



# TradeWorks ACADEMY

Council Bluffs Community  
SCHOOL DISTRICT



More Opportunities. More Choices.  
**Because Trades Work.**

# Build a future that is

# INDUSTRIAL

IN ALL INDUSTRIES THAT  
NEED SKILLED WORKERS



Jobs that do not require a B.A.  
or higher in the United States<sup>1</sup>

IN IOWA

Skilled service jobs added  
from 1991-2015:<sup>2</sup>



OPPORTUNITIES ARE  
GROWING FOR BOTH  
MEN AND WOMEN.

Certificate earned by gender:<sup>3</sup>

42%  
MALE

58%  
FEMALE



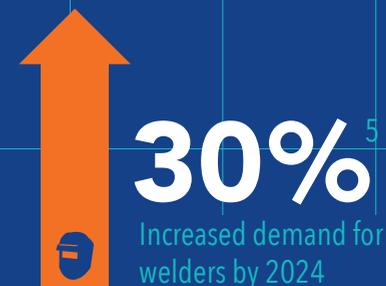
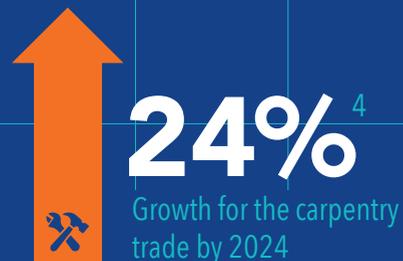
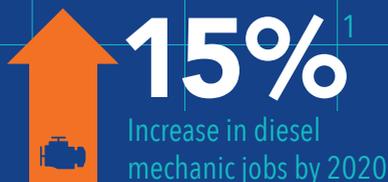
And finding well-paid  
employment is not the  
only advantage to a career  
in the trades.

The work is challenging, yet  
rewarding, and no two days  
are alike with a variety of  
different work environments  
and locations.

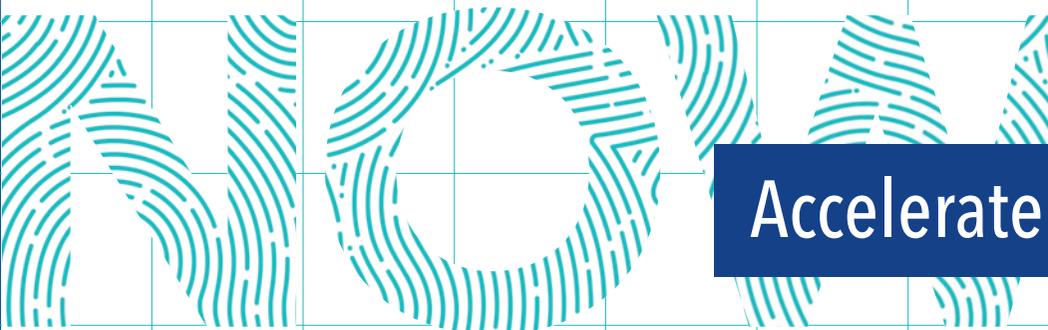
A CAREER IN THE  
TRADES MIGHT BE  
FOR YOU IF YOU:

- Like hands-on work;
- Enjoy seeing the immediate  
results of your work;
- Want to get started on your  
career path quickly;
- And, want to earn a good  
wage with benefits.

AND OPPORTUNITIES ARE  
STILL GROWING:



# Your future starts



Accelerate

With more than half of skilled trades workers over the age of 45, the shortage of workers continues to grow. For every five positions that are available, only one person has the skills to qualify.

**THIS IS YOUR OPPORTUNITY TO CHOOSE AN  
EXCITING AND FULFILLING CAREER PATH  
BEFORE YOU EVEN LEAVE HIGH SCHOOL.**

The TradeWorks Academy at Abraham Lincoln and Thomas Jefferson High Schools provides life-long skills that you can use to easily transition from school to career once you graduate. Students who participate in the academy learn the skills required for today's in-demand occupations.



# your career path

Set yourself up now for success later by enrolling in the TradeWorks Academy and fast tracking your way to a great career. At the TradeWorks Academy, students select from several different pathways, so no matter your strengths and interests, you can find a career path that's right for you. Match your skills with the areas of study below to see which path fits you best.

TradeWorks Academy offers five areas of study, including: Mechanics, Construction, Fabrication, Electrical, and Plumbing and HVAC/Refrigeration. Each can provide you with a unique skill set that can get you career-ready upon graduation.



MORE CHOICES

MORE OPPORTUNITIES



# Mechanics

## Get it in gear:

THESE DAYS, AUTOMOTIVE TECHNOLOGY GOES FAR BEYOND FIXING CAR ENGINES. OTHER CAREER OPPORTUNITIES ON THIS TRACK INCLUDE SERVICE MANAGER, AUTO TECHNOLOGY INSTRUCTOR AND INDEPENDENT GARAGE OPERATOR.

"I've been working on cars with my dad my whole life and thought that this would be a good way to pick up some extra elective credits. The teachers here have taught me tips and tricks on how to do things that you can't learn in the driveway."

### TYLER

Senior  
Thomas Jefferson High School



### SALARY OUTLOOK: AUTOMOTIVE AND DIESEL MECHANICS TECHNOLOGY

Average salary, first year with certificate:

# \$40,235

#### SKILLS NEEDED:

- Problem solving
- Good work ethic
- Leadership ability
- Strong technical aptitude
- Customer service skills

#### LEARN ABOUT:

- Automobile reconditioning
- Brakes systems and components
- Steering and suspension
- Engine performance
- Transmissions
- Drive trains and axles
- Specific industry tools and usage
- Vehicle climate control

#### POSSIBLE CAREERS:

- Automotive Technician
- Specialty Technician
- Service Manager
- Automotive Salesperson
- Auto Technology Instructor
- Lubrication Specialist
- Independent Garage Operator
- Manufacturer's Representative
- Service Station Manager



Average salary, first year with certificate:

# \$30,585

# Build a foundation:

**BUILD A SOLID LIFE FOR YOURSELF BY WORKING IN THE EVER-GROWING CONSTRUCTION INDUSTRY. IT'S IMPORTANT TO BE ABLE TO WORK WITH YOUR HANDS, BUT IT'S EVEN MORE IMPORTANT TO BE OPEN TO LEARNING, TO BE DETAIL-ORIENTED, TO ALWAYS ACT WITH SAFETY IN MIND, AND TO BE CREATIVE WITH PROBLEM SOLVING.**

"When I was younger, I helped my uncle build his own house. Now, this is something I want to do for myself and other people. I plan to own my own construction company in a few years and eventually become an engineer. I know the job market is looking for people with the skill set I'm obtaining."

**DAQUAN "DQ"**

Junior

Abraham Lincoln High School



### SKILLS NEEDED:

- Eye for details
- Basic math
- Ability to think critically
- Steady hands
- Utilize technology

### LEARN ABOUT:

- Hand and power tools
- Estimating project costs
- Blue prints and plans
- Foundation design, forming and pouring
- Building floors, walls ceilings and roofs
- Installing drywall, windows, doors, siding and trim
- Cabinetry

### POSSIBLE CAREERS:

- Carpenter
- Production Manager and Supervisor
- Finish Carpenter
- Kitchen & Bath Designer and Installer
- Furniture Finisher
- General Contractor
- Framer



# Electrical Systems

## Power it up:

ELECTRICIAN IS JUST ONE CAREER OPEN TO YOU ON THIS PATHWAY. BY STUDYING ELECTRICAL SYSTEMS, YOU COULD WORK IN ONE OF MANY DIFFERENT IN-DEMAND INDUSTRIES, INCLUDING AEROSPACE, MANUFACTURING, OR INFORMATION TECHNOLOGY. ELECTRICIANS MAY DESIGN AND INSTALL ELECTRICAL SYSTEMS AND WORK IN VERY SMALL TO EXTREMELY LARGE SETTINGS.

"A desk job just isn't for me so I have been exploring different career paths that will keep me on my feet and on the go. I love to problem solve and figure things out on my own. The skills I'm learning through the Academy are teaching me about basic home repair. So, even if I don't pursue a career in the trades, I will have these life skills forever."

### MATAYA

Junior

Abraham Lincoln High School



### SALARY OUTLOOK: ELECTRICAL APPRENTICESHIP

Average salary, first year with certificate:

# \$51,650

#### SKILLS NEEDED:

- Critical thinking
- Strong interpersonal communication skills
- Organizational skills
- Decisiveness
- Problem solving

#### LEARN ABOUT:

- Complex electrical systems
- Computer controlled systems
- Power lines, telephone lines, television and internet cabling
- Security and fire alarm systems
- Installing surveillance cameras and equipment

#### POSSIBLE CAREERS:

- Electrician Apprentice
- Electrical Engineer
- Electrical Service Technician
- Security Technician
- Fire Alarm Technician
- Electrical Service Technician



**SALARY OUTLOOK:  
HVAC/R MAINTENANCE  
TECHNOLOGY/TECHNICIAN**

Average salary, first year with certificate:

# \$31,517

## Keep it comfortable:

A CAREER IN PLUMBING OR HVAC/ REFRIGERATION MAY FIT YOUR LIFE IF YOU LIKE INVESTIGATING PROBLEMS AND ARE DETAIL-ORIENTED. NO MATTER IF YOU TEND TO WORK BETTER INDEPENDENTLY, OR IF YOU PREFER TO WORK AS PART OF A TEAM, THIS FIELD HAS APPRENTICESHIP, TECHNICIAN, MANAGER AND ENTREPRENEUR OPPORTUNITIES.

"It's uncommon for a girl to be interested in these sorts of classes, but I really enjoy learning these life skills. I especially like it when the boys are around and I'm like, 'Step aside, I got this.'"

### JAY'NIQUE

Junior  
Abraham Lincoln High School



### SKILLS NEEDED:

- Good hand/eye coordination
- Active listener
- Troubleshooter
- Focus on safety
- Ability to get in and out of tight spaces

### LEARN ABOUT:

- Pipefitting and steam fitting
- HVAC/R installation and maintenance
- Working with sheet metal
- Electrical wiring installation and repair
- Brazing and soldering wire
- Working with black piping

### POSSIBLE CAREERS:

- Plumber
- Plumbing and Hydronic Heating Apprentice
- Pipefitter Apprentice
- Steamfitter Apprentice
- Well Pump Apprentice
- HVAC Service Technician
- Installation Technician
- Refrigeration Technician
- Facilities Mechanic
- Service Manager



# Fabrication & Welding

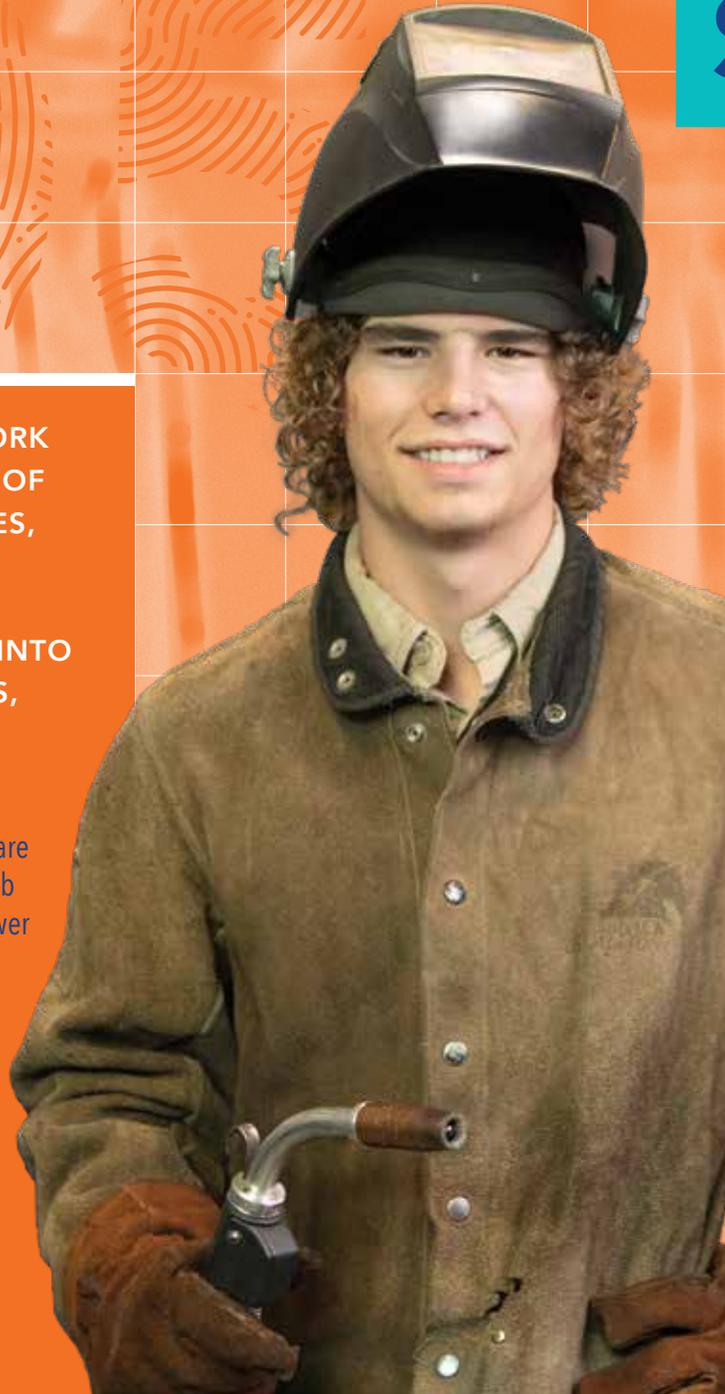
## Create it yourself:

WELDERS AND FABRICATORS MAY WORK VIRTUALLY ANYWHERE ON ANY SORT OF PROJECT, SUCH AS BRIDGES, PIPELINES, UTILITY PLANTS, SHIPS AND CARS. FABRICATORS ARE THE PEOPLE WHO CREATE THE COMPONENTS THAT GO INTO SMALL- AND LARGE-SCALE PRODUCTS, FROM TOYS TO RAILROAD TRACKS.

"Joining the Academy gave me a big head start. My friends that are the same age from other towns are just getting started, and I already have a full-time job at 18. The teachers were always there for me to answer questions. Even if I asked the same questions many times, they were patient and there to answer the questions I had. The teacher recognized my talent and encouraged me to pursue a career in welding. If I wasn't in the program, I'm not sure what I'd be doing right now."

### GARRETT

Graduate  
Abraham Lincoln High School



### SALARY OUTLOOK: WELDING TECHNOLOGY/WELDER

Average salary, first year with certificate:

# \$32,797

#### SKILLS NEEDED:

- Creativity
- Team player
- Quality control
- Detail-oriented
- Good with geometry and fractions
- Basic chemistry and physics

#### LEARN ABOUT:

- Reading and interpreting blueprints
- Laying out projects from cutting to tacking and completion
- Welding in all positions including flat, horizontal, vertical and overhead
- Types of welding including shielded metal arc welding, flux cored welding and gas welding
- Types of structural material such as steel, stainless steel, and aluminum and applicable welding metallurgy

#### POSSIBLE CAREERS:

- Structural Steel Welder
- Bridge Welder
- Underwater Welder
- Gas Metal Arc Welder
- Clean Room Welder
- Blacksmith

**THE TRADEWORKS ACADEMY  
IS JUST THE BEGINNING...**

# Achieve more.

The TradeWorks Academy is all you need to begin – or even finish – a college-level certificate, diploma or degree, starting in your junior or senior year of high school. Through a partnership with Iowa Western Community College, TradeWorks Academy students can pursue advanced training in the following programs:

## Certificate Programs

- Construction Technology
- HVAC/R Maintenance
- Industrial Technology
- Welding

## Diploma Programs

- Automotive Maintenance & Repair
- Construction Technology
- Diesel Mechanics
- Electrical Maintenance Specialist
- HVAC/R Technology
- Industrial Maintenance Technician

## Associate Degree Programs

- Automotive Technology
- Construction Technology
- Diesel Technology
- Electronic Engineering Technology
- Industrial Engineering Technology

**TO FIND OUT MORE ABOUT COURSES AND PROGRAMS  
AVAILABLE AT IOWA WESTERN COMMUNITY COLLEGE,  
PLEASE CONTACT YOUR SCHOOL COUNSELOR.**



# Start your future.

STOP BY ANY OF THE TRADEWORKS ACADEMY CLASSROOMS TO VISIT WITH AN INSTRUCTOR, OR ATTEND A CLASS AND SEE FOR YOURSELF.



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THE COUNCIL BLUFFS COMMUNITY SCHOOL DISTRICT IS PROUD TO OFFER FOUNDATIONAL COURSEWORK AND ADVANCED TRAINING FOR CAREERS IN SKILLED TRADES.



THE TRADEWORKS ACADEMY IS AVAILABLE TO STUDENTS AT THOMAS JEFFERSON AND ABRAHAM LINCOLN HIGH SCHOOLS.



**Achieve**   
**more**  

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**CB-Schools.org**

