

### Industrial Technology Maintenance (ITM)

National certifications based on industry-written, industry-approved standards





## ITM Level 1 Standards

- Industry-written and industry-approved
- Pilot companies include, but are not limited to:
  - Ashley Furniture
  - Bridgestone Metalpha
  - Caterpillar Forest Products
  - Con Agra Foods
  - General Mills
  - Menards
  - Nestle Purina; Nestle Water
  - Nissan North America
  - Ocean Spray
  - Shell Oil
  - Sherwin Williams
  - Target Food Distribution Center

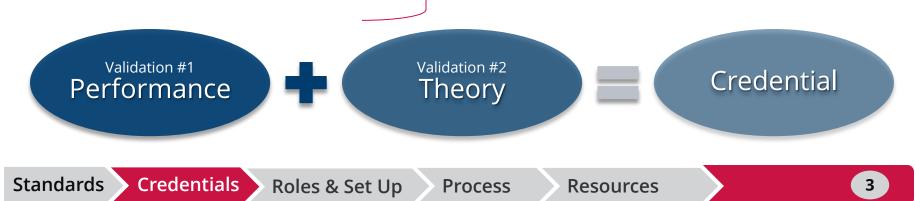




## ITM Level 1 Credentials

- Nine areas of focus
  - Maintenance Operations
  - Basic Mechanical Systems
  - Basic Hydraulic Systems
  - Basic Pneumatic Systems
  - Electrical Systems
  - Electrical Control Systems
  - Process Control Systems
  - Maintenance Welding
  - Maintenance Piping

#### \_ MODULAR DESIGN (earn in any order)



## Roles & Set Up



- 1. Organization: Your school or company
- 2. Sponsors: Individuals who oversee the performance assessment (Teachers, trainers, etc.)
- 3. Proctors: Organization employees who administer the theory assessment
- 4. Candidates: Individuals pursuing NIMS credentials (students, employees, apprentices, etc.)



# 1. Register your organization and primary point of contact (POC)

Who should complete this registration?	The individual who will oversee all NIMS activities at your location	
Examples	In Education Setting $\rightarrow$ Lead Instructor, Dean, Department Head, etc. In Industry Setting $\rightarrow$ Training Manager, HR Manager, Supervisor, etc.	
Responsibility	Oversee NIMS activity and coordinate payment	
<b>Registration &amp; Fees</b>	Complete the online <u>Organization Registration</u> (\$0)	
Account Functionality	<ul> <li>Register new sponsors</li> <li>View registered sponsors and their candidates</li> <li>Access <i>Resources</i> page</li> </ul>	



### 2. Register your sponsor(s)

Who should complete this registration?	The individual(s) who will oversee performance assessments	
Examples	In Education Setting $\rightarrow$ Instructor, Teacher, Teaching Assistant, etc. In Industry Setting $\rightarrow$ Trainer, Training Supervisor, etc.	
Responsibility	Oversee candidates' performance assessment activities Sign <i>CAR Affidavits of Successful Completion</i> and send to NIMS Schedule theory testing time and date with proctor(s)	
Registration & Fees	<ol> <li>POC logs into the <u>NIMS site</u>.</li> <li>Clicks <i>Add a Sponsor</i> and completes registration form (\$0).</li> <li>Repeat until all sponsors are registered.</li> </ol>	
Account Functionality	<ul> <li>View candidate profiles (includes earned credentials)</li> <li>Access <i>Resources</i> page</li> </ul>	
Тір	Sponsors ARE NOT REQUIRED to test for NIMS credentials	





### 3. Register your proctor(s)

Who should complete this registration?	The individual(s) who will oversee theory assessments. NOTE: Sponsors cannot serve as proctors.
Examples	In Education Setting → Administrator, testing center personnel, instructors of other subjects, etc. In Industry Setting → HR personnel, administrative personnel, etc.
Responsibility	<ul> <li>Oversee all theory assessments:</li> <li>Verify candidate identify</li> <li>Assist candidate in logging in and purchasing appropriate exam</li> <li>Enter confidential proctor code unlock exam</li> </ul>
Registration & Fees	<ul> <li>Proctors must complete <u>online registration</u> (\$0) prior to theory testing</li> <li>Proctor ID: enter first initial and full last name as one word</li> <li>Proctor Code: enter confidential code of your choosing; this code will be requested anytime an theory exam is taken</li> <li>NOTE: Proctors do not log in at test time; do not receive a username/password.</li> </ul>
Тір	Register multiple proctors



### 4. Register your candidate(s)

Who should complete this registration?	The individual(s) who is pursuing NIMS credentials	
Examples	In Education Setting $\rightarrow$ Student, apprentice, etc. In Industry Setting $\rightarrow$ Apprentice, trainee, employee, etc.	
Responsibility	<ol> <li>Successfully complete performance assessment</li> <li>Successfully complete theory assessment</li> </ol>	
Registration & Fees	Candidates must complete <u>online registration</u> (\$40) prior to attempting their first theory assessment NOTE: Registration is required once per candidate; Candidates are not required to re-register if multiple credentials are being pursued.	
Тір	Prior to registration: ensure candidate has an active, accessible email address	



## **Earning Credentials**



**Standards** 

Credentials Roles & Set Up

Process

Resources

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- Locate machine operation manual and determine normal operation pressure
- Perform pre-start procedure for machine, including:
  - Uverify zero energy state
  - Verify guards are in place
  - $\hfill\square$  Verify reservoir oil level is good
  - Do a machine walk around, looking for any loose items, leaks or other potential problems
- With assistance of qualified operator, put machine in manual mode
- Start hydraulic system
- □ While system is in operation, do the following:
  - Check system pressure on a pressure gauge
  - Use system relief valve to adjust system pressure to a different pressure as given by inspector
  - Return system pressure to normal machine operation state
  - Adjust a pressure reducing value to a pressure given by inspector (check for standard NIMS nomenclature)
  - Return pressure reducing valve to original setting
  - Locate a manual valve and determine if it is open or closed

Validation #1

## Performance: CAR

Applies to all Industrial Technology Maintenance credentials

- Demonstrate hands-on knowledge, skills, and abilities
  - Follow Credentialing Achievement Record (CAR)
  - Download CAR from *Resources* page (requires login)
  - Candidates complete CARs:
    - At school/company facility
    - Without assistance
    - Under sponsor supervision
  - No attempt limit; no time limit
  - Send Affidavit of Successful Completion to NIMS using the Affidavit Upload Portal at <u>https://goo.gl/bVTc6u</u>

Standards

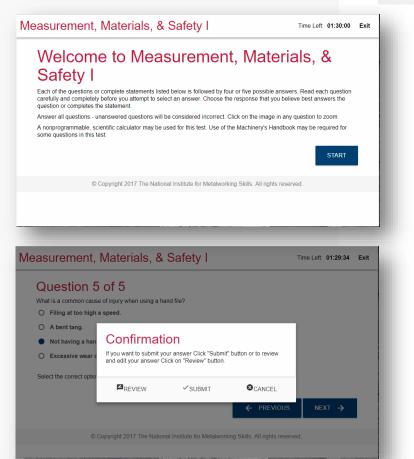
Credentials Roles & Set Up





### Validation #2 Theory

Applies to all Machining Level I and II credentials



Credentials

- Demonstrate theoretical knowledge, skills, and abilities through completion of a proctored, timed theoretical assessment
- Exams administered at your location
  - Accessed via NIMS website
  - Proctor required
  - Multiple choice, true/false, fill-in-the-blank, etc.
  - 90-minute time limit
  - Immediate results (pass/fail)
- Accommodations available (readers, paper tests, etc.)
- Retakes available anytime
- \$35 per level one; \$50 per level two (includes retakes)

Standards

Roles & Set Up



#### Standards

Credentials Roles & Set Up

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## Credential

- PDF emailed to candidate and sponsor upon passing theory exam
- Nationally recognized
- Portable
- Stackable
- No expiration
- Color PDFs accessible 24/7 (login required)







## Payment Options

Fee	Amount	
Candidate	\$40 per	
Registration	candidate	
Level I	\$35 per exam,	
Theory	per candidate	
Level II	\$50 per exam,	
Theory	per candidate	
Level III	\$50 per exam,	
Theory	per candidate	

<b>Option 1:</b> Pre-Pay	<ol> <li>Calculate expected candidate registration costs.</li> <li>Calculate expected theory exam fees.</li> <li>Prior to theory testing date(s): submit payment via check, credit card, or purchase order. (see below)</li> </ol>
> Check	<ol> <li>Mail check to NIMS.</li> <li>NIMS will put funds into an account identified by a 4-digit code. A NIMS rep will contact the organization POC and sponsor(s) with the code. At this time the code may be used.</li> </ol>
> Credit Card	<ol> <li>Call NIMS office with credit card ready.</li> <li>A NIMS rep will put funds into an account identified by a 4-digit code and provide that code. At this time the code may be used.</li> <li>A NIMS rep will email a receipt.</li> </ol>
> Purchase Order (PO)	<ol> <li>Send POs NIMS electronically by visiting the PO Upload Portal at <u>https://goo.gl/bVTc6u</u>.</li> <li>Complete all fields, attach your PO file, and click submit.</li> <li>A NIMS rep will email an account code that can be used to pay fees. An invoice will also be sent.</li> </ol>
<b>Option 2:</b> Pay On- Screen	When registering candidates or administering theory exams, have a credit card ready for on-screen payment. The payment screen will require the credit card type, card number, expiration date, and full billing address.



### **Frequently Asked Questions**

**Under 18?** Yes, if enrolled in a staterecognized training program **Certified Instructors?** Optional. Exam fees are waived for sponsors who wish to test.

Non-NIMS Projects? No. Performance assessments must follow CARs. Theory Before Performance? No. Performance assessments always occur first. Program Accreditation? Optional. Not a requirement for testing.

Proctor Code Sharing? No. Proctor codes are confidential and may not be shared.

**Theory Exam Retake Window?** Retakes can occur anytime; there is no waiting period. Fees are assessed for each attempt.

**Standards** 

Credentials Roles & Set Up

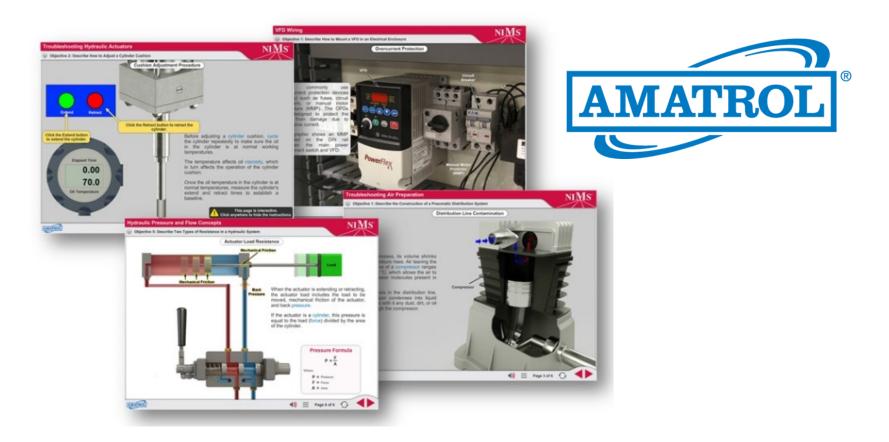
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## NIMS-Endorsed eLearning



#### Learn more: <u>amatrol.com/program/nims-itm/</u>

**Standards** 



## NIMS-Endorsed Textbook

#### G-W PUBLISHER

#### Industrial Maintenance and Mechatronics



**Industrial Maintenance and Mechatronics, 1st Ed.** by Goodheart-Willcox is exclusively endorsed by NIMS to prepare students to earn <u>all nine Industrial Technology Maintenance</u> <u>credentials</u>.

#### From the Goodheart-Willcox website:

*Industrial Maintenance and Mechatronics* is a comprehensive, standards-based text that provides curriculum support for college-level Industrial Technology Maintenance (ITM) programs...

Designed to work in conjunction with the Duties and Standards for Industrial Technology Maintenance, the standards-based learning package will help students pass the testing and performance requirements for NIMS credentialing and acquire the multidisciplinary, hands-on skills needed in today's advanced manufacturing industry.

Shawn A. Ballee | Gary R. Shearer



Learn more: <u>https://www.g-w.com/industrial-maintenance-mechatronics-2020</u>

**Standards** 

Credentials Roles & Set Up



#### Training includes:

- Sample lesson plans
- Details on equipment needed for successful testing
- The opportunity to earn NIMS ITM Level I credentials

### ITM Instructor Workshop

View other workshops: nimsready.org/workshops

#### Prerequisite

Basic knowledge of industrial technology maintenance

#### Description

In this 3-Day workshop, instructors and trainers gain insight into the ITM credentials and how to incorporate the credentials into curriculum.

The investment per participant is \$995.

Enhanced Training Option Standards Credent



### Thank You! Contact NIMS for support anytime.

email phone fax <u>support@nims-skills.org</u> (703) 352-4971 (703) 352-4991

facebook twitter linkedin <u>facebook.com/GoNIMS</u> <u>twitter.com/NIMS\_Inc</u> <u>http://goo.gl/gCv5Kw</u>

**Standards** 

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