state-of-the-art training centers around the country. Initial training for apprentices and skill- enhancement courses for journeymen are taught by industry veterans or industry and manufacturer technical experts. Subjects range from basic skills to new technologies, tools and installation methods. Safety is a critical component of our training. In conjunction with OSHA, we train for a variety of situations, so that our professionals are experts in OSHA standards, MSDS, first aid and CPR, fall protection, ergonomics, and more.

What is a Pile Driver?

Pile drivers work with pile-driving rigs that drive metal, concrete or wood piling into the earth during the early stages of construction. They are usually the first workers at a commercial job site. They drive metal sheet piling to hold back dirt during excavations, drive concrete, metal and wood pilings as part of the foundation system for skyscrapers and drive wood and concrete pilings to hold up docks, wharves and bridges. Some may work on offshore some may work as commercial divers involved in underwater construction. Pile drivers work with a variety of hand and portable power tools, and frequently cut, join and fasten metal construction materials using welding equipment and oxy-acetylene torches.

How Can I Prepare?

Successful Pile Drivers usually have solid math and problem-solving skills, high mechanical aptitude, good manual dexterity. It is suggested students have a fundamental understanding of general mathematics, algebra, physics, earth science, and the ability to read and comprehend construction drawings. Written and verbal communication skills are also essential. Experience in welding is beneficial, but not required.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree.
Local Apprenticeship Opportunities:	Pile Drivers Local 578 4979 Indiana Avenue, Ste 211 Lisle, IL 60582 Phone: 680-825-6072 www.piledrivers578.com
Application Period:	Applications are accepted daily during the following times: 8 am - 11 am & 1 pm - 3 pm
Application Cost:	No cost.

Pipe Fitter

Who Are We?

Pipefitter apprentices learn through both classroom and on-the-job training in what is considered by many to be the best construction industry apprentice program in the world. The five-year apprenticeship period is divided into one-year segments, each of which includes 1,700 to 2,000 hours of on-the-job training and a minimum of 216 hours of related classroom instruction.

What is a Pipe Fitter?

The Pipefitter is a tradesperson with the knowledge and ability to layout, fabricate, assemble, install, maintain, and repair piping systems that transport all types of fluids, slurries and gas in the residential, commercial and industrial sectors. They are the only trade to specialize in planning, design, and installation of low- and high-pressure steam systems. Their work is diverse and in fields such as oil refineries, steel mills, power plants, manufacturing plants, and in the automotive industry. The systems that the steamfitter-pipefitter may work on are some of the highest pressure and temperature applications and require a thorough knowledge of scientific principles to complete this work safely.

How Can I Prepare?

Successful Pipefitters have solid math and problem-solving skills, high mechanical aptitude, good manual dexterity and a tolerance for working in cramped spaces. Pipefitters need to be in good physical shape to perform the duties of the trade. It is suggested students have a fundamental understanding of physics and algebra. Written and verbal communication skills are also essential. Experience in welding and the ability to read and understand field drawings is also beneficial.

Apprenticeship Length:	5 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree
Local Apprenticeship Opportunities:	Pipefitters Training Center Local 597 10850 W. 187th Street Mokena, IL 60448 Phone: 708-826-9240 www.pfff597.org
Application Period:	Applications are accepted first Wednesday of each month
Application Cost:	\$20

Plumber

Who Are We?

The Plumber's Professional Training Centers have been turning out the best plumbers in the trade since 1902. Our state-of-the-art training facility is equipped with the latest technology so students can competently learn all the skillsets required in the trade. Students will be learning from masters of the craft both in the training center and on-the-job. The United Association of Plumbers spends over \$200 million a year in the training of apprentices and journeypersons. The Northwest Indiana local chapter has an annual budget of approximately \$500,000 on training alone. Upon successful completion of the 5 year apprenticeship program, students will walk away with a journey-level plumbing license and the know-how to complete any plumbing job. Continuing education hours are required for all journey-level plumbers so you can rest assure that you will always be up-to-date on new and emerging technologies.

What is a Plumber?

The plumber installs, repairs, maintains, and services piping and plumbing systems and equipment used for drinking (potable) water distribution, sanitary storm water systems, and waste disposal. They also work on technical installations for Medical Gas, Hydronic in-floor heating, Solar Panels, Heat Pumps, Cross-Connection Control and many other systems necessary for the health and safety of the general public. Their work is found mostly in the new home building and renovation, high rises, and commercial construction sectors including hospitals, schools, and other institutional buildings.

How Can I Prepare?

Successful plumbers usually have solid math and problem-solving skills, high mechanical aptitude, good manual dexterity and a tolerance for working in cramped spaces. Plumbers need to be in good physical shape to perform the duties of the trade. It is suggested students have a fundamental understanding of physics and algebra. Written and verbal communication skills are also essential.

Apprenticeship Length:	5 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	Plumbers Local 210 Joint Apprenticeship Training Center 2901 E. 88rd Place Merrillville, IN 46410 Phone: 219-942-7224 www.plu210.org
Application Period:	Applications are accepted once a year for three weeks during January. Application Schedule for 2020
Application Cost:	No cost.

Roofer & Waterproofer

Who Are We?

The Roofers & Waterproofers training center provides apprenticeship opportunities for individuals seeking a career in the Roofing & Waterproofing industries. Certified and trained instructors throughout our industry prepare individuals for a prosperous future in our industry. We pride ourselves on delivering value utilizing our skilled workforce and demanding the absolute best quality and service on every job. Our mission is to develop the most highly trained and dedicated roofing and waterproofing technicians in the country. Center provides Health & Safety Classes as well as Journeyman Upgrade classes to assure that we have the most progressive workforce. We pride ourselves on assuring that our members receive the most advanced training in the country. We are always looking to the future in developing a curriculum that keeps us a step ahead of all the rest.

What is a Roofer & Waterproofer?

Roofers and Waterproofers work on a variety of types of buildings, protecting those facilities against water intrusion and ultimate damage to the structure and its contents. Roofing in the commercial and industrial sector is generally of the built-up type or the single-ply category. In built-up roofing, layers or piles of felt are set in hot bitumen over insulation boards to form a waterproof membrane. An aggregate may be imbedded in a final bitumen coat to protect the membrane from ultraviolet radiation of the sun and other environmental hazards.

Single-ply roofing encompasses all of the newer plastic, thermoplastic polyolefin (TPO), rubber (EPDM) and other elasto-plastic type membranes that have their seams welded by solvent or hot air or glued with contact adhesive to form a monolithic waterproofing membrane. These systems may have a stone or rock or paver block ballast installed over them or they may be partially or totally adhered to the substrate. These systems are also installed over roof insulation boards.

A separate category of roofing is the modified bitumen system that may be applied with hot bitumen or torched-on with high intensity propane burners.

Another area of roofing is the residential type. Although these applications can also be done in the commercial and industrial sector as well. They include composition shingles, slate, tile and metal roofs.

Waterproofing is a specialty aspect of the roofing trade but is no less important than a roof in protecting a building against moisture intrusion. Waterproofing can be below grade, which is usually foundation work. It can also be done on plaza decks, parking garage floors and other sections of a building where water or moisture protection is crucial. Materials used in waterproofing are generally of the same type used in roofing, although there are many specialty application materials that may be specified for this type of work.

How Can I Prepare?

Acceptance into the apprenticeship program is highly competitive. The apprenticeship selection committee will look at your educational background, physical and mental capabilities and previous work experience. To prepare for entry into the apprenticeship program, applicants should hone their knowledge in the following areas of study: general mathematics (addition, subtraction, multiplication and division), geometry, communication skills, and reading and writing skills.

Apprenticeship Length:	4 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree
Local Apprenticeship Opportunities:	Roofers Local #26 Training Center 25 W 84th Avenue Merrillville, IN 46410 Phone: 219-756-8718 www.roofers26.com
Application Period:	Applications are accepted weekly on Wednesdays during the following times: 8 am - 12 pm
Application Cost:	No cost.

Sheet Metal Worker

Who Are We?

The Professional Sheet Metal Workers Local 20 is an Indiana state wide organization with seven areas; Evansville, Fort Wayne, Gary, Indianapolis, Lafayette, South Bend, and Terre Haute. We have five training centers which are located in Indianapolis, Evansville, Portage, Fort Wayne, and South Bend. Local 20 is committed to offering the best training in the nation. Our training takes place in some of the most modern facilities in the country including a Nationally recognized Testing, Adjusting, and Balancing Lab, a Service Lab that provides hands on instruction of all HVAC equipment, 5 accredited test facilities allowing us to provide weld certifications to our members for the American Welding Society (AWS), and 5 accredited Detailing Labs where students earn instruction of Auto-Cad and Benchmark. Our program is comprehensive and requires time, commitment, and attention. The courses taken are demanding and require dedication, repetition, practice and professional instruction.

What is a Sheet Metal Worker?

Sheet Metal Workers are recognized for always being the best at the myriad of crafts they perform. Sheet Metal Workers are unique in the construction industry as the only trade that designs, manufactures and installs their own products. These skilled craftspeople take ordinary types of flat metal and make them into specialized products for various duct and ventilation systems, as well as architectural and specialized metal fabrication. The types of careers our students and members are trained for include Air Conditioning, Architectural Metal Fabrication and Installation, Auto-Cad Detailing and Design, Heating, HVAC Service Work and Testing, Industrial Fabrication and Installation, Industrial Welding, Testing/Adjusting/Balancing (TAB), and Ventilating.

How Can I Prepare?

Acceptance into the Sheet Metal Workers Apprenticeship program is very competitive. Applicants should have excellent math, mechanical reasoning, and problem-solving and manual dexterity skills. Written and verbal communication skills are also essential. We assess applicants on their ability to observe jobsite specific details and their ability to locate information using charts, graphs, tables, forms, diagrams, floor plans, maps, and instruments. Courses in drafting, algebra, communication, and computer literacy are recommended.

Apprenticeship Length:	5 years
Ivy Tech Degree:	Associate of Applied Science from Ivy Tech Community College issued upon successful completion of apprenticeship program
Local Apprenticeship Opportunities:	Sheet Metal Workers Local 20 6450 Ameriplex Drive Portage, IN 46368 Phone: 219-764-1910 http://www.smw20training.com/
Application Period:	Applications are accepted on the 1st Friday of every month from 8:00 a.m. - 12:00 p.m.
Application Cost:	No cost.

Sprinkler Fitter

Who Are We?

The local Sprinkler Fitter training center is over 25,000 square feet and is located in Alsip, IL. Sprinkler training covers all aspects of commercial, industrial, residential and service work. The site has two large classrooms and an additional two computer rooms with 26 computers. The training center equipment includes, 14 welding booths, an overhead crane, a flame beveller, a plasma cutting machine, a diesel fire pump assembly, a fire pump on a live header with 22 sprinkler valves, and a two story wood frame house used for residential training. The training from this facility has produced six consecutive years of Apprentice State Champions and also serves for continuing journey-level training.

For nearly 70 years the Sprinkler Fitters working in northwest Indiana and Chicagoland area have installed, tested and maintained sprinkler systems. We are proud to have installed these necessary lifesaving and property saving systems that are so important to our way of life. We take our jobs extremely serious because you only get one opportunity to install these systems properly.

What is a Sprinkler Fitter?

A Sprinkler Fitter installs fire sprinkler piping systems including the layout and installation of underground fire mains. With proficient knowledge of fire codes and responsibility for safety applications this tradesperson installs and maintains pressurized piping equipment and devices to supply fire protection and extinguishing systems with water, foam, carbon dioxide and other materials in places such as hospitals, homes, commercial buildings, municipal buildings, industrial facilities and manufacturing plants.

How Can I Prepare?

Successful Sprinkler Fitters typically have solid math and problem-solving skills. They should possess high mechanical aptitude and good manual dexterity. They should be comfortable working on ladders and below grade in trenches. A Sprinkler Fitters typically work at heights between 10 and 30 feet above ground level. Recommended high school courses include: algebra, geometry, mechanical drafting, and English composition. Written and verbal communication skills are also essential.

Apprenticeship Length:	5 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree
Local Apprenticeship Opportunities:	Sprinkler Fitters Local 281 Apprenticeship Training Center 11900 S. Laramie Avenue Alsip, IL 60808 Phone: 708-597-1800 www.sprinklerfitterchicago.org/
Application Period:	Call 708-597-1800
Application Cost:	\$25

Technical Engineer

Who Are We?

The Technical Engineers have been working in the Chicagoland and northwest Indiana region since January, 1962. In Indiana, we cover several counties including Lake, Porter, La Porte, Newton, Jasper, Starke, and Pulaski. Apprenticeship training consists of a combination of on-the-job training and classroom contact hours.

What is a Technical Engineer?

Technical Engineers perform control, preliminary and construction surveys to provide line and grade and to establish or re-establish base lines, center, and offset lines. They also establish bench marks and transfer of grades and elevation; set up and operate instruments including optical and electrical, line, distance, and grade devices; read and interpret architectural, civil, mechanical, and electrical drawing plans and specifications; perform the computations necessary to layout horizontal and vertical work points and control lines for the multiple trades that work on construction sites.

Oftentimes, the Technical Engineer can become the liaison between owner, general contractor, sub-contractor, and tradesmen. Other areas of construction in which Technical Engineers participate include steel mills, refineries, chemical plants, ethanol and biofuel facilities, power generating stations of all types, high-rise structures, tunnels, caissons, pipelines, rail facilities, highways and bridges, marine surveys, and commercial projects of various sorts.

Technical Engineers are an integral part of all phases of construction from the actual field work to and including the management positions of estimating, supervision, and project management.

How Can I Prepare?

Individuals interested in becoming a Technical Engineer should prepare by taking plenty of math and science courses in high school. A strong foundation in algebra, geometry, and trigonometry is essential. The ability to work with numbers and perform mathematical computations accurately and quickly is very important. Mechanical drawing and computer aided drafting classes are also recommended in helping students to visualize and understand objects in both two and three dimensions. Other areas of study should include: earth sciences, geography, chemistry, physics, and computer literacy.

Apprenticeship Length:	5 years
Ivy Tech Degree:	Not eligible for Ivy Tech degree
Local Apprenticeship Opportunities:	Technical Division of Local 180 1400 West Washington Boulevard Chicago, IL 60607-1821 Phone: 312-421-1010 Ext. 162
Application Period:	Apprenticeship Application Information (PDF) http://www.plumberslu180ua.com/tech-apprenticeship.aspx

Additional Resources

[Bricklayers and Allied Craftworkers \(BAC\) - Union](#)

[International Masonry Institute \(IMI\) - Marketing](#)

[International Masonry Training & Education Foundation \(IMTEF\) - Training](#)

[North America's Building Trades Unions \(NABTU\)](#)

[International Union Painters and Allied Trades](#)

[International Association of Heat and Frost Insulators and Allied Workers](#)

[We Build NWI](#)

[Indiana Plan](#)