Electronic Security Technician 1    4050
Electronic Security Technician 2    4051

CLASS SERIES CONCEPT AND RESPONSIBILITIES
Electronic Security Technicians install, repair, and maintain manual and computer controlled security and environmental systems. These employees support and ensure safe, environmentally and economically efficient security, fire, electrical, and other facility support systems to meet agency operating needs.

DISTINGUISHING FEATURES
This is a two-level technical classification series.

The responsibilities within the Concept and Distinguishing Features are characteristic of the type and level of work associated with this class. Individual positions may do all or some combination of the responsibilities listed as well as other related responsibilities.

Level 1

The ELECTRONIC SECURITY TECHNICIAN 1 is the first of this two-level series. Employees at this level install, maintain, alter, and repair manual and computer controlled electronic systems used for the purpose of securing state owned facilities. Clear and diversified procedures, precedents, and industry standards govern judgement used to select the most appropriate solutions to solve problems. Job holders have independence to decide their own priorities. They may deviate from established procedures and practices provided the results are in compliance with established state and local building codes and agency policies and procedures.

Employees have regular contact with security staff, inspectors, State Fire Marshal officials, various agency managers/staff, project managers, consultants, general public, and contractors to make sure systems are functioning properly. Employees have frequent contact with maintenance staff and fire alarm personnel.

Installation, Maintenance, and Repair: Install, maintain, and repair manual and computer controlled electronic security and fire alarm systems. Systems include microwave and fence sensor systems, radio communication systems, access control systems, intercoms, Americans with Disabilities Act (ADA) door operators, card lock systems, closed circuit television monitoring devices, airlock security devices, electric strikes, magnetic locks, and electric cylindrical or mortise case locks, fire/smoke detection, telephone systems, and intrusion/duress alarm systems. Program or revise existing programs of computer-based telephone switching systems, digital video recording systems, and access control door systems. Program specialized network devices with proper IP addresses and communication protocol for security equipment utilizing the network or dial-up devices. Test communication equipment and resolve a variety of network or dial-up communication problems. Conduct inspections of electrical locking systems to make sure they are operational. Use digital and analog test instruments to install and evaluate systems. Respond to emergency failures of equipment and systems and troubleshoot and make repairs using technical manuals and wiring diagrams. Conduct diagnostic evaluations of security system equipment. Plan and perform regular inspection and preventative maintenance according to manufacturer’s specifications to ensure proper maintenance of all security systems. Stay current with manufacturer’s software system updates and patches.

Integrate access control systems with other systems, such as fire alarms, elevator controls, ADA door operators, intercoms, intrusion alarms and duress alarms. Access system from off-site laptop via remote desktop protocol (RDP) to make emergency changes in programming such as allowing access, locking doors, and deactivating keycards.

Administrative Functions: Maintain and update technical materials such as repair manuals, blueprints, schematics, wiring diagrams, technical bulletins, catalogs, and specification sheets. Maintain and update data for interior communication logs and manual and computer controlled electronic systems status reports. Prepare a variety of reports for management. Maintain inventory of the program’s equipment and supplies and recommend inventory adjustments.

The duties listed below are for positions that work with adult or youth inmate workers:

Some employees coordinate work flow and assign work to adult or youth inmate workers. Employees direct inmates to follow rules, policies, procedures, and security guidelines, instruct and train inmates on work techniques and procedures, and in safe and efficient operations of tools and equipment. Employees evaluate inmate work performance, search inmates and area for contraband, verify and sign inmate time cards, monitor work area for cleanliness and order, and direct inmates in cleaning methods.

Level 2 (In Addition to Duties described in level 1)

The ELECTRONIC SECURITY TECHNICIAN 2 is the second level of this two-level series. Employees at this level install, maintain, repair, and integrate complex manual and computer controlled electronic access systems, intrusion alarms, duress alarms, closed circuit televisions, intercoms, fire alarm systems, ADA door operators, and all related wiring infrastructure used for the purpose of maintaining and securing state owned facilities. Employees in this class also manage projects with agency managers, staff, and contractors, and provide status reports to management.

Employees have regular contact with security staff, inspectors, State Fire Marshal officials, various agency managers/staff, project managers, consultants, general public, and contractors to make sure systems are functioning properly. Employees have frequent contact with maintenance staff and fire alarm personnel.
Employees receive general supervision from a program manager. Work is reviewed for results, effectiveness of systems and compliance with all applicable federal, state, and local regulations. Employees in this class exercise independence in judgment and action to complete assigned tasks.

The Electronic Security Technician 2 is distinguished from the Electronic Security Technician 1 by the assignment to evaluate, plan, and implement system additions or alterations and to complete complex alterations with system-wide implications to integrated manual and computer controlled electronic systems. In addition, the Electronic Security Technician 2 has the responsibility to manage projects related to installation or modification of one or more agency security systems.

Programming and Component Integration: Review electronic equipment computer programming for problems and effectiveness and make necessary changes. Research new manual and computer controlled electronic systems and current state-of-the-art technology to execute new installations. Integrate new equipment with existing equipment and perform adaptation testing.

Review new construction plans and specifications for electronic door hardware, security systems and ADA door operators to ensure adherence to fire and life safety standards, building codes, and agency standards. Communicate recommendations to management, project managers, architects, contractors and/or design teams. Maintain up-to-date knowledge of manufacturer’s software system updates and patches, new products, new security system threats, and vulnerabilities. Evaluate proposed and existing electronic security procedures and equipment in cooperation with State Fire Marshall officials to ensure adherence to all life, fire, and safety issues.

Integrate access control equipment with other electronic systems, such as fire panels, elevator controls, ADA door operators, intercoms, intrusion alarms, and duress alarms. Access system from off-site laptop via RDP (remote desktop control) to make emergency changes in programming, such as allowing access, locking doors, and deactivating keycards.

Alter, Install, Maintain, and Repair: Alter, install, maintain, and repair all complex manual and computer controlled electronic security and fire alarm systems. Analyze, develop, and implement programs to make sure continuous operation of integrated systems is working. Respond to emergency failures of equipment and systems and troubleshoot and make repairs using technical manuals and wiring diagrams. Conduct diagnostic evaluations of security system equipment. Plan and complete regular inspections and preventative maintenance according to manufacturer’s specifications to assure proper maintenance of all security systems.

Project Management: Perform and/or lead special projects as requested. Manage, coordinate, and inspect construction projects to ensure adherence to agency standards, contractual agreements, federal, state, and local codes and regulations. Review blueprints for proposed construction to ensure accuracy of application and material. Estimate time and material and maintain schedules. Oversee projects and provide status reports to management.

Administrative: Maintain a technical library of repair manuals for all active equipment, blueprints, schematics, wiring diagrams, technical bulletins, distributor catalogs, manufacturing catalogs and specification sheets. Prepare monthly reports and manual and computer controlled electronic systems status reports. Develop training materials and instruct operating personnel in the proper operational procedures to use equipment. Maintain inventory of the program’s equipment and supplies, and recommend inventory adjustments.

The duties listed below are for positions that work with adult or youth inmate workers:

Some employees coordinate work flow and assign work to adult or youth inmate workers. Employees direct inmates to follow rules, policies, procedures and security guidelines, instruct and train inmates on work techniques and procedures, and in safe and efficient operations of tools and equipment. Employees evaluate inmate work performance, search inmates and area for contraband, verify and sign inmate time cards, monitor work area for cleanliness and order, and direct inmates in cleaning methods.

MINIMUM QUALIFICATIONS AND SKILLS

Electronic Security Technician 1

Possession of a current Journeyman Limited Maintenance Electrician (LME) electrical license or electrical license appropriate for work assigned issued by the Oregon Building Codes Division, AND four years of experience in the installation, maintenance or repair of manual and computer controlled electronic systems; OR

Possession of a current General Journeyman Electrical License and four years of experience in the installation, maintenance or repair of manual and computer controlled electronic systems.

Knowledge and Skills:

Knowledge of relevant state and federal electrical laws, codes, and statutes.
Knowledge of American with Disabilities Act guidelines relevant to building access and safety.
Knowledge of Oregon Occupational Safety and Health requirements.
Knowledge of relevant equipment, policies, procedures, and strategies to promote effective security operations.
Knowledge of materials, methods, and the tools involved in the construction or repair of facilities.
Knowledge of circuit boards, processors, chips, electronic equipment, computer hardware and software, including applications and programming.
Knowledge of electronic theory and equipment, including computer-based detection systems, closed-circuit television, digital equipment, radio communication systems, and telephone systems.
Knowledge of computers and computer systems, including hardware and software, used to program, write code in the language of the host control system, set-up functions, and enter data or process information.
Knowledge of analyzing information and evaluating results to choose the best solution and solve problems.
Knowledge of principles and processes for providing customer service, including customer needs assessment, quality standards for services, and evaluation of customer satisfaction.
Knowledge of arithmetic, algebra, geometry, calculus, and their applications.
Skill in estimating sizes, distances, and quantities; OR determining time, costs, resources or materials needed to perform a work activity.
Skill in the use of machines and tools, including their design, use, repair, and maintenance.
Skill in servicing, repairing, adjusting and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.
Skill in programming and multi-tasking.
Skill in maintaining confidentiality of information viewed through camera imagery from crime scenes, institutional settings, isolation cells, and other settings.
Skill in identifying errors or other problems or defects.
Skill in servicing, repairing, calibrating, regulating, fine-tuning; OR testing machines, devices, and equipment that operate primarily on the basis of electrical or electronic principles.
Skill in the use of computers and computer systems, including hardware and software, to program, write code, set-up functions, enter data or process information.
Skill in installing equipment and machines to meet specifications.
Skill in repairing machines or systems using the needed tools.
Skill in generating or adapting equipment and technology to serve user needs.
Skill in detecting weaknesses in alternative solutions, conclusions, or approaches to problems.
Skill in understanding written sentences and paragraphs in work related documents.
Skill in conducting tests and inspections of products, services or processes to evaluate quality or performance.
Skill in giving full attention to what other people are saying, taking time to understand the points being made and ask questions as appropriate.
Skill in communicating effectively in writing as appropriate for the needs of the audience.

Electronic Security Technician 2
Possession of a current Limited Maintenance Electrician (LME) electrical license or appropriate electrical license for work assigned issued by the Oregon Building Codes Division AND six years of experience in the installation, maintenance, or repair of manual and computer controlled electronic systems; OR
A General Journeymen Electrician license AND six years of experience in the installation, maintenance, or repair of manual and computer controlled electronic systems.

Knowledge and Skills (in addition to those listed in level 1):

Knowledge of practical applications of engineering science and technology, including applying principles, techniques, procedures, and equipment to the design and production of security services.
Knowledge of project management principles, processes, and techniques.
Knowledge of alteration techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
Knowledge of materials, methods, and the tools involved in the construction or repair of facilities.
Skill in active learning to understand the implications of new information for both current and future problem-solving and decision-making.
Skill in identifying measures or indicators of system performance and the actions needed to improve or correct performance relative to the goals of the system.
Skill in estimating resources and materials.

NOTE: The KNOWLEDGE and SKILLS (KS) are required for initial consideration. Some duties performed by positions in this class may require different KS. No attempt is made to describe every KS required for all positions in this class. Additional KS requirements will be explained on the recruiting announcement.

Adopted: 08/2017