

Radio & Television Broadcasting Technician (10.0202)

Cross-reference to Show-Me standards (main report)

Measurable Learner Objective and Task Statement	Knowledge (Content)	Performance (Goals)	Notes
A. Appreciate and apply all personal and work place safety procedures	CA 3, SC 1, HP 6, HP 7	1.4, 3.1, 3.5, 4.7	
1. Demonstrate appropriate safety practices (e.g., housekeeping, electrical, PPE, power tools, lifting, carrying, equipment, fall protection, ladder and scaffold).			
2. Recognize when first aid is needed for occupational injuries and follow proper procedures.			
3. Identify types, purposes, and operation of fire extinguishers and suppression systems.			
4. Observe and adhere to safety signs and codes (e.g., transmitter area).			
5. Identify and report potential safety hazards.			
6. Move or transport production equipment safely.			
7. Operate remote vehicles safely.			
B. Demonstrate basic trade and applied academic skills	CA 1, MA 1, SC 1, SS 6	1.10, 2.1, 2.7, 3.2, 4.6	
1. Professionally communicate using television editing terms.			
2. Describe television editing equipment functions and uses.			
3. Demonstrate basic academic skills (English, math, and science).			
4. Use correct industry terminology.			
5. Manage simultaneous job responsibilities.			
6. Interact appropriately with the public (clients and consultants).			
C. Select, handle, and connect cables consistent with industry and safety standards	CA 1, CA3, SC 1	2.1, 3.2, 3.3, 4.1	
1. Select and use cables correctly (e.g., sizes, types, handling, and storage).			
2. Identify cable connectors (e.g., BNC, RCA, XLR, and jacks).			
3. Explain basic electrical theory (e.g., Ohm's law, current voltage, and circuit loading).			

CA = Communication Arts
 MA = Math
 HP = Health/Physical Education

SS = Social Studies
 SC = Science
 FA = Fine Arts

Measurable Learner Objectives are bold font.

Radio & Television Broadcasting Technician (10.0202)

Cross-reference to Show-Me standards (main report)

Measurable Learner Objective and Task Statement	Knowledge (Content)	Performance (Goals)	Notes
D. Operate and manage basic computer systems	CA 3	1.8, 2.7, 3.1, 4.1	
1. Demonstrate file/system management (e.g., install software, create files, maintain sytem backup, manage files, and use applications).			
2. Apply word processing, email, database, internet, and spreadsheet applications within the radio and television environment.			
3. Demonstrate computer malfunction problem solving.			
E. Demonstrate general production techniques	CA 1, CA 3, SC 1	1.8, 2.1, 3.1, 4.1	
1. Troubleshoot production and equipment problems.			
2. Operate analog control mechanisms.			
3. Operate digital control mechanisms.			
4. Describe the radio/television market and environment.			
5. Describe different program formats.			
6. Explain the stages of production.			
7. Select appropriate digital compression formats.			
8. Research and write production material (e.g., commercials and interviews).			
F. Operate radio production equipment consistent with industry standards	CA 3, MA 1, MA 2	1.10, 3.2	
1. Operate an analog editor.			
2. Operate a digital editor.			
3. Operate mixing boards.			
G. Operate television production equipment consistent with industry standards	CA1, CA 3	2.1, 3.2, 3.3	
1. Log tapes.			

CA = Communication Arts

SS = Social Studies

MA = Math

SC = Science

HP = Health/Physical Education

FA = Fine Arts

Measurable Learner Objectives are bold font.

Radio & Television Broadcasting Technician (10.0202)

Cross-reference to Show-Me standards (main report)

Measurable Learner Objective and Task Statement	Knowledge (Content)	Performance (Goals)	Notes
2. Edit tapes (e.g., insert, assembly, and roll transition).			
3. Demonstrate non-linear editing.			
H. Demonstrate general technical skills consistent with industry standards	CA 1, CA 3, SC 1	1.8, 2.1, 2.5, 3.2, 4.1	
1. Operate a broadcast board.			
2. Identify options for program sources.			
3. Solve production problems.			
4. Demonstrate sequencing as it relates to a program format.			
5. Describe interruptible feedback (I.F.B.) systems (e.g., intercom and PA system).			
6. Demonstrate production-specific writing skills (e.g. script format).			
7. Maintain appropriate audio levels using VU meter.			
8. Demonstrate microphone use (e.g., differentiate, select, and set up).			
9. Describe signal flow principles (e.g., inputs and outputs).			
10. Describe satellite base station administration.			
11. Select different media formats.			
12. Determine appropriate media format for various productions.			
13. Record and playback using various recording devices.			
14. Demonstrate proper production hand signals.			
I. Demonstrate radio-specific technical skills	CA 1, CA 3	1.8, 2.1	
1. Monitor and control radio transmitters.			
2. Describe radio station broadcast systems.			

CA = Communication Arts
 MA = Math
 HP = Health/Physical Education

SS = Social Studies
 SC = Science
 FA = Fine Arts

Measurable Learner Objectives are bold font.

Radio & Television Broadcasting Technician (10.0202)

Cross-reference to Show-Me standards (main report)

Measurable Learner Objective and Task Statement	Knowledge (Content)	Performance (Goals)	Notes
J. Demonstrate television specific technical skills	CA 3, MA 2, FA 1, SC 1	1.10, 2.1, 2.5, 3.2, 4.1	
1. Operate studio camera with appropriate framing, focus, and depth of field.			
2. Set up EFP/ENG camera with tripod.			
3. Operate EFP/ENG camera using appropriate framing, focus, and depth of field.			
4. Calibrate the camera color using white balance procedures.			
5. Determine appropriate camera shots for various production procedures.			
6. Demonstrate shot types (e.g., xcu, os, pov, and ls).			
7. Demonstrate how to use switchers (cut, dissolve, and wipe).			
8. Compare and contrast lights and hangers.			
9. Set up cross-key lighting.			
10. Set up a subject using three-point lighting principles.			
11. Identify types of filters and describe/explain their uses.			
12. Demonstrate production graphics (e.g., placement, font, color, size).			
13. Operate a studio camera using appropriate camera movement (e.g., pan, truck, zoom, tilt, pedestal, arc, and dolly).			
14. Design sets for various productions.			
15. Explain different types of Teleprompters.			
K. Execute remote operations	CA 1, SC 1	1.10, 2.1	
1. Explain basic principles of television and radio microwave technology.			
2. Describe radio satellite downlinks.			

CA = Communication Arts
 MA = Math
 HP = Health/Physical Education

SS = Social Studies
 SC = Science
 FA = Fine Arts

Measurable Learner Objectives are bold font.

Radio & Television Broadcasting Technician (10.0202)

Cross-reference to Show-Me standards (main report)

Measurable Learner Objective and Task Statement	Knowledge (Content)	Performance (Goals)	Notes
3. Describe TV satellite uplinks and downlinks.			
4. Explain remote telephone systems (e.g., TV and radio).			
L. Use and explain the impact of audio and video aesthetics	CA 6, FA 1	1.2, 2.2, 3.2, 4.1	
1. Establish and influence audience mood (e.g., sound, light, and color).			
2. Influence audience responses (e.g., "inframe" techniques, symmetry, asymmetry, graphic mass, color, and/or other design forces).			
3. Apply production aesthetics (e.g., timing and pacing).			
4. Evaluate how production styles affect audience response (e.g., audio and video).			
M. Analyze future trends in media	CA 1	1.8, 3.5	
1. Explain cable operations.			
2. Describe ATV (advanced TV and digital).			
3. Describe procedures and technologies for multimedia and webcasting.			
4. Describe direct satellite broadcasting.			
N. Market and operate radio and TV business services	CA 1	1.8, 3.5	
1. Describe the basic business operations of cable, TV, and radio stations.			
2. Interpret rating shares (e.g., Arbitron and Nielson).			
3. Describe the flow of programming formats.			
4. Read and interpret program logs.			
O. Appreciate and apply federal, state, and local laws and regulations	CA 3, CA 4, HP 6	1.8, 2.1, 4.3, 4.7	
1. Comply with state and local laws affecting program content.			
2. Explain Federal Communications Commission (FCC) regulations regarding operating and broadcasting procedures.			

CA = Communication Arts

MA = Math

HP = Health/Physical Education

SS = Social Studies

SC = Science

FA = Fine Arts

Measurable Learner Objectives are bold font.

Radio & Television Broadcasting Technician (10.0202)

Cross-reference to Show-Me standards (main report)

Measurable Learner Objective and Task Statement	Knowledge (Content)	Performance (Goals)	Notes
3. Maintain an operating log to conform to FCC regulations.			
4. Adhere to state and federal environmental/regulatory requirements/codes (e.g., OSHA, and EPA).			
5. Explain Federal Aviation Administration (FAA) air traffic safety regulations related to broadcast and equipment.			
6. Explain First Amendment libel, slander, and defamation issues.			
P. Demonstrate situation-appropriate announcing skills	CA 1, CA 6, SS 6	2.1, 2.2, 2.5, 2.6	
1. Differentiate among types of announcers.			
2. Ad lib/perform impromptu speaking as situations arise.			
3. Use correct grammar.			
4. Use appropriate annunciation and pronunciation.			
5. Use appropriate vocal quality (e.g., tone, pitch, and volume).			
6. Use appropriate breath control.			
7. Recognize and appreciate the importance of "on air" presence.			
Q. Demonstrate leadership skills in the classroom, industry, and society	CA 1, CA 4, CA 6, SS 6, HP 2	2.1, 2.3, 2.6, 4.3, 4.4, 4.6, 4.8	
1. Demonstrate an understanding of SkillsUSA, its structure and activities.			
2. Demonstrate an understanding of one's personal values.			
3. Perform tasks related to effective personal management skills.			
4. Demonstrate interpersonal skills.			
5. Demonstrate etiquette and courtesy.			
6. Demonstrate effectiveness in oral and written communications.			
7. Develop and maintain a code of professional ethics.			

CA = Communication Arts

SS = Social Studies

MA = Math

SC = Science

HP = Health/Physical Education

FA = Fine Arts

Measurable Learner Objectives are bold font.

Radio & Television Broadcasting Technician (10.0202)

Cross-reference to Show-Me standards (main report)

Measurable Learner Objective and Task Statement	Knowledge (Content)	Performance (Goals)	Notes
8. Maintain an appropriate professional appearance.			
9. Perform basic tasks related to securing or terminating employment.			
10. Perform basic parliamentary procedures in a group meeting.			
R. Explain and demonstrate skills in a specialization area identified by the instructor			

CA = Communication Arts

MA = Math

HP = Health/Physical Education

SS = Social Studies

SC = Science

FA = Fine Arts

Measurable Learner Objectives are bold font.