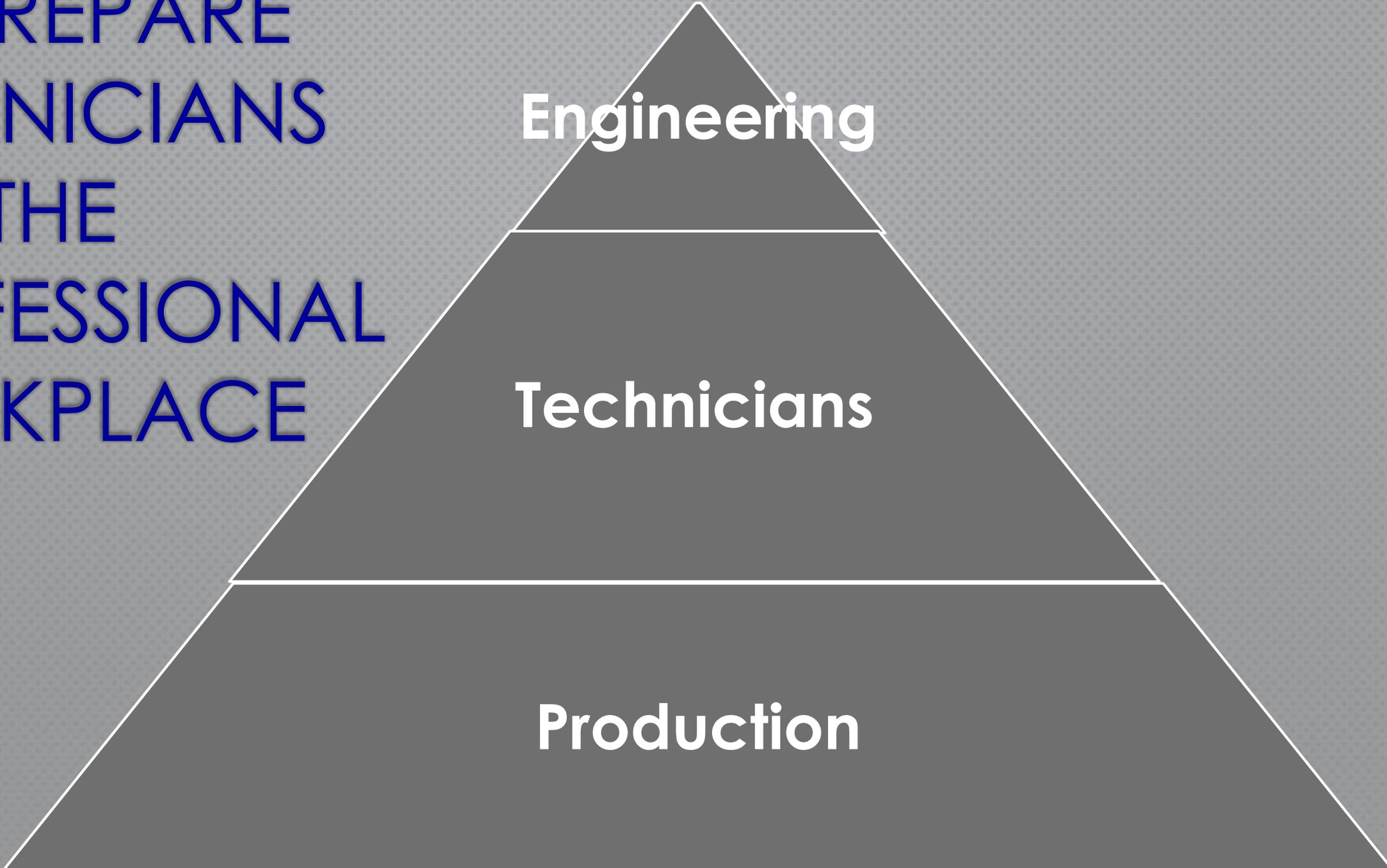




# AUTOMATION AND INDUSTRIAL TECHNOLOGY

**WE PREPARE  
TECHNICIANS  
FOR THE  
PROFESSIONAL  
WORKPLACE**



**Engineering**

**Technicians**

**Production**

# MIDDLE SKILLS

**CORE STRENGTH  
OF  
MODERN  
MANUFACTURING,  
LOGISTICS, AND  
DISTRIBUTION**



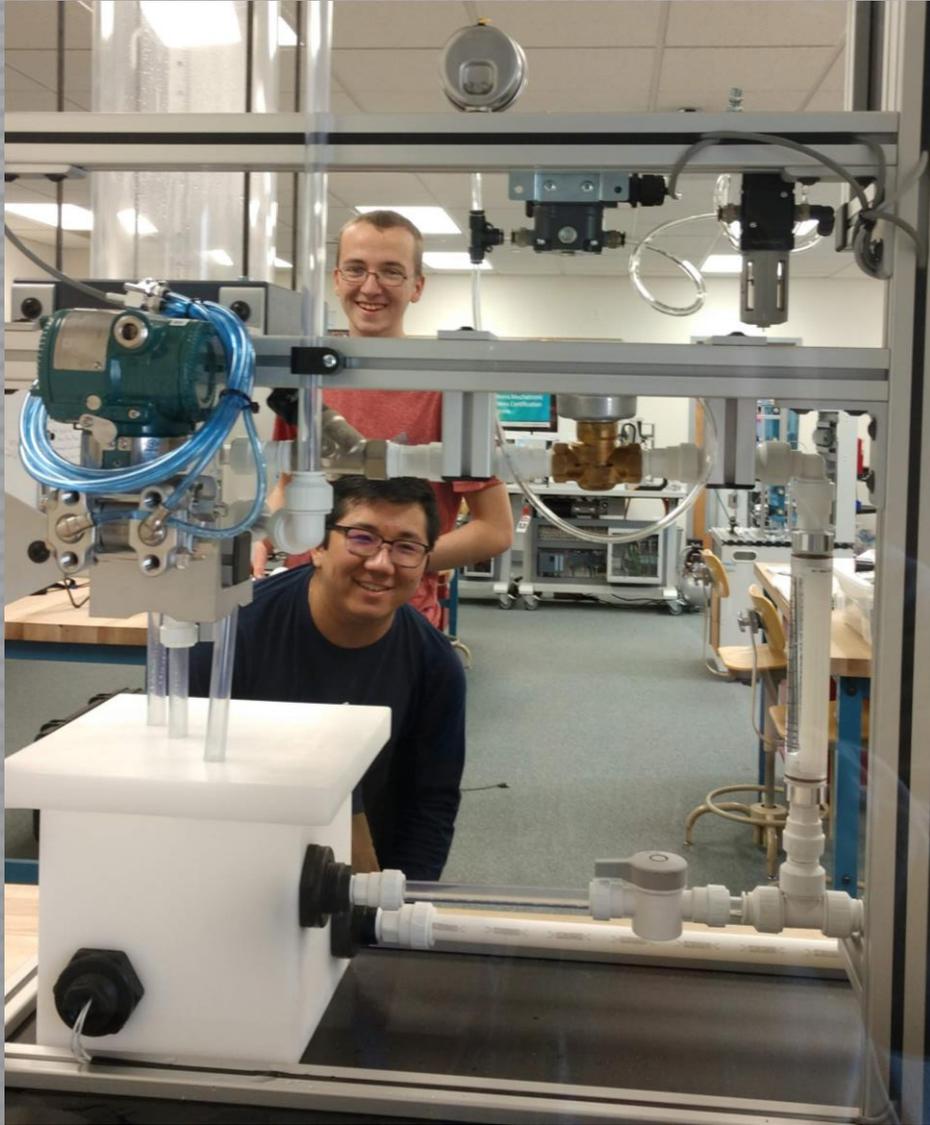
# TAILORED TO WORKFORCE NEEDS

**WHAT  
DO YOU DO  
AND  
WHY  
DO YOU DO IT?**

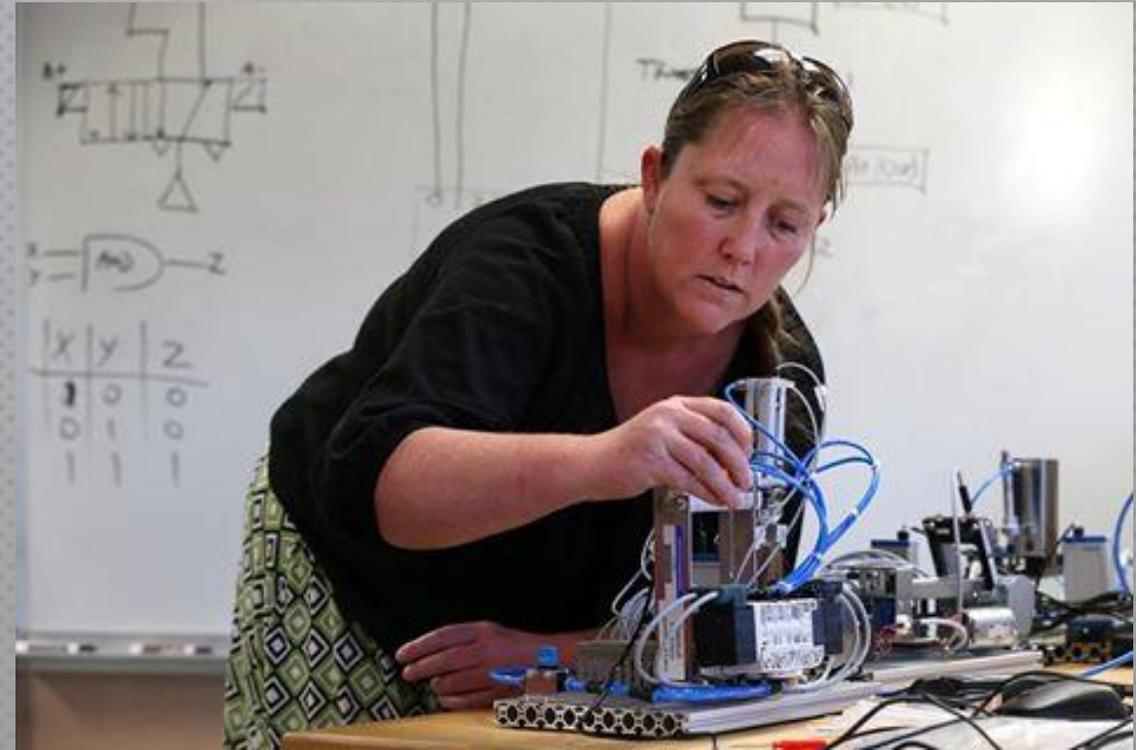


# CAREER READINESS EMBEDDED

- TECHNICAL COMMUNICATION
- MATH FOR INDUSTRY
- TIME MANAGEMENT
- DOCUMENTATION



- College Courses
- Accelerated
- Hybrid
- Jump Start College/Fast Track



## What We Offer

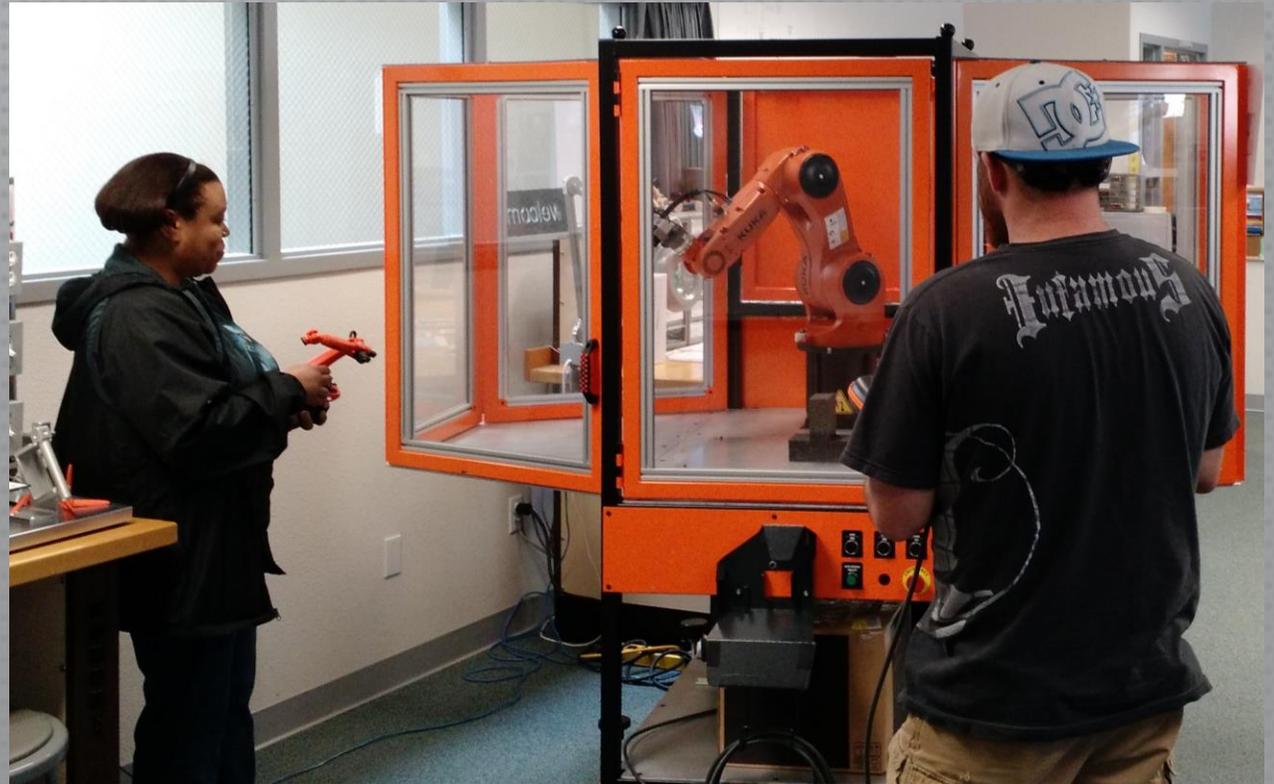
# PREPARING FOR TECHNICAL CAREERS





**We prepare  
Industrial Technicians  
with knowledge and skills in:**

**Electricity/Electronics  
Mechanical Systems  
Sensors  
Controls  
Pneumatics  
Hydraulics  
Robotics**



# HOW TO THINK, NOT WHAT TO THINK!



# WNC DEGREES AND CERTIFICATES

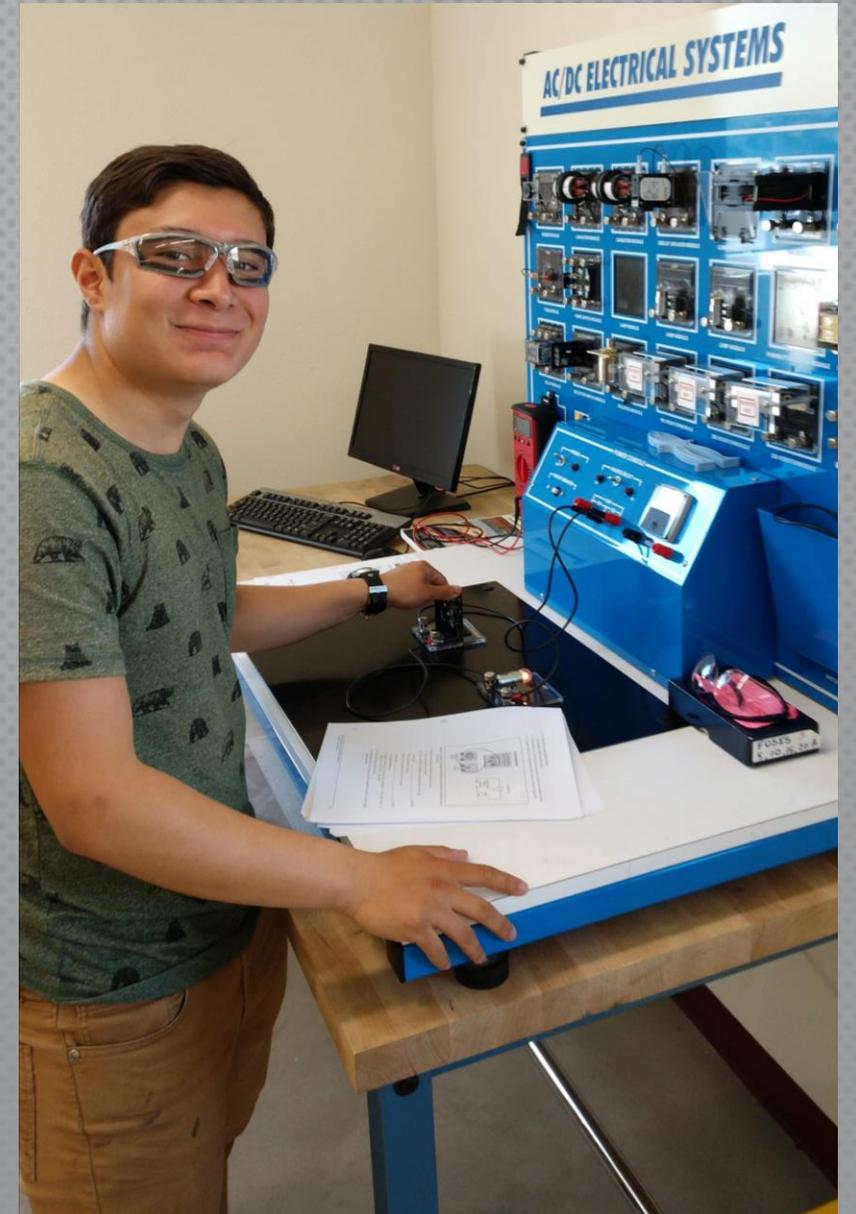
- **AAS: GENERAL INDUSTRIAL TECHNOLOGY**
  - INDUSTRIAL ELECTRONICS
- **AAS: AUTOMATED SYSTEMS**
  - MANUFACTURING TECHNICIAN
- **AAS: MECHATRONICS**
  - MECHATRONICS FOUNDATION
- **\*BAS: AUTOMATION AND DIGITALIZATION!**



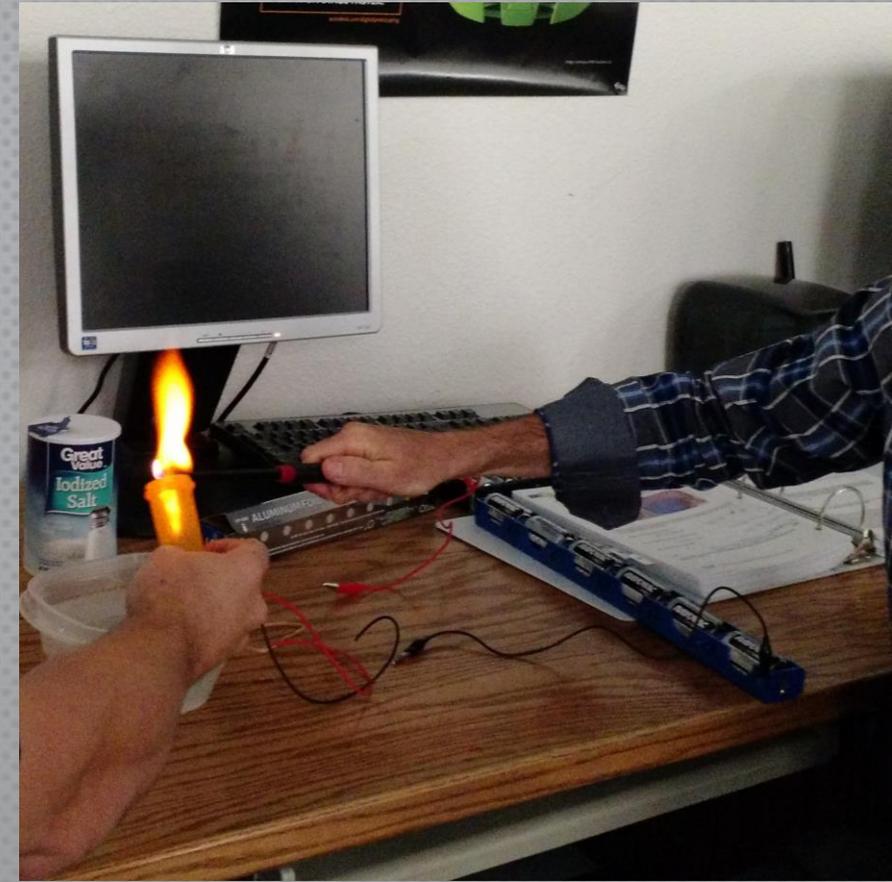


**#ITSYOU**

# HANDS-ON LABS



# PROJECTS FOR CERTIFICATION EXAM PREPARATION



# ONLINE CLASSWORK

## FUNDAMENTALS OF INDUSTRIAL TECHNOLOGY

Skill 5: Use a DMM to Measure Current in Series and Parallel Circuits

File Add Components Options

**Step 2 of 26**

Connect the series circuit with the DMM connected as shown in graphic 4.

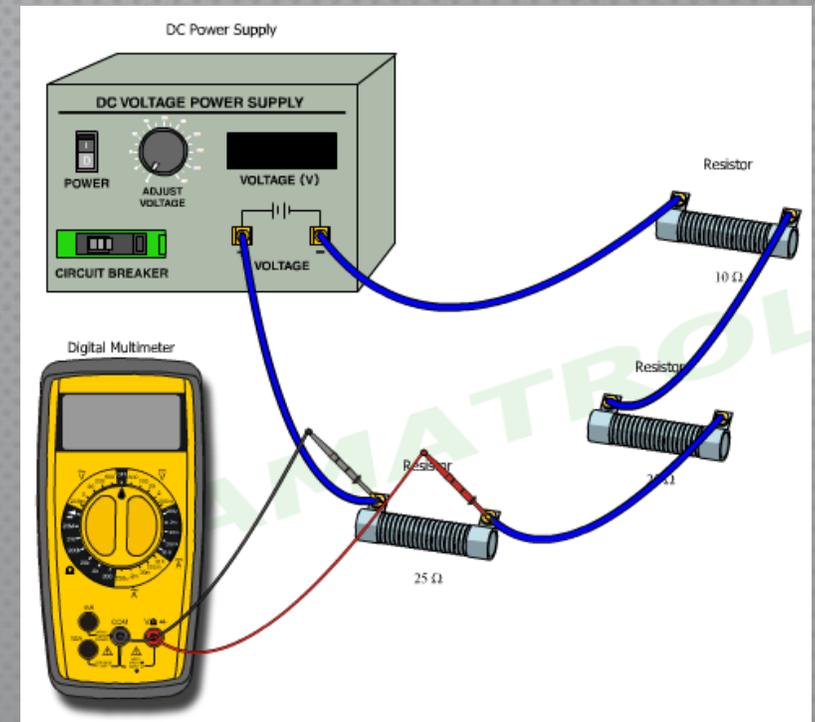
This will allow you to measure the current between the positive terminal of the power supply and R1.

Back Next

Step	Graphic
0	1  2
1	3
2	4

**Graphic 4** Enlarge

+ ZOOM - RESET VIEW ADD LEADS REMOVE LEADS REMOVE COMPS Removing Comps...



# Make it ... in Nevada



## Manufacturing Technician (MT1) Certification



# 3 EXAMS TO CERTIFY AS AN MT1

- **MATH AND MEASUREMENT**
  - ALGEBRA AND GRAPHS
- **SPATIAL REASONING & MANUFACTURING TECHNOLOGY**
  - ELECTRICITY
  - FLUID POWER
  - CONTROLS
  - MECHANICAL SYSTEMS
- **QUALITY AND BUSINESS ACUMEN**
  - LEAN MANUFACTURING
  - SPC

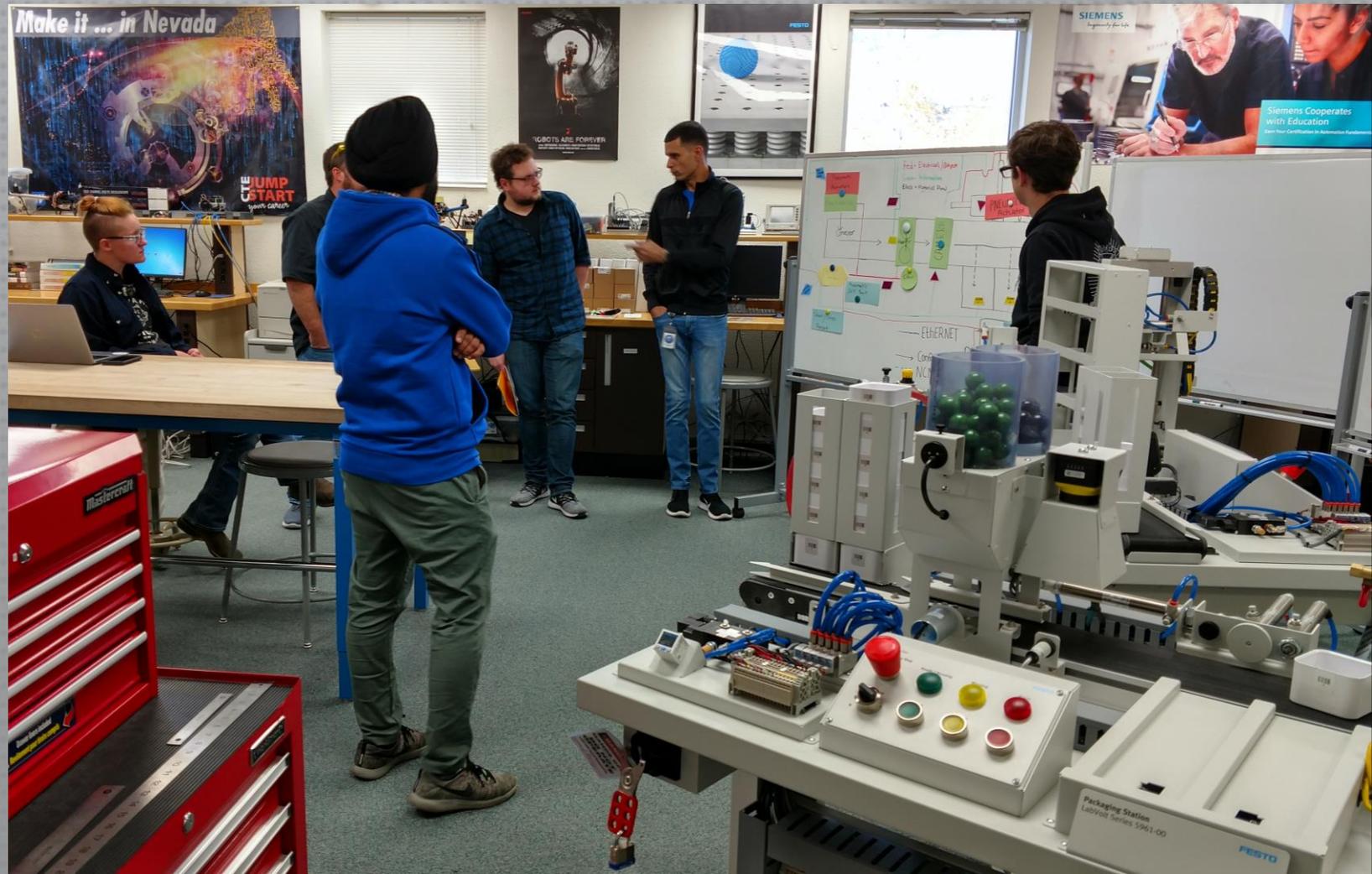
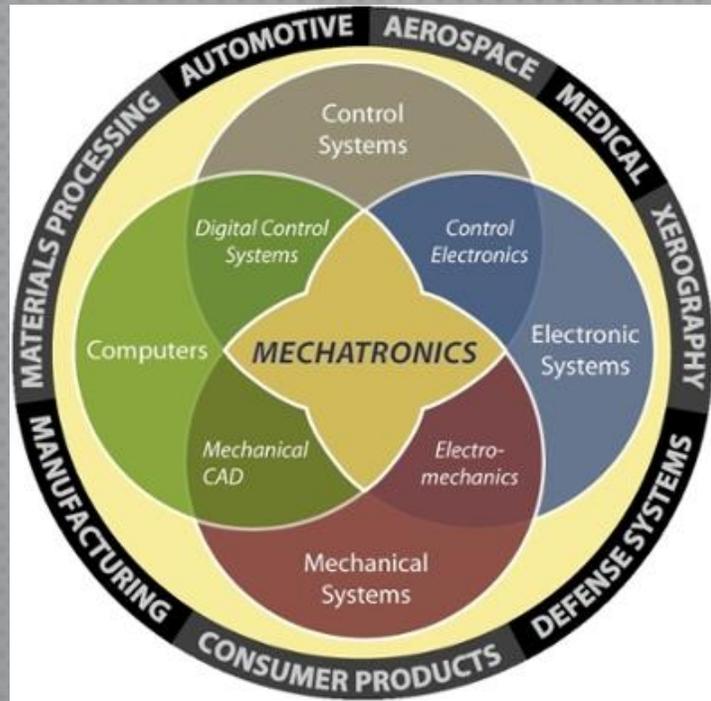
# THE MANUFACTURING TECHNICIAN

## MT1 CERTIFICATION





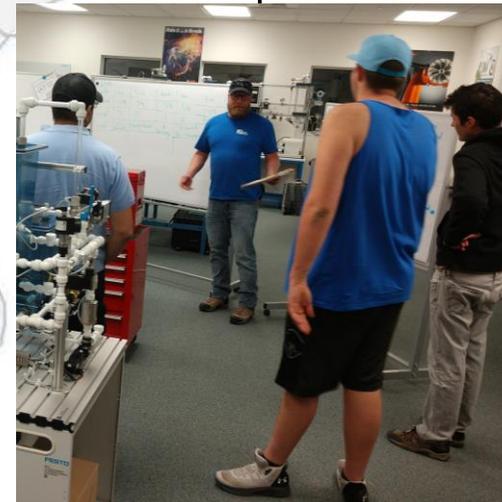
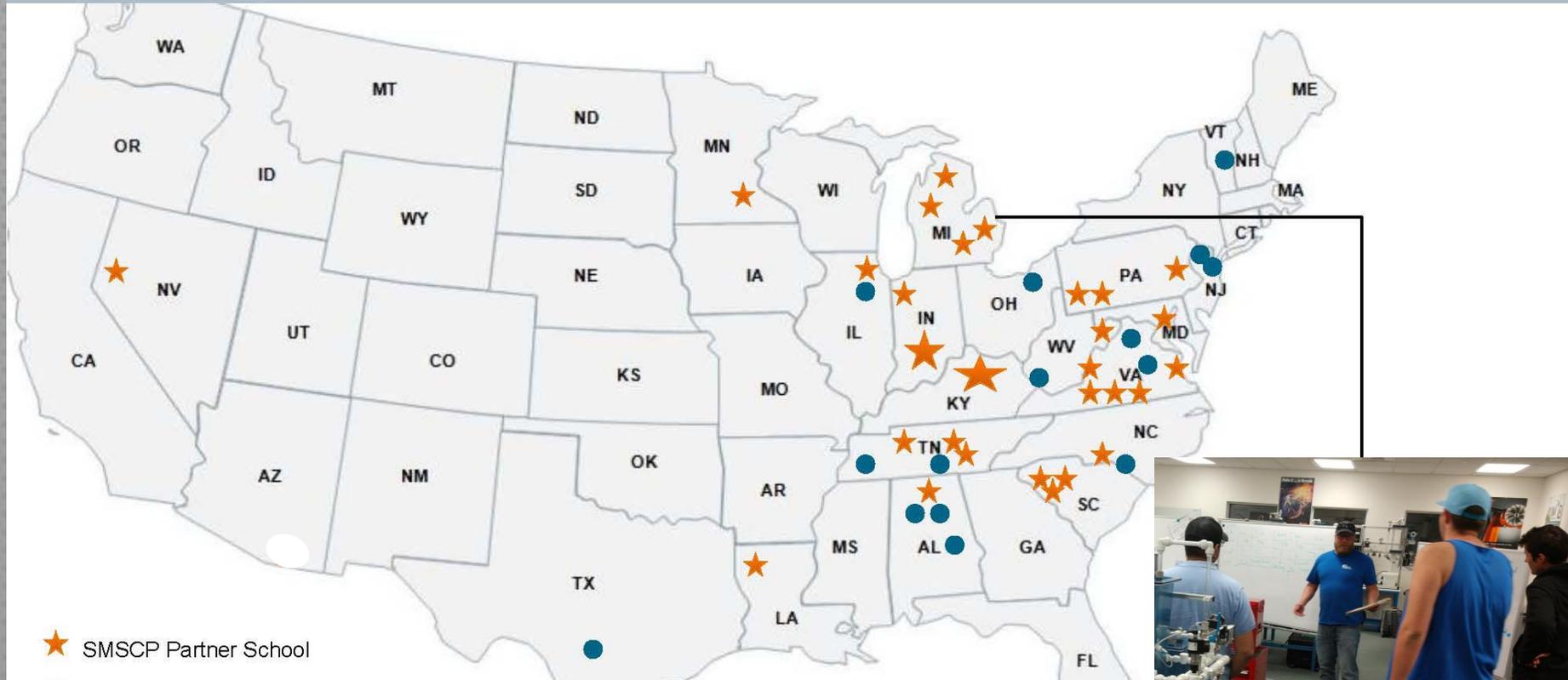
# SIEMENS MECHATRONIC SYSTEMS CERTIFICATION PROGRAM (SMSCP)



# CERTIFICATION BUILT ON JOB PROFILES

- **LEVEL 1: SIEMENS CERTIFIED MECHATRONIC SYSTEMS ASSISTANT.** EMPHASIS IS PLACED ON EFFICIENTLY OPERATING COMPLEX MECHATRONIC SYSTEMS, TROUBLESHOOTING MINDSET, AND COMMUNICATION.
- **LEVEL 2: SIEMENS CERTIFIED MECHATRONIC SYSTEMS ASSOCIATE.** THE FOCUS IN LEVEL 2 IS ON SYSTEMS MANAGEMENT, TROUBLESHOOTING, INVESTIGATION, AND REPAIR.
- **WHAT'S NEXT?!**

# SMSCP is implemented at 30\* Educational Institutions in the US



**SIEMENS**  
*Ingenuity for life*

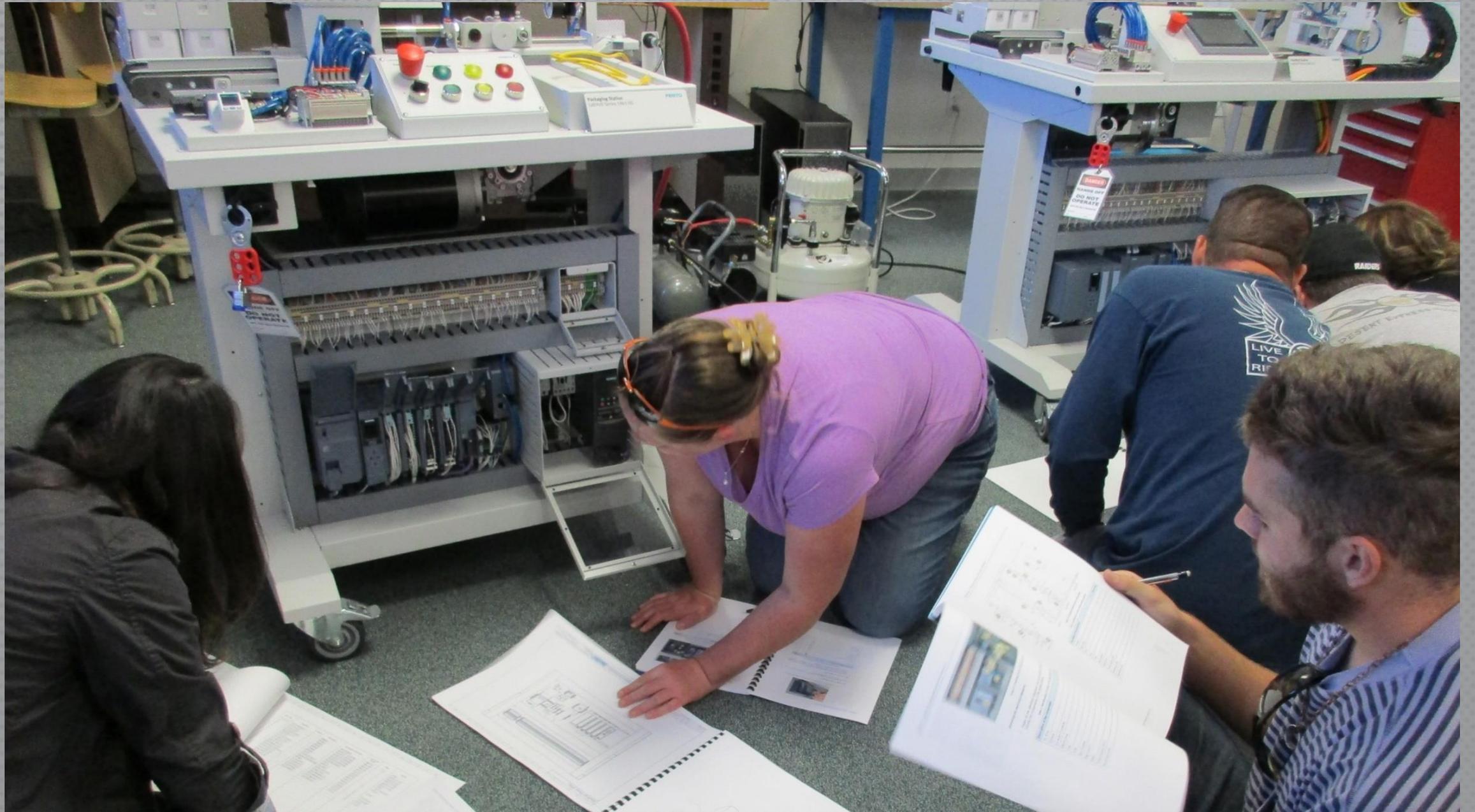
# SIEMENS MECHATRONIC SYSTEMS

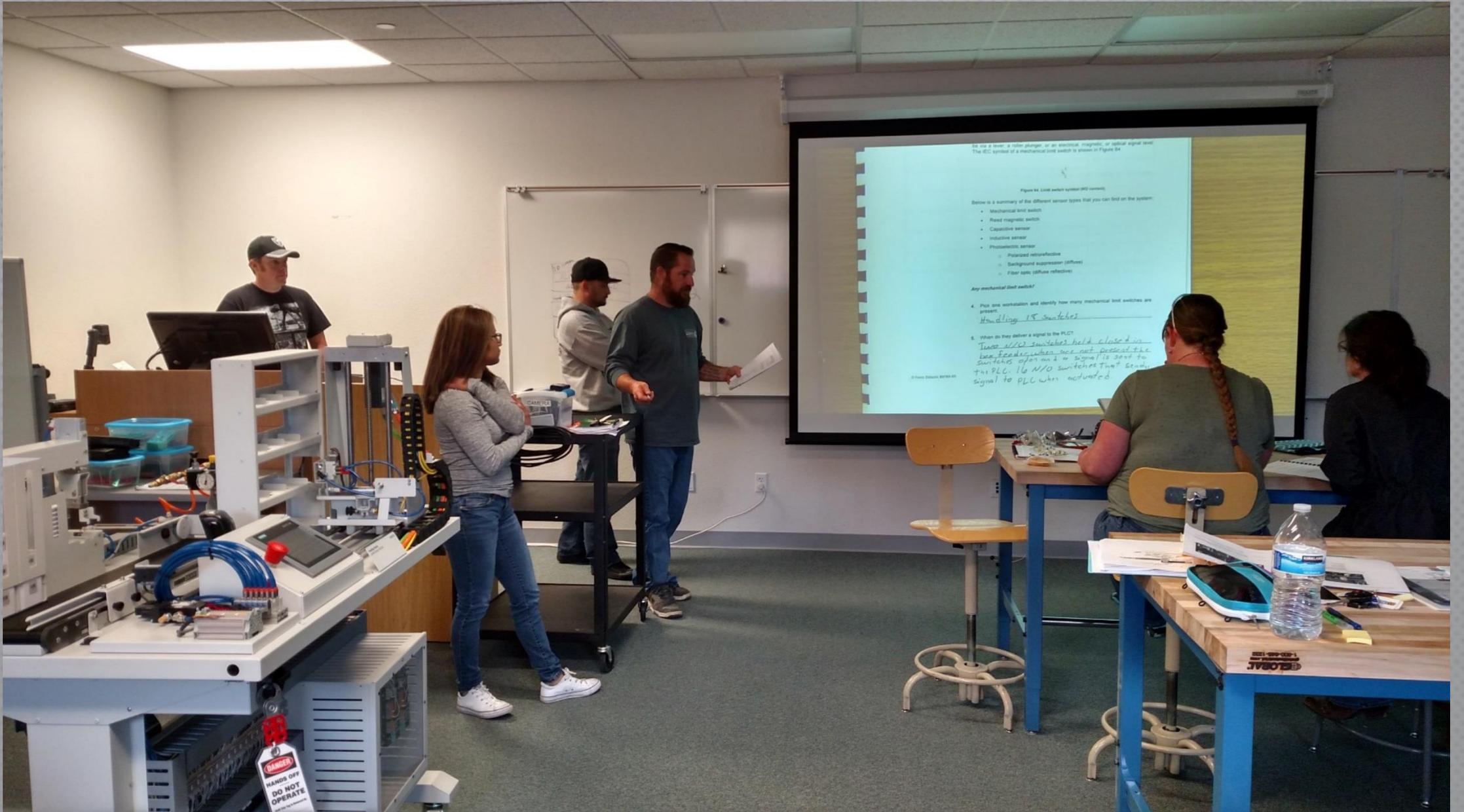
**RIGOROUS**

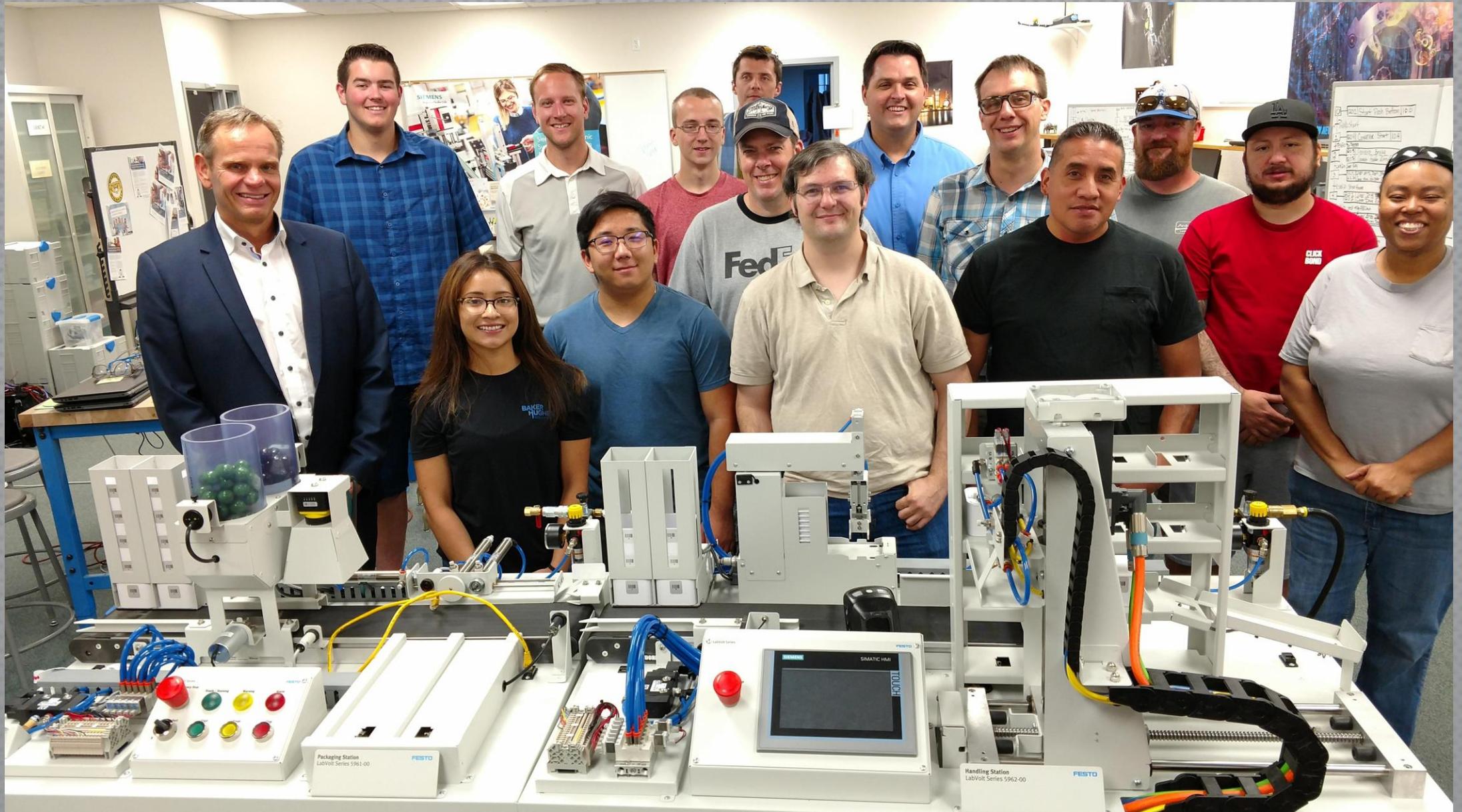
**ACTIVE**

**INTERACTIVE**



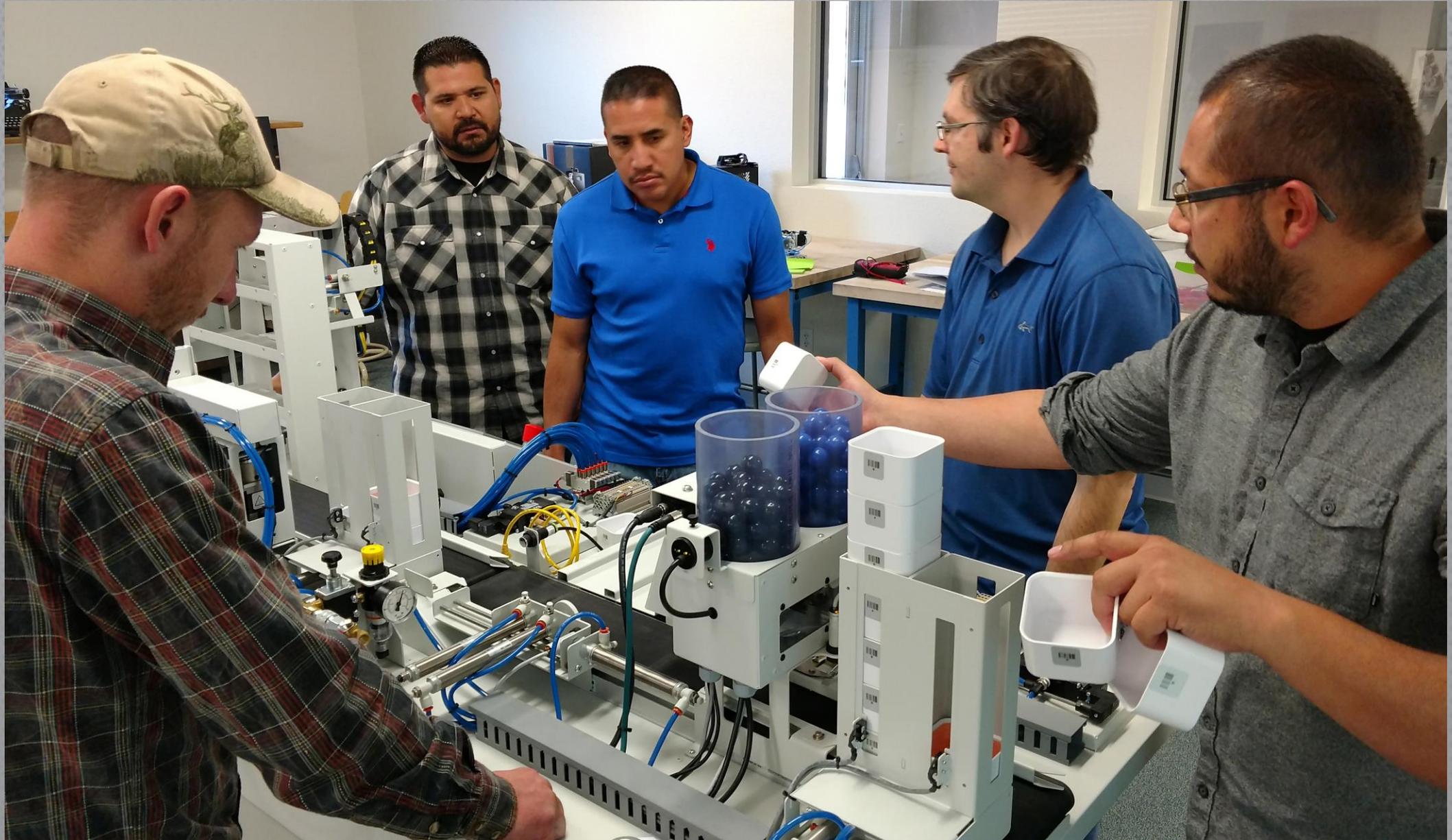


















**CLICK BOND** ADHESIVE-BONDED FASTENER TECHNOLOGY

Collaborative Engineering

TECHNOLOGY  
AND SUPPORT SINCE 1987  
OFFSHORE  
VEHICLE



**CLICK BOND**

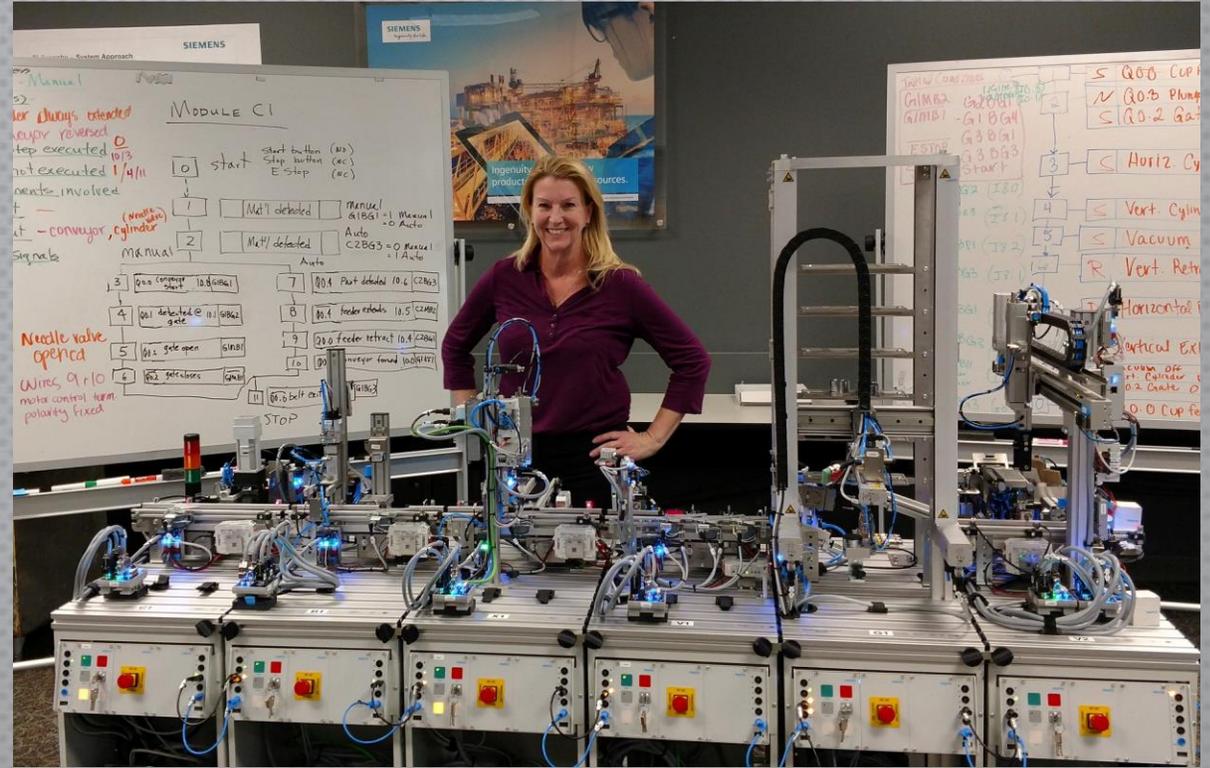
- > Improves Cycle
- > Reduces Labor
- > Minimizes Strain
- > Reduces Foreign
- > Prevents Corrosion

**CLICK BOND**



# WHAT'S NEXT?

- CONTINUED FOCUS ON RELIABILITY
- FOLLOW TRENDS IN AUTOMATION
- PREPARE THE TECHNICAL WORKFORCE FOR DIGITALIZATION



- **EMILY HOWARTH**
- **PROFESSOR, ELECTRONICS AND INDUSTRIAL TECHNOLOGY**
- ***EMILY.HOWARTH@WNC.EDU***

**@WNCCTE**

**#MAKEITINNEVADA**

