

CAPABILITY STATEMENT

Blue Ridge Community and Technical College offers comprehensive Advanced Manufacturing training programs tailored to meet the unique needs of your business. Our experienced faculty and staff work closely with local industry partners to identify specific training objectives that align with the economic and workforce demands of our region.

We will conduct a thorough analysis of your organization's training requirements and develop a customized training program that meets your business needs.

Blue Ridge CTC is a participant and training provider in the Department of Energy's Industrial Assessment Center. Industrial Assessment Centers leverage best practices in workforce development to train participants for in-demand clean energy and manufacturing jobs by providing hands-on technical assistance to small and medium-size manufacturers.

www.energy.gov/mesc/industrial-assessment-centers-iacs#schools

Technical Training Capabilities

- Automation
- CAD
- Consultation and Assessment
- Electrical Training
- Instrumentation
- Machining: CNC & Fabrication
- Mechanical Training
- Plastics Engineering Technologies
- PLC
- Quality Assurance Lab Technician
- Root Cause Failure Analysis
- Robotics
- Technical Writing
- Welding

Safety Training Capabilities

- ARC Flash Safety Training
- Electrical
- EMR: Emergency Medical Responder
- Environmental
- Fire Extinguisher
- General Safety
- Lock Out Tag Out
- OSHA 10 & 30 Certifications
- OSHA Confined Space Aid & Attendant
- OSHA Confined Space Rescue
- Power Industrial Trucks

Contact Kim Moss for Additional Information:

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Scan the QR Code or visit our website
for a full listing of available courses:
www.blueridgectc.edu

CAPABILITIES

Blue Ridge Community and Technical College specializes in creating customized curricula that adapt to the evolving needs of your business environment.

Our training solutions are designed to achieve targeted outcomes that directly benefit your organization, ensuring that participants acquire practical skills relevant to their roles. Additionally, participants who successfully complete our training courses, earn college credit, providing added value to both employees and employers.

If you have specific topics or skill areas you wish to explore that are not listed in our sample offerings, we welcome the opportunity to collaborate and expand our training solutions to meet your unique needs.

SAMPLE COURSE TOPICS *(continued on back)*

Automation

- Area Scanners: SICK
- Barcode Systems: Cognex
- FEA Analysis
- Machine Vision I & II: Cognex
- Motor and Automation Controls
- Networking: Networking Performance and Security
- Relay Control
- RFID Operation and Programming

CAD

- AutoCAD
- CAD: 2D Modeling
- CAD: 3D Modeling
- Inventor
- 3 - D Printing Process and Application



Electrical Training

- Basic Electrical Training
- Blueprint & Schematic Reading
- Electrical Safety: 70 E, Medium, High Voltage, Task Qualified
- Hydraulics, Pneumatics, and Sensors
- Industrial Controls
- Instrumentation
- Motor Control
- Process Control
- Systematic Trouble Shooting
- Troubleshooting: Electrical Systems
- Troubleshooting: PLC Systems
- VFDs

Instrumentation

- Instrumentation: Flowmeters Electromagnetic, Coriolis, Differential Pressure, etc.
- Instrumentation: HART Protocol
- Instrumentation: Level Elements and Calibration-Tuning Fork, Static Pressure, Radar, Ultrasonic, Level Flex
- Instrumentation: Meters and Calibrators
- Instrumentation: Pressure Transmitters E+H, Emerson
- Instrumentation: Valves
- Instrumentation: Valves Calibration, Installation, Repair
- Process Control: Loop Tuning

Machining: CNC & Fabrication

- CAM
- Computer Numerical Control
- CNC and Machining Work: Holding and Tooling
- CNC: Turning
- Gear Drives
- Geometric Dimensioning and Tolerancing
- Grinding: Tooling
- Heat Treat Principles
- Machining and Fabrication
- Machining: Coolants and Oils

Mechanical and Component Training

- Blueprint Reading
- Belt Drives & Chain Drives
- Dimensional Measurement
- Component Training: Hand Tools and Fasters
- Hydraulics, Pneumatics, and Sensors
- HVAC Maintenance
- Industrial Controls Mechanical Systems
- Inspection: Bore Gauges
- Inspection: Gauge Blocks
- Inspection: Height Gages
- Inspection: Surface Plates
- Inspection: Test Indicators
- Key Fasteners
- Laser Shaft Alignment
- Lean Manufacturing
- Light Curtain: SICK
- Manufacturing Process and Quality Process Controls
- Material Properties
- Mechanical Fabrication
- Pumps and Valves
- Pump Operation and Rebuilding
- Rigging: Various Types
- Tolerances
- Structural Systems
- Troubleshooting: Mechanical, Electric, & Mechatronic Systems
- V-Belt Drives
- Vibrational Analysis

Plastics Engineering Technology

- Basic Training: Injection, Injection Blow, and Extrusion Molding Technologies
- Extrusion Blow Molding: Kautex EBM Maintenance, Operation and Trouble Shooting
- Kautex EBM Simulator Training
- Injection Molding: Husky Maintenance, Operation and Trouble Shooting
- Injection Stretch Blow Molding: Nissei ASB Maintenance, Operation and Trouble Shooting
- Plastics Engineering Technology Online Training: Paulson

PLC

- Allen Bradley, Bosch, Siemens
- Basic PLC Programming
- Discrete I/O Interfacing
- Event Sequencing
- HMI Editing
- PLC Motion Control: Kinetix
- PLC Motor Control
- PLC Operation of Fluid Power Systems
- PLC Training: Allen Bradley, Siemens
- PLC Ethernet Communication
- Remote I/O
- Servo Drive: BOSCH, Allen Bradley
- Troubleshooting: Into and System Techniques

Power Industrial Trucks

- Aerial Lift
- Fork Lift: Stand -Up and Sit- Down
- Scissor Lift

Robotics

- Robotics: ABB, Fanuc, Kuka Instructor Certifications
- Robotics: ABB Electrical, Mechanical Maintenance
- Robotics: ABB Programming & Robot Studio
- Robotics: Fanuc Mechanical & Electrical Maintenance
- Robotics: Fanuc Programming, Electrical, Mechanical

Welding

- Welding: Fabrication
- Welding: MIG, TIG, Stick
- Brazing
- Sheet Metal Fabrication

