# CAREER PROGRESSION PATH

| WG 2606 | ELECTRONIC INDUSTRIAL CONTROLS MECHANIC |
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This occupation covers nonsupervisory jobs involved in thethe installation, maintenance, troubleshooting, repair, and calibration of electronic controls and indicating and recording systems used on industrial machinery or engines, in automated materials storage and handling systems, in aircraft engine and similar test facilities, or in energy monitoring and control systems. This work requires knowledge of the practical application of electronics theories and circuits that are applicable to power, timing, motion control, indicating devices, and pulse and counting mechanisms, including special purpose digital computers (microprocessors) dedicated to control functions, as well as a knowledge of industrial equipment operation and processes

**WG02 - WG05**

**Part 1**
**Apprentice/Helper/Trainee; Trade/Less than Journeyman**

Step

1. Complete New Hire Orientation
2. Complete Civilian Training Plan requirements for current position
3. Complete task qualifications for current position
4. Complete task certifications for current position
5. Master simple to common work tasks under supervision
6. Maintain successful to above average performance ratings

**WG05 - WG08**

**Part 2**
**Trade/Less than Journeyman**

1. Continue required on-the-job and formal classroom training required in Civilian Training Plan
2. Complete task qualifications for current position
3. Complete task certifications for current position
4. Master common to complex work tasks. At Grade 8 sheet metal workers require knowledge of construction practices of electronic equipment in order to recognize types and sizes of resistors, capacitors, wiring, transistors, etc., and follow signal paths through printed circuit and wired circuitry, recognizing actual circuit configurations that are shown in schematics and diagrams. They exercise skill in removing and replacing specified parts, following standard methods.
5. Maintain successful to above average performance ratings

**Part 3**
**Journeyman**

1. Continue required on-the-job and formal classroom training required in Civilian Training Plan
2. Complete task qualifications for current position
3. Complete task certifications for current position
4. Master common to complex work tasks. At Grade 10 sheetmetal workers perform the overhaul, installation, maintenance, modification, and repair of various types of electronically controlled industrial equipment that is characterized by moderate complexity of design, construction, and function. They apply knowledge of electronic theory and circuits and basic logic circuits to power, timing, and motion controls, indicating and counting mechanisms, and similar devices that are found in boiler combustion control systems; materials handling equipment, such as digital weighers, laser readers, electronic counters, and automatic/manual controls of fork lifts or other warehouse vehicles; in process controls, such as those sensing, recording, and dispensing chemicals to maintain a desired mixture; or production equipment, such as ultrasonic cleaners, electron beam welders, and profile follower milling machines and less complex numerically controlled machines, such as punch presses, lathes, boring machines, and drills, that have single or dual axes and point-to-point control.
5. Master common to complex work tasks. At Grade 11, Electronic Industrial Controls Mechanics work on highly complex systems of electronic sensing and control. This includes multiple axis numerically controlled (NC) machine tools with continuous path or contouring control capability, such as machining centers and omnia mills; nuclear plant controls; and computer controlled warehousing/stock-handling equipment and centralized environmental monitoring and control systems (EMCS) that use special purpose, dedicated computers to store operating parameters and initiate adjustments. Mechanics at this level require a thorough knowledge of logic circuits, of electronic amplification and control circuits, and of complex electrical, mechanical, hydraulic, and/or pneumatic systems. In addition, they must be well grounded in the industrial or environmental control processes to be accomplished by the equipment on which they work in order to properly test and coordinate the various portions of the system.
6. Master common to complex work tasks. At Grade 12, Electronic Industrial Controls Mechanics work on new systems of similar great complexity. They serve as "lead workers" on teams to install and put into operation major electronic control systems that are new to the activity or that are major modifications of existing systems, so that there is little knowledge of the system problem areas and expertise in its repair. They troubleshoot and repair new systems during the operational tests and improvise procedures to cope with unforeseen defects. They
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construct interface devices and modifications to the equipment from sketches and verbal instructions in order to refine the new system operations. Assignments are characterized by application of advanced electronic theory and frequent technological changes in systems.
7. Provide production support services
8. Maintain successful to above average performance ratings

**Part 4**
**Work Leader**

1. Continue required Journeyman level on-the-job and formal classroom training required in Civilian Training Plan
2. Master ability to teach others
3. Master ability to inspect others

**Part 5**
**Supervisors**

1. Continue required Journeyman level on-the-job and formal classroom training required in Civilian Training Plan
2. Master ability to supervise groups of workers (one subordinate supervisor)
3. Master ability to supervise groups of workers (two or more levels of subordinate supervisors)

*This list is not all inclusive. For more information on your series, visit the OPM site below. Copy and paste the link in your browser.*

[OPM Classification Standards](OPM Classification Standards)