Computer Integrated Machining Technical Standards

Criteria: Critical thinking and/problem solving
Standard:

A) Ability to measure, calculate, reason, analyze, integrate and synthesize information.
   1) Example: Evaluate drawings to perform proper machining tasks.
   2) Example: Apply basic mathematic skills to solve problems.
   3) Example: Demonstrate knowledge in machine related computations.

Criteria: Communication
Standard:

A) Appropriate interpersonal interaction with other students, faculty, staff, customers, facility owners, and other technicians.
   1) Example: Demonstrate knowledge and understanding of engineering drawings.
   2) Example: Ability to translate geometric tolerances and symbols as they relate to quality and inspection.

B) Effective communication with others, written and verbally.
   1) Example: Communicate with oral and written documents in the machining processes as they relate to part drawings.
   2) Example: Communicate with team to troubleshoot machine and programing issues.

Criteria: Motor Skills
Standard:

A) Sufficient motor function to set-up and run manual and CNC machines.
   1) Example: Perform basic competencies related to machining of various parts on manual and CNC machines.

B) Sufficient physical endurance to work on cement floors for extended periods of time with minimal travel in the work area.
   1) Example: Participate completely in lab activities.
   2) Example: Demonstrate the ability to perform bench related work activities.

Criteria: Professional Conduct
Standard:

A) Function effectively and efficiently during demanding seasonal workload periods.
   1) Example: Maintain an understanding and effective relationships with customers, colleagues, faculty, staff and other professionals.

B) Incorporate professional standards of practice into all activities.
   1) Example: Work effectively with a team in an academic or live project setting.
   2) Example: Refrain from using improper grammar, profane or inappropriate communications.
   3) Example: Respond appropriately to constructive feedback provided by fellow students, faculty, staff, and customers.

C) Demonstrate integrity and accountability during field work and academic setting.
   1) Example: Complete all assignments in a timely manner.
   2) Example: Be on time to class and have good attendance.

D) Present self in a professional manner during field projects and academic settings.
   1) Example: Wear appropriate clothing that is not distracting or offensive when in the learning environment or that may cause an unsafe environment.

E) Utilize computers correctly, effectively and professionally to acquire information and to communicate with others.

1) Example: Utilize the internet to collect current information from appropriate resources to use during programming and set-up of CNC machines.

Criteria: Sensory
Standard:

A) Hearing sufficient to assess equipment needs.
   1) Example: Hear and recognize unusual equipment noise and take appropriate action to resolve any safety hazard.
B) Vision sufficient to operate equipment in a safe/professional manner.
   1) Example: Accurately interpret non-verbal communications when working in a manufacturing environment.
C) Knowledge of industrial safety procedures.
   1) Example: Read and understand Material Safety Data Sheets (SDS) information related to clean-up and reporting chemical spills and personal safety concerns.