# **BYF** ARCHITECT

# ARCHITECT

## \$87,500 salary\*

Do you see beauty in buildings? Do you like to design? Then you may be drawn to architecture. Architects plan and design houses, office buildings and other structures. These plans show the building's appearance and details of its construction. Accompanying these plans are drawings of air-conditioning, heating and ventilating systems, electrical systems, communications systems and plumbing. These drawings can be done both on paper and in computer-based programs. Architects normally work in an office where they meet with clients, engineers, project managers and other architects.

### **Education Options**

A bachelor's degree, master's degree or project management certification is required.



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# **BYF** BOILERMAKER

# BOILERMAKER

## \$65,341 salary\*

Check out this adventurous career where you can work with flames and an assortment of tools! Boilermakers job duties are versatile and require knowledge from other crafts. They work in a variety of areas, from power generation and paper mills to refineries. They make and install boilers and other large containers. Tasks include reading blueprints, welding or bolting pieces together and installing valves and supports. Boilermakers also perform routine maintenance.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





# CARPENTER

## **\$56,877** salary\*

Do you like building, traveling and being outdoors? Why not consider a career that is fun and offers financial freedom. Carpenters measure, cut and shape wood, plastic, fiberglass and drywall. Commercial and industrial carpenters construct, erect, install and repair structures and fixtures. These carpenters are involved in many different kinds of construction, from buildings to highways and bridges to power plants.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





# CIVIL ENGINEER \$91,790 salary\*

Do you take joy in designing and executing plans? Would you like to see your ideas built right in front of your eyes? Then becoming a civil engineer may be for you. Civil engineers design, construct, supervise, operate and maintain large construction projects and systems including roads, buildings, airports, tunnels, dams, bridges and systems for water supply and sewage treatment. They spend time both in the office and on the project site therefore craft experience is an absolute plus!

### Education Options

A bachelor's degree, master's degree or project management certification is required.







#### CRAFT LABORER

## \$38,890 salary\*

Would you consider yourself a jack of all trades? If so, a craft laborer career might be an option to explore! They perform many basic tasks on construction sites and mostly work full time. Some work at great heights or outdoors in all weather conditions. This occupation would be a great way to get your foot in the door to other career opportunities in the construction industry.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





# **ELECTRICIAN**

# \$67,269 salary\*

If you're into sound systems, robotics or tinkering with wires, you should think about a career as an electrician. Electricians install and maintain all of the electrical and power systems for our homes, businesses and factories. Electricians in large factories usually do maintenance work that is more complex. These kinds of electricians may repair motors, transformers, generators and electronic controllers on machine tools and industrial robots. They also advise management as to whether the continued operation of certain equipment could be hazardous.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



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### GLAZIER

If you enjoy adventures, scenic views and have a creative side then this profession may be for you! Glaziers are true artisans who work with glass as their mediums. They select, cut, install, replace and remove residential, commercial and artistic glass. Glaziers use a variety of tools including glazing knives, saws, drills, grinders, putty and glazing compounds. They must work as a team when guiding and installing glass for large buildings.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- · Industry training programs

Students can start in high school where programs are available.



### **BYF.** HEAVY EQUIPMENT OPERATOR

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# HEAVY EQUIPMENT \$60,828 salary\*

Do you have an interest in operating dump trucks, bulldozers or other vehicles classified as heavy machinery? As a heavy equipment operator, you will learn how to safely use this type of equipment to move construction materials, dirt and other heavy objects at construction sites and mines. This occupation operates equipment that clears and grades land to prepare it for construction of roads, buildings and bridges, as well as airport runways, power generation facilities, dams, levees and other structures.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### HVAC TECHNICIAN

# \$62,472 salary\*

Are you interested in model building or have coined yourself Mr. Fix It? HVAC Technicians are always piecing things together as they install, maintain and repair heating, ventilation and air conditioning systems. Can't decide between a career in mechanical systems or electronics? HVAC covers it all! Motors, compressors, pumps, fans, thermostats and computerized switches control systems in residential, commercial and industrial structures. Technicians can also specialize in specific equipment, such as hydronics (water-based heating systems), solar panels or commercial refrigeration.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



# BYF. INSTRUMENTATION

# INSTRUMENTATION \$70,080 salary\*

Are you a problem solver with a knack for small details? Instrumentation may be the perfect craft profession for you. Instrument fitters and technicians perform key installation and maintenance functions across several industries and are trained in piping, tubing, fastening and working with metal production. Instrumentation technicians and fitters have to be familiar with electrical systems, craft-specific drawings and must be experts in the hand and power tools specific to their trade.

### Education Options

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



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# INSULATOR

## \$52,624 salary\*

Work with your hands in an industry that provides the economy with energy saving options. The insulation mechanic installs insulation systems on piping, plumbing, HVAC systems, equipment and other processing systems in new construction, retrofit and maintenance projects in the commercial and industrial industry. The result of an insulation mechanic's work ensures that systems perform at their highest level – saving energy, reducing fuel costs, reducing emissions and enhancing the work environment.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





# IRONWORKER

## \$60,060 salary\*

Ironworking is the ultimate in hands-on construction. If you are looking for an exciting career where you can balance from the top of a brand new skyscraper, then ironworking is for you. Ironworkers place and install iron or steel girders, columns and other construction materials to form the infrastructure all around us. Ironworkers must always be paying attention to details to check vertical and horizontal alignment.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





# MASON

## \$56,784 salary\*

Do you dream of building a structure with your own two hands or restoring historical buildings? Check out training in masonry! Brickmasons, blockmasons and stonemasons use bricks, concrete blocks and natural stones to build attractive, durable surfaces and structures. These craft professionals have created buildings, walls and roads for thousands of years and will continue to do so long into the future.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



# BYF. MOBILE CRANE

#### MOBILE CRANE OPERATOR

# \$66,119 salary\*

Do you wish your career involved using a joystick? No, we are not talking about becoming a professional video gamer. Mobile crane operators use state-of-the-art heavy machinery to move construction materials, earth and even petroleum products over short distances. A series of joysticks, levers and pedals allows the operator to use his or her knowledge of load calculations to place materials around a construction site.

### **Education Options**

- Technical schools
- Registered apprenticeships
- · Community colleges
- Industry training programs

Students can start in high school where programs are available.





# MILLWRIGHT

# \$66,919 salary\*

Do you take things apart and put them back together just to see how they work? Do you always have the right tool for the job? Then you would make a great millwright! Millwrights work on construction sites and in factories assembling and disassembling machinery. This work can involve intricate technical repairs or heavy machining tools, depending on the project. Millwrights have to be able to understand technical manuals for many different types of machines as well as have a high level of problem solving skills.

### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





# PAINTER

Do you have an eye for different colors, textures and tones? Would you consider yourself artsy? Try your hand at becoming a professional painter. Painters are responsible for choosing and applying just the right paint or colors to buildings and industrial structures. This career path ranges from industrial spray painters who apply coatings to prevent deterioration to decorative artisans who create faux finishes.

### **Education Options**

- Technical schools
- Registered apprenticeships
- · Community colleges
- Industry training programs

Students can start in high school where programs are available.



# **BYF** PIPEFITTER

### PIPEFITTER

## \$62,697 salary\*

Are you a little bit of a perfectionist? Do you enjoy reading plans and making something useful? Consider training to become a pipefitter. Pipefitters plan and install detailed pipe systems for commercial and industrial projects. These pipes may carry water, chemicals or gases to the crucial building systems. Pipefitters use many tools to cut and bend pipes to exact specifications.

### **Education Options**

- Technical schools
- Registered apprenticeships
- · Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### PIPELINE TECHNICIAN

# **\$57,070** salary\*

The pipeline industry has a wide range of opportunities, so whether you are looking to work with state-of-the-art technology in a control center, or travel as a service unit operator maintaining wells, there is a career for you. The derricks, pumps and drilling systems that make up a pipeline system are made up of advanced machinery and require strict qualifications and safety practices. Other craft professionals such as pipefitters and welders can also use their skills in the pipeline industry.

### Education Options

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.




#### PLUMBER

#### \$59,627 salary\*

Are you always tinkering with objects? Do people ask for your help with fixing mechanical things? Look into becoming a plumber! Plumbers do much more than fix sinks and toilets in residential homes. They design and install piping systems that distribute water and remove waste from buildings, and connect heating and cooling systems. Plumbers have to be knowledgeable in water distribution, blueprint reading, local ordinances and regulations, mathematics, mechanical drawing, physics, welding and soldering.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### POWER LINE WORKER

#### \$68,262 salary\*

If you are looking for a high-powered career, you've found it! Power line workers install and repair the various cables and lines of the power grids that cover the world. Whether lowered in a trench, hoisted in a bucket truck or suspended from a helicopter, power line workers make sure the electricity keeps flowing to every home, business and factory. Safety is top priority in highvoltage conditions, so the proper protective equipment must be worn at all times.

#### Education Options

- Technical schools
- Registered apprenticeships
- · Community colleges
- Industry training programs

Students can start in high school where programs are available.



### **BYF** PROJECT MANAGER

#### PROJECT MANAGER



Do others seek your guidance to complete group assignments or project-based tasks? Transfer these leadership skills to the construction industry through project management. Project managers are essential to completing projects on time and on budget. Their duties can include planning, coordinating, budgeting and supervising construction projects from development to completion. Project managers usually spend most of their time on site where they monitor projects and make daily decisions about construction activities.

#### Education Options

A bachelor's degree, master's degree or project management certification is required.







#### RIGGER

#### \$57,084 salary\*

Are you interested in practical physics? Do you love working outdoors? That combination is a good start to becoming a rigger. Riggers attach loads to cranes or structures using equipment like cables, pulleys and winches. Load calculations are necessary for each load and engineering principles are always in play. Riggers ensure equipment and materials are moved safely around a job site.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- · Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### ROOFER



Take an interest in becoming a roofer and rise above the rest! Roofers use a variety of materials to build roofs and cover structures such as houses, malls and hospitals. The materials used are shingles, asphalt, wood and aluminum. They perform routine inspections and maintenance on a building's roof and determine the best repair procedures. Safety procedures and proper personal protective equipment are key to perform these tasks.

#### Education Options

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



# BYF. CONSTRUCTION SITE SAFETY TECHNICIAN

## CONSTRUCTION SITE SAFETY TECHNICIAN \$67,720 salary\*

Do you like to lead by example? Are you a great communicator who engages well with people? These skills are needed for a career as a construction site safety technician. These professionals oversee safety fundamentals - from training staff, to implementing steps to prevent accidents, to inspecting daily safety procedures. When incidents occur, site safety technicians help with the investigation, file company reports and immediately correct the issues. If you enjoy a varied work environment, have a passion to care for others and are looking for a career that is in high demand, this is the role for you.

#### **Education Options**

- Technical schools
- Universities
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### SCAFFOLD Builder

#### \$52,990 salary\*

Do you enjoy team driven activities that involve strategy, communication and balance? Apply these skills to a career by becoming a scaffold builder. A scaffold builder works at great heights to install temporary structures such as ladders, walkways and handrails with a variety of power tools and lifts. These structures assist with constructing or repairing power plants, stadiums, hotels and other construction projects. Working effectively with others and understanding basic math skills are the secrets to a successful career.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### SHEET METAL WORKER

#### \$58,160 salary\*

Are you a visual person? Do you enjoy mechanics and fitting puzzles together? Sheet metal workers cut and mold sheets of metal into products for installing and repairing ventilation and air ducts. They also construct airplanes, automobiles and billboards. Most sheet metal fabrication shops are completely computerized, so sheet metal workers may be responsible for programming control systems on various pieces of equipment.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



## BYF. SITE LAYOUT/

#### SITE LAYOUT/ SURVEY ENGINEER \$65,300 salary\*

If math, measuring and engineering is your strength, consider a career in site layout. Surveyors are the first on the site to gather data about the elevation, contour and dimensions of the land being developed. This data gets used for everything from mapmaking, mining, engineering and general construction. Survey jobs are available in every segment of the construction industry including highway and bridge construction, pipeline and mining.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- · Community colleges
- Industry training programs

Students can start in high school where programs are available.



# BYF. SOLAR PHOTOVOLTAIC

## SOLAR PHOTOVOLTAIC \$43,010 salary\*

Does your dream job involve working under the sun? Why not capture that sustainable energy and become a solar photovoltaic installer? You will assemble, install and maintain the solar panels harnessing the sun's power in this fun career choice! Solar cells can come produced in panels, roof tiles, shingles or rolls of flexible panels. Every installation is unique, and electrical wiring is sometimes connected to a main utility electrical grid.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### SPRINKLER FITTER



Are you a detail-oriented kind of person? Sprinkler fitting may be a good career to consider! Sprinkler fitters design, install and test automatic fire protection sprinkler systems and components such as sprinklers, piping and valves. They have to know all of the local and national sprinkler codes and make sure that all work is according to specifications.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- · Community colleges
- Industry training programs

Students can start in high school where programs are available.





#### TOWER CRANE OPERATOR

#### \$66,329 salary\*

Looking for a career where you will be given the best seat in the house? Then check out the view as a tower crane operator! These craft professionals use their knowledge of load calculations and crane operations to hoist heavy materials off the ground and to significant heights. They must have endurance, agility and physical coordination, as well as great hand/eye coordination.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



# BYF. WELDER

#### WELDER

#### \$71,067 salary\*

Do you get a kick out of watching sparks fly on the Fourth of July? Choose a career in welding and watch them fly every day! Welders join objects together by applying heat or pressure. Skilled welders have a thorough knowledge of welding principals and metals. They use blueprints and drawings to build anything from ships to cars to bridges. Welders play a crucial role in maintaining a variety of power plants and have the opportunity to travel throughout the year.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.



## BYF. WIND TURBINE MAINTENANCE TECH

#### WIND TURBINE MAINTENANCE TECH \$56,680 salary\*

Are you a rock-climber who loves extreme heights? Would you consider yourself environmentally friendly? Being a wind turbine maintenance technician could be a great career for you! Wind turbine maintenance technicians are responsible for performing the complicated repairs and inspections on existing turbines. Sometimes these repairs take place at the very top of the turbine what is called the nacelle operating room. This operating room houses the instruments that measure wind speed and direction.

#### **Education Options**

- Technical schools
- Registered apprenticeships
- Community colleges
- Industry training programs

Students can start in high school where programs are available.

