

Contest Descriptions



3-D Visualization and Animation

Mimics the real world production environment where creative output must be accomplished within specific timeframes, resources and design constraints. This is a two-person team event. Contestants must produce high quality images and an animated short subject using 3D computerized images. Students are tested on their technical knowledge, production skills and creative/artistic abilities; take a preliminary written exam and do storyboarding (visual planning).

Action Skills

A five- to seven-minute demonstration of an occupational skill in an area in which a student is training. Contestants use examples, experiments, displays or practical operations to clearly explain their skills using contestant-prepared visual aids.

Advertising Design

Tests technical skills and creative aptitude just as though contestants worked for an ad agency. In addition to a written test, competitors will re-create a given advertisement on the computer. Competitors are judged on their accuracy, proficiency with industry standard software and ability to meet the given deadline. Contestants also compete in a creative portion of the competition. The creative portion involves the application of creative thinking and development of a design problem. Layout, drawing and illustration skills are used, as well as their ability to create vibrant, effective designs using the computer.

Architectural Drafting

Contestants will use their drafting skills to solve an Architectural problem. The problem includes a written test, a hand sketch, a computer-generated problem and a problem that may be solved using EITHER board drafting or CAD. The contest tests the contestants' problem solving abilities, not simply their CAD skills.

Audio Production (Radio Broadcasting)

The Audio Production contest is designed to challenge contestants to produce three radio spots using an information sheet provided. The team has 2.5 hours to write and produce the spots. They then edit the production and put it on a CD-ROM. The contestants are judged on the professionalism of their production, the quality of the audio and the conveyance of the information to the listener.

Automated Manufacturing Technology

Plotting is not a scored event; however the contestants must be able to generate a plot file that will be used to send their data to the plotter. A team contest for three students. The contest evaluates teams for employment in integrated manufacturing technology fields of computer aided drafting/design (CAD), computer aided manufacturing (CAM), and computer numerical controlled machining (CNC). CAD operators construct the part geometry; the CAM operator generates the tool paths; and the CNC operator sets up and machines the part.

Automotive Service Technology

Contestants will demonstrate their ability to perform jobs and skills based on the task list outlined by the National Institute for Automotive Service Excellence (ASE) and the National Automotive Technicians Education Foundation (NATEF). Workstations consist of on-vehicle, simulations, bench and component testing and a written test. Contestants will be judged on technical competency, accuracy, quality, safety and ability to follow directions. There are thirteen skill stations plus the written test.

Broadcast News Production (TV News Anchor)

The Broadcast News Production contest is comprised of four student members. Two students would serve as the news anchor team, one student will serve as the team's director/technical director, and one student will service as the floor director. Each team will write, produce, and complete a three-minute newscast as if it were live. Teams are evaluated on their broadcast writing ability, voice quality, diction, timing and pacing and performance techniques.

Cabinetmaking

Requires the building of a small cabinet from materials and drawings supplied. Contestants are expected to read the drawings, lay out and cut the parts using a table saw, laminate trimmer, hand drill, hinge boring machine and various hand tools. The parts must be accurately assembled, sanded and adjusted to tolerances specified by the judges.

Carpentry

Contestants will frame walls using wood and steel studs, cut and install common and hip and jack rafters, install drywall and baseboard moldings and window trim. Contestants will be judged on accuracy, ability to read and interpret blueprints, workmanship and the proper use of tools and equipment.

Chapter Display

Selects the outstanding promotional exhibit designed and constructed by SkillsUSA student members. The display is built around and articulates a common theme established annually by SkillsUSA.

Collision Repair Technology

The competition includes a series of workstations, a manually written estimate and an interview process designed to assess skills in metalwork, welding, plastic repair, structural analysis and estimating and an ASE written exam. The overall appearance of the finished product, speed and proper safety practices will be judged.

Commercial Baking

Challenges contestants to meet production and quality standards expected by industry. Students must scale, mix, prepare and bake six products (including breads, rolls, Danish, cookies and pies) and demonstrate cake-decorating skills. They must deliver a quality, salable product while working efficiently and under job-like conditions.

Community Service

Evaluates local chapter activities that benefit the community. SkillsUSA chapters present their best community service project for the year to a panel of judges. Contestants are evaluated on: (1) a notebook reporting the chapter's community service project and, (2) a live presentation by a chapter team of three members. The team may be a mix of high school and college/postsecondary students.

Computer Maintenance Technology

The CMT contest requires contestants to identify and repair computer hardware malfunctions, solve configuration problems, and install common components. In addition, the contestants take the A+ Certification exam. Their score on this exam is used as the basis for the written portion of the contest, and contestants who pass the exam receive their A+ Certification.

Cosmetology

Students will demonstrate their skills in haircutting, hair styling and longhair design in four separate tests. All work is performed on mannequins so everyone begins with the same model and the same type of hair. Contestants will recreate 2 women's' and 1 men's' haircut from a finished photo. A display of creativity is seen in the longhair segment of the competition where these future salon professionals demonstrate their own design skills. A parade finale closes the contest with each contestant walking down the stage with their completed mannequins to present to the audience.

Crime Scene Investigation

Contestants will be directed to the crime scene and briefed as to the situation. The contestants will, as a three-person team, process the crime scene. They will legally search for, properly collect and remove evidence of the crime. One member of the team will be required to lift a latent fingerprint from a pre-selected item of evidence. After the scene has been processed, the contestants will write their report, draw the crime scene sketch and mark their evidence.

Criminal Justice

For students preparing to be police officers or to work in other areas of criminal justice. Typically this contest will utilize both written examination and practical exercises to evaluate the contestants' abilities and knowledge of the field. The contestants are scored on their knowledge and application of U.S. Constitutional Law, written and verbal communications skills, and their ability to handle an entry-level law enforcement position.

Culinary Arts

The competition will encompass both hot and cold food preparation and presentation. Contestants are rated on their technical culinary skills, sanitation and food safety techniques, and above all, the quality of their prepared items, particularly their creative presentation.

Customer Service

Evaluates students' proficiency in providing customer service. The contest involves live, role-playing situations. Contestants demonstrate their ability to perform customer service in both written and oral forms including telephone and computer skills, communications, problem solving, conflict resolution and business etiquette.

Diesel Equipment Technology

Contestants cycle through fourteen stations testing basic engines; troubleshooting engines; electrical-electronics; chassis; transmissions; carriers; hydraulic systems; vehicle inspection; fundamental failure analysis; brake systems; air-conditioning; general shop skills; job interview skills; and a written test.

Electronics Technology

The contest is divided into four sections testing contestants' knowledge of: analog and digital circuitry; ability to troubleshoot electronic circuits; ability to construct and test experimental circuits; to design and select circuit components; and to assemble an electronic circuit. All aspects of the competition test contestants' abilities to use and calibrate electronic equipment, record and organize data, and demonstrate proper safety practices.

Extemporaneous Speaking

Requires contestants to give a three- to five-minute speech on an assigned topic with five minutes of advance preparation. Contestants enter the preparation area one at a time where they are given a speech topic. They are judged on voice, mechanics, platform deportment, organization and effectiveness.

Firefighting

The Firefighting contest evaluates the contestant's preparation for firefighting careers through hands-on skill demonstrations and both written and oral presentations. Areas tested include: safety; breathing apparatus; fire streams; ladders, ropes, knots and hoses; fire control; ventilation; emergency medical care and rescue; and protecting fire cause evidence. Contestants are evaluated using standards established by the National Fire Protection Association (NFPA).

First Aid/CPR

Evaluates contestant's ability to perform procedures or take appropriate action based on scenarios presented related to CPR and first aid. There is also a written exam. All skills are judged on nationally accepted standards identified by the American Red Cross for first aid emergencies and the American Heart Association for CPR. An AED scenario for all contestants will be included.

Food and Beverage Service

Contestants are tested on skills required in the "front of the house" of a fine restaurant. The focus is on guest service and guest relations in the dining room including: table set up; greeting guests; reservations procedures; presentation of menus; description of food, drinks, soups and specials of the day; taking orders; serving each course and clearing the table after each course; and preparation and presentation of the check and closing remarks. Contestants are judged on personal appearance, tableside manner, professionalism, ease with guests, courtesy, general knowledge and technical and verbal skills.

Graphic Communications

Contestant will participate in a seven part contest which includes the following segments in alphabetical order: DIGITAL WORKFLOW--NEED RIGHT NOW, ELECTRONIC PREPRESS--Prepare a file with either QuarkXPress or InDesign on an Apple Computer; FINISHING--Prepare table top folder for various folding exercises and a short written test; OFFSET PRESS OPERATIONS--Prepare press, install plate, make ready to print, two color on a preprinted two color sheet; ORAL PROFESSIONAL ASSESSMENT--Participate in an interview exercise; PRODUCTION PLANNING--Solve production problems relating to paper, ink and production; and, TECHNICAL KNOWLEDGE TEST--Complete general technical knowledge test.

Internetworking

The contest consists of three main parts--networking design, general networking knowledge and hands-on evaluations. The networking design problem tests a contestant's ability to design functionality, scalability, adaptability, and manageability of an internetworking system. The online written portion tests the student's complete knowledge of internetworking concepts. The hands-on component demonstrates the abilities of the contestant to make cables, trouble shoot network systems, configure routers and switches and to deliver customer service in a technical assistant center environment. The contestants will find errors in WAN and LAN networks; do an ISP configuration using routers and switches; talk a technician through an error they are having on their network; and, take an online, certification type test..

Job Interview

Divided into three phases: completion of employment applications; preliminary interviews with receptionist; and, in-depth interviews. Contestants are evaluated on their understanding of employment procedures faced in applying for positions in the occupational areas for which they are training.

Job Skill Demonstration A

Contestants demonstrate and explain an entry-level skill used in the occupational area for which they are training. Competitors in Job Skill A must demonstrate a career objective in an occupational area that is included in one of the contest areas of the SkillsUSA Championships.

Job Skill Demonstration Open

Contestants demonstrate and explain an entry-level skill used in the occupational area for which they are training or outside of their training program. Any technical skill may be demonstrated.

Masonry

While production is very important, quality workmanship is vital. The students will be expected to construct a composite brick & block project in a six-hour period that will test their ability to meet industry standards in quality. In addition to a written exam, the critical eye of journeyman judges will be the deciding factor in determining the winners. The contest project will include components of the most frequently used details in residential construction.

Opening and Closing Ceremonies

A teamwork and oral presentation contest that evaluates teams' understanding of the symbolic representation of the colors and assembled parts of the SkillsUSA emblem. Each team includes seven registered members in the roles of president, vice president, parliamentarian, reporter, treasurer, secretary and optional officer. The contest is a demonstration of the SkillsUSA Opening and Closing Ceremonies conducted according to the script and description as printed in the SkillsUSA Championships Technical Standards.

Outstanding Chapter

The Outstanding Chapter consists of activities students have been involved with during the school year. Activities consist of chapter meetings, leadership training, publicity, community projects, professional development, program of work, awards, local and state competition, and other chapter selected activities. Each activity is documented according to guidelines and submitted in a scrapbook for judging. A student representative is interviewed at the SkillsUSA Championship events.

Photography

Contestants demonstrate their ability to use digital SLR's, image editing software (Adobe Photoshop) and professional studio lighting. Students perform on-site photography, portrait studio lighting & posing, process and print digital photos and submit two 11x14 or 16x20 mounted & matted photographs in advance of the contest to be judged and displayed at the competition. Contestants are evaluated on their mastery of entry-level job skills.

Plumbing

Contestants "rough-in" hot and cold water lines with copper to a water heater and the sanitary drainage waste and vent lines with cast iron and PVC plastic for a water closet, a lavatory, a washer box and a floor drain. Water pipes are pressure tested on completed projects. Professional plumbers and pipe fitters judge the contestants on the basis of accuracy, workmanship, proper selection and use of tools and supplies, and proper safety practices.

Power Equipment Technology

Tests the student's skills in all areas of this technology. They must know and understand both 2 & 4 cycle engines. They should know and understand the related theories that go along with the types of engines that they will come across in the industry. They should also understand drive trains, hydraulic, as well as wiring schematics. Contestants will need to be versed in customer service. As they rotate through the various stations they are judged and scored on both physical and oral skills. They are further tested with their ability to read and follow the job tasks that are given.

Precision Machining Technology

Contestants will compete in NIMS Level I & II manual machining skills and knowledge areas including operation of manual milling machines, lathes, drill presses, and surface grinders. Contestant knowledge of CNC programming skills using a PC will be evaluated. Related knowledge and skill in the areas of engineering drawing interpretation, GD&T, technical math, machining practices, use of precision measuring/hand tools and ability to communicate verbally using proper industry terminology are also part of this competition.

Prepared Speech

Requires students to deliver a speech five to seven minutes in length on a common theme established by National SkillsUSA early in the school year. Contestants are evaluated on their ability to present thoughts relating to a central theme clearly and effectively, and on voice, mechanics, and platform deportment.

Principles of Technology

Evaluates contestants' understanding of basic technical concepts/principles of the applied sciences and ability to demonstrate and explain the concept/principle in action and application. Any technical concept may be demonstrated, provided it is related to the principles of technology curriculum and incorporates basic principles of the applied sciences.

Promotional Bulletin Board

Judges bulletin board displays created by SkillsUSA chapters. The bulletin boards promote SkillsUSA, career and technical education in general, and related occupational information. An oral presentation is also included.

Quiz Bowl

The Quiz Bowl tests a team of 5 competitors' ability to quickly respond to questions covering the areas of academic knowledge, professional development and current events. The participants respond to a question by activating a buzzer system. The teams receive one point for a correct answer and lose a point for each incorrect answer. The active rounds (preliminary and finals) are 100 questions each.

Related Technical Math

On a written test, contestants demonstrate skills required to solve mathematical problems commonly found in the skilled trades and professional and technical occupations. Skills demonstrated include addition, subtraction, multiplication and division of whole numbers, fractions and decimals; applied word problems; percentages; ratio proportions; averages; area; volume; metric measures and traditional (Imperial) measures and trigonometry.

Residential Wiring

Contestants are required to complete a written test, a practical conduit bending exercise and a hands-on installation and wiring exercise. Working from drawings and specifications sheets, contestants are required to install residential wiring and electrical devices. Judging is on the basis of general workmanship, accuracy of layout and installation, and adherence to the current national Electrical Code and standard industry safe practices.

Robotics and Automation Technology

Challenges two-person teams to demonstrate operation of an intelitek ER-4U, 5-axis servo-robot along with a set of sensors and motorized devices to resolve a simulated production process problem. They demonstrate and set-up a robotic workcell from a word problem task. Contestants are required to create a flow chart and sequence of operation. Teams are judged on efficiency, speed and teamwork.

TeamWorks

Requires teams of four to Present plans and build a joint project in three days, demonstrating their preparation for employment in residential construction. Team members must: analyze a project drawing; write an action plan and give a presentation (in which each team member is required to have an active part); and demonstrate their ability to work as a team performing skills in residential carpentry, plumbing, electricity and masonry. They are also judged on cleanliness of jobsite, timeliness of completing the project, and proper ordering and inventorying of tools and equipment.

Tech Prep Showcase

Recognizes outstanding Tech Prep students for their ability to present, through the design and construction of a display, the application of skills and education brought about through Tech Prep career training. Students perform a professional team presentation applying the appropriate technology associated with the Tech Prep program. A team consisting of three students enrolled in the same recognized Tech Prep program must present the project.

Technical Drafting

This contest evaluates contestant's preparation for employment and recognizes outstanding students for excellence and professionalism in the field of technical drafting. The contest will focus on the solution of industry-developed problems by applying appropriate technical drafting skills and tools including computer-aided drafting (CAD).

Telecommunications Cabling

For students interested in voice and data network cabling and installation. It tests worldwide standards for data and voice connections, physical and logical networks and signal transmission. Contestants demonstrate skills in reading network design documentation, part list set up and purchase, pulling and mounting cable, choosing wiring closets, patch panel installation and termination, installing jacks and cable testing. The contest stresses safety and working effectively in group environments.

Television (Video) Production

Teams of two contestants are required to shoot a one-minute VHS video on location to convey the "theme" of the event. Editing is done in the contest area with special emphasis on professional production of the video by industry standards, quality of audio and video, and adequate conveyance of the "theme" to the viewer.

Web Design

The project will be for each team's to complete a series of challenges, with a focus on web site usability and accessibility with at least one challenge related to scripting. Each challenge must be documented, clearly demonstrating the skills as outlined in the SkillsUSA Championships Technical Standards 2008.

Welding

Competitors receive contest drawings and a set of welding procedure specifications. All drawings, welding symbols, and welding terms conform to the latest edition of the American Welding Society standards. Through a series of stations, contestants are tested on various aspects of welding: measuring weld replicas, using weld measuring gauges; laying out a plate and using oxy-acetylene equipment to cut several holes that are checked for accuracy and quality; gas metal arc welding (GMAW) on steel making welds in various positions using short circuiting transfers; and, using a combination machine capable of providing the correct welding current for shielded metal arc (SMAW) and gas tungsten arc welding (GTAW). Competitors complete the steel project and weld an aluminum project in various positions using a variety of filler metals.

