



# Build Your Career

IN THE BUILT  
ENVIRONMENT



**PICK YOUR PASSION  
CHOOSE YOUR PATH**





# The Built Environment

The Built Environment covers everything from infrastructure to buildings to houses to recreation.

## Visionaries

The Built Environment relies upon real estate developers & planners to envision the project and architects to design.



See the bottom right of each page to see if the job is for visionaries.

## Business

There are a number of related occupations that just as important such as legal, finance, marketing, appraisal, accounting and information technology.



See the bottom right of each page to see if this job is for business.

## Producers

The Build Environment relies on engineers to figure out how to make projects function correctly



See the bottom right of each page to see if this job is for producers.



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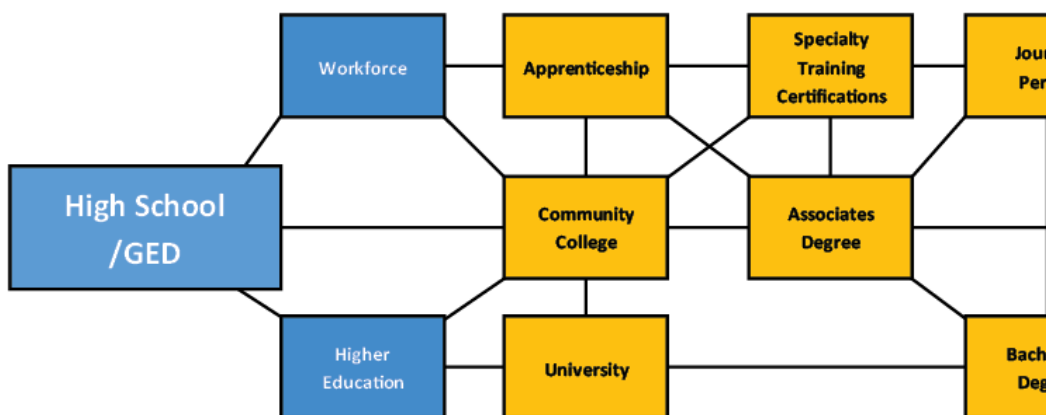




# Pathways

An **apprenticeship** is a training program for specialized and technical jobs called the “other four-year degree,” an apprenticeship includes classroom licenses for each trade. Some of the different trades that are apprenticeships and many more. Many apprenticeships now include the possibility of earning

The built environment industry offers many options no matter what path you take to become a construction manager. You could start off as an apprentice, become a master journeyman, or even a professional. These pathways are yours to explore and they all lead to rewarding and

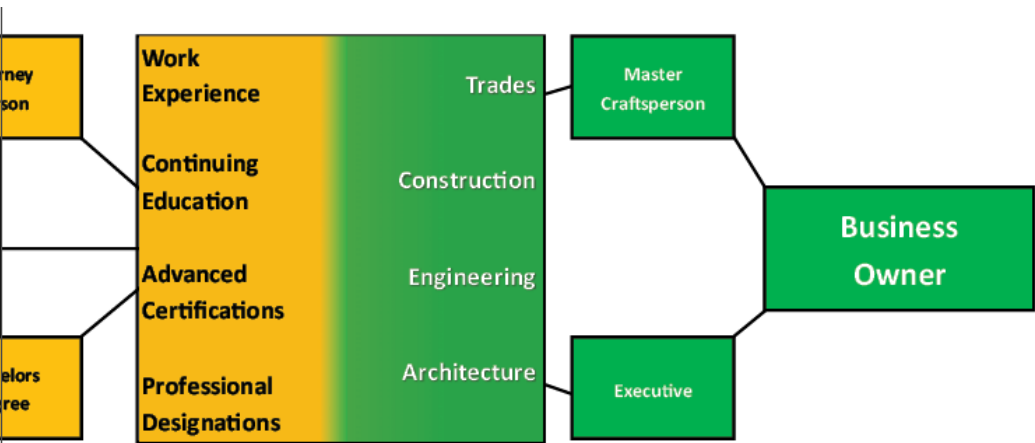




# To learn more, visit: [BuildYourPath.org/whats-your-path](http://BuildYourPath.org/whats-your-path)

Jobs that require a lot of brainpower as well as hands-on work. Sometimes on-the-job training that leads to specific certifications and apprenticeships include electricians, plumbers, HVAC technicians, carpenters, and construction workers. Some programs offer college credits that can be used at local community colleges.

Build for yourself. You could start off as a laborer and eventually become a master trade professional, own your own business and go to college along the way. There are many meaningful careers.





# CARPENTER



## What do Carpenters do?

Carpenters perform many different tasks during their workday. They need to be able to read and understand construction documents, plans, and specifications. Carpenters install many different building components, including windows, and doors, and have to be able to measure and cut materials accurately. Carpenters are trained to properly construct walls, floors, stairways, and doorways. They may rely on cranes and large equipment when constructing building frameworks.

**Carpenters build and repair frameworks and structures with wood or steel framing, stairways, doorways, trusses, and rafters.**

## QUICK FACTS

### SALARY RANGE

\$45,170-\$49,690 but will vary depending on experience and training.

### EDUCATION

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

## TYPES OF CARPENTERS

- **Residential carpenters** specialize in single-family, townhome, and condominium building and remodeling.
- **Commercial carpenters** build and remodel commercial office buildings, hospitals, hotels, schools, and shopping malls.
- **Industrial carpenters** work on civil engineering projects and in industrial settings.
- **Finish carpenters** provide finishing touches after the primary building of a structure is done.

### SKILLS YOU SHOULD HAVE

Advanced math skills  
Attention to detail  
Business skills  
Manual dexterity  
Physical stamina  
Physical strength  
Problem-solving skills







## CONSTRUCTION MANAGER



## What do Construction Managers do?

Construction managers oversee all aspects of worksites and construction projects. They plan, coordinate, budget, and supervise all phases of construction from the start of a project to its completion. Construction managers may work as project managers, superintendents, or cost estimators for general and sub-contracting firms.

**Construction managers oversee most of the personnel working on construction sites.**

## QUICK FACTS

### SALARY RANGE

\$91,370-\$95,630 but will vary depending on experience and training.

### EDUCATION

Anyone can become a Construction Manager if they take the right pathway. Some Construction Managers have a degree, but some start out in apprenticeships. Follow our pathway on pages 4-5 to see how.

### SKILLS YOU SHOULD HAVE

Analytical skills  
Business skills  
Communication skills  
Customer-service skills  
Decision-making skills  
Leadership skills  
Technical skills  
Time-management skills



## DESIGNERS/CAD



### What do Virtual Designers do?

Although designers used to draw plans by hand, now most of them use software that often involves computer-aided drafting and building-information modeling programs. This occupation is evolving, and this is where drafters and virtual designers come in.

**Using computing software, designers prepare technical drawings and plans that become templates for constructing a host of buildings and systems.**

### QUICK FACTS

#### SALARY RANGE

\$60,490 in central Maryland, but will vary depending on experience and training.

#### EDUCATION

An associate's degree or certificate from technical school is usually required.

#### GENERAL SKILLS YOU SHOULD HAVE

Attention to detail  
Critical-thinking  
Interpersonal skills  
Mathematical skills  
Time-Management

#### TECHNICAL SKILLS YOU SHOULD HAVE

AutoCAD  
Autodesk Revit  
MicroStation  
Floor Planning  
Rendering



## ELECTRICIAN



## What do Electricians do?

Electricians install electrical systems including lighting and control systems for public and private clients. Any system that involves electrical wiring is usually installed and maintained by an electrician. Installing these systems while buildings are being constructed is usually easier and less complicated than updating or renovating an existing building.

**Being an electrician is considered a trade career that generally requires an apprenticeship in order to become licensed as required by law.**

## QUICK FACTS

### SALARY RANGE

\$54,110-\$60,570 but will vary depending on experience and training.

### EDUCATION

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

### TYPES OF ELECTRICIANS

- **Inside electricians** maintain and repair large motors, equipment, and control systems inside businesses and factories.
- **Residential electricians** who work in new-home construction install components and provide access to power where needed.

### SKILLS YOU SHOULD HAVE

Ability to see all colors  
Business skills  
Critical-thinking skills  
Customer-service skills  
Manual dexterity  
Troubleshooting skills





## ELEVATOR MECHANIC



### What do Elevator Mechanics do?

Elevator mechanics need to be able to read construction documents, plans, and specifications, which allows them to properly determine equipment needed to complete a project. After reading the plans, elevator mechanics begin their projects, whether those projects involve installing systems, repairing cables, or performing the overall daily maintenance of a system.

**Elevator installers and repairers also known as elevator mechanics, work to install, repair, and maintain elevator, escalator, moving walkway, and lift systems.**

### QUICK FACTS

#### SALARY RANGE

The average starting salary is \$79,480-\$94,030.

#### EDUCATION

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

#### TYPES OF ELEVATOR MECHANICS

- **Installation mechanics** install new systems for elevators, escalators, and moving walkways.
- **Maintenance mechanics** repair existing systems, often specializing in the same systems and manufacturers.
- **Adjusters** focus on fine-tuning all equipment after installation and ensure that the system works properly.
- **Assistant mechanics** will work with someone who has completed the apprenticeship and earned a journeyman's license.

#### SKILLS YOU SHOULD HAVE

Attention to detail  
Computer skills  
Mechanical skills  
Physical stamina  
Physical strength  
Technical skills  
Troubleshooting skills



## FACILITIES MAINTENANCE



# What do Facilities Maintenance workers do?

Facilities maintenance workers keep buildings up-to-date and sustained once the project is complete. These workers return to site for the remaining life of the building.

**Facilities Maintenance workers have the task of applying basic fixes to equipment and building systems. They ensure building upkeep and functionality.**

## QUICK FACTS

### SALARY RANGE

\$64,668 in central Maryland, but will vary depending on experience and training.

### EDUCATION

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

### TECHNICAL SKILLS YOU SHOULD HAVE

HVAC  
Plumbing  
Carpentry  
Mechanics  
Painting

### GENERAL SKILLS YOU SHOULD HAVE

Attention to detail  
Computer skills  
Mechanical skills  
Physical stamina  
Physical strength  
Technical skills  
Troubleshooting skills



## FINISHING TRADES



### What do Finishing Trades do?

Finishing trades involve many facets within the built environment industry. Finishing trades include, but are not limited to the finishing of surfaces in: a building, such as flooring, painting, plastering, and tiling.

**No degree is required, follow the pathway of apprenticeship and you will find a great career in finishing trades, and it can lead to much more.**

## QUICK FACTS

### SALARY RANGE

\$45,000, but will vary depending on experience and training.

### EDUCATION

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

### TECHNICAL SKILLS YOU SHOULD HAVE

Moldings  
Mechanical skills  
Carpentry  
Glazing  
Roofing

### GENERAL SKILLS YOU SHOULD HAVE

Good balance  
Hand-eye coordination  
Manual dexterity  
Physical stamina  
Physical strength







## GLAZIER



## What do Glaziers do?

Glaziers work on residential and commercial properties installing glass used for showers, tabletops, room dividers, and anything else that involves the use of glass. They can also work on replacing older windows on existing buildings.

**A glazier installs glass in windows, skylights, and other fixtures in storefronts and buildings. Glaziers specialize in installing tempered and laminated glass, windows of all sizes, and doors to make a building seem open, airy, and inviting.**

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## QUICK FACTS

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### SALARY RANGE

\$48,109 in central Maryland, but will vary depending on experience and training.

### EDUCATION

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

### TECHNICAL SKILLS YOU SHOULD HAVE

Moldings  
Mechanical skills  
Carpentry  
Glazing  
Roofing

### GENERAL SKILLS YOU SHOULD HAVE

Good balance  
Hand-eye coordination  
Manual dexterity  
Physical stamina  
Physical strength





## HVAC TECHNICIAN



### What do HVAC Technicians do?

HVAC mechanics must understand how to read construction documents, plans, specifications, and technical manuals. HVAC systems are highly complex and are some of the first aspects that contractors analyze in order to estimate the duration and cost of a project.

**Heating, ventilation, and air conditioning (HVAC) mechanics, who may also work with refrigeration, install and maintain systems that control the temperature, airflow, and air quality in buildings.**

## QUICK FACTS

### SALARY RANGE

\$47,080-\$50,460 but will vary depending on experience.

### EDUCATION

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

### SKILLS YOU SHOULD HAVE

Attention to detail  
Computer skills  
Mechanical skills  
Physical strength  
Problem solving skills  
Technical skills  
Troubleshooting skills





## INSPECTORS



# What do Inspectors do?

Inspectors review plans to ensure they meet building codes, local ordinances, zoning regulations, and contract specifications. They may even oversee construction sites to be sure they meet safety standards. Inspectors do mostly on-the-job training learning from an experienced inspector.

**Inspectors ensure that all buildings and construction sites meet the requirements of applicable building codes. They also ensure that all zoning and land use regulations are followed.**

## QUICK FACTS

### SALARY RANGE

\$55,173 in central Maryland, but will vary depending on experience and training.

### EDUCATION

A degree in a related field or many years of job experience is usually required.

### GENERAL SKILLS YOU SHOULD HAVE

Attention to detail  
Building knowledge  
Communication skills  
Craft experience  
Physical stamina

### TECHNICAL SKILLS YOU SHOULD HAVE

Erosions  
Sediment controls  
Roofing  
Civil engineering  
Quality management







## LANDSCAPE ARCHITECT



### What do Landscape Architects do?

The main goal of a landscape architect is to enhance the natural beauty of a space and provide environmental benefits. The restoration of streams, wetlands, and other places altered by human use may also be part of their design work, as well as green roofs or rooftop gardens. In addition, landscape architects may work on historical restorations or memorials.

**Landscape architects and designers design attractive and functional parks, gardens, playgrounds, campuses, and public spaces.**

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### QUICK FACTS

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#### **SALARY RANGE**

\$65,760 but will vary depending on experience and training.

#### **EDUCATION**

A degree from an accredited university program is required.

#### **GENERAL SKILLS YOU SHOULD HAVE**

Analytical skills  
Communication skills  
Organizational skills  
Problem-solving skills  
Technical skills  
Visualization skills





## PLUMBERS



### What do Plumbers do?

Plumbers, pipefitters, and steamfitters install and repair piping that carries liquids or gases in residential, commercial, and industrial locations.

**Although plumbers, pipefitters, and steamfitters are three distinct specialties, their duties are often similar. Master plumbers who have gained years of experience in the field may develop a plumbing layout for new construction projects.**

### QUICK FACTS

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#### **SALARY RANGE**

\$52,590-\$58,040 but will vary depending on experience and training.

#### **EDUCATION**

A High School Diploma or GED is required. An apprenticeship is the traditional pathway.

#### **GENERAL SKILLS YOU SHOULD HAVE**

Advanced math skills  
Business skills  
Communication skills  
Customer-service skills  
Mechanical skills  
Physical strength  
Troubleshooting skills



## WELDING



## What do Welders do?

In short, welders join metal parts together. They also fill in holes and seams by using high-heat joint equipment. Given the strength of these joints, welders commonly work on ships, cars, and building structures.

**Welders use construction documents, plans, specifications, and sketches to understand the tasks involved in a project. They calculate the dimensions that they need and inspect structures.**

## QUICK FACTS

### SALARY RANGE

\$40,240 but will vary depending on experience and training.

### EDUCATION

A High School Diploma or GED is required. Apprenticeship is the traditional pathway.

### GENERAL SKILLS YOU SHOULD HAVE

Attention to detail  
Manual dexterity  
Physical stamina  
Physical strength  
Spatial orientation  
Technical skills







## WHAT IS BUILD YOUR PATH?

Build Your Path is a guide for built environment careers created by the Maryland Center for Construction Education and Innovation (MCCEI). Build Your Path is intended to help people realize how rewarding careers in the built environment can be! All different skill sets and personality types could find a place in this industry.

**Visit [mccei.org/map](https://mccei.org/map) for a searchable mapping function of training providers.**

## GET MORE BUILD YOUR PATH

**[BULDYOURPATH.ORG](https://www.bulldyourpath.org)**



Has full explanations of each career and many other careers in the built environment industry.

Downloadable directory of state-wide training programs.



**@BuildYourPath**

## Contact MCCEI

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**CONSTRUCTION**  
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# ANNE ARUNDEL WORKFORCE DEVELOPMENT CORPORATION

Anne Arundel Workforce Development Corporation is a non-profit workforce solutions provider building success for businesses and individuals in Anne Arundel County and the region. We provide businesses strategies for hiring qualified talent and providing customized workforce solutions, saving time and money. We also help those who are starting, transitioning, or advancing their careers by connecting them to up-to-date skills and certification required by businesses.

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