



Welding Technology Technical Standards

Technical Standards are nonacademic abilities and characteristics established to meet the essential functions of the selected program of study. This resource is provided to all potential applicants to facilitate the making of an informed decision about a program of study and future career. To better understand the nonacademic expectations of this program of study, the specific technical standards are provided below.

In the case of a qualified individual with a documented disability, appropriate and reasonable accommodations will be made unless to do so would fundamentally alter the essential instructional and training elements, cause undue hardship, or compromise safety in the classroom, lab, field, and/or clinical environment.

Standard	Definition of Standard	Example(s) of Technical Standard as applied in Program
Critical Thinking / Problem-Solving Skills	Ability to measure, calculate, reason, analyze, integrate and synthesize information sufficient for judgment.	<ul style="list-style-type: none">• Use logic and reason to identify strengths and weaknesses of alternative solutions, conclusions, or approaches to problems• Establish and manage time requirements for welding project completion

Standard	Definition of Standard	Example(s) of Technical Standard as applied in Program
Interpersonal Skills	Appropriate interpersonal interaction sufficient to work collaboratively with peers and small groups. Able to accept constructive criticism.	<ul style="list-style-type: none"> • Respect the dignity and rights of all individuals during all interactions • Establish rapport with clients and colleagues • Accept advice from peers, instructor, mentor, and employer
Communication Skills	Ability to effectively communicate using English verbal and non-verbal formats with faculty, peers, and employers, and customers.	<ul style="list-style-type: none"> • Interact professionally • Follow verbal and written instructions
Mobility	Physical abilities are sufficient to move in one's environment.	<ul style="list-style-type: none"> • Work standing, stooping, reaching, bending, and working at moderate heights • Climb ladders and scaffolding
Motor Skills	Sufficient motor function to execute movements required to perform duties with the ability to engage in skills requiring the use of gross and fine motor manipulation of arms, hands and fingers.	<ul style="list-style-type: none"> • Steadily operate a torch and other tools with precision • File, sand, and wire brush parts • Control industrial equipment like grinders and saws
Physical Strength and Stamina	Sufficient physical endurance to participate fully in the lab at an appropriate level.	<ul style="list-style-type: none"> • Push, pull, or lift 50lbs frequently and up to 100 lbs occasionally (with assistance).

Standard	Definition of Standard	Example(s) of Technical Standard as applied in Program
		<ul style="list-style-type: none"> • Perform repetitive physical movement • Work for up to 12 hour shifts with breaks
Sensory <ul style="list-style-type: none"> • Sight • Sound • Touch • Smell 	Sufficient auditory, visual, olfactory, and tactile ability to monitor and assess equipment safely.	<ul style="list-style-type: none"> • Identify alarms • Detect machinery and arc noise for malfunctions and proper operation • Detect flaws in molten metal • Work with diagrams and perform tasks in two and three dimensions • Able to take precise measurements to 1/16th of an inch
Behavioral / Emotional Skills	Present self in a professional manner in academic settings, demonstrating integrity, accountability and reliability; function effectively and adapt to circumstances including highly stressful or rapidly changing situations.	<ul style="list-style-type: none"> • Adapt to changing environments and schedules
Environmental / Occupational Exposure	Carry out job skills in a hazardous environment. Carry out job skills in extreme environmental conditions.	<ul style="list-style-type: none"> • Tolerate dusty and noisy environments • Tolerate exposure to possible hazards, including electrical shock, burns, and cuts

Standard	Definition of Standard	Example(s) of Technical Standard as applied in Program
		<ul style="list-style-type: none"> Perform skills in hot and cold temperatures
Industry Professional Shop Safety Standards	Perform skills following safety standards.	<ul style="list-style-type: none"> Wear correct PPE (personal protective equipment), including safety goggles, face shield, welding hoods, and cutting goggles for up to 8 hours a day Wear heavy-duty flame-resistant clothing for up to 8 hours a day

Please note: Examples are not all-inclusive.

Accessibility & Accommodations:

It is SCC's goal to create a learning environment that is accessible and inclusive. If a student has a question as to their ability to meet the minimal technical standards listed above, they should contact the Student Accessibility Coordinator to determine if the standard can be met with accommodations. To learn more about resources available to you, schedule a consultation or appointment, and/or establish accommodations that may be needed based on impact of a disability, please contact the Student Accessibility Coordinator at accessibility@southwesterncc.edu or 828.339.4326 (Balsam Center, Room 129A).

Signature of Understanding:

I have received a personal copy of the program specific technical standards. I was provided the opportunity to address any questions or concerns. I understand that these are enforceable, nonacademic standards required for the program of study and I certify that I have the ability to meet the technical standards of the program of study.

Student name (printed)

Student Signature

Date