SkillsUSA ILLINOIS

CNC Programmer

Career Competition

Career Cluster: Manufacturing/STEM

State Qualifying Exam: Yes   **National Contest:** Yes   **Participation:** Individual

Competition Description

This competition assesses the ability to write the CNC programs for both a milling and turning CNC machine from a part drawing and materials. The competition includes a written test evaluating contestant knowledge of computer numeric control machining. Related knowledge and skills in the areas of engineering drawing interpretation, geometric dimensioning and tolerancing, technical math, machining practices. Using precision measuring/ hand tools and communicating verbally using proper industry terminology are also part of this competition.

Tasks To Be Evaluated

CNC Programming Skills both milling and turning
Process Control (Inspection using English and metric measuring tools)
CNC Programming Theory Exam
Oral Professional Assessment (Resume)

Clothing Requirement

National Requirement:
Class C: Competition Specific: Manufacturing/ Construction Khaki Attire
- Official SkillsUSA khaki short-sleeve work shirt
- Khaki pants
- Black, brown, or tan leather work shoes.

State Requirement:
National Requirement OR
- Khaki short-sleeve work shirt
- Work pants of any kind are acceptable dress (no jeans)
- Black, brown, or tan leather work shoes.
- Any embroidered names or school patches must be covered, if applicable.

Provided by Competitor

- Laptop, or computer with CAD/CAM software with a post processor for a HAAS VF2 and HAAS ST10
- Pen or pencil for notes, or written calculations
- Basic Calculator
- One page resume
- Safety Glasses

Provided by Technical Committee

- All measuring tools

Additional Information

The competition area will be available for students at noon Thursday April 25th. Students can check in on Thursday from noon till 5:00.