

CONSTRUCTION TRADES

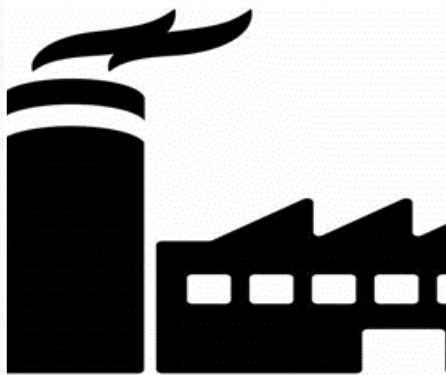


Not sure where to start?
Click here to learn about
workforce development!



Sectors

Industrial



Industrial construction is the construction of properties used for manufacturing, such as processing plants and factories

Infrastructure



Infrastructure is the basic physical and organizational structures and facilities needed for the operation of a society or enterprise

Building



Building construction is the process of preparing and forming buildings and systems



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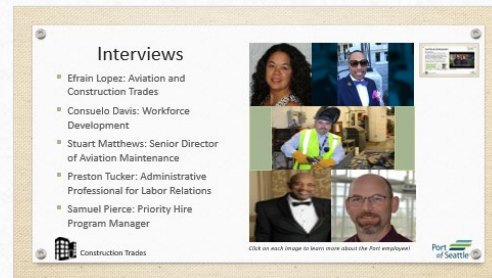
Workforce Development

Diversity Initiative:

The Port of Seattle fosters an environment that prioritizes the accessibility of both its resources and opportunities to workers across the Seattle land area. Their diversity initiative strives to use outreach strategies to work with people in different communities across King County. Their workforce development also provides benefits to help Port employees advance in or explore other careers.



Careers Directory



Interviews with Port employees



Click to watch video.



Construction Trades



Career Opportunities

More

Plumber

Electrician

Mason

Glazier

Engineer

Carpenter

Environmental
Advisor

Land
Surveyor

Aviation
Constructio
n/Mechanic

Electrician/
technician

Elevator
Mechanic

Roofer

Sheet
Metal
Worker

Painter

Cost
Estimator



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Career Opportunities

Driller

Welder/Cutter/
Solderer/Brazer

Pipelayer

Paver

Equipment
Mechanic

Electrical
Installer

Equipment
Operator

Interior
Designer

Drywall and
Tile Installer

Project
Manager

Accountant

Financial
Advisor

Data
Analyst

General
Contractor

Manufacturer



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Industrial Subsectors

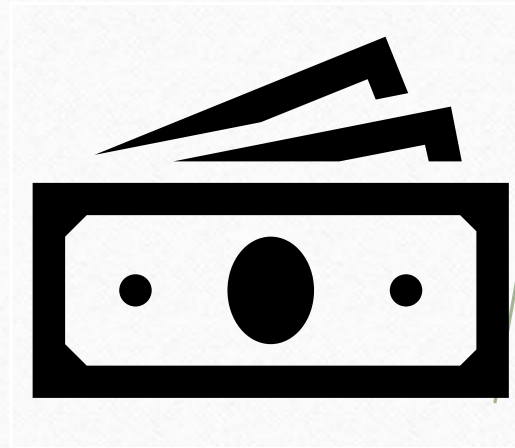


Design



A plan or drawing produced to show the look and function or workings of a building, garment or other object before it is built or made.

Financing



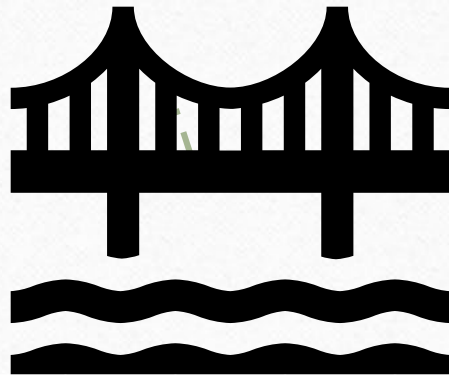
The process of providing funds for business activities, making purchases, or investing.



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Infrastructure Subsectors

Civil Engineering



A specialized engineer that maintains and operates in infrastructures & construction while finding problems in the public society.

Decommissioning



Decommissioning is a general term for a formal process to remove something from an active status or defund a project



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Building Subsectors

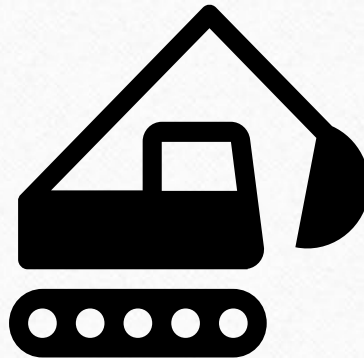


Commercial Construction



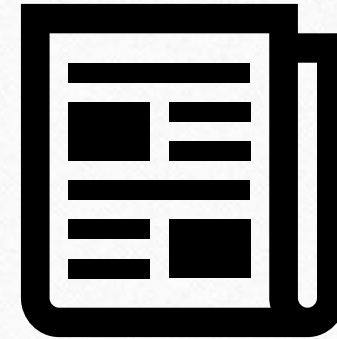
Any business constructed with the sole motive of gaining a profit.

Demolition



The destruction of any building or structure by dismantling, razing, destroying, or wrecking it.

Architectural Planning



Is a design and planning, and can contain architectural drawings, specification of the design, calculations, time planning of building process, and other stuff



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Commercial Construction

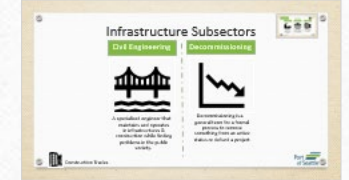
Commercial construction is concerned or engaged in commerce. Some examples of commercial construction include restaurants, shopping centers, offices, etc.

Job prospects within include:

<u>Roofer</u>	<u>Carpenter</u>	<u>Glazier</u>
<u>Pipe layer</u>	<u>Welder</u>	<u>Mason</u>
<u>Environmental advisor</u>	<u>Project manager</u>	<u>Plumber</u>
<u>Driller</u>	<u>Electrician/technician</u>	<u>Dry Wall & Tile Installer</u>
<u>Contractor</u>	<u>Equipment mechanic</u>	<u>Engineer</u>



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Civil Engineering

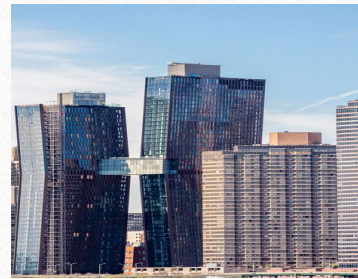
It takes place in the national government, private sector from individual homeowners & in international companies. There are multiple civil engineering professions. Professional engineering work in sub-disciplines in dealing with the design of public sector from municipal.

Job prospects within include:

<u>Electrician/ Technician</u>	<u>Engineer</u>	<u>Aviation Construction /Mechanic</u>	<u>Elevator Mechanic</u>
<u>Equipment Mechanic</u>	<u>Electrical Installer</u>	<u>Equipment Operator</u>	



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Architectural Planning

ARCHITECTURAL PLAN ASPECTS:

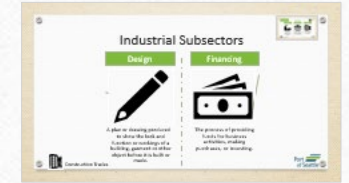
- ❖ Building, design process, architectural drawing, architectural design values, floor plan, planning and building construction.

Job prospects within include:

<u>Glazier</u>	<u>Graphic Designer</u>	<u>Painter</u>
<u>Carpenter</u>	<u>Project Manager</u>	<u>General Contractor</u>



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Financing

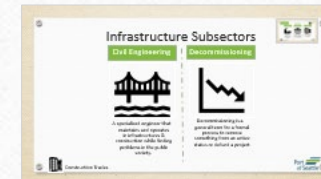
Financial institutions, such as banks, are in the business of providing capital to businesses, consumers, and investors to help them achieve their goals.

Job prospects within include:

<u>Cost Estimator</u>	<u>Accountant</u>	<u>Financial Advisor</u>
<u>Project Manager</u>	<u>Land surveyor</u>	<u>Data Analyst</u>



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Decommissioning

Job prospects within include:

Financial Advisor

Electrician/Technician

Data Analyst

Equipment Operator

Driller



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Demolition

- ❖ Demolition hazards
- ❖ Demolition tools
- ❖ Demolition v. deconstruction

Job prospects within include:

Elevator Mechanic

Equipment Operator

Equipment Mechanic

Project Manager

Environmental Advisor



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Design

Design is a plan or specification for the construction of an object or system or for the implementation of an activity or process, or the result of that plan or specification in the form of a prototype, product or process

Job prospects within include:

Interior Designer

Paver

Painter

Glazier

Graphic Designer

Carpenter

General Contractor



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Interviews

- Efrain Lopez: Aviation and Construction Trades
- Consuelo Davis: Workforce Development
- Stuart Matthews: Senior Director of Aviation Maintenance
- Preston Tucker: Administrative Professional for Labor Relations
- Samuel Pierce: Priority Hire Program Manager



Construction Trades



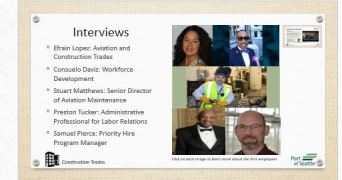
Click on each image to learn more about the Port employee!



Efrain Lopez

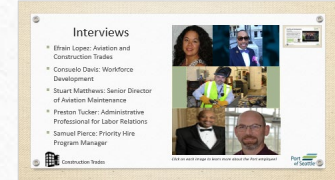


- He was born in Jalisco. He arrived in Los Angeles at the age 1 year and after 18 years he moved to Washington. He started to work in "Port of Seattle" since 2003.
- He want to represent the community of Latinos and he is voluntary to organization "Latinos Unidos"



Construction Trades





Consuelo Davis



Administrative Assistant for Workforce Development

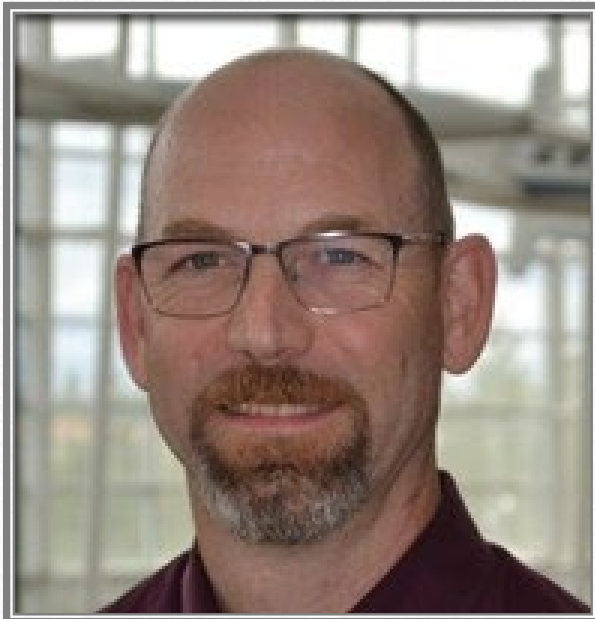
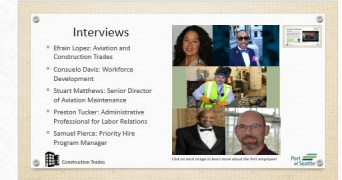
- Consuelo is of Latinx Filipino and Native American decent.
- Strives to provide women of color with jobs in construction
- Foster safe work environment on construction sites
- Continuously fights for fair and better wages for female POC



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Stuart Matthews



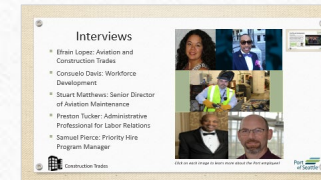
Senior Director of Aviation Maintenance

- He was born in Seattle he's the youngest out of 6 children's and he went to the University of Washington.
- He started working in Port of Seattle 4 years ago and he had a lot of support from his parents and friends.
- He is planning to retire at the Port of Seattle.



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Preston Tucker



Administrative Professional for Labor Relations

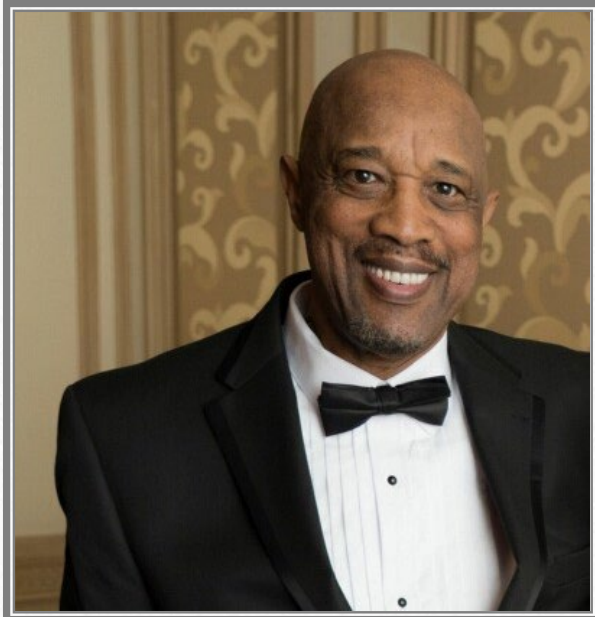
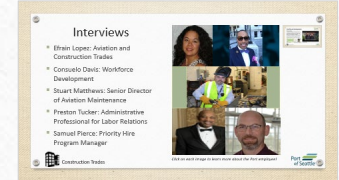
- Preston Tucker is dedicated to his work & for other people, he makes work easier for co-worker's and for employees.
- He does the departmental budgeting, commissioning process, manage internal and external labor communications.
- He champions diversity in his work and for others.
- Preston's family & his life growing up
- Preston personality



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Samuel Pierce



Priority Hire Program Manager

- Personal philosophy: "treat a person for who they are."
- What is the Hire Priority Program?
 - a program that identifies, recruits, and trains people (18+ years) of diverse backgrounds to implement a diversity initiative at the Port
- 6 PLA projects



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Aviation Construction/Mechanic



- Referred to as an Aircraft Maintenance Technician.
- They inspect and perform or supervise the aircraft's system.
- Ensure the plane is in operating condition.
- You need 18 months of practical experience with either, power plants or airframes.
- They need to schedule to inspect/operate on the plane when it's not in use.



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Elevator Mechanic



Construction Trades



- It's a skilled technician who constructs, modernize or repair an elevator/vertical transport.
- The mechanic belongs to trade and you must have permit in order to work on vertical transport.
- They can work on all types of vertical transportation.
- If any of the transports need repair/fix it is temporarily telling they're finished.

Electrician/ Technician



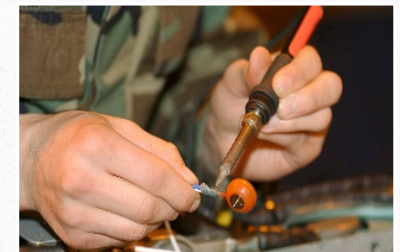
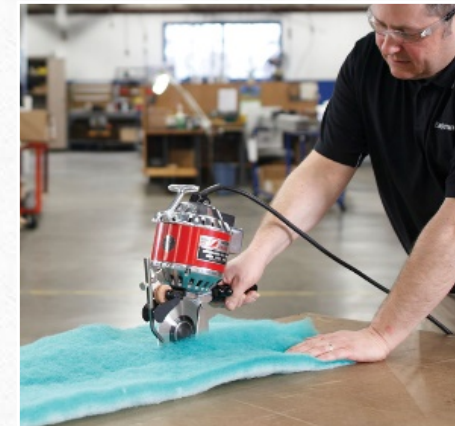
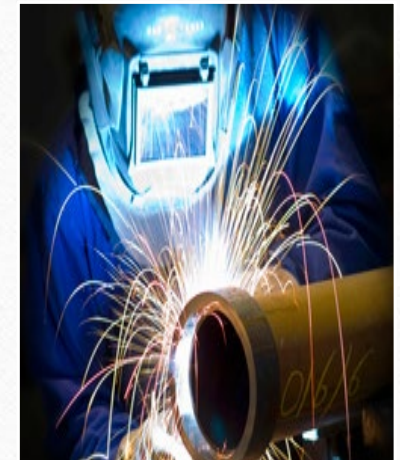
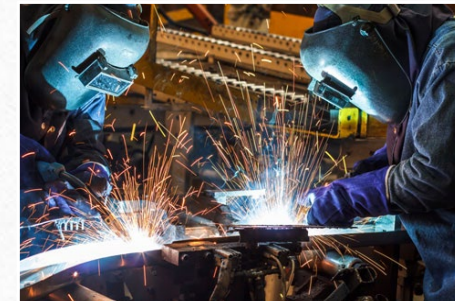
- A tradesman that specializes in electrical wiring in many things.
- They are used for installation of new electrical equipment, or maintenance and repair of electrical infrastructure.
- A technician is person who looks after equipment or work in a laboratory.
- They are proficient in the skill and technique in technology.
- Technician understand the theoretical principles in technical situations.

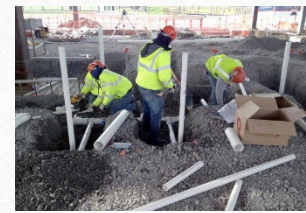


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Welder/Cutter/Solderer/Brazer

- Welding is fabricating and assembling metal structures and equipment.
- A cutter may do some or all of the following: check pattern designs and instructions online.
- Melts and applies solder along adjoining edges of workpieces to solder joints, using soldering iron, gas torch, or electric-ultrasonic equipment, the equipment can repair misaligned or damaged assemblies.
- Guides torch and rod along joint of workpieces to heat to brazing temperature, melt braze alloy, and bond workpieces together.
- Removes workpiece from fixture, using tongs, and cools workpiece, using air or water.





Plumber



- Commercial plumbers, Residential plumbers, and Service and Repair
- Install and repair plumbing fixtures and pipes
- Inspect and operate test equipment (i.e. pressure and vacuum gauges)
- Clear obstructions from piping systems (i.e. toilets and sinks)
- Estimate costs of repairs or installations
- Troubleshoot problems



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Mason

Builds structures from single units that are laid and bound together with mortar. Brick, stone and concrete blocks are the most common materials used in masonry construction.



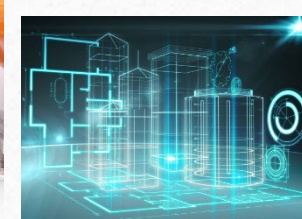
Glazier

Glaziers specialize in installing different glass products, such as insulated glass that retains warm or cool air and tempered glass that is less prone to breaking. In homes, **glaziers** install or replace glass items including windows, mirrors, shower doors, and bathtub enclosures.



Graphic Design

Graphic Designers create visual concepts, using computer software or by hand, to communicate ideas that inspire, inform, and captivate consumers. They develop the overall layout and production **design** for applications such as advertisements, brochures, magazines, and reports



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Roofer

A roofer repairs, replaces, and installs roofs on residential homes or commercial buildings





Carpenter

A carpenter is a skilled worker who makes, finishes, and repairs wooden objects and structures.



Cost Estimator

Cost estimators gather and analyze data to estimate the amount of money, time, materials, and labor required to complete a construction project, provide a service or manufacture a product.



Construction Trades

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Electrical installer

An electrical installer adjust, repairs or replaces defective wiring and relays in ignition, lighting, air-conditioning, and safety control systems, using electrician tools.



Paint is a liquid or mastic material that can be applied to surfaces to color, protect and provide texture. They are usually stored as a liquid and dry into a thin film after application.

Painter



Land Surveyor

Land surveying is a process for determining distances and angles between points on land. Land **surveyors** use traditional instruments and digital technology, to produce surveys, data and maps describing the Earth's surface features.



Engineer

Engineers, as practitioners of engineering, are professionals who invent, design, analyze, build and test machines, complex systems, structures, gadgets and materials to fulfill functional objectives and requirements while considering the limitations imposed by practicality, regulation, safety and cost.



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Environmental advisor

Your job is to help companies meet or exceed their environmental obligations.

Fulfilling the duties and responsibilities of an environmental advisor often requires collecting and reporting.

Environmental advisors usually report to an environmental manager or consultant.



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Sheet Metal Worker

Sheet metal worker is a skilled tradesman who creates, installs, and repairs sheet metal products.

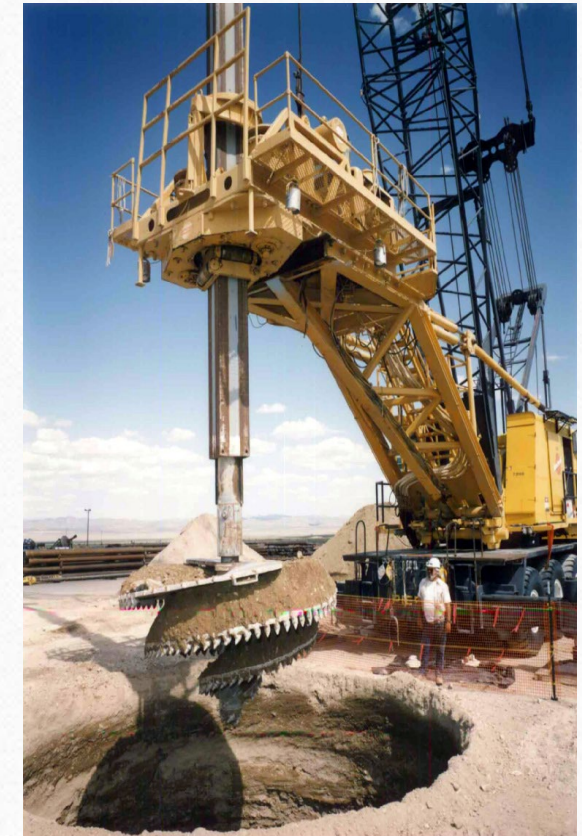


They can specialize in fabrication, installation, or maintenance, though most are skilled in all three areas



Driller

- The **Driller** is a team leader in charge during the process of well drilling.
- As a drilling engineer, you'll plan, develop and supervise the operations necessary for drilling oil and gas wells.



Pipelayer

To operate hand and power tools of all types: air hammers, shovels, and a variety of other equipment and instruments.

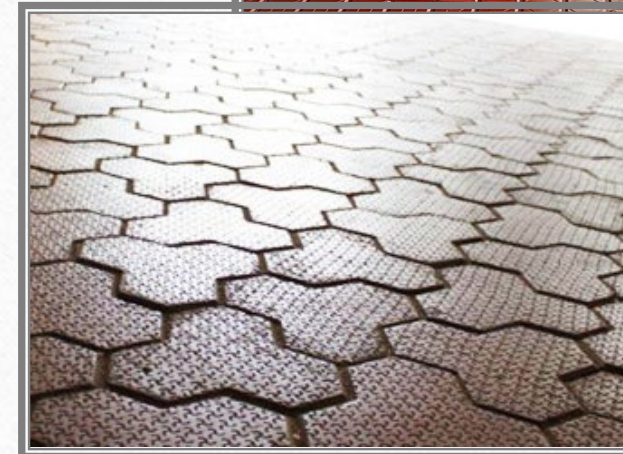
Pipelayers must use multiple skills in their work, from heavy equipment operation in some cases, to blueprint reading.



Paver

The term “paver” refers to thin, flat stones designed for use in **paving projects such as walkways, patios, and driveways.**

Both brick and concrete pavers are installed the same way, and both offer years of use and durability.



Equipment mechanic

- Basic tools include a jack, torque wrench, pliers, screwdrivers, ratchets, sockets, an air compressor, a multimeter, pry bars, various hammers and mallets, wire cutters, and vice grips.
- Equipment Mechanics, are industry mechanics who specialize in working with heavy machinery used in construction, farming, and railway transport. They work with the biggest engines, inspecting, servicing, and repairing any damage to the engine or vehicle.

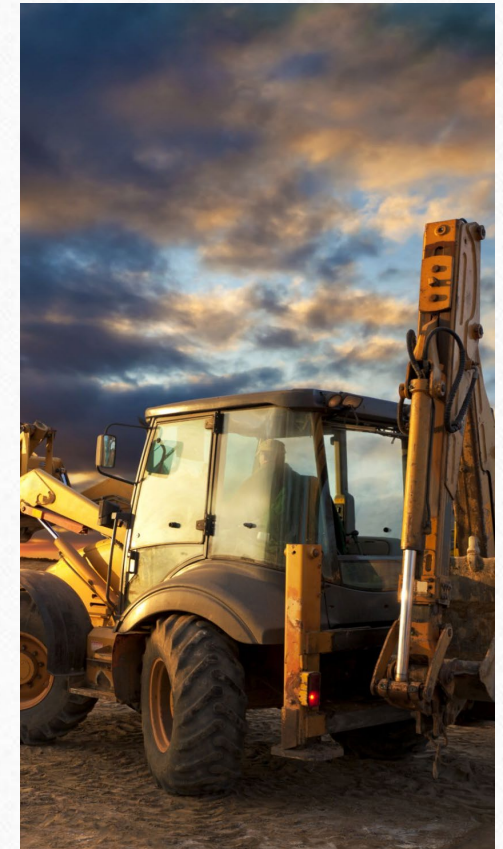


Equipment Operator

Operates heavy equipment used in engineering & construction projects

Roles may include...

- Move dirt or other heavy metals to and from construction sites
- Prepare job sites by clearing debris and other materials so that workers may access the site with ease
- Perform routine maintenance on equipment and minimal repairs on machines when needed



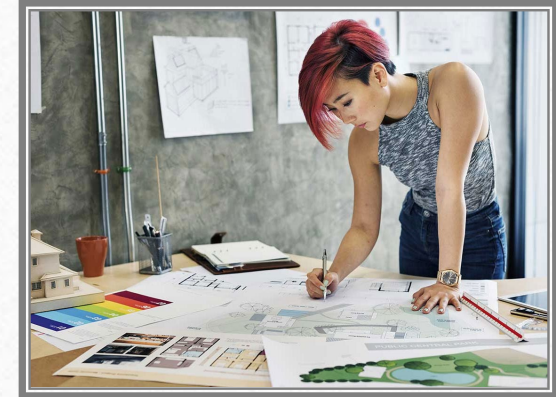
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Interior Designer

A multifaceted profession that includes

- conceptual development,
- space planning,
- site inspections,
- programming,
- research,
- communicating with the stakeholders of a project
- construction management
- Most importantly they conduct the execution of the design.



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Drywall and Tile Installer

Tile installer:

A skilled laborer who installs tiles made of hard materials such as granite, ceramic, glass or marble

Drywall installer:

Planned the installation by marking the lines on the drywall and using various measuring instruments





Project Manager

A project manager is a professional in the field of project management. Project managers have the responsibility of the planning, procurement and execution of a project, in any undertaking that has a defined scope, defined start and a defined finish; regardless of industry.



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Accountant

An accountant is a professional who handles the bookkeeping and prepares financial documents like profit and loss statements, balance sheets and more. They perform audits of your books, prepare reports for tax purposes, and handle all the financial information that's part of running your business.



Financial Advisor

A financial adviser or financial advisor, is a professional who suggests and renders financial services to clients based on their financial situation.



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Data Analyst

- Data analysis is a process of inspecting, cleansing, transforming and modeling data with the goal of discovering useful information, informing conclusions and supporting decision-making.
- They can mine and clean the data from primary and secondary sources then analyze and interpret results using standard statistical tools and techniques.



General Contractor

A general contractor, main contractor or prime contractor is responsible for the day-to-day oversight of a construction site, management of vendors and trades, and the communication of information to all involved parties throughout the course of a building project



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Manufacturer

- An employer of workers in manufacturing
- Manufacturing is the production of products for use or sale, using labor and machines, tools, and chemical or biological processing or formulation. It is the essence of secondary industry





COMMUNITY