Virtual Skills Academy from Sandhills Community College offers a quick-start road map that allows individuals to build knowledge in preparation for a career in manufacturing. This online academy is intended to provide basic mold understanding and bring awareness to opportunities within the manufacturing industry. Courses are stacked to follow a job progression plan. Unlike many other training programs, the Virtual Skills Academy requires minimal preparation. It is efficient, effective training that has been developed with input from manufacturing experts.

FLEXIBLE AND CONVENIENT
Online classes are self-paced, and easy to access through smart phones, tablets, and computers. Each course provides pre- and post-assessments and the ability to review and learn through a variety of engaging activities.

Virtual Skills Academy Provides:
- Preset curriculum
- Engaging online classes
- Supplemental videos
- Pre- and post-training knowledge assessments
- Guidance from Sandhills Community College Staff
- Readiness for On-the-Job Training
- Preparation for entry-level jobs in manufacturing
- Demonstrated proof of aptitude
- Opportunity to showcase personal initiative

CAREER PATHWAYS FOR MOLD MAKER JOB ROLES

Combine job roles for learning pathways, or offer single job roles for targeted learning. Large comprehensive programs also available.
MOLD MAKER

Get ready for your career to TAKE OFF

PLASTICS PROCESSING FUNDAMENTALS

Basic Measurement
- Basics of Tolerance
- Blueprint Reading
- Calibration Fundamentals
- Hole Standards and Inspection
- Thread Standards and Inspection

5S Overview
- Lean Manufacturing Overview
- Introduction to Mechanical Properties
- Introduction to Plastics
- ISO 9001 Review
- Bloodborne Pathogens

Fire Safety and Prevention
- Hand and Power Tool Safety
- Intro to OSHA
- Lockout/Tagout Procedures
- Noise Reduction and Hearing Conservation

Personal Protective Equipment
- Safety for Lifting Devices
- SDS and Hazard Communication
- Walking and Working Surfaces
- Geometry: Circles and Polygons

Geometry: Lines and Angles
- Geometry: Triangles
- Math Fundamentals
- Math: Fractions and Decimals
- Trigonometry: Sine, Cosine, Tangent
- Units of Measurement

MOLD MAKER

Basics of the Cylindrical Grinder
- Basics of the Surface Grinder
- Cylindrical Grinder Operation
- Dressing and Truing
- Grinding Processes

Grinding Safety
- Grinding Variables
- Grinding Wheel Geometry
- Grinding Wheel Materials
- Grinding Wheel Selection

Introduction to Grinding Fluids
- Setup for the Cylindrical Grinder
- Setup for the Surface Grinder
- Surface Grinder Operation
- Calculations for Programming the Mill

Canned Cycles for the Mill
- Creating a CNC Milling Program
- Introduction to GD&T
- Major Rules of GD&T
- Troubleshooting

Basic Cutting Theory
- Carbide Grade Selection
- Cutting Tool Materials
- Speed and Feed for the Lathe
- Speed and Feed for the Mill