



# Welcome to Western Area CTC

**Do you have what it takes to jumpstart a career??**

## **Student Requirements:**

- Good Work Ethic
- Positive Attitude
- Respect
- Creativity
- Organizational Skills
- Cooperation With Others



# Western Area CTC is operated by 9 school districts in Washington County:



Avella Area School District



Burgettstown Area School District



Canon-McMillan School District



Chartiers-Houston School District



Fort Cherry School District



McGuffey School District



Peters Township School District



Trinity Area School District



Washington High School

PRODUCTION	Projected Employment	Annual Openings	2009 Avg Wage
Bakers	9,960	254	\$26,390
Laundry & Dry-Cleaning Workers	9,140	257	\$22,390
Food Batchmakers	7,920	267	\$27,850
Water Treatment Plant Operators	7,650	165	\$43,020

TRANSPORTATION & MATERIAL MOVING	Projected Employment	Annual Openings	2009 Avg Wage
Truck Drivers, Heavy & Tractor-Trailer	82,860	1,873	\$40,580
Bus Drivers, School	27,270	446	\$27,820
Bus Drivers, Transit & Intercity	15,220	231	\$33,730
Cleaners of Vehicles & Equipment	13,480	520	\$22,390

MANAGEMENT	Projected Employment	Annual Openings	2009 Avg Wage
Farmers & Ranchers	30,010	339	N/A
Farm, Ranch & Other Agricultural Managers	16,930	362	\$75,730
Medical & Health Services Managers	15,450	388	\$85,280
Construction Managers	11,280	259	\$90,490

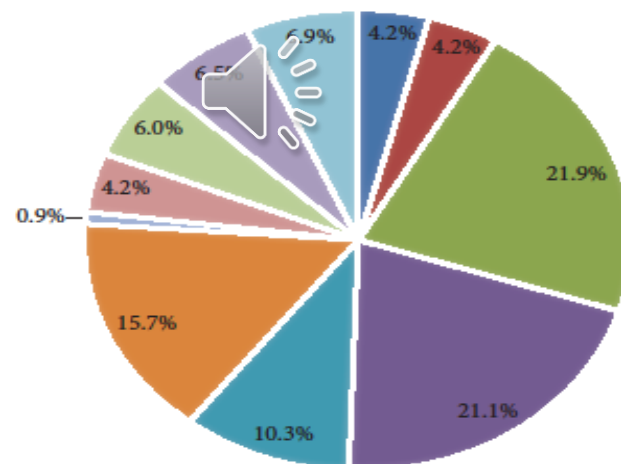
BUSINESS & FINANCIAL OPERATIONS	Projected Employment	Annual Openings	2009 Avg Wage
Accountants & Auditors	58,530	1,256	\$67,780
Management Analysts	26,410	463	\$89,070
Claims Adjusters, Examiners & Investigators	16,070	422	\$58,730
Cost Estimators	11,860	304	\$59,310

INSTALLATION & MAINTENANCE	Projected Employment	Annual Openings	2009 Avg Wage
Maintenance & Repair Workers	66,250	217	\$36,080
Automotive Service Technicians & Mechanics	40,330	904	\$35,830
Industrial Machinery Mechanics	17,540	401	\$44,570
HVAC & Refrigeration Mechanics & Installers	14,870	286	\$42,460

CONSTRUCTION & EXTRACTION	Projected Employment	Annual Openings	2009 Avg Wage
Carpenters	55,670	803	\$42,980
Construction Laborers	40,230	416	\$32,980
Electricians	26,350	679	\$56,230
Construction Supervisors	20,550	329	\$62,220

FARMING, FISHING & FORESTRY	Projected Employment	Annual Openings	2009 Avg Wage
Farmworkers, Crop, Nursery & Greenhouse	39,630	1,346	\$24,280
Farmworkers, Farm & Ranch Animals	6,440	216	\$23,570
Agricultural Equipment Operators	3,730	120	\$32,870
Farming, Fishing & Forestry Supervisors	2,480	66	\$50,010

## Pennsylvania's Projected 2018



## Occupational Workforce Composition

PROFESSIONAL & RELATED	Projected Employment	Annual Openings	2009 Avg Wage
Registered Nurses	157,300	4,424	\$63,600
Elementary School Teachers	83,520	1,952	\$52,370
Postsecondary Teachers	77,990	2,161	\$76,270
Licensed Practical Nurses	41,000	1,278	\$41,300

SERVICE OCCUPATIONS	Projected Employment	Annual Openings	2009 Avg Wage
Combined Food Prep & Serving Workers	139,390	3,698	\$19,220
Janitors & Cleaners	113,200	2,493	\$24,910
Waiters & Waitresses	104,460	6,008	\$19,310
Nursing Aides, Orderlies & Attendants	88,440	1,506	\$26,290

OFFICE & ADMINISTRATIVE SUPPORT	Projected Employment	Annual Openings	2009 Avg Wage
Office Clerks, General	166,250	3,261	\$28,250
Customer Service Reps	112,250	3,949	\$33,300
Bookkeeping, Accounting & Auditing Clerks	84,900	1,491	\$34,440

SALES & RELATED	Projected Employment	Annual Openings	2009 Avg Wage
Retail Salespersons	214,210	7,163	\$25,030
Sales Representatives	86,550	2,007	\$62,920
Retail Sales Supervisors	48,530	1,039	\$42,410
Insurance Sales Agents	19,780	427	\$67,620

# Architecture and Construction



# Carpentry

## What you will learn...

- ▶ Tool Safety
- ▶ Site Preparation
- ▶ Framing
- ▶ Interior Finishes
- ▶ Exterior Finishes
- ▶ Hand and Power Tools
- ▶ Blueprint Reading
- ▶ Building Materials
- ▶ Framing
- ▶ Estimating/Related Math









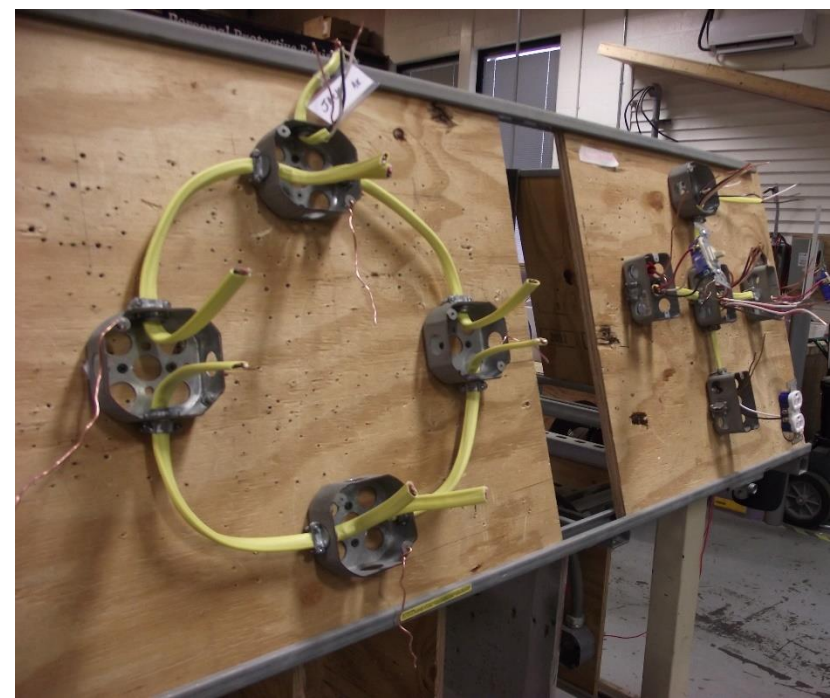
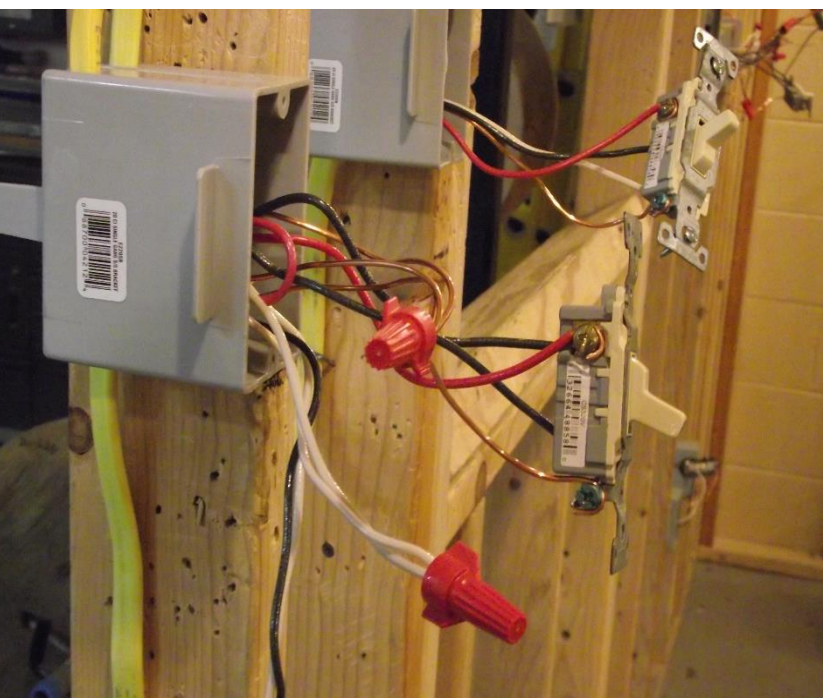
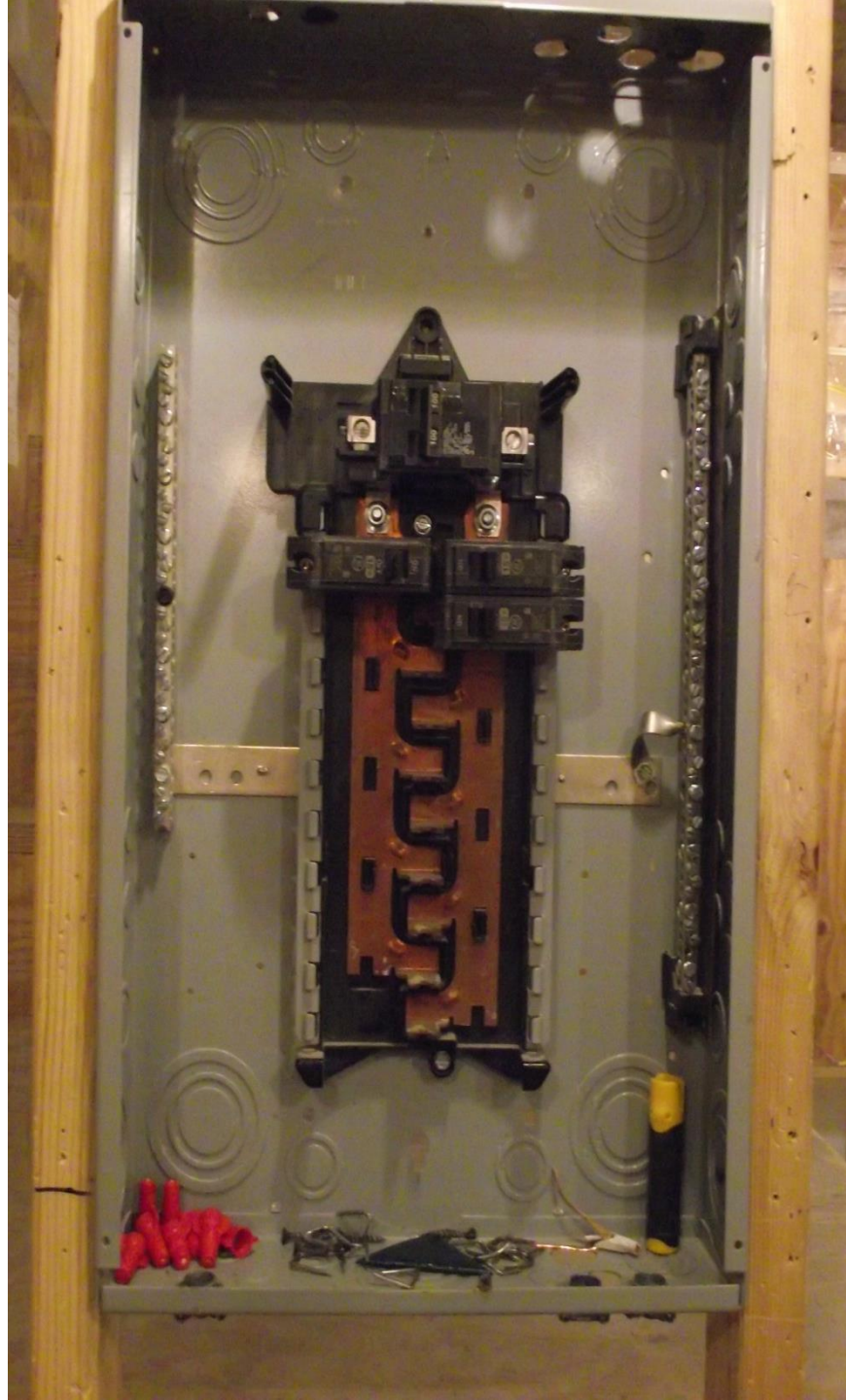
# Electrical Construction

What you will learn...



- ▶ National Electric Code
- ▶ Residential, Commercial, and Industrial Wiring
- ▶ Maintenance Electricity
- ▶ Telecommunication Wiring
- ▶ Conduit Bending
- ▶ Blueprint Reading
- ▶ Workplace Safety




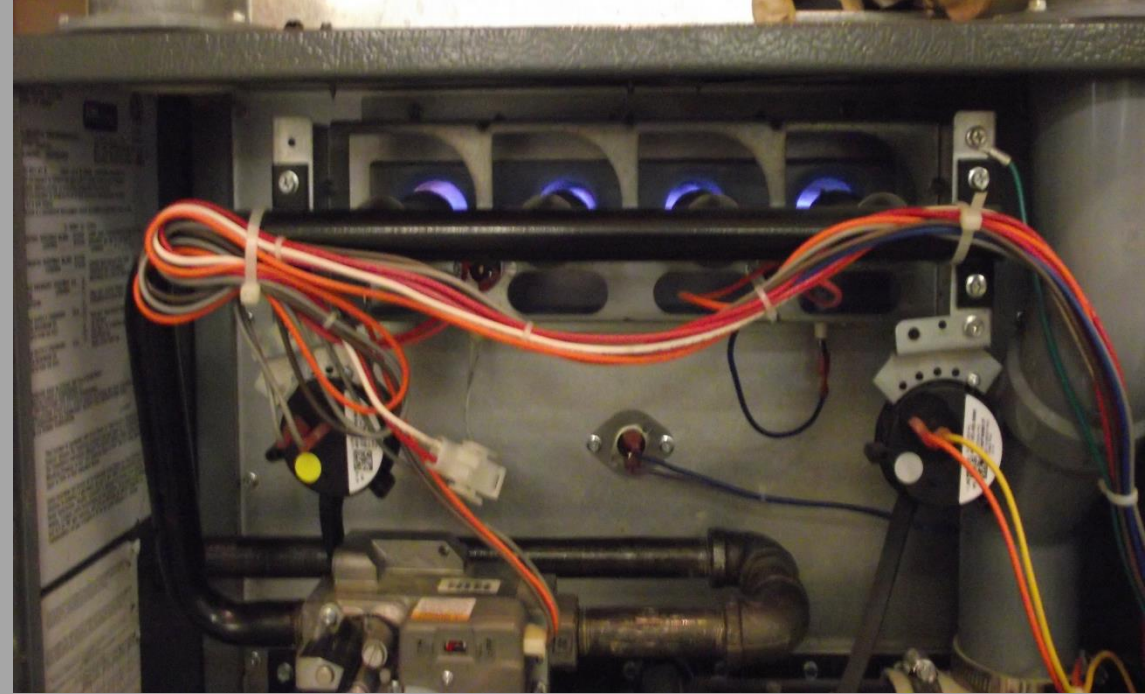




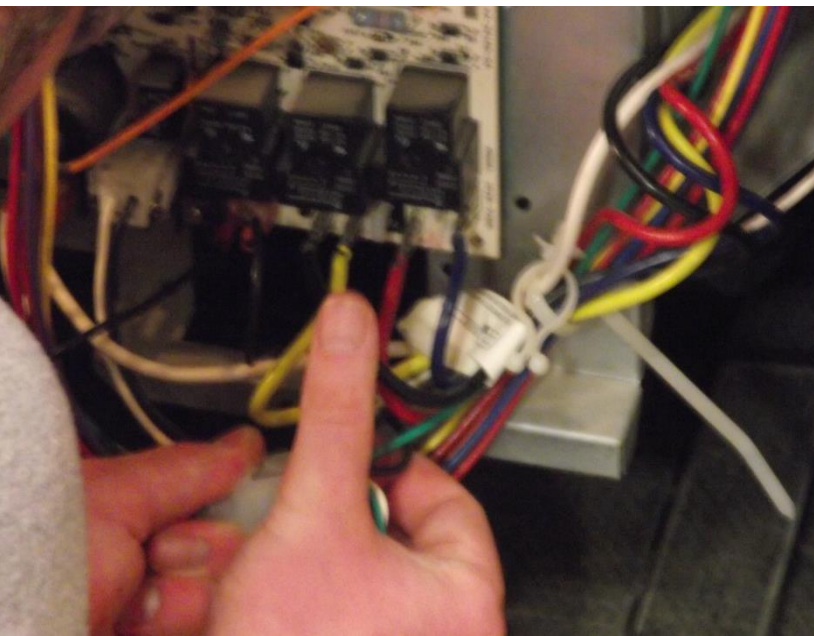
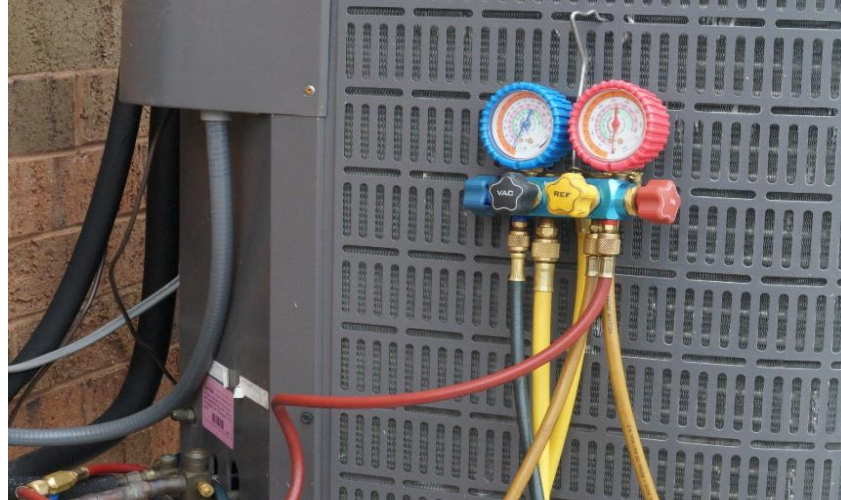
# Heating, Ventilation & Air Conditioning

What you will learn...

- ▶ Residential Forced Air Heating and Air Conditioning systems
  - ▶ Commercial Chilled Water Systems
  - ▶ Residential and Commercial Indoor Air Quality
  - ▶ Residential and Commercial Refrigeration Systems
  - ▶ EPA Approved Refrigeration Practices (recovering and charging)
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- ▶ Sheet Metal Fabrication
  - ▶ Copper Tubing, Steel Pipe, and PVC Pipe Piping Practices (installation)
  - ▶ Soldering and Brazing Techniques
  - ▶ Reading Blueprints
  - ▶ Wiring Diagrams
  - ▶ Wiring Basic HVAC Controls









# Masonry

What you will learn...

- ▶ General Maintenance
- ▶ Blueprint Reading
- ▶ Electrical Applications
- ▶ Plumbing
- ▶ Carpentry
- ▶ Masonry



- ▶ Painting and Decorating
- ▶ Dry walling and Texturing
- ▶ Remodeling
- ▶ Welding
- ▶ Safety Awareness









Health, Public and Human Services

# Cosmetology

What you will learn...

- ▶ Anatomy and Physiology
- ▶ Cleansing and Conditioning
- ▶ Hair Design and Shaping
- ▶ Chemical Hair Reformation
- ▶ Hair Colorization and De-colorization



- ▶ Skin Treatments and Make-up
- ▶ Manicuring and Pedicuring
- ▶ Sanitation and Sterilization
- ▶ State Law/State Board Preparation - requires 1250 hours of attendance to be eligible
- ▶ Clinical Practices







# Culinary Arts

## What you will learn...

- ▶ Basic Cooking & Food Preparation
- ▶ Soups & Stocks
- ▶ Sauces & Gravies
- ▶ Salads & Fruits
- ▶ Vegetables & Starches
- ▶ Meat, Poultry & Seafood Production
- ▶ Breakfast Production
- ▶ Appetizers & Specialty Desserts
- ▶ International Food Production
- ▶ Sanitation









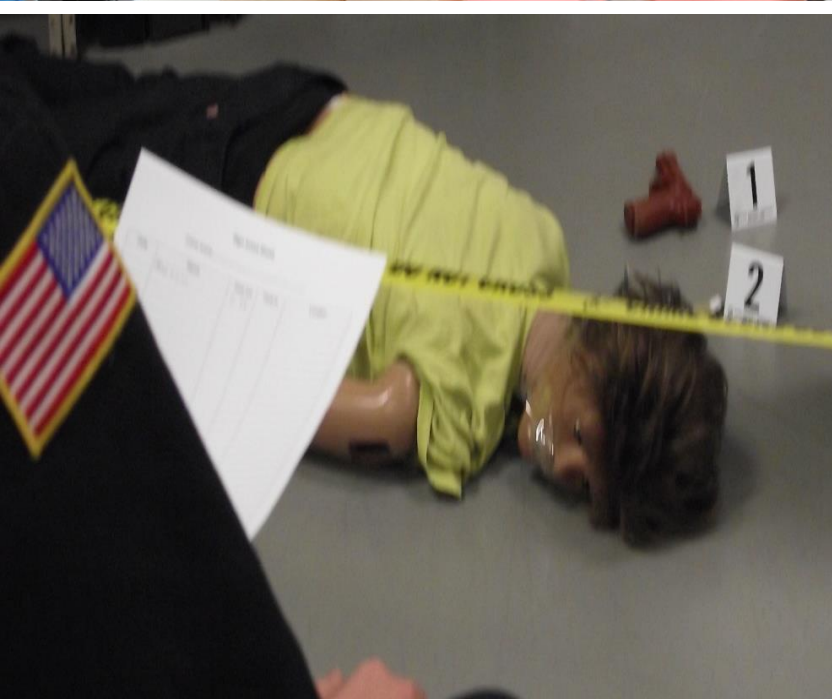
# Emergency and Protective Services

What you will learn...



- ▶ Essentials of Firefighting Skills
- ▶ Fire and Emergency Activities
- ▶ Police and Security Procedures
- ▶ CPR - Healthcare Provider
- ▶ Rescue Activities
- ▶ Physical Conditioning
- ▶ Homeland Security
- ▶ Emergency Medical Procedures



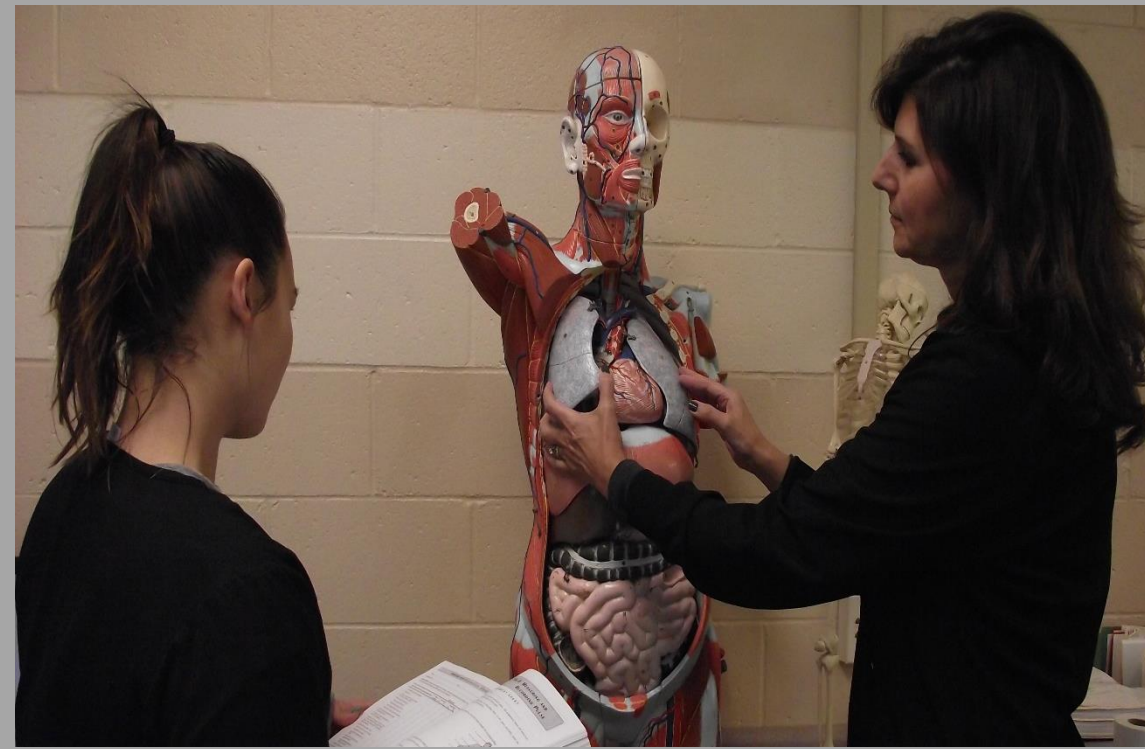




# Health Assistant

## What You Will Learn...

- ▶ Anatomy and Physiology
- ▶ Communication Skills
- ▶ Medical Records
- ▶ Ethics
- ▶ First Aid
- ▶ Prepare for Patient Care Technician certification
- ▶ CPR
- ▶ Medical Terminology
- ▶ Diseases
- ▶ Infection Control
- ▶ Patient Care and Vital Signs







# Information Technology



# Networking

What you will learn...



- ▶ Computer Hardware - Repair and Maintenance
- ▶ Operating Systems and Software
- ▶ Network Technologies - Tools and Troubleshooting

- ▶ Computer Components using A+
- ▶ Security Fundamentals
- ▶ Local Area Networking using Net+ and CISCO





# Manufacturing



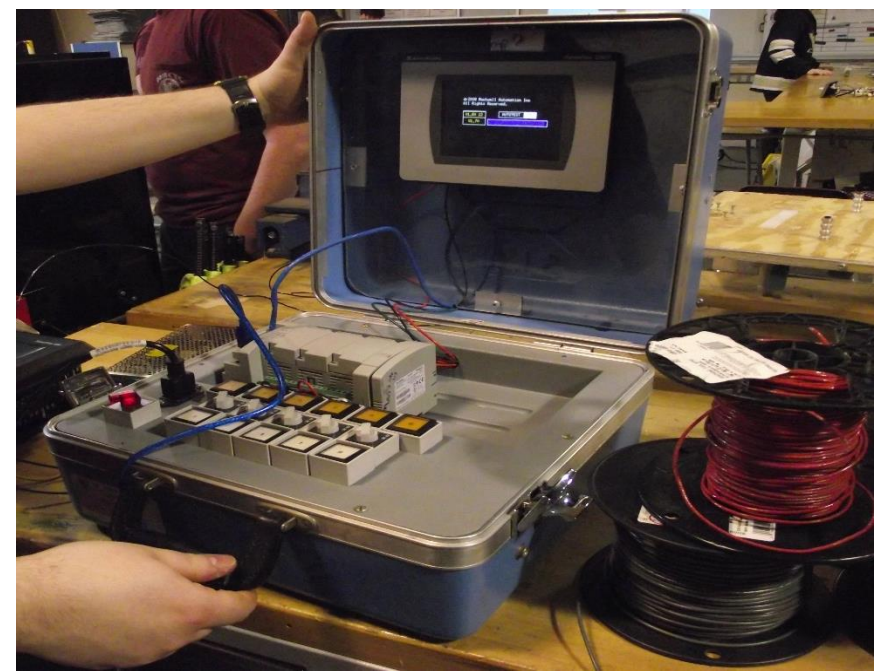
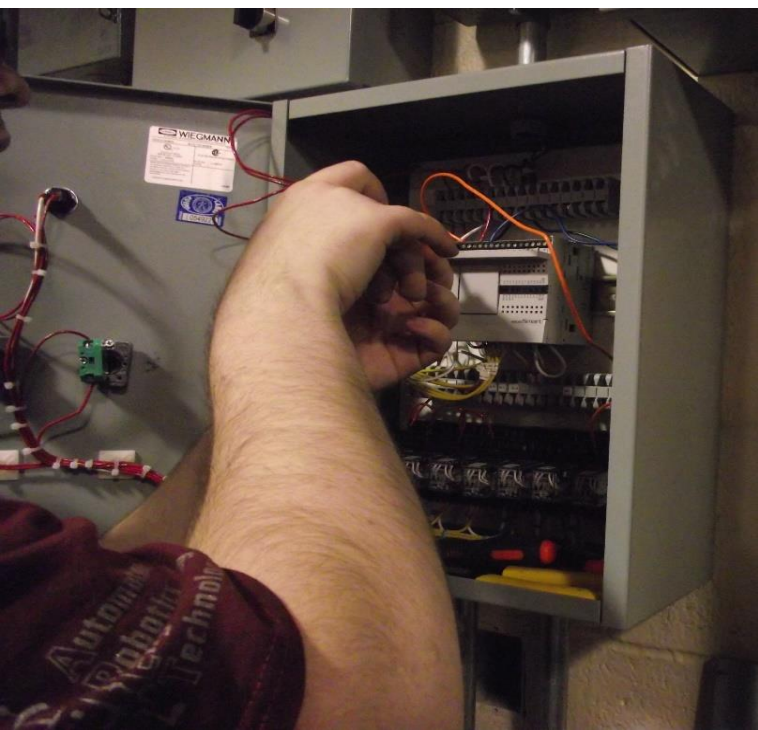
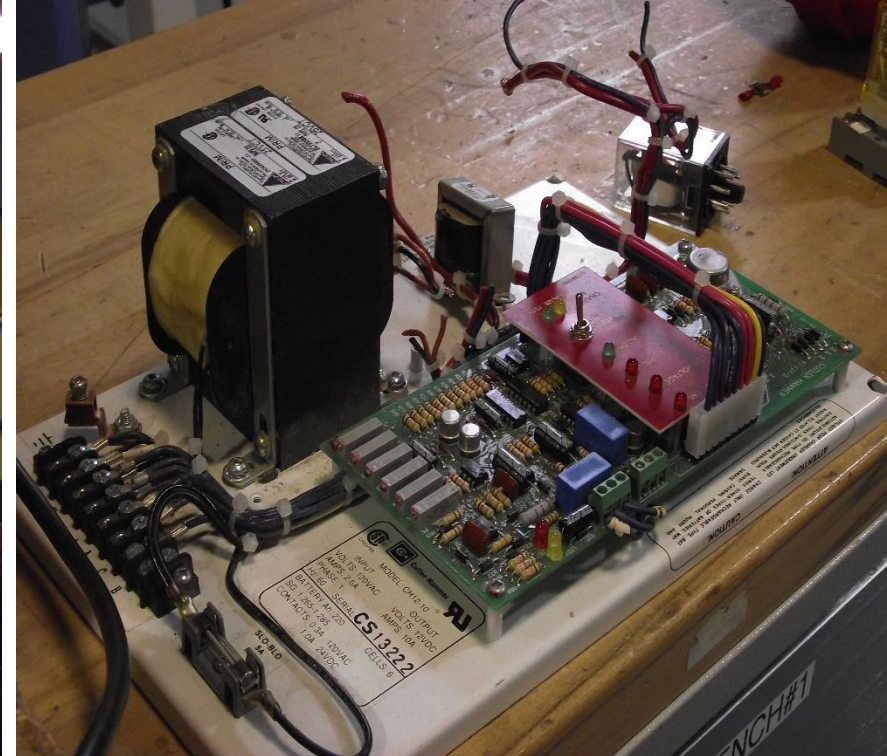
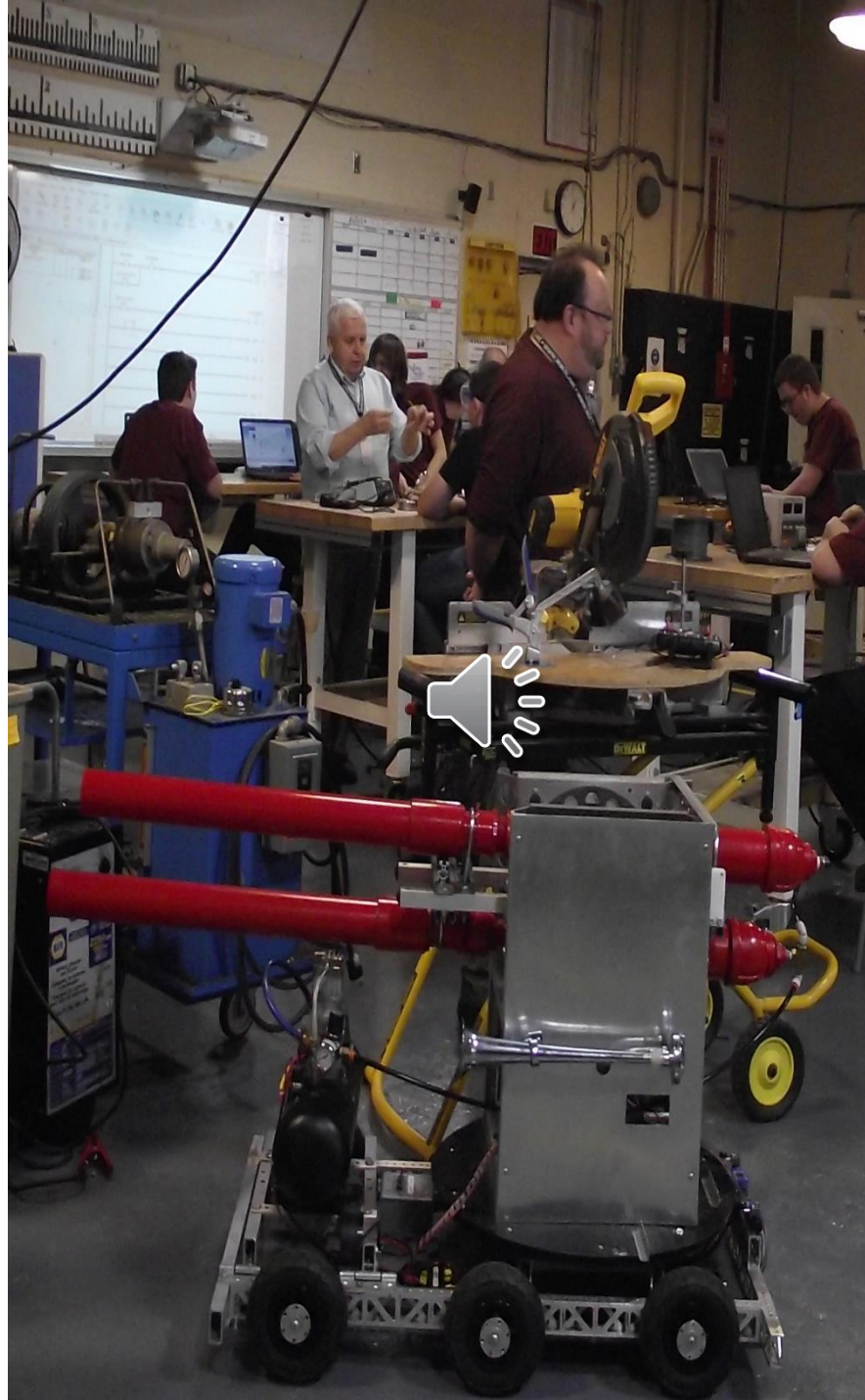
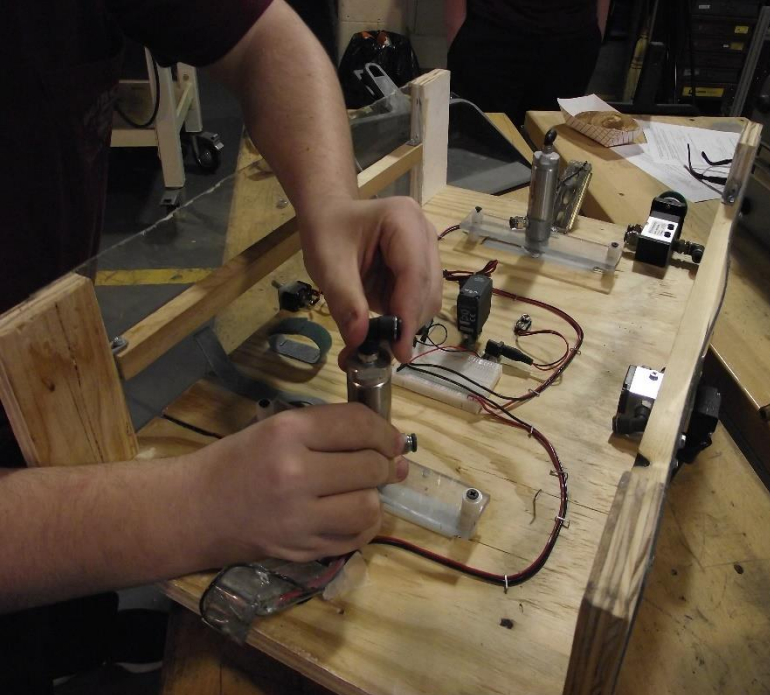
# Mechanical/Automation Technology



## What you will learn...

- ▶ AC/DC Motor Theory
- ▶ Basic Electronics
- ▶ Basic Electricity
- ▶ Basic CAD
- ▶ Basic Electrical Engineering
- ▶ PLC/HMI Programming
- ▶ Motor Controls
- ▶ OSHA Training
- ▶ NCCER Training







# Machine Shop

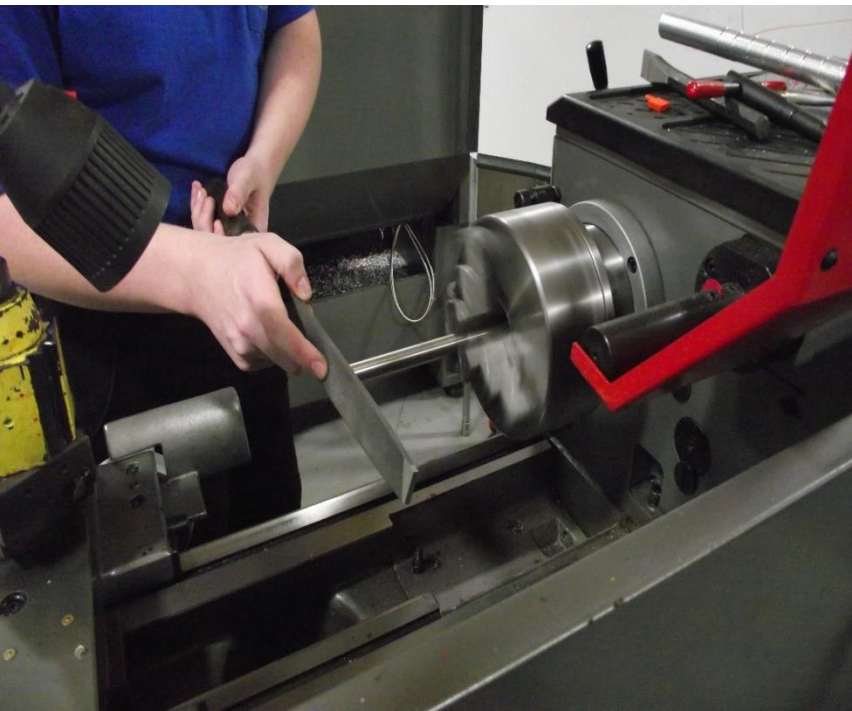
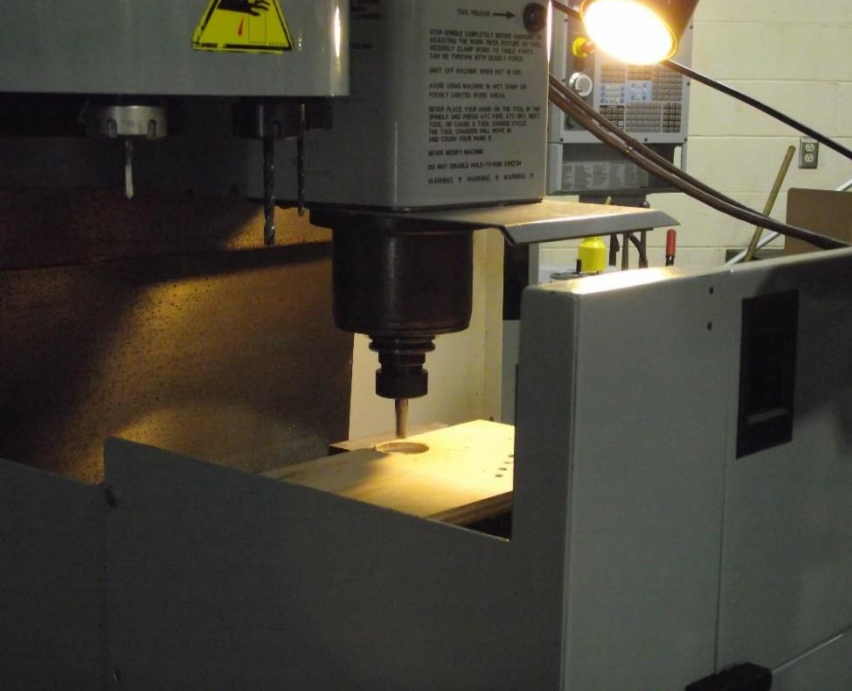
What you will learn...

- ▶ Blueprint Reading
- ▶ CNC Programming
- ▶ Drill Press and Grinding Machine Operations
- ▶ Lathe Operations



- ▶ Metallurgy
- ▶ Milling Operations
- ▶ Prepare for NIMS - National Institute for Metalworking Skills certification







# Welding

What you will learn...

- ▶ Safety
- ▶ Tools and Equipment
- ▶ Blueprint Interpretation
- ▶ SMAW - Shielded Metal Arc Welding
- ▶ Prepare for AWS certification
- ▶ GMAW - Gas Metal Arc Welding
- ▶ FCAW - Flux Cored Arc Welding
- ▶ GTAW - Gas Tungsten Arc Welding
- ▶ OFCs - Oxyfuel Gas Cutting types







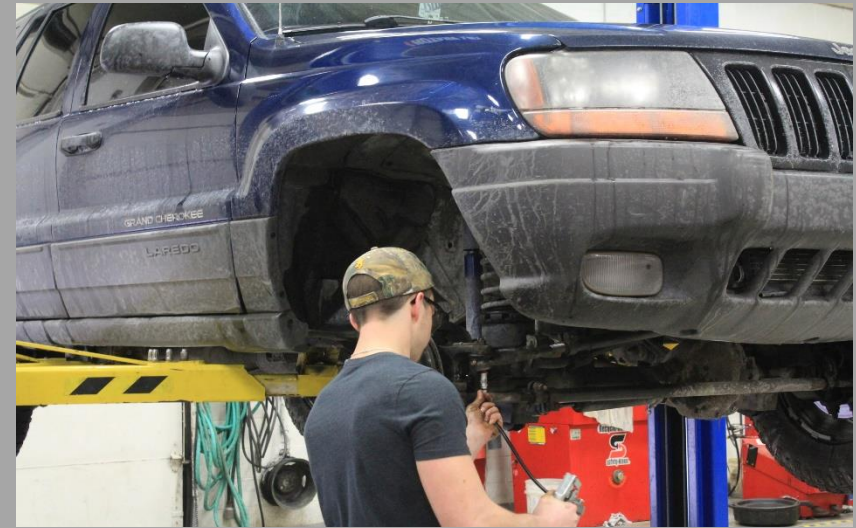
# Transportation, Distribution and Logistics



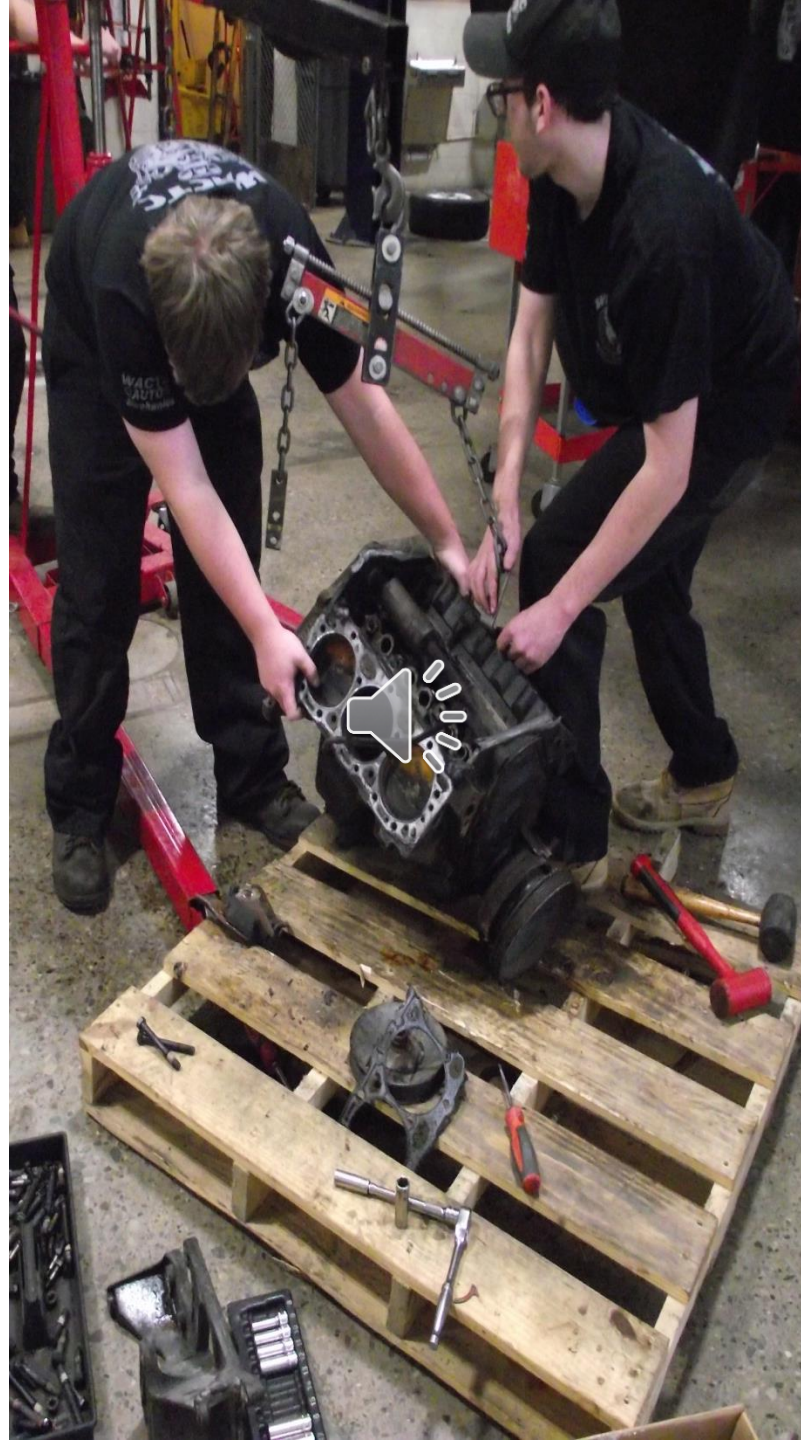
# Auto Mechanics

## What you will learn...

- ▶ Automotive electrical systems
- ▶ Cooling and lubrication systems
- ▶ Ignition systems
- ▶ Steering and suspension systems
- ▶ Brake systems
- ▶ Fuel systems
- ▶ Wheel alignment
- ▶ Computerized engine controls
- ▶ Drive train systems
- ▶ Engine mechanical systems
- ▶ Restraint systems
- ▶ Electric and hybrid vehicle technology
- ▶ Alternate fuels
- ▶ Preventative maintenance









# Collision Repair

What you will learn...

- ▶ Safety
- ▶ Vehicle Detailing Process
- ▶ Non-Structural Repairs
- ▶ Structural Repairs
- ▶ Welding and Cutting Operation - MIG, TIG



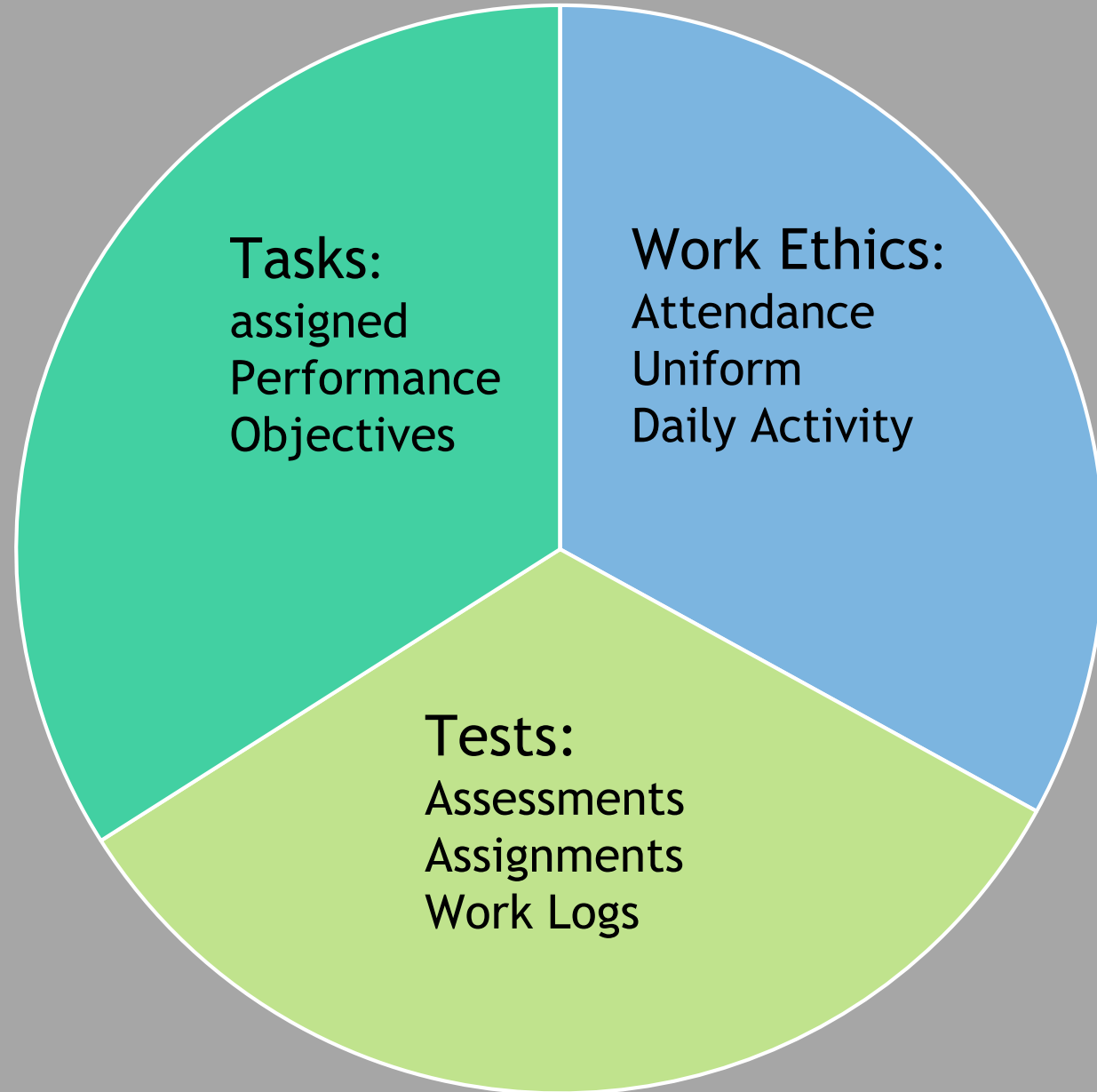
- ▶ Painting and Refinishing Operations
- ▶ Identification/Repair of plastic parts
- ▶ Damage Analysis







# Grading



# Next steps....

- ▶ Attend tour of Western Area - arranged through district
- ▶ Schedule visit of 2 CTC program areas - arrange through district Special Education teacher
- ▶ Complete application
- ▶ Participate in IEP revision meeting - arranged through district Special Education teacher