

Scioto County CTC

Engineering

Essential skills needed for success **upon completion** of the program

Rating Key: 1=Not Essential 2= Slightly Essential 3= Essential 4= Very Essential

Key Career Skills	1	2	3	4
Visual acuity/depth perception – the ability to detect differences – A visual inspection is the first step of the diagnostic process			X	
Auditory acuity – the ability to detect differences in pitch/sound	X			
Oral communication- the ability to verbally express/explain ideas				X
Written communication- the ability to write communication necessary for the field				X
Physical mobility and strength- the ability to meet physical demands of the field		X		
Arm- hand coordination & fine finger dexterity – the ability to manipulate objects as required				X
Stability- the ability to employ consistent operating procedures and protocol				X
Ability to collect, analyze, and interpret numerical data in an applied setting – Measurements of resistance and Ohm’s calculation				X
Ability to creatively problem solve				X
Ability to organize and prioritize work process				X
Ability to discriminate between objects of similar size, shape, color and spatial relationship				X
Ability to use tools of the trade safely and accurately				X
Willingness to adapt and change per industry standards and culture – Technology is rapidly advancing in this field			X	
Ability to consistently abide by industry rules and regulations			X	
Ability to work accurately and follow procedures to industry standards			X	
Soft Skills				
Ability to get along with colleagues and persons of authority			X	
Ability to demonstrate flexibility and adaptability			X	
Ability to demonstrate multicultural awareness and acceptance of diversity			X	
Ability to consistently demonstrate honesty, integrity, and respectfulness			X	
Positive attitude toward work including tasks of minimal interest			X	
Ability to work independently			X	
Ability to stick to assigned task to a positive or expected conclusion			X	
Dependability (attendance, punctuality)			X	
Ability to follow and retain: oral instructions – multi-step			X	
Ability to follow and retain: written instructions – multi-step			X	
Ability to follow and retain: diagram/chart instructions – simple to complex			X	
Ability to follow and retain: visual model/demonstrated instructions – interpretation of writing diagrams is an essential task			X	
MATH Skills				
Count, record, compare, calculate whole numbers (grades 1-3)				X
Calculate fractions, decimals, order of operations, pre-algebra (grades 4-6)				X
Algebra I, ratios/proportions, formulas, square root (grades 7-9)				X
Geometry, Algebra II, Trigonometry, Statistics (grades 9-12)			X	
Advance Algebra, Pre-Calculus, Calculus (grades 10-12)			X	
READING Skills				
Grade Level 1-4 (primary textbooks)				X
Grade Level 5-7 (basic newspapers)				X
Grade Level 8-12 (high school textbooks)				X
Able to read and apply the use of industrial manuals (high school textbooks)			X	
Grade Level 12+ (college textbooks)			X	