

# ADVANCED Manufacturing

sandhills.edu/advancedmanufacturing

The Advanced Manufacturing program offers high-tech, in-demand career training through state-of-the-art equipment designed to meet the growing demand for skilled workers. Through partnerships with local employers, the Advanced Manufacturing Program aligns class offerings and curriculum to provide employers a pipeline of skilled workers with job-specific skills.



Classes prepare students to achieve national certifications from institutes such as the National Center for Construction Education Research (NCCER), Manufacturers' Skills Standards Council (MSSC), Electronic Technicians' Association (ETA), and the National Institute for Metalworking Skills (NIMS). Content focuses on safety and fundamental job skills preparing students for gainful employment. Job placement assistance and career coaching are offered to students who successfully complete the course.

Opportunities are also available for high school students. Please see your guidance counselor for more information regarding the high school track and visit sandhills.edu/ceccp for additional details.

**For more information, contact Deneane Smith at (910) 246-4117 or [smithl@sandhills.edu](mailto:smithl@sandhills.edu).**

Advanced Manufacturing Education at SCC is made possible in part due to the generous contributions of these supporters:



**Classes are held at the Palmer Advanced Manufacturing Center on the Pinehurst Campus and at the Sandhills Hoke Center in Raeford.**

[manufacturingmodernized.com](http://manufacturingmodernized.com)

We offer Advanced Manufacturing classes on our Pinehurst campus, at the Hoke Center in Raeford and at Raeford High School.

- **Bobby McCollum**  
Electrical Instructor



## PINEHURST CAMPUS CLASSES

### Electrical Level 2

Instructor: Bobby McCollum  
106 Palmer Center  
\$185 (plus text)  
CEU: 16.5

This course builds upon the concepts and skills acquired in the NCCER Electrical Level I course.

- Students learn about AC and DC motors, including the main components, circuits and connections.
- Basic principles of human vision and the characteristics of light and on the handling and installation of various types of lamps and lighting fixtures is taught.
- All types of bends in all sizes of conduit up to 6 inches and on mechanical, hydraulic and electrical benders is covered.
- Successful completion qualifies students to receive the NCCER Electrician Level II Certification and inclusion on the NCCER National Registry for Electricians
- Prerequisite: Successfully completed NCCER Electrical Level I

Course Code: 1436

Tuesdays and Thursdays, Sept. 8-Apr. 13

6-9 pm

## Electrical Level 3

Instructor: Bobby McCollum  
106 Palmer Center  
\$185 (plus text)  
CEU: 16.5

This course builds upon the concepts and skills acquired in the NCCER Electrical Levels I & II courses.

- Load Calculations – Branch and Feeder Circuits
- Conductor Selection and Calculations
- Practical Applications of Lighting
- Successful completion qualifies students to receive the NCCER Electrician Level III Certification and inclusion on the NCCER National Registry for Electricians.
- Prerequisite: Successfully completed NCCER Electrical Levels I and II.

Course Code: 1437

Tuesdays and Thursdays, Sept. 8-Apr. 13

6-9 pm

## Welding Level 2

Instructor: Brett Dysart  
107 Palmer Center  
\$285 (plus text and supplies)  
CEU: 22.2

Welding Level 2 follows the National Center for Construction and Research (NCCER) curriculum and builds upon content learned in Welding Level 1.

- Students learn the physical characteristics and mechanical properties of metals.
- Pre and post heating of metals, gas metal and flux cored arc welding is taught.
- Welding safety and symbols, and interpreting detailed welding drawings is taught.
- Upon successful completion of written and performance assessments and required training hours, students will be awarded a certificate of completion from NCCER.
- Prerequisites: NCCER Welding Level I

Course Code: 2431

Monday and Wednesday, Aug. 24-Jun. 14

6-9 pm

## CNC Machining I

Instructor: Shane McNeill  
202 Palmer Center  
\$185, \$75 materials (plus text)  
CEU: 14.4

The CNC Machining class provides the training and skills needed to operate state-of-the-art industry equipment for creating and precision parts.

- Designed to teach students to read and interpret blueprints and understand machinability and chip formation.
- Students learn to calculate speeds, feeds and depth of cut for various machine operations.
- They will learn how use carbides and other tool materials and how to assemble work-holding components and perform basic semi-precision and precision layouts.
- After successful completion of this course, students will have a basic knowledge of Numerical Control and Computerized Numerical Control (NC) and (CNC) machine tools.
- Prerequisites: Basic Machining Experience Preferred

Course Code: 1435

Mondays and Wednesdays, Aug. 24-Mar. 10

6-9 pm

## HOKE CENTER CLASS

### Basic Programmable Logics Control

Instructor: Steve Fisk  
108 Johnson Hall  
\$185, \$50 materials  
CEU: 9.6

In industry, computers are vital to the manufacturing process in assembly lines and robotics. Learn the basics of PLC operations.

- Learn how to create a PLC program and design complex logic operations.
- Learn storage function applications and how to implement program flow control.
- Analog processing and how to solve complex text assignments is taught.
- This is the second of three classes in the SCC Automated Technology Certificate program.

Course Code: 1438

Tuesdays and Thursdays, Sept. 1-Feb. 4

6-9 pm



### CAMPUS HEALTH PRECAUTIONS

*For the continued safety and well-being of students, faculty and staff, the college has undertaken efforts to stymie the spread of the COVID-19 virus on campus:*

- all face-to-face classroom and lab instruction will require covering of the nose and mouth (mask, bandanna, or scarf) and proper physical distancing,
- a nose and mouth covering is required if within six feet of another person whether it be indoors or out,
- additional touch-free hand sanitizing stations have been installed,
- deep cleaning is carried out each evening using EPA-approved disinfectants and foggers,
- campus-wide sanitation of door pulls and light switches is carried out twice every weekday,
- the use of water fountains has been discontinued,
- service desk shields have been installed,
- doors and hallways are marked as to traffic flow direction, and
- bathrooms have posters reminding of proper hand-washing techniques.