



## SkillsUSA Florida Championship 2021

### PREPARING FOR THE CONTEST

#### Introductory Information

*This document serves as a supplement to the official SkillsUSA Technical Standards found online at [absorb.skillsusa.org](http://absorb.skillsusa.org) to be used to prepare for state-level virtual competitions. State-level contests will follow the "Standards and Competencies" outlined in the official SkillsUSA Technical Standards (Virtual). Contestants and instructors should review the contest's Technical Standards as a first step in preparing for a competitive event.*

*Any information contained in this document applies to state-level competitive events only. Download and review the State Virtual General Regulations at [skillsusafl.org/state-conference](http://skillsusafl.org/state-conference) for more information regarding virtual contests. The list of supplies and materials outlined below is subject to change; updates will be posted to our website on the contest updates page.*

*SkillsUSA Professional Members (advisors and teachers) can access the standards through SkillsUSA Absorb ([absorb.skillsusa.org](http://absorb.skillsusa.org)). To join as a Professional Member visit [bit.ly/skillsusa-prof](http://bit.ly/skillsusa-prof).*

#### Clothing Requirements

*Because of the nature of virtual competitions, official SkillsUSA competition clothing is not required, but is encouraged. Students may also compete in trade-appropriate attire if official contest attire is not available. Alternatively, competitors may dress in business attire. See State Virtual General Regulations for more information.*

#### Class C: Contest Specific - Manufacturing/Construction Khaki Attire

- Official SkillsUSA khaki short-sleeve work shirt and pants
- Black, brown or tan leather work shoes
- Note: Safety glasses must have side shields or goggles (prescription glasses may be worn only if they are equipped with side shields. If not, they must be covered with goggles).

#### Supplies and Materials

*Contestants will need the following for the contest:*

- 1:1 device for each contestant with camera, microphone and internet connection of at least 2 Mbps up/down
- Filming Device  
*A device to complete a video recording. This may be a laptop, phone or other device with support devices like a tripod, microphone, etc. Preferred file format is MP4.*
- 1-page resume for in PDF format
- 3D printers and post processing equipment
- Gloves for wash tank
- Post processing tools

- Blank engineering notebook for team use during the contest
- Personal computer system (laptop or desktop) with computer design system capable of rendering files in STL format. Make sure software licensing will work without an internet connection, if needed. Up to one computer per contestant is permitted; only one computer is needed to complete the project.
- GrabCAD software downloaded to computer for contestant to use at contest. Software is available for download at [grabcad.com/print](http://grabcad.com/print). This software will be used during the contest; team should familiarize themselves with the software in advance.
- Calipers
- Needle nose pliers
- Pencil or pen for engineering notebook
- Sandpaper
- Additional supplies and materials may be required. Contest supply and materials lists will be posted on the Contest Updates page by March 1.

*SkillsUSA Florida will provide the following for the contest:*

- Contest prompt and information
- Contest Prep Box, with materials needed for the contest like stopwatch, measuring tape, and large face digital clock that must be used in pre-recorded videos
- Meeting links and upload information

#### Local Proctor Information

*A local contest proctor (non-advisor/program instructor) must be present for the contest. The proctor should review the technical standards, this document and the state contest which will include an integrity statement containing additional information for the proctor.*

*Once the contest is complete, the contestants, chapter advisor and onsite proctor will sign-off on the integrity statement. Additional contest proctor information can be found on our website.*

#### Advisor Information

*An advisor or instructor must be present for the duration of the competition to ensure safety and conduct standards are upheld. Advisors will not participate in judging or interfere in the contest, except in the event of safety or conduct violations, or equipment malfunction. Any communication between students and their advisors during the contest will result in disqualification.*



### CONTEST INFORMATION

#### Knowledge Performance

*This contest includes two multiple choice knowledge assessments. Instructions and credentials to complete these assessments will be provided when the contest window opens. These assessments should be completed under the supervision of the contest proctor.*

- **Additive Manufacturing Assessment** –  
*Based on the standards and competencies as outlined in the Technical Standards.*
- **Professional Development Career Readiness Assessment** –  
*Assesses preparedness to enter the workforce as defined by the SkillsUSA Framework, which identifies skills that are essential for success in the workplace and life.*

#### Skill Performance

*This contest will be a team-oriented event. Teams will be comprised of two contestants from the same school in the same division. The contest will consist of 3D design, 3D "mini challenge", and the engineering notebook.*

#### Contest Guidelines

*This contest will require contestants to submit an Engineering Notebook and 3D printed Design file, and make a live presentation to a panel of judges via Zoom.*

*Teams will receive a design problem at least 2 weeks prior to the start of the contest. They must construct a thoughtful design to solve the problem outlined in the prompt. The design must be printed prior to the start of the competition. Schools are responsible for their own 3D printing. Teams will submit their design files, along with photos of the finished product. If any parts of the design are mobile, a video should also be included to show the movement of any parts. Teams will also submit their engineering notebook.*

*Teams will record a presentation of their engineering notebook. A simple PowerPoint (optional) may be used to show screen shots of the design process to complement their engineering notebook. The PowerPoint and engineering notebook will guide the presentation to*

*the judges. Presentations should be five to seven minutes, with penalties for presentations outside the time window.*

*Stratasys printers are preferred but not required.*

*Teams will also participate in a mini-challenge, where they will be given a small problem to solve live with judges. The team will present their results of the challenge to the judges. All team members must participate in the presentation.*

*Full schedule and information will be released by March 1.*

*This contest requires live and recorded sessions. Recordings must be setup, started, monitored and stopped by the contest proctor. The camera must be setup in such a way as to show all materials and a clear workspace. The contestant should be visible in the recording at all times. The recording must be unedited (continuous) to ensure no outside help was provided.*

*Additional files may be required to be submitted. These requirements will be outlined in the state contest prompt.*

*The contestants will not mention their name, school, city or state. Basic safety practices related to the skill performed must be followed.*

*At the completion of the event, the team, chapter advisor and proctor will sign-off on the integrity statement. This integrity statement will need to be submitted with the entry.*

### SUBMISSION REQUIREMENTS

*The following needs to be uploaded by the deadline. No late submissions will be accepted.*

- Statement of Assurances: PDF file (\*Upload by April 1)
- Resume: PDF file (\*Upload by April 1)
- Design files
- Photos/videos of printed design: JPG/JPEG or MP4 files
- PowerPoint (optional): PDF file
- Engineering Notebook: PDF file
- Integrity Statement: PDF file