

FILM AND TV PRODUCTION 50.0602.00 TECHNICAL STANDARDS

An Industry Technical Standards Validation Committee developed and validated these standards on April 10, 2025. The Arizona Career and Technical Education Quality Commission, the validating authority for the Arizona Skills Standards Assessment System, reviewed these standards on May 27, 2025.

Note: Arizona's Professional Skills are taught as an integral part of the Film and TV Production program.

The Technical Skills Assessment for FILM AND TV PRODUCTION is available SY2025-2026.

Note: In this document i.e. explains or clarifies the content and e.g. provides examples of the content that must be taught.

STANDARD 1.0 ANALYZE THE COMMUNICATIONS MEDIA TECHNOLOGIES INDUSTRY, ITS BUSINESS PRACTICES, AND ROLE IN THE ECONOMY

- 1.1 Investigate the evolution of the Communications Media Technologies industry [e.g., development of written communication and the printing press, telecommunications era, rise of broadcasting, digital revolution, social media and mobile apps, emerging technologies (i.e., virtual reality, advanced video conferencing, AI-powered communication tools, etc.), streaming services, creator economy, quantum computing, generative AI, etc.]
- 1.2 Describe the impact of the Communications Media Technologies industry on society, marketing practices, and economics
- 1.3 Examine the benefits of creating content with a global reach (i.e., inspire creativity, make a business competitive and profitable, attract top talent, boost employee morale, improve adaptability, promote personal growth, etc.)
- 1.4 Analyze customer service practices appropriate for the Communications Media Technologies industry (i.e., building strong relationships with customers, actively listening to customer needs and providing feedback, communicating effectively, developing and adhering to customer service standards, resolving disputes promptly and efficiently, etc.)
- 1.5 Examine time management practices appropriate to the Communications Media Technologies industry (i.e., strategic planning, prioritizing tasks and projects, enhancing productivity through efficient workflow, achieving goals and meeting deadlines, implementing time-tracking tools and software, managing remote and distributed teams effectively, continuous improvement through feedback and training, etc.)
- 1.6 Identify professions that comprise the Communications Media Technologies industry (i.e., animation, filmmaking, broadcasting, graphic design, music and audio production, photography, printing, publishing, news analysis and reporting, etc.)
- 1.7 Explore how skills and knowledge acquired in the Film and TV Production program can be applied to various career clusters
- 1.8 Comply with OSHA and other safety standards and regulations in the workplace (i.e., conducting risk assessments, providing safety equipment, offering proper safety training, maintaining detailed records, implementing fall prevention procedures, ensuring fire safety protocols, handling and storing hazardous materials, adhering to electrical shock standards, addressing ergonomic risks, following safety guidelines for transporting personnel and equipment, etc.)

STANDARD 2.0 ANALYZE LEGAL AND ETHICAL ISSUES RELATED TO THE COMMUNICATIONS MEDIA TECHNOLOGIES INDUSTRY

- 2.1 Explain copyright, intellectual property, proprietary rights, plagiarism, software licensure, Creative Commons license, patent and trademark law, trade secrets, digital rights management (DRM), open-source licensing, public domain, and the fair use doctrine
- 2.2 Discuss consequences when violating copyright, privacy, and data security laws (i.e., monetary penalties, prison, injunctions, financial restitution, loss of distribution, reputational damage, legal fees, operational disruptions, loss of intellectual property rights, regulatory scrutiny, employee impact, etc.)
- 2.3 Explain the importance of fair use for individuals and businesses (e.g., intellectual property, patents, copyrights, trademarks, trade secrets, protecting ideas and concepts, encouraging responsible creativity and innovation, promoting access to information, and balancing rights with public interest)
- 2.4 Describe common legal issues in Communications Media Technologies professions (i.e., free speech, defamation, copyright, censorship, intellectual property law, Al-generated content, privacy and data protection, licensing agreements, cybersecurity, advertising regulations, content moderation, etc.)
- 2.5 Discuss the legal and ethical use of emerging technologies, focusing on safety, privacy, regulation, bias and fairness, transparency and accountability, data security, environmental impact, user consent, accessibility, employment impact, and cultural sensitivity (i.e., drones, helicopters, artificial intelligence, etc.)

STANDARD 3.0 ANALYZE FACTORS THAT CONTRIBUTE TO PERSONAL SUCCESS IN THE COMMUNICATIONS MEDIA TECHNOLOGIES INDUSTRY

3.1 Practice written, verbal, and nonverbal communications appropriate to the target audience and situation

- 3.2 Apply formatting, editing, and proofreading skills to all forms of communications
- 3.3 Explain the importance of using industry terminology in communications (i.e., demonstrates expertise, boosts professional credibility, enhances collaboration and training, reduces misunderstandings, enhances client relationships, etc.)
- 3.4 Identify and practice interpersonal communication skills (i.e., active listening, empathy, body language, openness, negotiation, problem-solving, conflict resolution, assertiveness, positive attitude, collaboration, adaptability, etc.)
- 3.5 Identify standards and practices for dressing professionally and appropriately for the workplace
- 3.6 Explore tools and techniques used to enter and advance within the Communications Media Technologies industry (i.e., networking, job boards, resumes, reels, physical and digital portfolios, mentorship, industry certifications, continuous learning through workshops and online courses, etc.)
- 3.7 Describe a professional portfolio that summarizes skills, experience, and accomplishments and showcases various work samples (i.e., photos, graphics, writings, testimonials, interactive elements, etc.) across multiple platforms (i.e., websites, blogs, landing pages, PDFs, videos, slideshows, etc.)

STANDARD 4.0 DEVELOP A STORY AND SCRIPT

- 4.1 Explain types of writing styles and their applications (e.g., expository, creative, copywriting, interactive, descriptive, persuasive, and narrative)
- 4.2 Explain different types of storytelling (e.g., narrative and journalistic) and delivery methods (e.g., oral, written, visual, and digital)
- 4.3 Differentiate among types of conflict (i.e., person vs. self, person vs. person, person vs. environment, person vs. institution, person vs. society, person vs. fate, etc.)
- 4.4 Explain different types of script formats (i.e., news rundown, screenplay, stage play script, documentary script, T-form, beat sheet, etc.)
- 4.5 Define and explain the benefits of storyboarding as a tool to help filmmakers and animators visualize how a scene will unfold, making it easier to plan the flow of action and camera work, enhance team communication, prevent errors, and manage resources efficiently
- 4.6 Describe elements of effective interviewing skills (e.g., research, preparation, clear communication, active listening, asking insightful questions, creating a comfortable environment, and providing feedback)
- 4.7 Describe proper script formatting (i.e., font selection and size, margins, line spacing, capitalization, scene descriptions, location headings, character headings, dialogue, page numbers, title page formatting, etc.)
- 4.8 Describe the process of generating a storyboard and shot list for each scene (i.e., screenplay markup, aspect ratio determination, subject sketches, background drawings, motion arrows, camera movement, shot numbers, lighting notes, sound design elements, character blocking, etc.)
- 4.9 Develop a detailed production schedule and budget (i.e., script breakdown, production timeline, resource allocation, cost estimation, contingency planning, use of budgeting and scheduling software to ensure efficient use of time and financial resources, etc.)

STANDARD 5.0 APPLY CINEMATOGRAPHY TECHNIQUES

- 5.1 Explain how delivery format (e.g., oral, written, visual, and digital) influences storytelling (i.e., audience engagement, message clarity, emotional impact, etc.)
- 5.2 Distinguish between primary and secondary visual sources (i.e., primary footage, B-roll, lower thirds, character generators, graphic overlays, etc.)
- 5.3 Apply compositional techniques with a camera (e.g., rule of thirds, leading lines, framing, balance, continuity, background, foreground, headroom, lead room, and depth of field, symmetry, and negative space)
- 5.4 Investigate manual camera settings for creativity (e.g., shutter speeds, ISO, aperture, color temperature, frame rate, white balance, and focus modes)
- 5.5 Demonstrate fundamental shot types and angles [e.g., establishing, long, wide, full, medium, close-up, extreme close-up, three-quarter, over-the-shoulder, two-shot, three-shot, group, insert, master, cutaway, bird's-eye, high angle, low angle, Dutch angle, point-of-view (POV) shots, and reaction shots]
- 5.6 Explain and demonstrate fundamental dynamic shot types to enhance visual storytelling (i.e., dolly, dolly zoom, truck, tracking, rack-focus, jib, parallax, reverse angle, pan, tilt, zoom, crane shots, handheld shots, whip pans, etc.)

STANDARD 6.0 DETERMINE ROLES AND RESPONSIBILITIES FOR CAST AND CREW

- 6.1 Describe the purpose and format of a project (i.e., end state, personal and team benefits, goals, action plan, stakeholder involvement, risk management, evaluation metrics, etc.)
- 6.2 Identify the hierarchy of the production crew and their responsibilities (i.e., Executive Producer, Producer, Director, Line Producer, Assistant Director, Production Designer, Field Producer, Camera Operator, Key Grip, Sound Mixer, Editor, etc.)
- 6.3 Identify the cast or talent and their responsibilities in the production (i.e., actors, singers, dancers, musicians, models, voice actors, stunt performers, extras, etc.)
- 6.4 Explain production protocols (i.e., on-set, off-set, on-location, remote, etc.)

STANDARD 7.0 ANALYZE EQUIPMENT, TOOLS, AND TECHNOLOGIES

- 7.1 Explain the function and application of industry standard audio equipment and accessories (i.e., microphones, mixing boards, cabling, XLRs, audio interfaces, headphones, monitors, etc.)
- 7.2 Explain the function and application of industry standard lighting equipment and accessories (i.e., internal, external, three-point lighting, tungsten, fluorescent, LED, light stands, filters, diffusers, gels, barndoors, softboxes, reflectors, lighting control systems, etc.)
- 7.3 Explain the types and uses of digital cameras, equipment, and accessories [i.e., DSLRs, broadcast cameras, smartphones, studio vs. Electronic News Gathering (ENG), mirrorless cameras, action cameras, lenses, tripods, monopods, gimbals, etc.]
- 7.4 Identify industry standard audio editing software to meet project requirements (i.e., Avid Pro Tools, Adobe Audition, Steinberg Nuendo, Apple Logic Pro, Cubase, Reaper, Sound Forge, Audacity, GarageBand, etc.)
- 7.5 Identify industry standard video editing software to meet project requirements (i.e., Adobe Premiere Pro, Final Cut Pro, AVID Media Composer, DaVinci Resolve, Sony Vegas Pro, HitFilm Pro, Lightworks, MAGIX Video Pro X, Filmora, etc.)
- 7.6 Identify industry standard cabling, assembly, and connection types (i.e., microphone, speaker, lighting, video, rigging, multiwire, adaptors, extensions, connectors, etc.)
- 7.7 Describe proper cable management techniques (e.g., over-under method, taping down cables, cable deployment, cable storage, and labeling for identification)
- 7.8 Describe industry standard grip and gaffing equipment (i.e., lighting and electrical supplies, rigging supplies and hardware, specialty tapes, etc.)
- 7.9 Demonstrate proper use, maintenance, and care of equipment and tools

STANDARD 8.0 PERFORM PRE-PRODUCTION TASKS

- 8.1 Identify pre-production elements and considerations for different projects (i.e., purpose, target audience, delivery method, logistics, budget, schedule, scope, risk management, collaboration strategies, legal considerations, etc.)
- 8.2 Examine the project and scope (i.e., equipment, location, budget, schedule, logistical requirements, etc.)
- 8.3 Identify equipment based on project needs
- 8.4 Identify location needs (i.e., reference photographs and video, lighting and sound, power requirements, etc.)
- 8.5 Identify required permissions and permits to film on private and public properties
- 8.6 Assemble cast and crew according to project needs
- 8.7 Discuss industry standard forms (i.e., contracts, release forms, production forms, production insurance forms, etc.)

STANDARD 9.0 PERFORM PRODUCTION TASKS

- 9.1 Identify production elements and considerations for different projects (i.e., on-set, in studio, live productions, etc.)
- 9.2 Identify and perform director duties (e.g., working with talent, disseminating commands and information to cast and crew, and execute creative vision, demonstrating leadership and decision-making skills, resolving conflicts, and employing effective communication and collaboration techniques)
- 9.3 Describe how individual crew members work with talent (e.g., rehearsing, blocking, stunt safety and performance, lighting and filming/shooting)
- 9.4 Identify and perform the duties of each production role (i.e., camera operator, sound operator, grip, gaffer, on-air talent, etc.)
- 9.5 Demonstrate basic lighting techniques (i.e., three-point, natural, artificial, reflectors, etc.)
- 9.6 Demonstrate audio recording techniques for the project (i.e., room tone, levels, etc.)
- 9.7 Explain the need to reflect, revise, and refine production decisions

STANDARD 10.0 PERFORM POST-PRODUCTION TASKS

- 10.1 Identify post-production elements and considerations for different projects [i.e., mixing, color correction, special effects, editing, Compression Decompression Algorithms (CODECs), etc.]
- 10.2 Import and organize digital assets to create an efficient workflow (i.e., file naming, bin management, assembling, reviewing, sharing, backup strategies, metadata tagging, etc.)
- 10.3 Evaluate, if captured, footage meets project goals, and if not, plan and execute a reshoot
- 10.4 Identify the stages of editing (e.g., logging, first assembly, rough cut, fine cut, picture lock, and sound lock)
- 10.5 Demonstrate editing techniques using industry standard software (e.g., cuts, trims, color correction, cropping, audio leveling, timing and pacing, key framing, chroma key, transitions, compositing, continuity, and fades)
- 10.6 Ensure the proper use of safe zone areas and aspect ratios for product delivery
- 10.7 Discuss how to integrate legally approved, ethically sourced audio into a project (i.e., music, voice-overs, etc.)

- 10.8 Create artistic expression through the implementation of sound elements [e.g., Foley, Audio Dialogue Replacement (ADR), sound effects, soundtrack, natural (NAT) sound, and voiceover]
- 10.9 Determine effective titles, text, and graphics (i.e., guidelines for typography, color schemes, layout consistency, audience engagement, accessibility, etc.)
- 10.10 Revise a project based on feedback
- 10.11 Render a product for distribution

STANDARD 11.0 DELIVER, MARKET, AND DISTRIBUTE PROJECT

- 11.1 Develop a marketing plan for a project (e.g., include target audiences, objectives, key messages, marketing channels, budget, promotional strategies, marketing activities, performance metrics, and results)
- 11.2 Identify marketing channels (i.e., social media, email campaigns, traditional media, etc.)
- 11.3 Export and exhibit the project in accordance with marketing and distribution decisions
- 11.4 Evaluate effectiveness of project delivery, marketing, and distribution