



Additive Manufacturing

March 28, 2025

2025 SkillsUSA Maryland State Championship

Competition Update (02/21/2025)

To best simulate the SkillsUSA national competition, the 2025 SkillsUSA Maryland Additive Manufacturing state contest will be held as a multi-day event with both remote and in-person components.

Remote Portion of Competition:

- **Design Challenge:** Will be posted on Monday, March 24, 2025, at 8 a.m. on the State Conference page.
- **Initial Design Submission:** Due by Tuesday, March 25, 2025, at 6 p.m. This must include:
 1. Fully dimensioned technical drawing with title block and BOM/parts list in PDF format.
 2. Part files in native CAD file format (original format of CAD software used to create parts).
 3. Part files in STL file format.
 4. 3D print report showing estimated print time, material usage, and part layout. Provide as a PDF or image file (jpg, bmp, png, tiff).

Optional hand sketches or other documentation (no points awarded for this).

- **Design Revision:** After the initial submission, a change to the project specifications will be issued to the team. Teams will have an additional day (depending on timing of initial submission) to revise, test, and complete their design.
- **Final Design Submission:** Due by Wednesday, March 26, 2025, at 6 p.m. This must include the same submissions as were expected with the initial submission.

All design documents must be received as email attachments and time-stamped no later than Wednesday, March 26, 2025, at 6 p.m. This allows teams approximately 24 hours to finalize their design. Teams can resubmit design revisions as long as the 5:00 p.m. deadline has not expired.

All emailed submissions will be sent to the contest chair at: jpbrown@jbtsinc.com

NOTE: Teams are encouraged to practice efficient time management and not wait until the last minute to submit their design.

Teams will have the remaining time before the competition on Friday, March 28, 2025, to 3D print the design* they submitted to the judges. Teams are welcome to work on 3D printing

the physical model at school or at another location. The 3D printed models may use the following filament types: PLA, ABS, Nylon, and PETG.

In-Person Portion of Competition:

This contest will be facilitated at Carroll County Career and Technology Center on **Friday, March 28, 2025.**

Schedule (subject to change):

- 4:00 p.m. - 6:00 p.m. Dinner
- 6:00 p.m. - 6:15 p.m. Contestant Orientation
- 6:15 p.m. - 7:45 p.m. Presentations
- 7:45 p.m. - 9:00 p.m. Performance Test

Resume:

Contestants will provide a current resume for review. Hand all resumes to the competition chair during the contestant orientation.

Presentations:

Teams will provide the judges with their Design Notebooks and give a presentation of their design(s) and their finished part(s).

Performance Test:

Teams will complete the assigned task(s) per the Design Challenge utilizing their printed part(s) to accomplish the assigned tasks and will be scored based on the performance of their design.

Any questions should be directed to the contest chair at: jpbrown@jbtsinc.com

Best of luck to all the competing teams!

Contest Chair: Mr. Joshua Brown, President – JB Technical Solutions Inc., Waynesboro, PA
jbtsinc.com