

**CLASS TITLE:                    ELECTRONIC DIGITAL TECHNICIAN**

**Class Code: 02300100**  
**Pay Grade: 20A**  
**EO Code: C**

**CLASS DEFINITION:**

**GENERAL STATEMENT OF DUTIES:** To construct, install, inspect, test, calibrate, service and/or repair a variety of types of electronic/computerized managed locking systems and other electronic equipment and apparatus, both digital and analog, for operational, research, experimental or educational purposes; to write and document diagnostic software for microprocessor-based systems; and to do related work as required.

**SUPERVISION RECEIVED:** Works under the general supervision of a superior from whom specific assignments are sometimes received with wide latitude for selecting and utilizing appropriate methods for effecting construction and repairs.

**SUPERVISION EXERCISED:** As required, may supervise technical assistants or other personnel temporarily assigned to special projects.

**ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:**

To construct, install, inspect, test, calibrate, service and/or repair a variety of types of electronic/computerized managed locking systems and other electronic equipment and apparatus, both digital and analog, such as logic gates and networks, microprocessors, digital measuring instruments, electronic data processing equipment, computers and associated peripherals for operational, research, experimental or educational purposes.

To write and document diagnostic software for microprocessor based systems.

To check and repair microprocessor-based computing and testing equipment.

To program, maintain and repair electronic/computerized managed locking systems i.e. Card Access, Omnilocks, Unican 800 and etc.

To calibrate oscilloscopes and special instruments, digital multimeters, digital frequency counters, as well as, curve tracers using voltage, resistive and current source calibrators testing devices.

To construct special instruments that are used in electrical, computer engineering and/or laser research laboratories; and to assist environmental researchers in designing and building instruments.

To write and document diagnostic software for microprocessor systems; to test and repair computer systems and to test subsystems.

To set up, maintain and manage laboratories including the bench set-up, stocked with proper cables and connectors.

To connect and operate testing devices such as digital multimeters, signal and/or function generators, digital data analyzers, logic test probes and signal tracers and high frequency oscilloscopes for the purpose of locating defects by making appropriate measurements.

To dismantle faulty equipment.

To maintain an adequate supply of electronic material and repair parts for construction and test work.

To maintain an up-to-date inventory of all capital equipment.

To do related work as required.

**REQUIRED QUALIFICATIONS FOR APPOINTMENT:**

**KNOWLEDGES, SKILLS AND CAPACITIES:** A working knowledge of the principles, methods and techniques applied in the construction, installation, calibration, inspection, service and repair of a variety of types of electronic/computerized managed locking systems and other electronic equipment and

apparatus and the ability to apply such principles, methods and techniques; a working knowledge of computer programming techniques and practices to include microprocessor assembly language; the ability to construct and/or install electronic apparatus and devices, both analog and digital, in accordance with prescribed plans and specifications including circuit diagrams; the ability to work on high voltage equipment; the ability to detect, diagnose and correct defects and causes of malfunctions in electronic equipment and apparatus; the ability to maintain an inventory of required parts and supplies necessary for repairs and maintenance services as well as an inventory of all operational and testing equipment, instruments and apparatus; and related capacities and abilities.

### **EDUCATION AND EXPERIENCE:**

Education: Such as may have been gained through: graduation from a senior high school plus additional study in an electronic technician school or technical institute with courses in electronics, electro-mechanics, computers, and at least one major micro-assembly language; and

Experience: Such as may have been gained through: employment equivalent to a journeyman level involving the testing and repair of digital electronic logic devices, electronic/computerized managed locking systems, microprocessors, computers or other electronic equipment.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

Class Revised: June 7, 1998

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