

2025 Oklahoma SLSC State CNC & Automated Manufacturing Contests Memo

NO SUBSTITUTIONS WILL BE ALLOWED AFTER FRIDAY, March 28th, 2025.
THERE WILL BE NO SUBSTITUTIONS ALLOWED ON-SITE AT THE
CONFERENCE

DATE, TIME & LOCATION

2025 State Skills USA CNC Technology and Automated Manufacturing contests will be held Monday, April 28th, at Tulsa Tech Broken Arrow Campus. There will be an optional familiarization meeting from 4:00pm-6:00pm Sunday, April 27th in the contest area. Contestant ID Badges will be handed out at the contest Monday morning.

The contest orientation will begin promptly at 8:00 a.m. and the contest will start at 8:30a.m. on Monday April 28th. The contest will last approximately 6 hours. The contestants will have 3 hours to write their program and three hours for other tests.

ONLINE TESTING

Contestants will be judged on their SkillsUSA knowledge through Professional Development test. Testing will be completed online and proctored through their technology centers. Online testing opens March 14, 2025, and closes April 4, 2025.

RESUME- Change to submission type please for 2025 please read

All contestants will submit a digital resume prior to contest day. Contestants will receive an email to the address used to register the contestant for contest with instructions and link to access the SkillsUSA Competitor Portal page. The email will contain contestants username and contestant number, which are required to login to the Competitor Portal.

Deadline to submit resume is April 22, 2025.

LUNCH

There will be a short lunch break provided. Machine Tool Specialties is sponsoring lunch through the Tulsa Tech Broken Arrow cafeteria.

CLOTHING REQUIREMENTS

Contestants should not wear clothing that has school identification visible to the judges. Those contestants wearing program uniforms will need to cover all identifying patches.

CELLPHONES AND OTHER SMART DEVICES

Cellphones, electronic watches and/or other electronic devices not approved by a competition's technical committee are NOT allowed in the competition area. **No Cell phones will be used during the contest. If a contestant is using a cell phone during the contest it will be automatic disqualification.**

AWARDS CEREMONY

Winners will be recognized at the General Session on Tuesday morning, April 29th, at 9am at the Arvest Convention Center in the Grand Hall.

All competitors must wear official SkillsUSA dress to the Awards Session, where winners are announced. Competitors who are not dressed appropriately or lack official attire will be denied access to the awards stage. Students must be present when their contest is announced. If a student is improperly dressed, absent, or misses their contest being called, the production will not be paused for any reason, and they will forfeit their opportunity to go on stage to receive the award. No exceptions will be made. No hats or sunglasses will be allowed to be worn on stage.

- Official dress for men: Official blazer, jacket or sweater; black dress slacks; white dress shirt; plain black tie with no pattern or SkillsUSA black tie; black socks and black shoes.
- Official dress for women: Official blazer, jacket or sweater; black dress slacks or knee-length skirt with business like white, collarless blouse or white blouse with small, plain collar that may not extend onto the lapels of the blazer, and black dress shoes

INDUSTRY AWARDS ***

Prizes are the responsibility of the individual contests. Prizes are not guaranteed and are not supplied at the SkillsUSA Oklahoma state level.

Industry awards should be labeled with the name and address of the award supplier so that an appropriate "Thank you" may be sent, must be accompanied by an industry award donation information sheet (available on the Oklahoma SkillsUSA website) and be brought to the awards area in the Conference Hall on Sunday April 27th between 12:00pm & 4:00pm or Monday, April 28th 2025 between the hours of 8:00 am and 4:00pm.

JUDGES

We need judges to judge the CNC programs. If you know of an individual that could spend Monday with us in a judging role please contact bsmith@gctcok.edu

RULES and REGULATIONS

We will follow the national rules, regulations, and contest content as closely as possible.

MATERIALS, TOOLS, EQUIPMENT and SUPPLIES Required:

Pencil or something to write with

Non-programmable calculator. (A Machinist Calc Pro is acceptable) Paper

Emergency Form

Machinery Handbook, or Shop Reference for Students and Apprentices use of a Trig formula sheet will also be allowed for contest.

Programming workbooks or User manual for lathe or mill. Technician contestants will be allowed a lathe book and a mill book both. **All books should be free of had written notes.**

Books will be checked and if notes are written in it that book will not be allowed.

Stage #1 CAD

CAD Contestant will Create a Model and a Blueprint with enough instructions to recreate the Model. Once a Model has been completed the Cad file must be saved with the contestant number and part number (Ex. 5071_10.stp) as the name of the file so that it can be identified. Then it must be submitted to the judges for scoring before it can be given to the CAM Contestant. Once the CAD file has been submitted, the file can be given to the CAM Contestant. There are two different parts in this contest and a student can submit files one at a time or all at once. Contestants are allowed (1) revision of their submitted files for scoring. Each time the Model file is presented for scoring it will override the previous submission. There can only be one contestant for the CAD Position.

Stage #2 CAM

CAM Contestant will begin to Create tool path for the CAD model once judges have the CAD file and return the USB back to the team. Once the CAM tool paths have been completed, it must be saved with the contestant number and part number (Ex. 5071_10.txt) as the name of the file so that it can be identified. Tool path file(s) must be submitted to judges before it can be given to the CNC. There are two different parts in this contest and contestants can bring files one at a time or all at once for scoring. Contestants are allowed (1) revision of their submitted files for scoring. Each time the tool path file is presented for scoring it will override the previous submission. There can only be one contestant for the CAM Position.

Stage #3 OPERATOR

Once the Judges have a parts Tool Path file, it may be given to the CNC to set up and run in the simulator. Once the operator is finished setting up the simulator, they will call for a judge to come score their process. There are two different parts in this contest, contestants may call a Judge for a CNC check once they are ready. Contestants are allowed (1) revision check of their CNC for scoring. There can only be one contestant for the CNC Position.

MATH PROBLEM

The math problem portion of the contest may be completed by any of the contestants and once completed, will need to be submitted for scoring.

Lunch and Contest Conclusion

Midway through the contest we'll break for lunch for 30 min. at 11:30am and lunch will be outside of the contest area. During lunch there will be no working on the contest. At Noon the contest will resume until completion. During the contest if a student needs to go to the restroom, they will need to notify a Judge unless of course it is an emergency. Using a phone during the contest is prohibited and during a restroom break it is discouraged unless it is an emergency to help maintain the integrity of the contest.

Upon the completion of the contest contestants will turn in all files on the provided USBs for final scoring and may remain in the contest area for a Debriefing of the contest.

Contestant Provided Items

Computer/Laptop for each station of contest, Calculator, Machinery's Handbook, Pen and Paper

Contest Provided Items

USB for file transfers, power outlet for computer/laptop, software links necessary for contest.

Software instructions and download instructions are provided below

Installing Intelitek Software (Install CNC Base for Competition)

<http://www.intelitekdownloads.com/downloads.php>

Open the link above and then follow the link below.

<https://youtu.be/Xz1iiFTcFkY>

Use this link to learn how to setup and use the Intelitek CNC Base software.

<https://youtu.be/GLR2F8i5E5A>

Tutorial of the Vericut software that will be used for post processor code verification. Downloadable files are in the description of the video.

<https://youtu.be/WGRqW3PScKs?si=up-qmSPucNf35YLK>

The logo for IONITE features the word "IONITE" in a bold, sans-serif font. The letter "I" is orange, while the letters "O", "N", "I", "T", and "E" are yellow. The letter "O" is stylized as a flame, with a red and orange flame shape rising from its top and curving around its right side.

YOUR POTENTIAL

2024 - 2025
