

Career Descriptions

This is just the beginning of a lifetime of exciting opportunities that a construction career can bring you. As your knowledge and experience grow, there will be many career choices available to you ... craft professional, foreman, project superintendent, project manager, company owner, just to name a few.

Maybe your dream is to build a skyscraper, a home, a bridge, a highway, or an entire city? You can build it in construction and you can start building your construction career right now. Your high school vocational education program can provide you with craft training, job shadowing, and intern opportunities.

Below is a list of craft professional career descriptions, wage information, and the average length of training on just a few exciting careers in construction:

CARPENTERS

Salary: \$18.04 hourly \$37,520 annually

Carpenters cut, fit, and join wood and other building materials. There are three types of carpenters: form, framing, and finish. Form carpenters build the forms into which concrete is poured during the construction of buildings, roads, bridges, etc. Framing carpenters construct the framing required for structures. Finish carpenters install exterior siding, interior trim, cabinets, etc. All carpenters use a variety of hand/power tools and can read blueprints. The average length of a carpentry training program is four years.

CONCRETE FINISHER

Salary: \$16.25 hourly \$33,790 annually

Concrete finishers build skyscrapers, sidewalks, houses, highways, dams, etc. They finish horizontal surfaces such as airport and roadway pavements, floors, and foundations. They also finish vertical surfaces such as walls, cast columns, piers, beams, and girders. They have excellent math skills and can calculate vertical rise or fall, squareness, and right triangles. The average length of a concrete finishing training program is two to three years.

ELECTRICIAN

Salary: \$21.29 hourly \$44,290 annually

Electricians plan and install the electrical systems for structures. They install wiring and other electrical components such as breaker boxes, switches, and light fixtures. Electricians know local and national electrical codes. In most parts of the United States, electricians must be licensed. The average length of an electrical training program is four years.

ELECTRONIC SYSTEMS TECHNICIAN

Salary: \$17.80 hourly \$37,020 annually

Electronic Systems Technicians design, integrate, install, and provide field maintenance and service on products that transport voice, video, audio, and data signals in commercial or residential premises. Electronic Systems Technicians work for a variety of companies including alarm, security, or home automation companies; custom designer/installers; data cabling companies; home theater designers, etc. The average length of an electronic systems technician training program is three years.

HEAVY EQUIPMENT OPERATOR

Salary: \$18.47 hourly \$38,410 annually

Heavy Equipment Operators run heavy machinery such as dump trucks, bulldozers, backhoes, front -end loaders, and excavators. They work outside and are a critical component in preparing the construction site for building. The average length of a heavy equipment operations training program is three years.

HVAC TECHNICIAN

Salary: \$17.93 hourly \$37,290 annually

HVAC (heating, ventilation, and air conditioning) technicians install, maintain, and repair heating, ventilation, and air conditioning systems. There are several different kinds of HVAC systems and technicians can specialize in each of these systems. HVAC technicians understand the operating principles of the different systems and can interpret specifications. The average length of an HVAC training program is four years.

IRON WORKER

Salary: \$20.79 hourly \$43,240 annually

There are several types of ironworkers. Structural ironworkers move and install large girders and beams on bridges and building frames. Ornamental ironworkers install pre - constructed materials on elevators, stairways, and balconies. Reinforcing ironworkers strengthen the concrete in walls, piers, and roads. Ironworkers are skilled in

mathematics, blueprint reading, welding, and riveting. The average length of an ironworking training program is three years.

MASON

Salary: \$20.60 hourly \$42,850 annually

There are several types of masons. Bricklayers construct walls of brick, block, or panels. Stone and block masons specialize in building walls of stone and concrete block. Masons also have knowledge of mathematics and blueprint reading. The average length of a masonry training program is three to four years.

MOBILE CRANE OPERATOR

Salary: \$18.49 hourly \$38,430 annually

Mobile Crane Operators hoist and swing loads with a complex, rotating machine called a mobile crane. Their knowledge includes emergency control skills, load/capacity chart usage, and proficiency in handling the specific type of crane for a particular job. The average length of a mobile crane operation training program is three to four years.

PAINTER

Salary: \$15.49 hourly \$32,210 annually

Painters apply paint and coating on a structural surface. They must know what type of paint or coating to apply and how the environment will affect the surface. Painters work with a variety of hand and power tools to prepare the surface and apply the paint/coating. The average length of a painting training program is three years.

PIPELINER

Pipeliners maintain and repair pipelines, pumping stations, and tank farms. They must be trained to use sand blasting equipment to remove rust and foreign substances from meters and valves. Pipeliners must know how to operate such equipment as backhoes, bulldozers, and side booms; install screw-pipe and manifold connections, using wrenches and pipe tongs; and operate pumping equipment and pipe-cleaning-and-wrapping machines.

PLUMBER, PIPEFITTER, STEAMFITTER

Salary: \$20.97 hourly \$43,620 annually

Plumbers design and install piping systems that distribute water and remove waste from buildings. These systems include those connected to washers, sinks, toilets, heating, and cooling systems. Plumbers are knowledgeable in water distribution, blueprint reading, local ordinances and regulations, mathematics, mechanical drawing, physics, welding, and soldering. In most parts of the United States, plumbers must be licensed. The average length of a plumbing training program is four to five years.

SHEET METAL WORKER

Salary: \$18.43 hourly \$38,330 annually

Sheet Metal Workers cut and mold sheets of metal into products for installing and repairing ventilation and air ducts. They also construct aluminum siding, metal roofing, and gutters. They have excellent math skills and can read blueprints. The average length of a sheet metal training program is four years.

SPRINKLER FITTER

Salary: \$20.97 hourly \$43,620 annually

Sprinkler Fitters design, install, and test automatic fire protection sprinkler systems and components such as sprinklers, piping, and valves. They know local and national sprinkler codes. The average length of a sprinkler fitting training program is four years.

WELDER

Salary: \$15.16 hourly \$31,530 annually

Welders join objects together by applying heat or pressure. Skilled welders have a thorough knowledge of welding principles and metals. They can weld objects to specification from drawings. Skilled welders can perform all three types of welding: arc, gas, and resistance. The average length of a welding training program is three to four years.

[Source: Table 1. National employment and wage data from the Occupational Employment Statistics survey by occupation, November 2003](#)