**Traffic Signal Technician Certification Programs**

**IMSA** is the oldest established association of its kind in the world. Although it dates back to 1896, its hardworking staff and volunteers are continuously developing and updating its many programs to ensure they are current and technically correct.

The driving purpose of the organization is to keep its members and others in the profession up-to-date on proper procedures in the industry. Through our publication, *The IMSA Journal*, and our website, we keep our members informed about new products and developments.

Since its origin, IMSA has grown in size, stature, and prestige. Today, the Association has members throughout the United States, Canada, and the world. Through its continuing dedication to public safety, IMSA has gained recognition and influence with local, state, provincial and national governments, as well as other professional organizations.

**Who Should Participate**

Individuals who participate in all aspects of Traffic Signal specialties should participate in these seminars. That includes everyone from Traffic Signal operations people to Traffic Signal Design and management. The materials and seminars are a valuable resource for people seeking training to expand their knowledge in design, installation, and maintenance of traffic signal systems.

**Benefits of These Programs**

These seminars will take the student through all levels and facets of Traffic Signal maintenance and operations. Each level will enhance the student’s knowledge and understanding of the Traffic Signal Technician field.

**Certification**

IMSA's internationally recognized Certification programs identify individuals who have demonstrated required knowledge, skills and experience to perform specific technical tasks in one or more of the following fields:

- Fiber Optics
- Fire Alarm Monitoring
- Interior Fire Alarm
- Public Reporting Systems
- Public Safety Telecommunicator
- Roadway Lighting
- Signs and Pavement Markings
- Traffic Signal Inspection
- Traffic Signals
- Transportation Center System Specialist
- Work Zone Temporary Traffic Control

IMSA Certification reflects an individual’s accomplishment and professional advancement while demonstrating achievement to the general public, coworkers, employers and others.

**Dedicated to providing quality certification programs for the safe installation, operation and maintenance of public safety systems; delivering value for members by providing the latest information and education in the industry.**

**Special Note:** The procedures of specific state and local agencies may vary from those presented in these programs. It is highly recommended that each participant become familiar with the practices of their own applicable agency which has jurisdiction over his or her area of operation.

**Visit IMSA’s website for information on certification renewal, CEUs, and IMSA’s TARPs program.**

**IMSA also offers certification in Fiber Optics for ITS, Traffic, Fire Alarm, and Communication Systems.**

**Visit the IMSA website at:**

[www.IMSA safety.org](http://www.IMSA safety.org)

or Call Toll Free: (800) 723-4672

or Fax to: (321) 806-1400

or E-mail to: info@IMSA safety.org

**IMSA**

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[www.IMSA safety.org](http://www.IMSA safety.org)
Prerequisites:
- Traffic Signal Technician Level III

Traffic Signal Field Technician Level II

Traffic Signal Field Technician Level II certification signifies the holder has a balanced background in traffic signal technology from seminar work and experience. The Level II Field certification includes the following areas:

1. Traffic signal control system troubleshooting, on-site repairs, and maintenance.
2. Utilization and maintenance of test and diagnostic equipment.
3. Analysis of traffic operations and maintenance.
4. Use of test equipment for diagnosis and certification of control cabinet equipment.
5. Programming, test equipment, signal phasing and timing, detection, system communications, maintenance, and documentation.

The certification holder will be prepared to make a substantial contribution to traffic signal maintenance and repair of signalized intersections, whether employed by a private firm or a public agency.

Prerequisites:
- Traffic Signal Technician Level II
- Two years experience in the traffic signal field

Traffic Signal Construction Technician Level II

Traffic Signal Construction Technician Level II certification designates the holder as having a well-rounded background in traffic signal technology from seminar work and experience. The Level II Construction certification indicates the technician has additional training on traffic signal control system construction, safety, materials, methods, and equipment. Activities covered include:

- Safe operation of construction equipment (from concrete saws to cranes).
- Planning activities, documentation and installation of conduits, poles, mast arms, signal heads, cabinet and inductive loops.
- Setup and testing of a new signal installation.
- Certification holder will be prepared to make a substantial contribution to the traffic signal construction group of a private or public agency where new or replacement traffic signal construction is the focus.

Prerequisites:
- Traffic Signal Tech Level I
- Two years experience in the traffic signal field

Traffic Signal Design/Engineering Technician Level II

Traffic Signal Design/Engineering Technician Level II certification indicates the holder has a thorough background in traffic signal technology from seminar work and experience. The Design/Engineering Level II certification indicates the technician has additional training on traffic signal control systems planning, theory of operation, and regulatory issues. Areas of training include:

- Industry standards, liability and regulatory considerations.
- Data collection, site inspections, phase plans, volume density and coordination.
- Timing, equipment selection, and project management.

The certification holder will be prepared to make a substantial contribution to traffic signal design and planning, whether employed by a private firm or a public agency.

Prerequisites:
- Traffic Signal Field Technician Level II
- Two years experience in the traffic signal field

Traffic Signal Senior Field Technician Level III

Traffic Signal Senior Field Technician Level III certification has been prepared to test the candidate on a wide range of topics relating to field expertise and general knowledge of the applied traffic signal technologies in the field. This includes:

- NEMA Standards (TS1 & TS2).
- Various traffic signal devices and manufacturers.
- FHWA and ITE vehicle detection manuals.
- MUTCD signal head types specifications and installation methods.
- IMSA WIRE and Cable Specifications.
- MUTCD traffic signal control cabinet equipment.

The 100-question exam associated with this certification has been prepared to test the candidate on:

- Traffic Signal Field Technician Level II
- Traffic Signal Technician Level I
- Two years experience in the traffic signal field

Traffic Signal Senior Bench Technician Level III

Traffic Signal Senior Bench Technician Level III certification is designed for the experienced Traffic Signal Field Technician. This certification has been prepared to test the candidate on:

- Traffic Signal Field Technician Level II
- Traffic Signal Technician Level I
- Two years experience in the traffic signal field

This refresher/review seminar and Bench Technician exam is designed for the experienced Traffic Signal Field Technician. This certification has been prepared to test the candidate on:

- Traffic Signal Field Technician Level II
- Traffic Signal Technician Level I
- Two years experience in the traffic signal field

Traffic Signal Technician Level I

Traffic Signal Technician Level I certification indicates the holder is familiar with the concepts and terminology associated with signalized traffic control devices and systems. The content is designed for the entry-level technician who has had some prior training or experience in electrical technology. Worksite safety is a primary skill area, having been covered in Work Zone Temporary Traffic Control and in this seminar. Principals of operation and primary electrical detail of cabinet wiring and components will be introduced. Equipment, methods, and materials for signal system construction will be reviewed, as well as the basics of traffic signal design, maintenance, and legal issues. With proper supervision, this certification holder will be prepared to make a contribution on any traffic signal crew, whether involved in construction, maintenance, or design preparation.

Prerequisites:
- Work Zone Temporary Traffic Control Certification

Traffic Signal Bench Technician Level II

The Traffic Signal Bench Technician Level II certification indicates the holder has a well-rounded background in traffic signal technology from seminar work and experience. The Level II certification technician will have additional training on traffic signal control cabinet equipment.

This training includes the programming, application, and maintenance of controllers, traffic signal controllers, vehicle and pedestrian detection systems, and communication and power wiring of the cabinet. The technician will also be trained in electronic circuit operation and fault diagnosis, and the use of test equipment for diagnosis and certification of control cabinet equipment. The certification holder will be prepared to make a substantial contribution to the signal maintenance operation of either a private firm or a public agency by preparing signal cabinets for deployment and troubleshooting and repairing cabinet components in the field.

Prerequisites:
- Work Zone Temporary Traffic Control Certification
- Traffic Signal Technician Level I
- Two years experience in the traffic signal field