



ONE DAY • BLUEPRINT30 COURSE SERIES

Intro to the Skilled Trades

Hands-On Careers That Build America

From wiring a house to framing a building to keeping engines running, the skilled trades keep the country working. This course gives you a real look at ten in-demand trades. No four-year degree needed, many pay you to learn.

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The Trades, By the Numbers

The skilled trades are some of the most in-demand, stable careers in the country.

\$58,360

median pay for construction and trade occupations, well above the national average

Paid to Learn

apprenticeships let you earn a wage while you train, no student debt required

Growing Shortage

the country faces a shortage of skilled tradespeople as experienced workers retire

No 4-Year Degree

most trades require an apprenticeship or certificate, not a college degree

WHY NOW

The Trades Need You, By the Numbers

A generation of tradespeople is retiring, and there aren't enough people coming in behind them.



41%

of the construction workforce is projected to retire by 2031



53%

of skilled trades workers are already over age 45



2 of 5

only about 2 replacement workers enter the trades for every 5 who retire



1.9M

additional construction workers needed over the next decade



2.1M

skilled trades positions could go unfilled nationwide by 2030



9.5%

projected electrician job growth through 2034, triple the average for all jobs

Sources: NCCER, EMSI, ABC, JLL / U.S. Dept. of Education, BLS (2026)

What Are the Skilled Trades, Really?

The skilled trades are hands-on careers that require specialized training, usually through an apprenticeship, trade school, or on-the-job program, rather than a four-year degree.

Not Just for "Some People"

Trade careers are for anyone who likes working with their hands, solving real problems, and seeing the result of their work at the end of the day. There's no single "trades type" of person, tradespeople come from every background.



Apprenticeship: learn on the job while earning a paycheck, often 2 to 5 years



Licensing: many trades require passing a state license or certification exam



Union & non-union: some trades are organized through unions with set pay scales



Specialization: tradespeople often focus on residential, commercial, or industrial work

OVERVIEW

The Trades at a Glance

Ten in-demand trades. We'll cover each one in this course.



Electrician



Plumber



HVAC Technician



Carpenter



Welder



Automotive Technician



Mason / Bricklayer



Painter



Heavy Equipment Operator



Landscaper / Groundskeeper

CAREER OUTLOOK

Salary & Career Outlook

Pay depends on location, experience, licensing, and union status.

 Electrician	\$40,000 to \$85,000/yr	 Automotive Technician	\$32,000 to \$60,000/yr
 Plumber	\$42,000 to \$85,000/yr	 Mason / Bricklayer	\$38,000 to \$65,000/yr
 HVAC Technician	\$40,000 to \$75,000/yr	 Painter	\$32,000 to \$50,000/yr
 Carpenter	\$38,000 to \$70,000/yr	 Heavy Equipment Operator	\$38,000 to \$65,000/yr
 Welder	\$35,000 to \$65,000/yr	 Landscaper / Groundskeeper	\$28,000 to \$42,000/yr

Construction & Building Trades

The trades that frame, finish, and build the spaces we live and work in.



Carpenter

\$38,000 to \$70,000/yr

Builds and repairs structures made of wood, from framing houses to finish carpentry and cabinetry.



Mason / Bricklayer

\$38,000 to \$65,000/yr

Lays brick, block, and stone to build walls, walkways, and structures that last generations.



Painter

\$32,000 to \$50,000/yr

Prepares and paints interior and exterior surfaces, one of the most accessible trades to start in.

Mechanical & Technical Trades

Licensed trades that keep power, water, and climate systems running.



Electrician

\$40,000 to \$85,000/yr

Installs and repairs wiring, panels, and electrical systems. One of the fastest-growing, highest-paying trades.



Plumber

\$42,000 to \$85,000/yr

Installs and repairs pipes that carry water, gas, and waste. Consistently one of the top-paying trades.



HVAC Technician

\$40,000 to \$75,000/yr

Installs and services heating, cooling, and refrigeration systems. Strong demand tied to climate control needs.

More Skilled Trades

From the shop floor to the job site to the great outdoors.



Welder

\$35,000 to \$65,000/yr

Joins metal parts using heat. Specialized welders (pipeline, underwater) can earn \$80,000 or more.



Automotive Technician

\$32,000 to \$60,000/yr

Diagnoses and repairs vehicles. Growing demand for technicians trained on electric and hybrid vehicles.



Heavy Equipment Operator

\$38,000 to \$65,000/yr

Operates cranes, bulldozers, and excavators on construction and infrastructure projects.



Landscaper / Groundskeeper

\$28,000 to \$42,000/yr

Maintains and designs outdoor spaces. One of the easiest trades to start in with room to build a business.

Education & Requirements at a Glance

Career Path	Typical Education	Path to Entry
Most Trades	No degree required	Paid apprenticeship, typically 2 to 5 years
Licensed Trades (electrician, plumber, HVAC)	HS diploma / GED	Apprenticeship, plus a state license exam
Trade School Path	HS diploma / GED	6 month to 2 year certificate program
Union Trades	HS diploma / GED	Union apprenticeship application through a local hall

Can You Join with a Felony or Conviction?

Often, yes. The trades are one of the more accessible paths for people with records.

Trade Unions

Many building trades unions have publicly committed to fair-chance apprenticeship programs

Licensing Boards

Some licenses have restrictions for certain offenses, but many states have reformed these rules in recent years

Non-Licensed Trades

Work like carpentry, painting, and landscaping often has fewer barriers for people with records

Know Your Rights

Many states now "ban the box" on trade license applications, delaying background checks until later in the process

Steps You Can Take Right Now

1

Research apprenticeship programs through local unions or trade schools

2

Look into pre-apprenticeship programs, they prepare you for entry with no experience needed

3

Get your OSHA 10 safety certificate, a common first step across every trade

4

Talk to a tradesperson about what a day in their job actually looks like

5

Practice basic math skills, measurements and fractions come up in almost every trade

6

Check if a trade school or community college near you offers a trades program

What's Next in This Pathway

This course is just the beginning. Two more ONE DAY courses go deeper:



ONE DAY: Intro to Logistics Careers

Warehouse, freight, and supply chain careers, another set of no-degree-needed paths with strong demand.



ONE DAY: Merchant Marine & Port Careers

Careers on ships, at ports, and offshore, a different kind of hands-on work with its own paid training paths.

PUT IT INTO PRACTICE

Course Activities

Reflection prompts, a myth vs. fact challenge, key terms, a matching activity, and discussion questions to work through on your own or as a class.



Reflection Questions

Grab a notebook or open a doc. There are no wrong answers, just start thinking it through.

1

Have you ever watched someone fix, build, or install something and thought "I could do that"? What was it?

2

Which of the ten trades in this course interests you most, and why?

3

Would you rather work indoors or outdoors, alone or with a crew?
How does that shape which trade might fit you?

4

What's one thing you're already good at with your hands?

Key Terms to Know

Ten words you'll hear no matter which trade you choose.

Apprenticeship

A paid, structured training program combining on-the-job work with classroom instruction.

Journeyman

A tradesperson who has completed an apprenticeship and can work independently.

Master

The highest certification level in many trades, often required to run a business or train others.

OSHA 10

A 10-hour workplace safety certification course common across the trades.

Pre-Apprenticeship

A program that prepares people with no experience to enter a full apprenticeship.

Union Hall

The local office where union tradespeople register for job assignments.

Journeyman License

A state-issued credential allowing a tradesperson to work without supervision.

Blueprint

A technical drawing showing how something should be built or installed.

Subcontractor

A tradesperson or company hired by a general contractor to do specialized work.

Punch List

A list of small fixes needed to finish a job before it's considered complete.

Match the Trade to the Job

Draw a line from each trade on the left to the description that matches it on the right.

1. Electrician
2. Plumber
3. Welder
4. Carpenter
5. HVAC Technician
6. Mason

- A. Installs and repairs pipes that carry water and gas
- B. Joins metal parts together using intense heat
- C. Builds and repairs structures made of wood
- D. Installs and repairs wiring and electrical systems
- E. Lays brick, block, and stone to build structures
- F. Installs and services heating and cooling systems

Answer key: 1-D 2-A 3-B 4-C 5-F 6-E

Discussion Questions

For a class, small group, or a conversation with a mentor.

- 1 What's one skilled trade you interact with almost every day without realizing it?
- 2 Why do you think trade careers are sometimes looked down on compared to a four-year degree?
- 3 What would you want to know before committing to a multi-year apprenticeship?
- 4 How might starting your own trade business change your career path?
- 5 What's one trade you think will be in high demand in twenty years? Why?
- 6 If you were mentoring someone entering the trades, what's one piece of advice you'd give them?

How to Get Started & Get Certified

You don't need a degree or years of experience. You need to show up, be reliable, and be willing to learn.

Where to Get Started

- **OSHA 10 Safety Card**
10-hour course, available online or through trade schools
- **Pre-Apprenticeship Programs**
Offered through community colleges and workforce boards
- **Union Apprenticeships**
Apply directly through local union halls, such as IBEW or the UA
- **Trade School Certificates**
6 month to 2 year programs at community and technical colleges
- **State Licensing Exams**
Required for electricians, plumbers, and HVAC techs in most states

Your Next 3 Steps

- 1 Finish this course**
Earn your certificate. You can view it under "My Certificates"
- 2 Connect with employers**
Meet local trade unions, apprenticeship programs, and trade schools through Blueprint30
- 3 Share your progress**
Show your certificate to potential employers and apprenticeship coordinators

Visit blueprint30.com to get started today



Every building, every wire, every pipe started with someone in the trades. Your future starts today.



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