



# CHART OF COMPETENCIES

**AUTOMATION  
TECHNICIANS**

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**CHRC** Cultural  
Human Resources  
Council

**CRHSC** Conseil  
des ressources humaines  
du secteur culturel

# An Automation Technician

Very few theatre technicians classify themselves as Automation Technicians (ATs). Nonetheless, the work of an AT is performed in small, medium and large theatres across the country; in high tech and low tech settings; and for both road shows and permanent shows in live theatre, music, circus, dance, opera, film and television. It is in many ways an emerging occupation, the demands on which are expected to grow quickly with advances in technology.

For the purposes of this profile, an AT has been described as: someone who is involved as an installer, operator, troubleshooter or maintenance person with the automation technology on a live music, theatrical or dance production.

The presence of “automated technologies” on theatre, film, television and concert sets is increasing and the skills to handle the equipment, from simple to complex, are demanding. They are frequently learned on-the-job, although there is an increasing demand for formal training for those who perform AT jobs. Nonetheless, it is important to note that while skills can be taught at schools, artistic sensitivity is learned on the job and hence the crucial aspect of practical experience for training ATs.

**This document presents the outcomes of an occupational analysis (1) for AUTOMATION TECHNICIANS. It identifies the combined competencies that make up the work of an Automation Technician in the cultural sector.**

The Cultural Human Resources Council ([www.culturalhrc.ca](http://www.culturalhrc.ca)) is a national organization dedicated to strengthening Canada’s cultural workforce and improving the HR environment within the cultural sector. It strives to be at the centre of vision and forward thinking in the area of cultural human resources development. CHRC members include self-employed artists, cultural workers and arts organizations from the many disciplines which comprise the sector.

This **Chart of Competencies** is to be used in conjunction with the **Competency Profile for AUTOMATION TECHNICIANS**.

The **Competency Chart and Profile** can be used by individuals to evaluate their own skills and to determine areas where they should pursue additional training. On a corporate level, this material can be applied in defining job profiles, developing competency-based professional development programs, negotiating and customizing training programs, developing career planning programs, recruitment profiles and individual position descriptions.

**YOU SHOULD FIND EVERYTHING YOU DO SOMEWHERE ON THE COMPETENCY CHART, BUT YOU WILL NOT NECESSARILY DO EVERYTHING IDENTIFIED ON THE CHART.**



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## PROFESSIONAL COMPETENCIES :

### A. INSTALL AND STRIKE AN AUTOMATION SYSTEM

- 1. Establish technical requirements
- 2. Assemble components
- 3. Perform initial adjustments
- 4. Test components
- 5. Test the automation system
- 6. Dismantle the automation system

### B. OPERATE AN AUTOMATION SYSTEM

- 1. Cue a show
- 2. Facilitate rehearsals
- 3. Perform preshow checks
- 4. Run a show

### C. MAINTAIN AN AUTOMATION SYSTEM

- 1. Establish a maintenance schedule
- 2. Ensure availability of spares
- 3. Verify safety features of equipment and effects
- 4. Clean automation system
- 5. Perform component adjustments
- 6. Replace worn hydraulic system components
- 7. Replace worn pneumatic system components
- 8. Replace worn electronic system components
- 9. Replace worn mechanical system components
- 10. Replace worn electrical system components
- 11. Replace worn automation computer system components
- 12. Maintain automation computer

### D. TROUBLESHOOT SYSTEMS

- 1. Apply diagnostic process
- 2. Ensure repair of automation computer systems
- 3. Ensure repair of electronic systems
- 4. Ensure repair of electrical systems
- 5. Ensure repair of mechanical systems
- 6. Ensure repair of hydraulic systems
- 7. Ensure repair of pneumatic systems

# Technician must be able to...

## E. PROVIDE AND SHARE TECHNICAL EXPERTISE

- 1. Express preferences on systems design
- 2. Recommend improvements
- 3. Assist and advise during the show / rehearsals
- 4. Train substitute / replacement

## F. PERFORM ADMINISTRATIVE DUTIES

- 1. Create / update cue sheets
- 2. Complete reports
- 3. Write technical documents

## G. COMPLY WITH REGULATIONS AND PRACTICES

- 1. Ensure safe workplace
- 2. Follow original specifications (specs.)
- 3. Obtain / renew required personal certificates
- 4. Comply with codes

## H. OPERATE TOOLS AND EQUIPMENT

- 1. Operate computer
- 2. Operate automation console
- 3. Use pressure gauges
- 4. Use electrical diagnostic tools
- 5. Use cable cutters
- 6. Use swager
- 7. Use crimping tools
- 8. Use soldering tools
- 9. Use tachometer
- 10. Use hand pumps
- 11. Use rigging equipment
- 12. Use shop tools
- 13. Use ladders
- 14. Use jacks
- 15. Use chain motor
- 16. Use gear pullers
- 17. Use chain breaker
- 18. Use torque wrench
- 19. Operate man lift
- 20. Operate fork lift
- 21. Use conventional hand tools
- 22. Use conventional power tools

## GENERAL COMPETENCIES :

### I. DEMONSTRATE COMMUNICATION SKILLS

- 1. Communicate ideas / events in a clear, concise manner
- 2. Listen
- 3. Use and interpret signals
- 4. Use communication technology and tools

### J. DEMONSTRATE PERSONAL SKILLS

- 1. Demonstrate a sense of responsibility
- 2. Work methodically
- 3. Demonstrate attention to details
- 4. Maintain focus
- 5. Demonstrate sensitivity to objects in motion
- 6. Demonstrate a sense of anticipation
- 7. Demonstrate resourcefulness
- 8. Demonstrate teamwork skills
- 9. Practice theatre etiquette
- 10. Prioritize
- 11. Meet deadlines
- 12. Practice punctuality
- 13. Work under pressure
- 14. Demonstrate flexibility
- 15. Recognize one's limitations
- 16. Make decisions
- 17. Solve problems
- 18. Commit to zero tolerance behavior
- 19. Work at heights
- 20. Demonstrate manual dexterity
- 21. Demonstrate confidence to exercise safety and due diligence
- 22. Demonstrate analytical skills
- 23. Stay current