

IMSA Certification Descriptions

IMSA Roadway Lighting Technician I

The core information and skill set necessary for people working on roadway lighting are covered in the IMSA Roadway Lighting Technician I Certification exam for qualified professionals. The topics include electrical safety and codes, fundamental electricity, legislation, jurisdictional needs, and fundamental building and maintenance. Those who need professional certification and are responsible for the installation and upkeep of roadway lighting are the target audience for this exam.

Prerequisite: IMSA Work Zone Temporary Traffic Control Technician

IMSA Traffic Signal Technician I

The IMSA Traffic Signal Technician I Certification certifies the holder as being knowledgeable about the ideas and terms related to signalized traffic control devices and systems. The certification is geared toward entry-level technicians who have some prior knowledge of electrical technology or training. Work site safety is a key skill area that is addressed in both this certification and IMSA Work Zone Temporary Traffic Control Technician. The exam tests knowledge of basic electrical specifications of cabinet wiring and components; operating principles; the tools, processes, and materials used to build signal systems; the fundamentals of traffic signal design and upkeep; and legal concerns. With the right supervision and direction, the bearer of this certification is ready to contribute to any traffic signal crew that is working on construction, maintenance, or design.

Prerequisite: IMSA Work Zone Temporary Traffic Control Technician

IMSA Traffic Signal Field Technician II

The Traffic Signal II Certification signifies that the holder possesses formal training and hands-on experience that provide a solid foundation in traffic signal technology. The IMSA Traffic Signal II certification demonstrates the technician's extensive training in evaluating traffic signal control systems, on-site repairs, and maintenance techniques and tools. The following topics are covered in the exam: programming and replacement, signal maintenance, traffic signal operations and equipment standards, signal phasing, timing and detection, document preparation, detection, testing of equipment, and troubleshooting. Regardless of whether they work for a private company or a government organization, those who hold the certification are ready to contribute significantly to the upkeep and repair of signalized intersections.

Prerequisites:

IMSA Work Zone Temporary Traffic Control Technician

IMSA Traffic Signal Technician I

Two years of traffic signal experience in the field

IMSA Signs & Pavement Markings Technician I

This certification tests an overview of the most recent techniques, supplies, and laws used to place and upkeep pavement markings and signs on today's roads. The Manual on Uniform Traffic Control Devices

(MUTCD) and its application, the numerous kinds of signs and pavement markings, and their use and interrelationships are addressed in detail along with other accepted industry standards and practices. Environmental safety, equipment maintenance, bike lanes, asset management, school zones, visibility, and retro-reflectivity, along with tort and risk liability are also included. This certification is designed for those in charge of installing and maintaining signs and/or pavement markings on our roads.

Prerequisites:

IMSA Work Zone Temporary Traffic Control Technician

One year experience is required in the field of traffic operations.

IMSA Signs & Pavement Markings Technician II

The IMSA Signs & Pavement Markings Technician II is an advanced certification and builds on the foundation provided by the Signs and Pavement Markings I certification. This certification focuses on the additional technical knowledge and skill sets needed specifically upkeep and installation of signs. Sign design experience is necessary. It also certifies that the IMSA Signs and Pavement Markings Technician has a deeper understanding of the standards for applying signs and pavement markings in line with the MUTCD and other references. When and where traffic control devices are installed, as well as the proper building, installation, and maintenance are addressed in the certification. Other topics covered include the sign specifications for guide and route signs, street name signs, speed zones, needs for freeways and expressways, special toll managed lanes, and attention to location and design specifications. The IMSA Signs and Pavement Markings II certification also focuses on the higher knowledge and skill sets necessary for pavement marking

design, installation, and upkeep as well as pavement marking products and installations. Topics covered include colors, material safety, retro reflectivity, pavement marking visibility and freeway/expressway markings. This certification is designed for individuals who are reliable in installing and maintaining signs and pavement markings on our roads and who want to obtain a high level of professional certification.

Prerequisites:

Required two years of experience within field traffic operations.

IMSA Signs & Pavement Markings Technician I

IMSA Work Zone

This entry-level exam addresses fundamental and complex Temporary Traffic Control in Work Zone techniques. When traffic must be moved through or around road construction, maintenance tasks, utility work, and incidents on or near the roadway, traffic control issues may arise. This exam explores the design, installation, and maintenance concepts for traffic control devices and defines relevant standards for typical urban, rural, and highway scenarios. It also covers traffic control theory and equipment, hand signaling tools, typical construction scenarios, and traffic terminology. This certification tests the important knowledge to keep all technicians safe in Work Zones.

Prerequisite: None

Traffic Signal Construction II

The IMSA Traffic Signal Construction II Certification represents the holder's thorough knowledge of traffic signal technology developed through practical experience. A technician who earns this certification has substantial training in traffic signal control system methods, construction, materials, and safety. Mast arms, signal heads, inductive loops, cabinets, and conduit installation are some of the tasks covered, as well as planning tasks, paperwork, and the safe operation of construction equipment (from concrete saws to cranes). The setup and testing of new signal installation is also covered. The certification holder is ready to contribute significantly to the traffic signal construction team of a private company or a public organization where the focus is on new or replacement traffic signal construction.

Prerequisites:

IMSA Work Zone Temporary Traffic Control Technician

IMSA Traffic Signal Technician I

Two years of traffic signal experience in the field

IMSA Traffic Signal Inspector

The IMSA Traffic Signal Inspector Certification is intended to improve public safety by demonstrating that the holder comprehends the basic ideas related to traffic signal installation inspections. Our transportation system relies heavily on traffic signals, and the smooth operation of these signals is crucial to preserving safe mobility. Knowledgeable traffic signal inspection is required to make sure that

proper/specified construction techniques are followed for signal installation, resulting in signals that perform properly. An important component of lowering the liability exposure of governmental organizations due to broken traffic lights is knowledgeable inspection. This certification is designed for people who are liable for inspecting traffic signal construction, and it is beneficial for contractors as it also shows an inspector's point of view for traffic signal construction.

Prerequisites:

IMSA Work Zone Temporary Traffic Control Technician

IMSA Traffic Signal Technician I

IMSA Traffic Signal Sr. Field III

The IMSA Traffic Signal Sr. Field III Certification is designed to test an individual's knowledge and skills of traffic signal technologies used in the industry. It is recommended that anyone taking this exam is knowledgeable of the following resources: Signal Head Types (Incandescent, L.E.D., Programmable, etc.) specifications and installation methods, IMSA Wire and Cable Specifications, ITE – Traffic Engineering Manual current edition, ITE – Traffic Control Devices Handbook current edition, Traffic Signal Preemption Devices – Various Manufacturers Operation and Setup Manuals, Understanding of Basic Electronics and Electrical and the National Electrical Code and/or Canadian Electrical Code., M.U.T.C.D. (current standard), NEMA Standards (TS1 and TS2), 170/2070 Standards, Various Traffic Detection Methods (Acoustic, Microwave, Radar, Loops, etc.) Setup and Configuration Manuals, Video Detection Manufacturers Setup Manuals, Lightning Protection Devices, FHWA, and ITE Vehicle Detection

Manuals, Data Communications Methods (Copper, Fiber Optic, Wireless, etc.).

Prerequisites:

IMSA Traffic Signal Field Technician II

Experience of five years required in traffic signal operations.

IMSA Transportation Center System Specialist

The IMSA Transportation Center System Specialist Certification is intended for transportation specialists whose job duties include managing and running a road system inside a TMC. The certification represents an individual's understanding of fundamental ideas and the technology behind the tools, machinery, and software in daily use at a TMC. Topics include data collection; video, operations, and control; incident detection; manual and automatic, collection of data, sub-systems, networks; security and topology, computer assisted analysis and reporting; and telecommunications. This certification is designed for professionals that install, maintain, or run transportation management centers.

Perquisite: None