

# MAKE A POWER MOVE



## WHY WORK IN UTILITIES?

 The Utilities industry plays an integral role in the Houston region by powering our factories, commercial establishments and homes.

EMPLOYS NEARLY  
**550,000 WORKERS**  
★★★★ IN THE U.S. 

Driver of future   
**GREEN TECHNOLOGY**

**20,000 WORKERS**  
**IN THE HOUSTON**  
**REGION** 

A rewarding career in one of Houston's thriving industries could be yours in just two years.

## WHAT ARE YOU UP FOR?

- ✓ You want to help provide the tools that **MAKE EVERYDAY LIFE POSSIBLE**.
- ✓ You enjoy **HANDS-ON** work and are **GOAL ORIENTED**.
- ✓ You are an **EFFECTIVE COMMUNICATOR** and an **ACTIVE LISTENER**.
- ✓ You are a **DECISION MAKER** and have excellent **JUDGEMENT**.
- ✓ You are **DEPENDABLE, ADAPTABLE, and FLEXIBLE**.



UP**SKILL**HOUSTON.org

# CAREERS IN UTILITIES INCLUDE...

## INDUSTRIAL MACHINERY MECHANICS

Average Annual Salary: \$55,000  
\$14-\$43/hour  
Two-Year Degree or Certificate



Repair, install, or maintain industrial production machinery or refinery and pipeline distribution systems. Responsible for general building repairs and ensuring that everything works.

## POWER PLANT OPERATOR

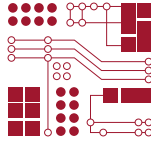
Average Annual Salary: \$55,000  
\$14-\$43/hour  
Certificate or On-the-Job Training



Control power plants and the flow of electricity from plants to substations. Distribute power among generators and regulate the output of several generators. Monitor instruments to meet varied consumer demand.

## ELECTRICIAN

Average Annual Salary: \$48,000  
\$13-\$35/hour  
Two-Year Degree or Apprenticeship



Install, test, and repair electrical equipment. Apply electrical theory and related knowledge to design, build, repair, calibrate and modify electrical components, circuitry, controls and machinery.

## PLUMBER/PIPEFITTER

Average Annual Salary: \$52,000  
\$17-\$33/hour  
Two-Year Degree or Apprenticeship



Layout, assemble, install, and repair pipelines or systems that carry water, steam, air, or other liquids or gases for industrial systems. They apply pipe system knowledge and read blueprints understand how the whole system works together.

## ELECTRICAL & ELECTRONICS ENGINEERING TECHNICIANS

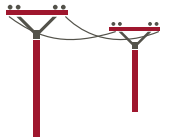
Average Annual Salary: \$65,000  
\$16-\$35/hour  
Two-Year Degree



Apply electrical and electronic theory and related knowledge, to design, build, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for evaluation and use in decision making.

## ELECTRICAL POWER-LINE INSTALLER & REPAIRER

Average Annual Salary: \$58,000  
\$15-\$41/hour  
Certificate or On-the-Job Training



Install or repair cables or wires used in electrical power or distribution systems. May also erect poles and transmission towers.

# OUR GATEWAY TO THE REST OF THE WORLD

## WHY WORK IN PORT AND MARITIME?



Houston waterways and ports contribute nearly **200,000 jobs** to Texas



OF THE CURRENT WORKFORCE IS **EXPECTED TO RETIRE** IN THE NEXT DECADE

The Port of Houston is the **#1** export hub in the nation and one of the busiest ports in the world

HOUSTON RANKS **#2 IN THE U.S.** FOR MARITIME JOBS

Skilled professionals are in **HIGH DEMAND**

A rewarding career in one of Houston's thriving industries could be yours in just two years.

## WHAT ARE YOU UP FOR?

- ✓ You like the idea of an **INTERNATIONAL WORK LIFE** that **REVOLVES AROUND THE OCEANS.**
- ✓ You enjoy **HANDS-ON** work and are **GOAL-ORIENTED.**
- ✓ You are an **EFFECTIVE COMMUNICATOR** and an **ACTIVE LISTENER.**
- ✓ You are a **DECISION MAKER** and have excellent **JUDGEMENT.**
- ✓ You are **DEPENDABLE, ADAPTABLE,** and **FLEXIBLE.**



UP**SKILL**HOUSTON.org

# CAREERS IN PORT AND MARITIME INCLUDE...

## INDUSTRIAL MACHINERY MECHANIC

Average Annual Salary: \$51,000

\$14-\$43/hour

Two-Year Degree or Certificate



Install, adjust, or maintain industrial machinery or refinery distribution systems. Responsible for general building repairs and ensuring that everything works. Keep track of machine safety and efficiency.

## DIESEL ENGINE SPECIALIST

Average Annual Salary: \$46,000

\$15-\$35/hour

Two-Year Degree or Certification



Repair and maintain diesel engines that power transportation equipment at the Port and in companies that support it. Work on heavy vehicles, including trucks, bulldozers, cranes and forklifts.

## PLUMBER/PIPEFITTER

Average Annual Salary: \$49,000

\$15-\$36/hour

Two-Year Degree or Certificate



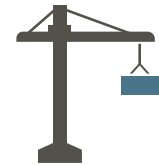
Layout, assemble, install, and repair pipelines or pipe systems that carry water, steam, air or other liquids or gases for industrial systems. Study blueprints and apply knowledge of specific pipe systems to better understand how the system works together.

## CRANE & TOWER OPERATOR

Average Annual Salary: \$56,000

\$17-\$40/hour

Certificate or On-the-Job Training



Load and unload containers on and off ships. Extend and retract horizontally mounted booms and lower and raise hooks attached to load lines.

## WELDER

Average Annual Salary: \$43,000

\$15-\$36/hour

Two-Year Degree or Technical Certificate



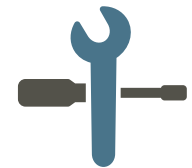
Use specialized equipment to join metal components. Cut metal to follow blueprints for pipe or structural steel systems. The skill level varies among different types of welding.

## MAINTENANCE MECHANIC

Average Annual Salary: \$50,000

\$12-\$22/hour

Apprenticeship, Certification or On-the-Job Training

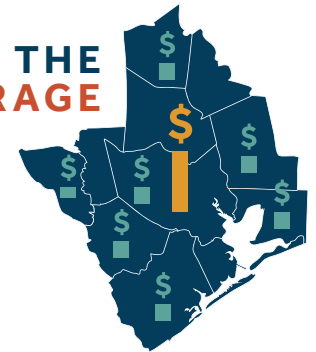


Keep machines, mechanical equipment, buildings, and roads at port facilities in good repair by performing routine checks. May work alongside and assist machinery mechanics.

# THE ENGINE REVVING HOUSTON'S ECONOMY

## WHY WORK IN PETROCHEM?

HIGHER SALARIES THAN THE  
HOUSTON AVERAGE



HOUSTON IS THE  
ENERGY CAPITAL  
OF THE WORLD

Petrochemical companies in Houston are investing **\$60 Billion** in facility expansions

Nearly **12,000 annual openings** for skilled positions over the next five years

A rewarding career in one of Houston's thriving industries could be yours in just two years.

## WHAT ARE YOU UP FOR?

- ✓ You want to **IMPROVE THE PRODUCTS** that make everyday life possible.
- ✓ You are a **PROBLEM SOLVER** and **COMFORTABLE WITH CHANGE**.
- ✓ You like being **PRECISE** and are **GOOD WITH DETAILS**.
- ✓ You are **RELIABLE** and very **SAFETY CONSCIOUS**.
- ✓ You have good **COMMUNICATION SKILLS** and work well as **PART OF A TEAM**.



UP**SKILL**HOUSTON.org

# CAREERS IN PETROCHEM INCLUDE ...

## INDUSTRIAL MACHINERY MECHANIC

Average Annual Salary: \$51,000

\$15-\$43/hour

Two-Year Degree or Certification

Repair, install, or maintain industrial production machinery or refinery and pipeline distribution systems. Responsible for general building repairs and ensuring that everything works.



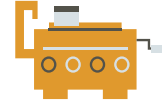
## PROCESS TECHNICIAN

Average Annual Salary: \$67,000

\$16-\$48/hour

Two-Year Degree

Ensure that plants are producing high-quality products by monitoring the refining process for fuels, chemicals, and plastics. Responsible for collecting samples of products for laboratory testing and safely operating control room instrumentation systems. Make changes to the operating process as needed to ensure quality.



## PIPEFITTER

Average Annual Salary: \$52,000

\$20-\$30/hour

Two-Year Degree or Technical Certificate

Layout, assemble, install, and repair pipelines that carry liquids or gases for industrial production. Study blueprints and apply knowledge of specific pipe systems to better understand how a whole system works together.



## QUALITY ASSURANCE LABORATORY TECHNICIAN

Average Annual Salary: \$43,000

\$19-\$40/hour

Certificate or On-the-Job Training

Conduct tests to ensure raw materials and finished products meet or exceed quality standards. Operate, calibrate, and maintain lab equipment to ensure high-quality products.



## WELDER

Average Annual Salary: \$43,000

\$15-\$36/hour

Two-Year Degree or Certification

Use specialized equipment to join metal components. Cut metal to follow blueprints for pipe or structural steel systems. The skill level varies among different types of welding.



## INSTRUMENTATION TECHNICIAN

Average Annual Salary: \$60,000

\$15-\$50/hour

Two-Year Degree or Technical Certificate

Work with a wide variety of devices to control pressure, flow, temperature, force, and chemical make-up. Inspect instruments and diagnose problems. Additionally, install and maintain plant equipment.



# FUELING HOUSTON INTO THE FUTURE

## WHY WORK IN OIL AND GAS?



**HOUSTON IS THE ENERGY  
CAPITAL OF THE WORLD.**

**More than 1 out of 4 U.S. JOBS IN OIL AND  
GAS EXTRACTION RESIDE IN HOUSTON ★**



Skilled professionals are in **HIGH DEMAND**



EMPLOYED MORE THAN **250,000  
WORKERS** IN THE GREATER HOUSTON  
REGION IN 2016.

A rewarding career in one of Houston's thriving  
industries could be yours in just two years.

## WHAT ARE YOU UP FOR?

- ✓ You are looking for a **DIVERSE ENVIRONMENT** and lots of **TRAINING AND DEVELOPMENT OPPORTUNITIES.**
- ✓ You are a **QUICK LEARNER** and **TAKE INITIATIVE.**
- ✓ You are **FLEXIBLE** and have a **STRONG WORK ETHIC.**
- ✓ You have **EFFECTIVE COMMUNICATION SKILLS** and work well as **PART OF A TEAM.**
- ✓ You have strong **TECHNICAL AND COMPUTER SKILLS.**



UP**SKILL**HOUSTON.org

# CAREERS IN OIL AND GAS INCLUDE...

## GEOLOGICAL AND PETROLEUM TECHNICIAN

Average Annual Salary: \$68,000  
\$20-\$30/hour

Two-Year Degree and On-the-Job Training

Support scientists and engineers exploring and extracting natural resources, such as minerals, oil, and natural gas. Analyze samples of soil and minerals to locate valuable resources.



## ELECTRICAL ENGINEERING TECHNICIAN

Average Annual Salary: \$60,000  
\$16-\$52/hour

Two-Year Degree

Assist in designing and developing electrical and electronic equipment. Use measuring and diagnostic devices to adjust, test, and repair equipment. Manufacture and deploy equipment for automation.



## INDUSTRIAL MACHINERY MECHANIC

Average Annual Salary: \$51,000  
\$15-\$43/hour

Certificate or On-the-Job Training

Perform preventive maintenance, detect breakdown conditions before they happen, make machinery adjustments, and repair broken equipment.



## PETROLEUM PUMP SYSTEM OPERATOR

Average Annual Salary: \$68,000  
\$18-\$45/hour

Certificate or On-the-Job Training

Oversee petroleum refinement, which is the primary function of Houston's oil and gas sector. May specialize in controlling pumping systems, gauging oil in storage tanks, and regulating oil flow into pipelines.



## MECHANICAL ENGINEERING TECHNICIANS

Average Annual Salary: \$59,000  
\$15-74\$/hour

Two-Year Degree

Modify, develop, test, or calibrate machinery and equipment for use in the extraction of oil and natural gas. Set up machinery and instrumentation.



## QUALITY CONTROL INSPECTOR

Average Annual Salary: \$43,000  
10\$-40\$/hour

On-the-Job Training

Monitor quality standards for extracted oil and natural gas. Test, sort, sample, or weigh raw materials to ensure quality consistent with specifications and free from defects and deviations from specifications.





# GLOBAL HEALTH IN HOUSTON'S HANDS



## WHY WORK IN HEALTH CARE?

Houston is home to the largest medical complex in the world



**The Texas Medical Center**

1 OUT OF 8  
**JOBS**  
IN THE REGION IS  
IN HEALTH CARE.

HOUSTON  
EMPLOYS OVER  
**335,000**  
HEALTHCARE  
PROFESSIONALS

ONE OF THE  
**FASTEST**  
**GROWING**  
INDUSTRIES IN THE U.S.



A rewarding career in one of Houston's thriving industries could be yours in just two years.

## WHAT ARE YOU UP FOR?

- ✓ You want to help **IMPROVE THE LIVES OF MILLIONS.**
- ✓ You are **DETAIL-ORIENTED** and **SELF-CONFIDENT.**
- ✓ You have a **POSITIVE MENTAL ATTITUDE** and are **COMFORTABLE DEALING WITH PRESSURE.**
- ✓ You are **RELIABLE** and have a **STRONG WORK ETHIC.**
- ✓ You have **EFFECTIVE COMMUNICATION SKILLS** and can **EMPATHIZE** in difficult situations.



UP**SKILL**HOUSTON.org

# CAREERS IN HEALTHCARE INCLUDE...

## DIAGNOSTIC MEDICAL SONOGRAPHER

Average Annual Salary: \$71,000  
\$26-\$86/hour  
Two-Year Degree



Operate special imaging equipment to create images or conduct tests that help physicians assess medical conditions. Assist during surgical procedures.

## RADIOLOGICAL TECHNOLOGIST

Average Annual Salary: \$57,000  
\$20-\$37/hour  
Two-Year Degree



Perform tests using several kinds of medical technology. Take x-rays and carry out studies with computerized scanners. Administer non-radioactive materials to patients for diagnostic purposes.

## MEDICAL RECORDS AND HEALTH INFORMATION TECHNICIAN

Average Annual Salary: \$38,000  
\$11-\$33/hour  
Two-Year Degree



Organize and manage health information while ensuring the quality, accuracy, accessibility, and security of the data in both paper and electronic files. Code and categorize patient information for insurance reimbursement purposes, registries, and patient histories.

## SURGICAL TECHNOLOGIST

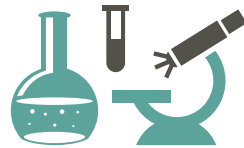
Average Annual Salary: \$47,000  
\$16-\$31/hour  
Two-Year Degree



Prepare patients for surgery and set up surgical equipment in the operating room. Prepare solutions and medications used in surgery. Assist the surgical team as needed.

## MEDICAL AND CLINICAL LABORATORY TECHNICIAN

Average Annual Salary: \$38,000  
\$13-\$28/hour  
Two-Year Degree



Conduct complex laboratory testing for early diagnosis, treatment, and prevention of disease. Collect samples and perform tests to analyze body fluids, tissue, and other substances.

## LICENSED PRACTICAL AND VOCATIONAL NURSE

Average Annual Salary: \$47,000  
\$19-\$35/hour  
Certificate and License



Provide basic medical care to patients under the supervision of a registered nurse. Monitor patients' health, administer basic care, and provide comfort.

# HOUSTON WAS NOT BUILT FROM BEHIND A DESK.



## WHY WORK IN CONSTRUCTION?

\$\$\$\$\$\$ More than \$90 billion in construction contracts were awarded in Houston in the past 5 years.



OF THE NATIONAL WORKFORCE EXPECTED TO RETIRE IN THE NEXT DECADE

Construction Employed 1 out of every 13 workers in the region in 2015.



OVER 43,000 NEW JOBS IN CONSTRUCTION WILL BE CREATED ACROSS HOUSTON IN THE NEXT 7 YEARS

A rewarding career in one of Houston's thriving industries could be yours in just two years.

## WHAT ARE YOU UP FOR?

- ✓ You take **PRIDE IN YOUR WORK** and want to leave a **LEGACY**.
- ✓ You **LIKE STAYING ACTIVE** and **WORKING WITH YOUR HANDS**.
- ✓ You are a **PROBLEM SOLVER** and adapt well to **NEW CHALLENGES**.
- ✓ You are **PRECISE** and have an **EYE FOR DETAIL**.
- ✓ You have **GREAT COMMUNICATION SKILLS** and function well as part of a team.



UPSKILLHOUSTON.org

# CAREERS IN CONSTRUCTION INCLUDE...

## WELDER

Average Annual Salary: \$43,000

\$15-\$36/hour

Two-Year Degree or Technical Certificate

Specialize in joining metal materials using high heat. Work on projects varying from skyscrapers to submarines. May create and help erect frames for large buildings and bridges.



## CARPENTER

Average Annual Salary: \$35,000

\$13-\$29/hour

Apprenticeship or On-the-Job Training

Cut, shape, and install materials to construct and maintain office buildings, factories, and other structures. Install framing, drywall, insulation, flooring, roofing, cabinetry, interior trim work, formwork, and bracing.



## PIPEFITTER

Average Annual Salary: \$49,000

\$15-\$36/hour

Two-Year Degree or Technical Certificate

Layout, assemble, install, and repair pipelines that carry liquids or gases for building or industrial production. Study blueprints and apply knowledge of specific pipe systems to better understand how a whole system works together.



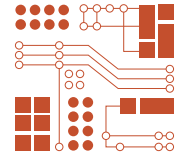
## ELECTRICIAN

Average Annual Salary: \$46,000

\$15-\$36/hour

Two-Year Degree or Apprenticeship

Install, operate, maintain, and repair electrical wiring and control systems in homes, commercial businesses, and industrial plants. Install lighting, conduct electrical inspections, and repair generators and electronic controllers.



## HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) TECHNICIAN

Average Annual Salary: \$45,000

\$14-\$33/hour

Two-Year Degree or Apprenticeship

Work with electrical and mechanical components to install, maintain, and repair HVAC systems. May specialize in areas such as climate control, air quality and transfer, or commercial refrigeration.



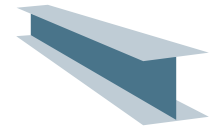
## IRON WORKER


Average Annual Salary: \$39,000

\$14-\$28/hour

Apprenticeship or On-the-Job Training

Erect structures and frameworks made of steel and iron. Join support beams, steel girders, columns, and other structural materials. Work in teams to build bridges, commercial buildings, and industrial facilities.





**DYNAMIC.  
STATE OF THE ART.  
MADE IN TEXAS.**

## WHY WORK IN ADVANCED MANUFACTURING?



HOUSTON IS A **GLOBAL MANUFACTURING HUB**;  
PRODUCING MEDICAL DEVICES, COMPUTERS,  
MACHINERY, AND EVEN ROBOTS!

SKILLED PROFESSIONALS ARE IN  
**HIGH DEMAND**

HOME TO  
APPROXIMATELY  
**6,300**  
MANUFACTURING  
FACILITIES

ONE OF THE **LARGEST INDUSTRIAL EMPLOYERS**  
IN THE NATION WITH **200,000**  
SKILLED WORKERS

A rewarding career in one of Houston's thriving  
industries could be yours in just two years.

## WHAT ARE YOU UP FOR?

- ✓ You want to make some of the **MOST INNOVATIVE** and **TECHNOLOGICALLY COMPLEX PRODUCTS** in the world.
- ✓ You are **DETAIL ORIENTED** and a **PROBLEM SOLVER**.
- ✓ You are **HANDY** and have **MECHANICAL AND TECHNICAL ABILITIES**.
- ✓ You are **RELIABLE** and willing to take on **MULTIPLE TASKS**.
- ✓ You have **EFFECTIVE COMMUNICATION SKILLS** and work well as **PART OF A TEAM**.



UP**SKILL**HOUSTON.org

# CAREERS IN ADVANCED MANUFACTURING INCLUDE...

## INDUSTRIAL MACHINERY MECHANIC

Average Annual Salary: \$51,000

\$14-\$43/hour

Two-Year Degree/ Apprenticeship/

On-the-Job Training

Install, adjust, or maintain industrial machinery or refinery distribution systems. Responsible for general building repairs and ensuring that everything works properly; keeping track of machines are safety and efficiency.



## QUALITY CONTROL INSPECTOR

Average Annual Salary: \$43,000

\$19-\$40/hour

Technical Certificate or On-the-Job Training

Monitor quality standards for manufactured products. Inspect, test, sort, sample, or weigh raw materials or assembled products to ensure quality consistent with specifications, and free from defects and wear.



## CNC MACHINE TOOL PROGRAMMER

Average Annual Salary: \$64,000

\$16-\$40/hour

Two-Year Degree

Develop programs to control the manufacturing of metal or plastic parts by automatic machine tools, equipment, or systems.



## MACHINIST

Average Annual Salary: \$41,000

\$14-\$31/hour

Two-Year Degree

Set up and operate machine tools to that produce precision parts and instruments used in manufacturing. Fabricate, modify, or repair mechanical instruments or maintain industrial machines.



## ELECTRICAL ENGINEERING TECHNICIAN

Average Annual Salary: \$60,000

\$16-\$52/hour

Two-Year Degree

Assist in designing and developing electrical and electronic equipment. Use measuring and diagnostic devices to adjust, test, and repair equipment. Manufacture and deploy equipment for automation.



## WELDER

Average Annual Salary: \$43,000

\$15-\$36/hour

Two-Year Degree or Technical Certificate

Use specialized equipment to join metal components or to fill holes, indentations, or seams of fabricated metal products. Cut metal, based on blueprints, to construct new pipe or structural steel systems.

