ADVANCED MANUFACTURING

ELECTRICAL THEORY I BASICS

Learn about basic electrical concepts such as current flow, series and parallel circuits, LED technology, and understand how it applies to your workplace and home. This course includes instruction on how to work safely around electricity. Students will participate in hands-on labs and experiments.

DCB 1947	**T**	**3/24-4/21**	**6-9pm**	**KSU**	**$199**

CNC OPERATOR THEORY & LAB

This course covers the fundamentals needed to qualify for an entry level CNC operator position. Students will be introduced to the fundamentals of the operation of CNC machines. Required textbook: *CNC Control Setup for Milling and Turning*, ISBN 9780831133504

MFG 104	**M**	**1/27-5/11**	**6-9pm**	**CT**	**$626**
(3-credit class)					
No class 2/17, 2/18, 3/9					
DCB 2258	**M**	**1/27-5/11**	**6-9pm**	**CT**	**$626**
(non-credit bearing class)					
No class 2/17, 2/18, 3/9					

FUNDAMENTALS OF ELECTRICITY

This algebra based electricity fundamentals course is geared towards those looking to understand electricity as it relates to a manufacturing or construction career. Topics covered will include basic electrical principles, Ohm's Law, Watt's Law, power and energy, series, parallel and combination circuits, wire size and ampacity, magnetism and inductors, alternating current, capacitors, three-phase power, motors, and troubleshooting. This course includes a lab component. Required textbook: *Electrical Studies for Trades*, ISBN 9781133278238

MEC 102	**R**	**1/23-5/14**	**5-8pm**	**SRC**	**$626**
No class 3/12					
(3-credit class)					
DCB 2182	**R**	**1/23-5/14**	**5-8pm**	**SRC**	**$626**
No class 3/12					
(non-credit bearing class)					

INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS (PLCS)

This course will provide the fundamentals of a programmable logic controller (PLC). Hands-on instruction and industrial-type applications of PLCs requiring relay ladder logic control and a study of automated manufacturing and the functions of PLCs in an industrial environment will be provided. Topics include components of a PLC, memory organization, discrete I/O, numbering systems, logic gates, Boolean algebra, relay ladder logic, times, counters, word level logic and troubleshooting.

MEC 103	**M**	**1/27-5/11**	**5-9pm**	**SRC**	**$626**
No class 2/17, 2/18, 3/9					
(3-credit class)					
DCB 2155	**M**	**1/27-5/11**	**5-9pm**	**SRC**	**$626**
No class 2/17, 2/18, 3/9					
(non-credit bearing class)					

CNC OPERATOR CREDENTIAL

7-10 credits

The CNC Operator Credential prepares successful completers for entry-level positions as a CNC Operator. This credential consists of four courses which include Blueprint Reading for Manufacturing or AutoCAD, Geometric Dimensioning and Tolerancing, Intro to CNC Programming and CNC Operator.

CNC PROGRAMMER CREDENTIAL

10-13 credits

This credential consists of five courses which include Blueprint Reading for Manufacturing or AutoCAD, Geometric Dimensioning and Tolerancing, Intro to CNC Programming, CNC Operator and Mastercam.

AUTOCAD CREDENTIAL

9-12 credits

The AutoCAD Credential prepares successful completers for entry-level positions in a wide variety of industries that employ those with these skills. These industries include both advanced manufacturing as well as green technology. This credential consists of four courses which include Blueprint Reading, AutoCAD, Solid Modeling I and CAD Internship.

MICRO-CREDENTIALS:
The Bite-Sized Course of Study that Bulks-Up Your Resume with Skills to Enhance Your Career.

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- Computer Aided Drafting (CAD)
- Computer Game Design
- Computer Numerical Control (CNC) Operator
- Computer Numerical Control (CNC) Programmer
- Customer Service
- Mobile Application Development
- Small Business Management
- Web Application Developer

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www.sunyulster.edu/microcredentials

LOOKING FOR TECHNICAL TRAINING FOR YOUR TECHNICIANS OR ENGINEERS?

Let us know what you are looking for and we can put together a course for you. For more information, contact Barbara Reer at reerb@sunyulster.edu or 845-802-7171

EARNING CREDIT FOR WHAT YOU KNOW

SUNY Ulster recognizes many nontraditional modes of learning, including credit for life experience and proficiency examinations. If you use these opportunities to earn credit, you must still meet the residency requirement (a minimum of 30 credit-bearing semester hours of academic course work at SUNY Ulster for the associate degree and 15 credit-bearing semester hours for the one-year diploma). Any course for which alternative credit is given may not be repeated at the College for credit. If you intend to transfer to four-year institutions you should be aware that any credit received from alternative modes would be subject to re-evaluation by the four-year institution. These credits will not be used in calculating your cumulative average.

M - MONDAY • T - TUESDAY • W - WEDNESDAY • R - THURSDAY • F - FRIDAY • S - SATURDAY • U - SUNDAY