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***Completing the
Application Forms for
NICET Computer Based Testing Programs***



NICET Technician Application Instructions

Standard Model Programs

The following pages contain information about the application process for NICET’s standard model certification programs.

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Apply for your exam online to pay by credit card and receive your test confirmation overnight.

At www.nicet.org, select the “Login” menu option to access your account and the online exam application.

National Institute for Certification in Engineering Technologies
1420 King Street
Alexandria, Virginia

June 2014

Introduction and Overview

Selecting a certification

To find out how your background, job needs, and career goals fit with NICET's certifications, please review the program information and career planning tips available on our website. After that, any remaining questions can be discussed with NICET staff by phone (888-476-4238 or 703-548-1518) or email (tech@nicet.org).

A NICET certification program that features standardized exams (as opposed to work element exams) is a Standard Model program. Each of these programs has a unique application package, which can be downloaded from NICET's website.

In each program's application package, the second page will hold the "Requirements for Certification" chart, which lists the criteria for each Level of certification. Please read these certification requirements very carefully before applying for an exam.

Application forms

The application package is divided into two applications: the Test Application and the Experience application. If you are applying for NICET certification, then you must submit both the Test Application and the Experience Application. (If you are applying only for a test—without certification—then you may submit only the Test Application.) If you have previously submitted a part of the Experience Application, see the instructions for that part to determine whether you will need to submit it again.

Test Application

This application applies to all standard model programs. Each time you apply for a standard model exam, you must complete these two sections:

- Section 1: Candidate Information
- Section 2: Test Selection and Payment

The Test Application may be completed quickly and easily online at www.nicet.org. If you apply online for your exam, then to be considered for certification, you must print and complete your Experience Application package, and mail it to NICET.



Experience Application

The Work History, Verifier Data, and Personal Recommendation forms are typically common to multiple standard model programs. However, the Performance Verification and Major Project Write-Up guidelines are specific to the program's practice area.

- Part I: Work History
- Part II: Verifier Data
- Part III: Performance Verification
- Part IV: Personal Recommendation (for higher-Level certifications)
- Part V: Major Project Write-Up (for top-Level certifications)

Standard model testing

Standard model exams are administered on computers (normal keyboard/mouse operation) at Pearson Vue's secure, proctored test centers, which are usually open several days per week.

Eligibility windows

On your application, you will choose an eligibility window, which is a 3-month period within which you must take your test. Windows begin on the 1st day of each month, and end on the last day of the third consecutive month (examples: January 1 – March 31, February 1 – April 30, etc.). The testing windows and their ID numbers are listed in the table at right.

You may choose any window that starts within 6 months of the date of your application. If you are applying for more than one exam, then you may select the same eligibility window for your exams if you wish.

Eligibility Schedule	
Window ID	Window Months
1	January/February/March
2	February/March/April
3	March/April/May
4	April/May/June
5	May/June/July
6	June/July/August
7	July/August/September
8	August/September/October
9	September/October/November
10	October/November/December
11	November/December/January
12	December/January/February

Scheduling your exam

After receiving your complete test application and payment, NICET will inform its standard model test vendor, Pearson Vue, that you are authorized to schedule the exam. NICET will send you a Test Confirmation notice with instructions for scheduling your exam online or by phone. When you schedule, you will be prompted to select a test center and to select an available date within your eligibility window. Then, you will select your appointment time. To reserve your preferred location, date, and time, please schedule well in advance.

If you complete the Test Application online, you will receive your test confirmation notice overnight via email, and you'll be able to schedule your exam the next day.



Changing a scheduled test date

Up to a day or two before your scheduled test date, you may, if necessary, reschedule your exam without penalty. However, certain conditions will require the payment of a fee:

- rescheduling when you are close to your scheduled test date;
- failing to appear for your exam; or
- moving your test to a new eligibility window.

To reschedule your standard model exam, please follow the instructions at:

<http://www.nicet.org/default/assets/File/reschedulepv.pdf>.

Applying to test as part of a group

If you are testing as part of a group, you should check with your sponsor for any special conditions associated with your test. If a single company check is accompanying several applications, accurate and timely processing of the applications requires that either:

- a. all the applications are mailed together with the check in the same envelope, **or**
- b. a list of all applicant names is attached to the check.

Mailing the application

If your application includes a check or money order for payment of the exam fee, then mail it to:

NICET
c/o Bank of America
PO Box 418651
Boston, MA 02241-8651

to expedite: NICET
c/o Bank of America Lockbox Services
Lockbox 418651
MA5-527-02-07
2 Morrissey Blvd.
Dorchester, MA 02125

If you already submitted payment of the exam fee, and you are now mailing NICET your Experience Application materials, then mail to:

NICET
Attn: Certification Services
1420 King Street
Alexandria, VA 22314

When you will hear from NICET

Before the exam

If you complete the Test Application online, then overnight you'll receive via email a confirmation notice with instructions for scheduling your exam. If you mail the Test Application to NICET, then NICET will email your test confirmation notice within four weeks of receiving your application. If you do not receive a confirmation notice, then contact NICET at 888-476-4238 (press "3") or test@nicet.org.

After the exam

Upon completing the exam, you will receive a preliminary examination score report at the test center. Then, you will receive your official score report from NICET by mail within 14 days of your exam.

Once you have passed an exam requirement, NICET will evaluate your Experience Application materials to determine whether you have satisfied all the criteria for the certification. This evaluation can take up to 90 days after your test date. If you are awarded the certification, you will receive a certificate and approval letter/wallet card by mail. If NICET determines that you have not satisfied all the criteria for the certification, then you will receive a Conditional Decision Letter requesting further information.

Privacy of Testing Information

NICET will give test results only to the examinee, unless the examinee submits a signed release form.

NICET does not sell mailing lists, phone numbers, or email addresses of applicants and/or certificants. NICET may occasionally provide such lists for one-time use by bona fide organizations for educational or professional development purposes.

Make a copy of everything you send to NICET and keep it with your testing/certification records.

Your name and identification number must appear on every page of every part of the application.



Test Application

Test Application

Test Application

Section 1: Candidate Information

Each time you apply for an exam, you must submit the Candidate Information form to provide NICET with the following information:

Name

Write your name as it appears on the government-issued photo ID that you will bring with you to the test center. At the test center, the proctor will check your ID to make sure that it is identical to the name you provided on your application. This name will appear on all correspondence and certification documents issued by NICET.

ID number

If you have previously applied for a NICET exam, then you have already been issued an ID number that you can use to identify yourself. If this is your first NICET exam, then you must provide NICET with a government- issued ID number. The acceptable types of ID numbers appear on the application form. NOTE: NICET reserves the right to require a photocopy of this ID to confirm the submitted information (i.e. name, ID number, address, and signature).

Address information

Please provide your up-to-date home and business address information.

Electronic contact information and preferences

Provide us with your phone numbers and email addresses, and indicate whether NICET may send correspondence such as letters and eligibility notifications via email. Note: NICET will send approval letters, certificates, and wallet cards only by post mail. **Please make sure that messages from nicet.org are NOT blocked by your email filters.**

Applicant's Statement of Understanding

Prior to signing this statement, you'll need to read NICET's Conditions of Application and NICET's Code of Ethics, both of which are included in the Test Application. After reading these materials, sign and date the form to indicate your agreement with the Statement of Understanding.

Applicants may opt to complete the Test Application (Candidate Information form and the Test Selection and Payment online). While the instructions may vary slightly for the online version of these forms, the requested information remains the same.



Section 2: Test Selection and Payment

Before applying for an exam, review program descriptions and certification requirements on NICET's website. Start at <http://www.nicet.org/become-certified/what-certifications-are-available/>, and click on a program name to visit the program's information page. There, you'll find information regarding the test content and references.

Examination Selection

Indicate the test(s) you wish to take by checking the box beside the test name.

For each exam you selected, indicate which 3-month eligibility window you prefer by entering the Window ID Number to the right of the selected test. The start date of the window must not be more than six months from the postmark date on the Test Application form.

Add the fees of your selected exams, and then write the sum in the "Total" box. Note: check NICET's website or call NICET at 888-476-4238 to ensure that you are using an up-to-date application which lists the current fee amounts.

Total Amount Due

If you are mailing your Test Application, then you must include a NICET examination fee voucher or a check or money order, payable to NICET, for the total amount due. Mail the form with the voucher, check or money order to:

NICET
c/o Bank of America
PO Box 418651
Boston, MA 02241-8651

to expedite: NICET
c/o Bank of America Lockbox Services
Lockbox 418651
MA5-527-02-07
2 Morrissey Blvd.
Dorchester, MA 02125



If you complete the Test Application online, then you may submit your exam fee payment by credit card.



Experience Application

Part I

Work History

Experience Application

The purpose of this form is to provide NICET with information about your work experience. You must submit a complete and detailed work history to be adequately evaluated for certification. Your write-up will be evaluated against the current criteria for the level of certification you are seeking. If sufficient experience is lacking, or if sufficient detail has not been provided, you will receive Conditional Decision Letter requesting additional information.

If you have previously submitted a complete and detailed work history to NICET, then you should submit only an update covering the time since your last submittal, unless otherwise requested by NICET.

Make several copies of the blank Work History form. A separate Work History form should be completed for each position held. Complete all blocks of information. Each piece of information has a role in the certification process.

Section 1 – Position Identification

What is a “position?” Every time your employer or job title changes, you have a new position and must complete a separate copy of the form. For example, if you move from the AAA Company to the XYZ Company, then you have taken a new position. Similarly, if you stay at the same company but your job title changes from Technician I to Technician II, then you have a new position that should be reported separately.

Section 2 - Time Allocation

Because some candidates’ scope of work covers a range of technical specialty areas, this form is prefilled with a variety of **system types**. Empty spaces labeled as “Other” are provided for types of systems that are not listed. If some of your work involves “integrated systems” (those that are pre-engineered with multiple functions or have a common control mechanism), these should also be listed separately from the types of systems that are involved in them. For example, “electronic special hazards systems” should be listed separately from special hazards systems that do not have an integrated fire detection system.

Section 3 – Detailed Description of Work Performed

Provide the details of what kind of work you are actually doing in regard to various systems/facilities/materials and responsibilities. What types of projects are you involved with? What work teams are you a part of and what is your role in each? How do you relate to other professionals, trades, and customers?

Keep a copy of your completed work history

Besides being a useful record for future interactions with NICET, a carefully prepared work history is a valuable career development tool.

If you’ve earned a degree in a directly related engineering technology program, you may be eligible for a work experience credit toward certification. Please refer to Policy 33. Work Experience Credit for Engineering Technology Degree (<http://www.nicet.org/about-us/policies/policy33/>).

If submitted without a fee payment, this form may be mailed to:

NICET Evaluation, 1420 King Street, Alexandria, VA 22314



Verification of Performance

A responsible and technically competent individual who is in a position to inspect and/or approve the applicant's work must verify that the candidate has demonstrated general competencies, specific accomplishments, and project work related to the certification.

NICET requires verification of competent performance of the Performance Measures listed in Part III of the application package. (Procedures for completing these are continued in the instructions for Part III.) Each individual who acts as a NICET candidate's verifier must complete the Verifier Data form for the candidate's records.

Verification Procedures

Choosing a Verifier: You must first secure one or more qualified individuals to act as your verifier(s). Your verifier should be your immediate supervisor **unless**:

- The applicant is either the owner of the business or the highest-ranking manager in the organization, or;
- The applicant's immediate supervisor is not technically knowledgeable in the specialty area.

In these cases, an alternate verifier must be found; one who has been in a position to inspect and/or approve the applicant's work. If you have questions about who may act as your verifier or how to proceed with this or other verification processes, please contact the NICET staff at 888-476-4238 (press "4") or at tech@nicet.org.

You may utilize more than one supervisor, past supervisor, or alternate verifier to cover the variety of performance measures to be verified.

While Part II collects information about the Verifier, Part III lists the program's Performance Measures by Level. First, identify those levels for which you must submit performance verification. This will include all levels in the program up to and including the level of certification that you are seeking.

Print your name and Candidate NICET ID Number at the top of the Performance Verification form. Then give the form(s), along with a copy of the "Verifier Instructions" (found on the following page in this instruction booklet) to each person who will be acting as your Verifier.

If submitted without a payment, the completed and signed Parts II and IIIs must be mailed to the following address:

NICET Evaluation
1420 King Street
Alexandria, VA 22314

NICET cannot approve any verifications until the Verifier's "Verifier Information" form has been received and approved.

Verifier Instructions

The Verifier plays a vital role in the process of evaluating candidates for certification. NICET asks that you treat this role with seriousness, integrity, and professionalism.

The appropriate forms should be provided to you by the candidate. You will need to complete Part II (Verifier's Data) and then verify Part III (Performance Verification).

Part II: Verifier Data: This form provides information about your qualifications and your relationship with the candidate. It must be submitted one time for each candidate whose performance you are verifying. After filling in the requested information, carefully read the "Verifier's Statement" and sign the document. Please mail the completed form to the following address:

NICET
1420 King Street
Alexandria, VA 22314

Part III: Performance Verification: The candidate's name and your name must be printed at the top of the form.

Part III contains the Performance Measures for the program, organized by certification level.

The question next to each Performance Measure asks if the candidate's job performance has demonstrated the capability required for proper performance of the task. Initial in the appropriate box. Read carefully the Statement of Verification and then, if you can, within your professional responsibility and judgment, attest to the statement in regard to the work of the candidate, complete and sign the Verification form (Part III).

If submitted without a fee payment, the completed Part III forms should either be:

mailed to:	NICET Evaluation 1420 King Street Alexandria, VA 22314	or faxed to:	NICET Evaluation 703-682-2756
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Experience Application

Part IV

Personal Recommendation

A current Personal Recommendation is a requirement for certification in all programs, but not necessarily all levels; check your program's requirements to see which levels require recommendation.

This recommendation is used by NICET as a current evaluation of overall competence and professional character and is valid for one year from the date of the recommender's signature. If approved, it will apply to any related program in which you test during that year.

This form must be completed by professionals who are familiar with the technical capabilities and background of the applicant and can attest to the technical quality, responsibility, and ethics demonstrated in the applicant's work experience. NICET prefers recommendations by licensed professional engineers, registered land surveyors, or NICET-certified engineering technologists and senior engineering technicians, but will also accept recommendations by other professionals such as graduate engineers, scientists, senior level technicians and technologists, fire marshals, code officials, or officials of other authorities having jurisdiction.

Recommendation and verification may NOT be performed by the same individual. Recommendations may NOT be submitted by relatives or subordinates of the applicant.

Print the candidate's name and NICET ID Number at the top of the two pages of the form. The remainder of the form is to be completed by the Recommender.

Section 1: Recommender's Personal Information

This section requests information about the identification and qualifications of the Recommender.

Section 2: Recommender's Relationship with the Candidate

This section asks how well the Recommender knows the candidate's work practices.

Section 3: Recommender's Evaluation of the Candidate

The recommender provides an overall recommendation of the candidate for engineering technician work, followed by a more specific assessment of the candidate's work practices and capabilities.

Section 4: Recommender's Statement

The recommender must read, sign, and date the Recommender's Statement.

Mailing the form

If submitted without payment, this form may be mailed to:

NICET Evaluation
1420 King Street
Alexandria, VA 22314



Experience Application

Part V

Major Project Write-Up

Major Project Write-up

At a program's highest level of certification, an additional requirement is typically your description and write-up of a complete project (or a section of a project) for which you held substantial responsibility.

The write-up must be a separate document that describes the purpose of the project, your role in the project, and the system involved in the project. Specific project requirements vary from program to program; more information related to your write-up is available in the guidelines listed in Part V of your Experience Application.

If submitted without payment, the Major Project Write-up form may be mailed to:

NICET Evaluation
1420 King Street
Alexandria, VA 22314



NICET ENGINEERING TECHNICIAN CERTIFICATION
Certification Application Package
Fire Alarm Systems



Basic Instructions

Certification candidates must submit the entire Certification Application Package, including the Test Application and the Experience Application. After a candidate passes a written exam requirement, his or her work experience will be evaluated by NICET.

At minimum, a candidate must submit the Test Application in order to schedule and sit for an exam. However, to prevent delays in certification, candidates are recommended to submit their completed Experience Application at the time they apply for the exam.

Each NICET Standard Model program has a specialized Certification Application Package, which can be found on NICET's website. Each Certification Application Package is comprised of the following parts:

Requirements for Certification

Test Application

Section I: Candidate Information

Section II: Payment Form

Experience Application

Part I: Work History

Part II: Verifier Data

Part III: Performance Verification

Part IV: Personal Recommendation (required at Levels III and IV)

Part V: Major Project Write-Up (required at Level IV)

Mail your application with payment to:

NICET
c/o Bank of America
PO Box 418651
Boston, MA 02241-8651

If you paid online or are submitting supplemental documentation that does not require payment send to:

NICET Evaluation, 1420 King Street, Alexandria, VA 22314

REMEMBER!

- **Ensure that you are submitting the correct application materials and fee payment. Access the current certification criteria and fee information at www.nicet.org.**
- **Make a copy of the entire application and keep it with your testing/certification records.**
- **Include name and identification number on every page of every part of the application.**



NICET ENGINEERING TECHNICIAN CERTIFICATION
Certification Application Package
 Fire Alarm Systems



Requirements for Fire Alarm Systems Certification

Level I	Level II	Level III	Level IV
Examination – Pass the:			
Level I exam	Levels I and II exams	Levels I, II, and III exams	Levels I, II, III, and IV exams
Performance Verification – Obtain supervisor verification of:			
All Level I Performance Measures	All Levels I and II Performance Measures	All Levels I, II, and III Performance Measures	All Levels I, II, III, and IV Performance Measures
Work History – Provide complete, detailed position descriptions and time allocations showing¹:			
A minimum of 3 months of technical experience with fire detection and signaling systems.	<p>A minimum of 2 years of fire detection and signaling systems experience, which MUST include:</p> <p>At least 12 months of fire alarm systems experience, including alarm and detection, notification, sprinkler monitoring, and interfaces and controls for agent releasing suppression systems (either agent or water-based systems) in any of the following roles/functions: installation, inspection, testing, commissioning, technical system estimating and sales, plans preparation, or maintenance.</p> <p>The 2 years MAY include up to 12 months of related experience².</p>	<p>The minimum required for Level II, PLUS 3 additional years (for a total of 5 years) of fire detection and signaling systems experience, which MUST include:</p> <p>At least 33 months of fire alarm systems experience, including installation, maintenance, inspection, testing, commissioning, technical system estimating and sales, plan preparation, code compliance review, project management, and/or technical business management. The three years must include field experience, team leadership, and at least one year in a fire alarm systems technical management role.</p> <p>The 3 years MAY include up to 3 months of related experience².</p>	<p>The minimum required for Level III, PLUS 5 additional years (for a total of 10 years) of fire detection and signaling systems experience, which MUST include:</p> <p>At least 45 months of fire alarm systems experience, including technical business management and/or or a management role in installation, maintenance, inspection, testing, commissioning, technical system estimating and sales, plan preparation, and/or code compliance review. The five years must include at least two years of overseeing fire alarm systems project management.</p> <p>The 5 years MAY include up to 15 months of related experience².</p>
Personal Recommendation – Obtain recommendation ratings showing a capacity for:			
<i>(not required)</i>	<i>(not required)</i>	Independent engineering technician responsibilities	Senior engineering technician responsibilities
Major Project – Provide a detailed description of a major project and your role in it showing:			
<i>(not required)</i>	<i>(not required)</i>	<i>(not required)</i>	Senior responsibility for a fire alarm system project of substantial complexity

¹ Time periods are full time equivalent.

² Related experience may include involvement in fire alarm or other code-driven and/or life safety electrical building systems work beyond the scope of the core experience defined above for this Level, including, but not limited to, low voltage systems, building electrical power or control systems, special hazards systems, or smoke control systems in the role/function of installation, inspection, testing, commissioning, maintenance, technical system estimating and sales, plans preparation, code compliance review, project management, or technical business management. It may also include providing full-time technical support or training to fire alarm systems technicians.



National Institute for Certification in Engineering Technologies®

A division of the National Society of Professional Engineers
www.nicet.org



NICET ENGINEERING TECHNICIAN CERTIFICATION Test Application - Section 1: Candidate Information

(Please print clearly or type)

ID Number

Mr. Ms. **Name:** _____
Last Name First Name Middle Initial

Name Change? If your name has changed since your last application, enter your previous name here: _____

Note: At your test site, you will be required to present a government-issued photo ID; the name on your ID must be identical to the name that you provide above. This name will also appear on all correspondence and any certification documents issued to you by NICET.

Indicate your status below. You must write your ID number in the space provided at the top right corner of each page of the application.

I have a NICET ID my number is: _____. **Note:** If you have achieved NICET certification, your NICET ID number is NOT the same as the certification number that appears on your certificate and wallet card. Your NICET ID number can be found on most of your personal NICET records. If you do not know your NICET ID number, please call NICET at 888-476-4238.

This is my first application.
First-time applicants must provide ONE of the government ID numbers requested below. In the Test Application Package and the Experience Application package, when a space is provided in the top right corner for a NICET ID number, please write your Government ID number. Once NICET has processed your test application, you will be issued a permanent NICET ID number.

- Social Security Number: _____
- Driver's License No.: _____ State: _____ Expiration date: _____
- Government-issued photo ID no.: _____ Issue date: _____ Expiration date: _____
Issuing agency: _____
- Passport No.: _____ Issuing country: _____ Issue date: _____

NICET reserves the right to require a photocopy of this ID to confirm the submitted information (name, ID number, address, signature).

Address Information

Home Address:

Street Apt.

City State Zip Code +4

When receiving items by mail, which address do you prefer?

Business Home

Present Employer:

Company Name

Business Address:

Street

City State Zip Code +4

Present Position Title: _____

Electronic Contact Information and Preferences

Phone Numbers Business: _____ Home: _____
Mobile/cell: _____ Fax: _____

Email Addresses Business: _____
(Please print carefully) Home: _____

May we contact you about NICET business by:

- **Email?** yes no **If yes, preferred email address?** Business Home
If you permit NICET to contact you by email, then your testing authorization notice and other correspondence about your upcoming exam will be delivered via email. Please ensure that your e-mail filter can accept messages from the domain @nicet.org
- **Fax?** yes no

Applicant's Statement of Understanding

I certify that the information given on this page is accurate and current, that NICET may use the information as indicated to identify me and to send me information, and that it is my responsibility to notify NICET should any of the information provided on this page change. I have read, understood, and accept the NICET Conditions of Application. I have read, understood, and agree to abide by the NICET Code of Ethics.

Signature

Date

Conditions of Application for Technicians

1. **NICET has established policies, procedures, and fees** that govern certification decisions, the uses of certification, and interactions with applicants and certificants. These policies, procedures, and fees may be changed by NICET at any time without prior notification. These policies, procedures, and fees are freely available on NICET's website (www.nicet.org). Each person who signs any NICET application accepts and agrees to follow these policies and procedures in all dealings with NICET.
2. **Each NICET certification may have multiple criteria** that must be met by a candidate in order for the certification to be conferred. These criteria may be changed by NICET at any time without prior notification. Current criteria, along with general information about NICET and its certification programs, are available from NICET's website (www.nicet.org). Individuals who are not resident in, or working in, the United States or its territories may not be eligible for certification. These individuals must contact NICET before applying and may be required to follow additional procedures, with additional fees, to demonstrate that they meet the criteria.
3. All applicants, candidates, and certificants **must comply with the NICET Code of Ethics** (see previous page) and follow generally accepted ethical practices at all times. For example, acquiring and/or providing specific knowledge of test questions prior to testing, or acquiring or providing assistance during an examination; intentionally providing information to NICET that is incomplete, or inaccurate; or knowingly providing technical services in an unsafe, inaccurate, or unprofessional manner may subject the offender to any number of sanctions, including legal prosecution.
4. NICET reserves the right to **deny, suspend, or revoke any certification** (pending or awarded) should the Institute determine that an applicant, candidate, or certificant has misrepresented information, violated a NICET policy or procedure, or violated the NICET Code of Ethics.
5. Maintenance of **current accurate contact information** is the responsibility of the applicant. NICET requires accurate contact information to communicate to the applicant important information related to testing, certification, and recertification.
6. **The NICET name, logo, and certification mark are the property of NICET and may not be used without the expressed written permission of the Institute.**
7. **NICET approval letters, wallet cards, and certificates** are issued to certificants for their use but remain NICET property at all times and may be recalled by the Institute at any time without prior notification.
8. **NICET test questions and examinations** are the copyrighted property of NICET. Any copying, sharing, or distribution of the content of those test questions and/or examinations constitutes copyright infringement and is a violation of U. S. federal law. Violators will be subject to suspension or revocation of NICET status and/or prosecution to the full extent of the law.
9. Each person who signs a NICET application grants NICET the **right to contact individuals** named in application materials or other communications with NICET to confirm the accuracy of information provided by the applicant.
10. **NICET certification must be used, represented, and displayed** in accordance with NICET policies. NICET certification does not constitute a license to practice engineering.
11. Each person who signs a NICET application grants NICET the **right to publish their name, address, and certification** information in its certification directories and to provide that information to others in response to bonafide inquiries. Test scores will be given to the test-taker only, unless the test-taker submits a release form authorizing NICET to give the scores to another specified individual.
12. The applicant's **Social Security number or government-issued ID number** is required for identification purposes. It will be used for NICET internal use ONLY and will not be given to anyone else without legitimate legal reason.
13. **An applicant's test records will be purged** for an individual certification area after five years if no further testing is completed in that certification area and the individual is not certified in that area. If the applicant has active certifications or is actively testing in other certification areas, the records for those other certification areas will not be affected.
14. **An applicant with a disability** as defined in Title III of the Americans with Disabilities Act who may be placed at a disadvantage when taking a NICET certification examination must advise NICET, in writing, of their needs by including a letter or other appropriate documentation with their application. NICET will respond by telephone or other means to make appropriate accommodations.
15. **All certifications expire** three years after an individual's initial certification is awarded and every third year thereafter. Recertification will be based on the certificant's activities during that three-year period. Requirements and fees may be found in NICET's Continuing Professional Development Policy (See www.nicet.org). Several months before expiration, a recertification application will be sent to the last postal or email address provided by the certificant. If the application with payment is not received by NICET prior to the expiration date, the certificate will expire. Reinstatement to Active Status will involve an additional fee. If reinstatement has not occurred three years after the expiration date, all certifications and all testing records will be purged. Payment of new testing and/or application fees does not substitute for payment of the full recertification fee when due. Additionally, obtaining a higher-level NICET certification does not alter or "reset" the originally established three-year certification period.

NICET Code of Ethics

NICET-certified engineering technicians and technologists recognize that the services they render have a significant impact on the quality of life for everyone. As they perform their duties and responsibilities on behalf of the public, employers, and clients, they shall demonstrate personal integrity and competence. Accordingly, certificants shall:

1. Have due regard for the physical environment and for public safety, health, and well being. If their judgment is overruled under circumstances where the safety, health, property, or welfare of the public may be endangered, they shall notify their employer, client, and such other authority as may be appropriate. An employee shall initially express those concerns to the employer.
2. Undertake only those assignments for which they are competent by way of their education, training, and experience.
3. Perform their duties in an efficient and competent manner with fidelity and honesty.
4. Admit and accept their own errors when proven wrong and never distort nor alter the facts in an attempt to justify their decisions.
5. Avoid conflicts of interest whenever possible. When unavoidable, they shall disclose to their employer or client, in writing, any action that might create the appearance of a conflict of interest.
6. Avoid receiving and granting bribery in all its forms.
7. Strive to maintain their proficiency by updating their technical knowledge and skills in engineering technology.
8. Not misrepresent or permit misrepresentation of their own or their associate's academic or professional qualifications nor exaggerate their degree of responsibility for any work.
9. Not reveal facts, data, or information obtained in connection with services rendered without prior consent of the client or employer except as authorized by law.



Candidate Name: _____

NICET ID No.: _____



**NICET ENGINEERING TECHNICIAN CERTIFICATION
Test Application - Section 2:
PAYMENT FORM**

Examination Selection		
For each exam selected, indicate the Window ID number of your preferred 3-month testing window (not to be more than six months from the postmark date on this application) from the Eligibility Schedule to the right. The fee includes an experience evaluation if the candidate passes the written exam.		
	Window ID	Fee
Electrical Power Testing		
<input type="checkbox"/>	Level I Exam (10027)	\$210
<input type="checkbox"/>	Level II Exam (10028)	\$270
<input type="checkbox"/>	Level III Exam (10029)	\$325
<input type="checkbox"/>	Level IV Exam (10030)	\$375
Inspection and Testing of Fire Alarm Systems		
<input type="checkbox"/>	Level I Exam (10035)	\$210
<input type="checkbox"/>	Level II Exam (10036)	\$270
Fire Alarm Systems		
<input type="checkbox"/>	Level I Exam (10007)	\$210
<input type="checkbox"/>	Level II Exam (10008)	\$270
<input type="checkbox"/>	Level III Exam (10009)	\$325
<input type="checkbox"/>	Level IV Exam (10010)	\$375
Inspection and Testing of Water-Based Systems		
<input type="checkbox"/>	Level I Inspection & Testing Fundamentals (10017)	\$155
<input type="checkbox"/>	Level I Work Practices Exam (10018)	\$155
<input type="checkbox"/>	Level II Inspection Exam (10019)	\$165
<input type="checkbox"/>	Level II Testing Exam (10020)	\$165
<input type="checkbox"/>	Level II Work Practices Exam (10021)	\$165
<input type="checkbox"/>	Level III Inspection & Responsibilities Exam (10022)	\$210
<input type="checkbox"/>	Level III Advanced Testing Exam (10023)	\$210
Water-Based (formerly Automatic Sprinkler) Systems Layout		
<input type="checkbox"/>	Level I Exam (10011)	\$210
<input type="checkbox"/>	Level II Exam (10012)	\$270
<input type="checkbox"/>	Level III General Plan Preparation Exam (10013)	\$265
<input type="checkbox"/>	Level III Hydraulics & Water Supply Exam (10014)	\$265
<input type="checkbox"/>	Level IV Exam (10016)	\$375
Special Hazards Systems		
<input type="checkbox"/>	Level I Exam (10031)	\$210
<input type="checkbox"/>	Level II Exam (10032)	\$270
<input type="checkbox"/>	Level III Exam (10033)	\$325
<input type="checkbox"/>	Level IV Exam (10034)	\$375
Video Security Systems Technician		
<input type="checkbox"/>	Level I Exam (10001)	\$210
<input type="checkbox"/>	Level II Exam (10002)	\$270
<input type="checkbox"/>	Level III Exam (10003)	\$325
<input type="checkbox"/>	Level IV Exam (10004)	\$375
Video Security Systems Designer		
<input type="checkbox"/>	Level I Exam (10005)	\$270
<input type="checkbox"/>	Level II Exam (10006)	\$270
Total:		

Eligibility Schedule			
Window ID	Window Period	Window ID	Window Period
1	January/February/March	7	July/August/September
2	Feb/March/Apr	8	August/September/October
3	March/April/May	9	September/October/November
4	April/May/June	10	October/November/December
5	May/June/July	11	November/December/January
6	June/July/August	12	December/January/February

You can apply for your test online.

You can submit payment for this application at NICET's website. Visit www.nicet.org, and login to your account. From there, you can submit/update your contact information, select your test, and pay with a credit card.

Payment and mailing information

Payment of the total Examination fee in the form of a check or money order made payable to NICET, must accompany this application form. Any Certification Application that includes a check or money order must be sent to NICET at:

Via U.S. Postal Service:
NICET
c/o Bank of America
PO Box 418651
Boston, MA 02241-8651

Via FedEx, UPS:
NICET
c/o Bank of America Lockbox Services
Lockbox 418651
MA5-527-02-07
2 Morrissey Blvd.
Dorchester, MA 02125

Any Certification Application forms that do not include a payment must be sent to:

Evaluations
NICET
1420 King Street
Alexandria, VA 22314

Don't forget to:

- Sign and Date the Applicant's Statement of Understanding in Section 1.
- Enclose your payment.
- Keep a copy of this application for your records.
- Mail all sections of this application together.

Express Evaluation (optional)

To speed up your experience evaluation, please contact NICET at 888-476-4238, Option 4, to ask for Express Evaluation instructions and arrange for electronic payment of the Express Evaluation fee of \$275 per subfield per Level. Express evaluations will be completed within 10 business days of the receipt of payment.

NICET OFFICE USE ONLY						
Employer ID	Postmark Date	Spec. Cont.	ADA	App #	Lockbox #1	Amt. Paid



Experience Application Part 1: Work History Sections 1, 2, and 3



INSTRUCTIONS and CHECKLIST

First-time applicants (and those specifically directed by NICET):

For the span of your entire career, complete one form **consisting of at least sections 1, 2, and 3** for each position held at each employer **and** for any period within a given position in which your responsibilities changed significantly.

Returning applicants

Follow the instructions above solely for the period of time from the end date of your last work history submittal to the date you submit a new application.

Section 1 – Position Identification

Section 2 – Time Allocation

Break out your experience into all applicable technical areas in which you worked while in the position listed in Section 1.

Section 3 – Detailed Description of Work Performed

For each Subfield / Technical Area (S/TA) into which you divided your work in Section 2 – Time Allocation, provide detailed descriptions, in your own words, of the work you performed.

- Detail the technical and supervisory nature of the work.
- Describe the types of tasks you performed and the types and scopes of projects on which you worked.
- Detail the types of materials, tools, machinery, systems, and system components with which you worked.

For all gaps in your work histories (e.g., unemployment periods, winter breaks, and so on.

In Section 2, line item “Other”, write “Gap” and in Section 3 on page 2 of 3 provide the reason for the gap.

If you are submitting a work history amendment you must submit the following:

- a signed and dated letter of explanation for the changes you made to your account
- the amended work history forms countersigned by your verifier, who by so doing indicates his or her attestation to the accuracy and completeness of the amended account

Work History Form Checklist – Do:

- Submit Sections 1, 2 and 3 of the form of the form for each position held.
- Ensure that the forms are completely and accurately filled out for the period from one submittal to the next.
- Make sure to provide the “Dates Positions Held” including **month** and **year**.
- Provide in Section 3, corresponding detailed descriptions for each Subfield / Technical Area (S/TA) in which your experience was broken out in Section 2, using your own words.
- Sign and date each page as indicated. Unsigned documents will not be accepted.

Work History Form Checklist - Do Not:

- Submit official position descriptions, resumes, testimonials, and marketing materials in lieu of completing Section 3 to describe your responsibilities.
- Submit amended work experience accounts without a signed letter of explanation for the changes in your work history unless directed to do so by NICET.
- Have verifier countersign work history forms unless directed by NICET to do so.
- Submit forms of your own design.

All information provided in candidate’s application is cross-evaluated with documents on file to verify the following:

- consistency of work experience accounts
- appearance of signatures and initials
- appropriateness of verifier and recommender

and, as needed, through third-party entities including the following:

- licensing bodies and authorities having jurisdiction
- previous and current employers
- other sources of official documentation

Note: Work experience documents submitted with applications to test are placed in the queue for evaluation when a candidate meets the exam requirements for a given subfield and level. Work experience documents received in response to Conditional Decision Letters (CDLs) are placed in the queue for evaluation upon their receipt. In both cases the documents are evaluated in the order they are placed in their respective queues. (first-come, first-served)

Based on the present workload, it may take up to 90 days from the date a candidate meets an exam requirement for work experience documents to be evaluated and up to 60 days from date of receipt for CDL responses to be evaluated.



Candidate: _____ NICET ID No: _____



Experience Application - Part I: Work History

Section 1 – Position Identification

Employer:	Location of employer (city, state):	Name of supervisor (s):
Candidate's Position:	Dates position / responsibilities held:	Full-time <input type="checkbox"/> Part-time <input type="checkbox"/> Seasonal <input type="checkbox"/>
President / owner / co-owner	From: Month _____ Year _____ To: Month _____ Year _____	If part-time, hours per week: _____ If full-time seasonal, months worked per season ____

Section 2 – Time Allocation

Subfield / Technical Area (S/TA)	Description	Time devoted to S/TA (%)
Fire Alarm Systems (FA)	Fire alarm systems specific activities including project management, system layout (plan preparation), equipment selection, installation, troubleshooting, servicing, and technical sales.	%
Fire Alarm Systems Inspection / Testing (ITF)	Fire alarm systems work limited to performing, planning, and coordinating the inspection and testing of fire alarm systems.	%
Special Hazards Systems (SH)	Special hazards suppression systems specific activities including project management, system layout (plan preparation), equipment selection, installation, acceptance testing, troubleshooting, servicing, and sales.	%
Water-based Fire Protection Systems Layout (SP)	Water-based fire protection systems layout specific activities including project management, system layout (plan preparation), hydraulic calculations, site evaluation, equipment selection, plan approval, and sales.	%
Water-based Fire Protection Systems Inspection / Testing (ITS)	Specifically performing and managing the inspecting and testing of existing systems according to NFPA 25. Does not include work performed during installation and final testing / commissioning of new systems.	%
Water-based Fire Protection Systems Fitting / Fabrication (SF)	The performance and supervision of fitting, fabrication, maintenance, tests and inspections performed during installation and final testing / commissioning of new water-based fire protection systems or additions to systems.	%
Other Fire Protection Work (OFP)	This includes work with portable extinguishers, standpipe hoses and nozzles, municipal and private fire hydrants, fire-stopping, and firefighter duties.	%
Video Security System Technician (VST)	Video security systems specific activities including management, installation, preventative and corrective maintenance, tests and inspections, troubleshooting, and servicing.	%
Video Security System Designer (VSD)	Video security systems design and plan preparation specific activities including management, plan preparation, site evaluation, equipment selection, plan approval, and technical sales.	%
Industrial Instrumentation (I/I)	Industrial instrumentation work including management, design assistance, installation and maintenance of industrial measurement and control systems.	%
Audio Systems (AS)	Audio system specific activities including the layout, installation, and maintenance of audio systems for commercial, industrial, and large space applications.	%
Electrical Power Testing (EPT)	Specifically testing electrical power equipment, cabling, and systems operating in the range of 600 V and above. Does not include general wireman duties.	%
Other Low / Limited Voltage Systems (LV)	Work with non-fire alarm low/ limited voltage systems such as security, access control, nurse call, building control, computer networking, and emergency lighting.	%
Other Electrical Systems (GE)	General electrician work - residential and commercial wiring of loads including light machinery, lighting, HVAC components, and distribution panels and outlets.	%
Other	Specify: Gap:	%
The sum of all the values in this column cannot exceed 100%.		100%

AFFIDAVIT: I certify that the above is a true and complete breakout of the time I spent working in the subfields/technical areas indicated for the listed position. I understand that provision of misinformation is in violation of the NICET Code of Ethics and policy, and can result in the rejection of this application and/or the revocation of any certificate NICET has issued in my name.

Applicant's Signature

Date

Verifier's Signature
(Only if directed by NICET)

Sections 1, 2, and 3 must be filled out for each position held.

All information provided is subjected to cross-confirmation with documents on file and as needed through third-party entities including licensing bodies, previous and current employers, and other sources of official documentation.



Candidate: _____ NICET ID No: _____



Experience Application - Part I: Work History
Section 3 – Detailed Description of Work Performed

NICET cannot accept submissions provided on forms or in formats other than our own.

Provide separate entries for each S/TA for which you made an entry in Section 2 using the designated abbreviations. If supplementary space is needed use additional pages of Section 3.

S/TA	** Example**	Detailed Description of Technical Work Performed	** Example**
SF		Supervised and performed the installation, corrective maintenance, under construction testing, and commissioning of new fire sprinkler systems and system additions. Systems installed included wet, dry, pre-action, deluge, and foam. Components installed and maintained included piping, pipe hangers, earthquake bracing, alarm check valves, various cutout valves, flow sensors, FD connections, standpipe hose connections, jockey and fire pumps, and backflow preventers. Installed systems of 25 – 600 heads in a variety of building types including residential and commercial high rise, mercantile, manufacturing, school, and military.	
S/TA		Detailed Description of Technical Work Performed	
S/TA		Detailed Description of Technical Work Performed	
S/TA		Detailed Description of Technical Work Performed	
S/TA		Detailed Description of Technical Work Performed	

AFFIDAVIT: I certify that the above is a true and complete breakout of the time I spent working in the subfields/technical areas indicated for the listed position. I understand that provision of misinformation is in violation of the NICET Code of Ethics and policy, and can result in the rejection of this application and/or the revocation of any certificate NICET has issued in my name.

Applicant's Signature

Date

Verifier's Signature
(Only if directed by NICET)

Sections 1, 2, and 3 must be filled out for each position held.

All information provided is subjected to cross-confirmation with documents on file and as needed through third-party entities including licensing bodies, previous and current employers, and other sources of official documentation.



Candidate: _____

Candidate NICET ID No.: _____



NICET ENGINEERING TECHNICIAN CERTIFICATION Experience Application, Part II: Verifier Data

(Please print legibly or type)

To be completed by the Verifier only

Name: _____ Title: _____

Current employer: _____

Daytime phone: _____ Email: _____

Professional licenses/certifications: _____

My observation of the candidate occurred during my employment at:

Current employer

Previous employer: _____

My observation of the candidate occurred as a part of my role as:

Candidate's direct supervisor

Candidate's indirect supervisor/manager responsible for the candidate's work results/outcomes

Engineer on one of the candidate's projects

Governmental authority: _____

Contract supervisor for: client, or general contractor

Other: _____

I have (Check all that apply):

directly observed the candidate's work.

directly observed the results of the candidate's work.

received reliable reports from those who have directly observed the candidate's work.

observed the candidate's ability to supervise others who are doing this work.

During what time period were you in the above-indicated relationship with the candidate?

From ____ / ____ to ____ / ____
Mo. Yr. Mo. Yr.

Verifier's Statement:

I certify that:

- *I understand and have carefully considered each performance measure that I have verified or will verify.*
- *I have not verified, and will not verify, any performance measure that I have not either personally observed or received reliable and specific reports from one who has personally observed the performance.*
- *I have not signed, and will not sign, any verification statement on a form that does not have the candidate's name at the top.*
- *I have not asked nor will I ask anyone to sign my name in my stead.*

Signature _____ Date _____ Initials _____

Mail the completed Experience Application Package with payment to: NICET, c/o Bank of America, PO Box 418651, Boston, MA 02241-8651
If this form supplements a previously-paid experience evaluation, send it to: NICET Evaluation, 1420 King Street, Alexandria VA 22314



Candidate: _____ Verifier: _____

NICET ENGINEERING TECHNICIAN CERTIFICATION
Experience Application, Part III: Performance Verification
Fire Alarm Systems

Instructions to the Verifier: For each performance measure listed, please write your initials in the column at the right if you have witnessed that capability in the candidate's performance of his/her job.

Level I Performance Measures		
The candidate has repeatedly demonstrated:		Verifier's Initials
0303-1101	awareness of job site safety procedures.	
0303-1102	an ability to reliably identify common fire alarm systems equipment and related materials as directed.	
0303-1103	an ability to perform <u>at least one of the following</u> : <ul style="list-style-type: none"> • select the appropriate simple hand and power tools for a given task and use them safely; or, • select the appropriate software or drafting tools for a given task and use them properly. 	
0303-1104	an ability to perform <u>at least one of the following</u> : <ul style="list-style-type: none"> • proper installation techniques for conduit, wire, and junction boxes related to fire alarm systems; or, • proper application of conduit, wire, and junction boxes related to fire alarm systems. 	

Statement of Verification: I verify that I have a detailed personal knowledge of the candidate's performance related to each of the performance measures that I have initialed above and that, in my best professional judgment and according to government and industry standards and best practices, each initialed statement is true and has been repeatedly and consistently demonstrated.

Signature: _____ Date: _____

Level II Performance Measures		
The candidate has repeatedly demonstrated:		Verifier's Initials
0303-3101	ethical behavior on the job, consistent with the NICET Code of Ethics.	
0303-3102	an ability to give complete and accurate reports on his or her activity, progress, and problems encountered.	
0303-3103	an ability to train end users in the operation and basic maintenance of the installed fire alarm system.	
0303-3104	an ability to direct the work of another individual on a fire alarm system job.	
0303-3105	an ability to perform <u>at least one of the following</u> : <ul style="list-style-type: none"> • mount control equipment, peripheral devices, and related hardware in conformance with manufacturers' specifications; or, • document the correct placement of control equipment, peripheral devices, and related hardware in conformance with manufacturers' specifications. 	
0303-3106	an ability to perform <u>at least one of the following</u> : <ul style="list-style-type: none"> • connect test equipment such as voltage, current, and resistance meters in order to test and diagnose system problems; or, • identify the appropriate calculations, codes and standards, and testing lab ratings required to prepare plans in accordance with project specifications. 	
0303-3107	an ability to perform <u>at least one of the following</u> : <ul style="list-style-type: none"> • routine installations of basic fire alarm systems following the project plans or shop drawings without immediate supervision; or, • prepare basic documentation such as drawings and submittals, quotations, inspection reports, and record of completion reports in conformance with project specifications and applicable codes and standards. 	

Statement of Verification: I verify that I have a detailed personal knowledge of the candidate's performance related to each of the performance measures that I have initialed above and that, in my best professional judgment and according to government and industry standards and best practices, each initialed statement is true and has been repeatedly and consistently demonstrated.

Signature: _____ Date: _____

Note: Each verifier must submit a "Verifier Data" form for this candidate.
Performance verification may be provided by a single verifier or a combination of verifiers.

Mail the completed Experience Application Package with payment to: NICET, c/o Bank of America, PO Box 418651, Boston, MA 02241-8651
 If this form supplements a previously-paid experience evaluation, send it to: NICET Evaluation, 1420 King Street, Alexandria VA 22314



Candidate: _____ Verifier: _____

NICET ENGINEERING TECHNICIAN CERTIFICATION
Experience Application, Part III: Performance Verification
 Fire Alarm Systems

Instructions to the Verifier: For each performance measure listed, please write your initials in the column at the right if you have witnessed that capability in the candidate's performance of his/her job.

Level III Performance Measures

<i>The candidate has repeatedly demonstrated an ability to:</i>		Verifier's Initials 
0303-5101	prepare or review bid or layout packages to meet the specifications and requirements of clients, design professionals, and AHJs.	
0303-5102	identify site conditions relevant to fire alarm system layout, and correctly identify the occupancy types and codes and standards involved.	
0303-5103	create or review fire alarm system shop drawings (including power supply) to meet device requirements, job specifications, and codes and standards.	
0303-5104	communicate, in writing, technical information that is clear and accurate.	
0303-5105	identify and implement contractual obligations.	
0303-5106	develop and implement an installation strategy, including resolution of on-site scheduling conflicts and issues with other trades and project stakeholders.	
0303-5107	identify fire stopping requirements that meet applicable codes and standards.	
0303-5108	plan and oversee a complete and successful system commissioning, including documentation of test completion and creation of as-built drawings.	
0303-5109	select and correctly use computer applications for programming a fire alarm system.	
0303-5110	determine whether a specific device will meet codes, standards, and project specifications.	
0303-5111	identify appropriate test procedures to effectively troubleshoot and repair system faults.	
0303-5112	recognize a skill deficiency and recommend appropriate training.	
0303-5113	directly manage two or more simultaneous fire alarm system activities, meeting time, budget, and technical requirements.	
0303-5114	monitor work practices to maintain safety and comply with environmental codes.	
0303-5115	engage in work practices that consistently comply with the NICET Code of Ethics.	

Statement of Verification: I verify that I have a detailed personal knowledge of the candidate's performance related to each of the performance measures that I have initialed above and that, in my best professional judgment and according to government and industry standards and best practices, each initialed statement is true and has been repeatedly and consistently demonstrated.

Signature: _____ Date: _____

Note: Each verifier must submit a "Verifier Data" form for this candidate.
Performance verification may be provided by a single verifier or a combination of verifiers.

Mail the completed Experience Application Package with payment to: NICET, c/o Bank of America, PO Box 418651, Boston, MA 02241-8651
 If this form supplements a previously-paid experience evaluation, send it to: NICET Evaluation, 1420 King Street, Alexandria VA 22314



Candidate: _____ Verifier: _____

NICET ENGINEERING TECHNICIAN CERTIFICATION
Experience Application, Part III: Performance Verification
 Fire Alarm Systems

Instructions to the Verifier: For each performance measure listed, please write your initials in the column at the right if you have witnessed that capability in the candidate's performance of his/her job.

Level IV Performance Measures

<i>The candidate has repeatedly demonstrated an ability to:</i>		Verifier's Initials 
0303-7101	prepare a complete, accurate, and realistic response to an RFP/RFQ.	
0303-7102	develop contractual criteria for fire alarm system projects that meet legal and AHJ requirements.	
0303-7103	evaluate the requirements for a new or existing fire alarm system and its components, and to provide a clear rationale, based on functionality, codes and standards, and cost, for either replacement or repair of any deficiencies.	
0303-7104	develop and accurately document project budgets that meet the client's needs, contractual obligations, codes and standards, and the company's resource constraints.	
0303-7105	coordinate multiple project plans and schedules to meet project objectives, minimize conflict with other trades, and optimize use of company resources.	
0303-7106	communicate with design professionals and AHJs while maintaining a professional bearing and demonstrating subject matter expertise.	
0303-7107	review shop drawings for technical accuracy, including, but not limited to, power and battery calculations and component compatibility.	
0303-7108	establish clear and correct guidelines for the selection of system components that will meet applicable criteria*.	
0303-7109	recognize and mitigate potential threats to a fire alarm system's functionality or reliability from severe environments, nuisance alarms, or other sources.	
0303-7110	accurately evaluate the completion of a fire alarm system installation project to assure that applicable criteria* have been met.	
0303-7111	coordinate and oversee multiple project teams, assuring that each meets budget, schedule, and other contractual requirements, as well as applicable code requirements.	
0303-7112	monitor the general and job-specific capabilities of staff, to assure that they have received adequate training on technical, safety, and communication issues.	
0303-7113	accurately report technical information and standards interpretations, both verbally and in writing.	
0303-7114	engage in work practices that consistently comply with the NICET Code of Ethics.	
*applicable criteria" may include codes and standards, AHJ requirements, contractual obligations, project specifications, or client needs, as appropriate.		

Statement of Verification: I verify that I have a detailed personal knowledge of the candidate's performance related to each of the performance measures that I have initialed above and that, in my best professional judgment and according to government and industry standards and best practices, each initialed statement is true and has been repeatedly and consistently demonstrated.

Signature: _____ Date: _____

Note: Each verifier must submit a "Verifier Data" form for this candidate.
Performance verification may be provided by a single verifier or a combination of verifiers.

Mail the completed Experience Application Package with payment to: NICET, c/o Bank of America, PO Box 418651, Boston, MA 02241-8651
 If this form supplements a previously-paid experience evaluation, send it to: NICET Evaluation, 1420 King Street, Alexandria VA 22314



Candidate: _____

Candidate's NICET ID No: _____

NICET ENGINEERING TECHNICIAN CERTIFICATION

Experience Application, Part IV: Personal Recommendation

(Please print legibly or type)

Section 1 – Recommender's Personal Information

This form must be completed by a professional who is familiar with the technical capabilities and background of the applicant and can attest to the technical quality, responsibility, and ethics demonstrated in the applicant's work experience. NICET prefers recommendations from licensed professional engineers, registered land surveyors, or NICET-certified engineering technologists and senior engineering technicians, but will also accept recommendations from other professionals such as graduate engineers, scientists, senior level technicians and technologists, fire marshals, code officials, or officials of other authorities having jurisdiction.

Name: _____ Phone Number: (____) ____ - _____

Position Title: _____

Company Name: _____

My highest degree is: ____ in: _____ field from: _____ school

I am (registered, certified, licensed) as: _____ by: _____

Registration/Certification/License Number: _____ Date granted: _____

Describe your technical background: _____

The person who completes this recommendation form cannot also provide Performance Measure verifications for this candidate. NICET will not accept recommendation forms that are completed by relatives or subordinates of the applicant.

Section 2 – Recommender's Relationship with the Candidate

Familiarity with the candidate's character, abilities, and accomplishments:

- ___ Unfamiliar – little relevant interaction
- ___ Somewhat familiar – occasional interaction
- ___ Reasonably familiar – regular interaction
- ___ Very familiar – frequent interaction

Length of time that you have known the candidate: _____ years and _____ months

Nature of your relationship with the candidate:

- ___ association within the company
- ___ association through professional activities
- ___ association through contracting activities
- ___ other: _____

Describe your professional relationship with the applicant: _____



Candidate: _____

Candidate's NICET ID No: _____

NICET ENGINEERING TECHNICIAN CERTIFICATION Experience Application, Part IV: Personal Recommendation

Section 3 – Recommender's Evaluation of the Candidate

Role of the Engineering Technician:

Apply well-defined and proven procedures, methods, and practices, derived from established or real-time engineering guidance, to specific technical assignments, and do so in an ethical and responsible manner.

Regarding the role described in the box above:

I do not recommend this candidate for this role.

I recommend this candidate for this role because he/she has (check all that apply):

made substantial progress toward independent capability in this role.

fulfilled this role, demonstrating good, Independent technical judgment and self-management.

fulfilled this role, demonstrating a capability to resolve complex technical issues and lead a team of technicians.

Please indicate by placing a mark in the one most appropriate box to the right of each statement, whether, and to what degree, the candidate demonstrates each of the following attributes.

	Never	Some-times	Mostly	Always	Don't know
The candidate consistently works hard to achieve the objectives of his/her job.					
The candidate is attentive to his/her own work and to the work of others that impacts his/her own responsibilities.					
The candidate shows initiative and equanimity in dealing with new jobs, changed circumstances, or problems, and accepts responsibility for outcomes.					
The candidate organizes and directs the activities of work teams to achieve their objectives in a timely and cost-effective manner.					
The candidate develops and maintains cordial and goal-oriented relationships with work team members and with clients.					
The candidate encourages, uses, and appreciates the ideas and initiative of others.					
The candidate communicates clearly and effectively with work team members and clients.					
The candidate's actions are ethical and his/her statements are truthful and do not conceal or hold back relevant information.					

Additional comments or observations on the candidate's capabilities, responsibility, and achievements:

Section 4 – Recommender's Statement

I attest that all information I have provided is, to the best of my knowledge, true. I understand that falsifying information on this form can affect my right to serve as a recommender or a verifier for other NICET certification candidates and can result in my own NICET certification(s) being revoked.

Name of Recommender (please print)

Signature of Recommender

Date

Incomplete recommendation forms will not be accepted by NICET.

This form expires one year after being signed by the recommender.

Mail the completed Experience Application Package with payment to: NICET, c/o Bank of America, PO Box 418651, Boston, MA 02241-8651
If this form supplements a previously-paid experience evaluation, send it to: NICET Evaluation, 1420 King Street, Alexandria VA 22314



NICET ENGINEERING TECHNICIAN CERTIFICATION Experience Application, Part V: Major Project Fire Alarm Systems

Each candidate for certification at Level IV in Fire Alarm Systems must submit a write-up (in narrative/essay format) of their role in a large and technically complex fire alarm system project demonstrating senior-level engineering technician capabilities and responsibilities.

General Guidelines

The Major Project Write-up must be a concise, detailed, 2 to 3 page written description of the candidate's role in one* major fire alarm system project.

The major project write-up must be type-written, identified by the candidate's name and NICET ID number, and on separate pages from other application documents. (The write-up is not a part of the work history in Part I of the application.)

The write-up must specifically identify the project and your role/title in it.

The candidate must be the sole author of the major project write-up. (Official job or project descriptions or testimonials from others will not be accepted.)

The project must be recent (within the last 4 years) and must have been completed.

Your involvement in the project must include a range of fire alarm systems activities*.

The candidate's involvement in the project must demonstrate independent, senior-level engineering technician work, including delegation of responsibilities and duties.

The write-up must reflect senior-level understanding of the nature and importance of the various aspects of the system and the project, and the roles of the various people involved in the completion and acceptance of the project.

Guidelines for Description of the Project

The write-up should address each of the following in a detailed narrative:

- The location of the project, the type of facility, and the purpose or objective of the project
- Size of the project (square footage, number of stories, installation time, etc.)
- Time period (start/stop dates, dates of candidate's involvement, amount of time candidate spent on project)
- Scope of fire alarm system project (risers, circuits, interconnections, spacing of components, etc.)

Guidelines for Description of the Candidate's Role

The write-up should address each of the following in a detailed narrative:

- Supervisory or oversight responsibilities (number of people, the tasks they performed, and your relationship to them)
- Range/scope of activities and role in each activity (hazard analysis, design calculations, approvals, proposals, system installation, check-out and final approval test, etc.)

**Note: If all of these activities cannot be documented for a single project, they may be accumulated via several more narrowly focused projects.*

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Fire Alarm Systems Certification

Level I Content Outline

The skills and knowledge listed under each task are suggestive of those involved in that task, but are not intended to constitute an exhaustive listing.

1.1 Installation Tasks

Questions related to these tasks make up 77–82% of the exam.

1.1.1 Properly mount and connect fire alarm system components.

Knowledge:

- Representation of system components, cabling, and dimensions on system drawings
- Terminology related to basic components and installation operations
- Roles of codes and standards in fire alarm systems work
- Scopes of the IBC, IFC, and IRC
- Scopes of NFPA 1 and 101 codes
- Scopes of NFPA 70 and 72 standards
- Types of fire alarm systems and associated devices
- Tools required for mounting and connecting fire alarm system components, and their operation
- Materials required for mounting cables and devices
- Functions performed in a fire alarm system by manual fire alarm boxes, automatic fire detection devices, audible signaling appliances, visible signaling appliances, and annunciators; and how they are operated

Skills:

- Communicate with other team members about the installation process.
- Recognize the on-site hierarchy of authority.
- Properly use hand and power tools to mount and connect fire alarm system components.
- Apply proper installation techniques under supervision.
- Use project plans and specifications to determine dimensions, type of materials, elevations, and locations.
- Mount and fasten field devices, sensors, and video cameras; and connect power and signaling wiring.
- Assist with acceptance testing by activating initiating and notification devices or visually identifying remote annunciation of devices.

1.1.2 Practice correct wiring methods.

Knowledge:

- Representation of system components, cabling, and dimensions on system drawings
- Tools required for mounting cables, wires, conduit, and fixtures, and their operation
- Types of outlet and junction boxes and their applications
- Types of wire and cable, and their applications
- Types of conduit and their applications
- Materials required for mounting cables

Skills:

- Use project plans and specifications to determine dimensions, type of materials, elevations, and locations.
- Properly use hand and power tools to mount cables, wires, conduit, fixtures, and supports.
- Apply proper installation techniques under supervision.
- Feed cables through access holes, roof spaces, and cavity walls to reach fixture outlets.
- Position and terminate cables, wires, and strapping.

1.1.3 Practice work-site safety.

Knowledge:

- OSHA Publications
- American Red Cross First Aid and Safety Handbook
- Potential hazards associated with hand and power tools
- Potential hazards associated with electrical cables and equipment
- Materials that require special handling and/or disposal methods
- Potential hazards associated with lifts, ladders, and other equipment



1.1.3 Practice work-site safety. (Continued)

Skills:

- Alert the supervisor to any unsafe conditions at the work site.
- Practice safe usage of hand and power tools.
- Practice safe usage of work-site equipment in accordance with the manufacturer's guidelines.
- Recognize common injuries or conditions, such as cuts, sprains, electrical shock, heat exhaustion, frost bite, fractured limbs, head injuries, or heart attacks.
- Apply basic first aid for common injuries or conditions utilizing materials found in a typical first aid kit or elsewhere at the work site.
- Practice safe ladder usage.
- Use proper fall protection equipment and practices.
- Properly use head, eye, hearing, and foot protection.
- Read and interpret materials safety data sheets (MSDS), and identify hazards information on those forms.

- Identify any hazardous locations specific to the facility where work will be performed.

1.2 Maintenance Tasks

Questions related to these tasks make up 18–23% of the exam.

1.2.1 Perform simple maintenance tasks and operate basic test equipment.

Knowledge:

- Purpose and operation of basic test equipment
- NFPA 72 test and inspection form

Skills:

- Read, interpret, and follow manufacturers' published instructions for fire alarm system component operation and maintenance.
- Clean fire alarm system components.
- Operate smoke detector testers, heat sources, battery testers, sound pressure meters, VOMs, manometers, and air flow meters in support of the testing of a fire alarm system.



Fire Alarm Systems Certification

Level II Content Outline

The skills and knowledge listed under each task are suggestive of those involved in that task, but are not intended to constitute an exhaustive listing.

2.1 Submittal Preparation and Layout Tasks

Questions related to these tasks make up 15 - 20% of the exam.

2.1.1 Verify the occupancy classification and the requirements of applicable codes and standards for specified premises.

Knowledge:

- IBC, IFC, and IRC
- NFPA 1 and 101

Skills:

- Read and interpret commonly referenced code requirements.
- Identify code requirements that apply to specified occupancies.
- Verify that general site conditions are consistent with occupancy classifications designated by others.
- Communicate findings to project supervisor.

2.1.2 Assemble project information for shop drawings.

Knowledge:

- Elements of a shop drawing
- Types of information found on fire protection, architectural, mechanical, electrical, structural, and site plans
- Types of performance information found in contractual documents, including cutting and patching, site access, parking and test requirements, etc.
- Types of information found in project specifications

Skills:

- Read and interpret project specifications.
- Determine the scope of the project.
- Read and interpret drawings with basic information about the facility, the proposed fire alarm system, and other building systems.
- Derive facility and building system information from architectural, mechanical, electrical, structural, and site plans.

2.1.3 Task Deleted

2.1.4 Survey site conditions to verify that they support the requirements of the fire alarm system design and layout.

Knowledge:

- IBC, IFC, IRC, and NFPA 101
- NFPA 70 and 72
- Building features and construction materials
- Basic terminology of codes and standards
- Building construction and design (e.g. risers, electrical closets, etc.)

Skills:

- Measure lengths, heights, and ceiling pitch.
- Verify floor plans and collect information about building features, dimensions, and materials as relevant to a fire alarm system project.
- Verify that room identification and apparent use is consistent with floor plans.
- Record building features and details that must be considered in designing and installing a system to meet applicable standards.
- Inspect installation sites and study work orders, building plans, and installation manuals in order to determine materials requirements and installation procedures.

2.1.5 Draft simple shop drawings.

Knowledge:

- IBC, IFC, IRC, and NFPA 1 and 101
- NFPA 70, 72, 170, and applications of other NFPA standards
- Types of information found on architectural, fire protection, mechanical, electrical, structural, site plans, and related design drawings
- Types of information found in project specifications
- Use of architectural scales in preparation and reading of drawings
- Types of information presented in a shop drawing

Skills:

- Use computerized drafting tools.
- Draft a correctly oriented, scaled, lined, and dimensioned layout drawing with correct symbols, legend, and title block.
- Prepare basic fire alarm systems layouts in accordance with standards.
- Calculate the number and spacing of fire detection devices and notification appliances required for a given space.
- Prepare materials lists from project specifications.
- Deliver prepared drawings to supervisor for approval.



Level II Content Outline

2.1.6 Determine power supply and loading requirements for fire alarm systems.

Knowledge:

- NFPA 70 and 72
- Basic electrical circuits
- Basic mathematics
- Types of information found in project specifications

Skills:

- Determine the requirements of NFPA 72 for primary and secondary power for various types of fire alarm systems.
- Read and interpret manufacturers' published instructions.
- Read and interpret electrical plans and related design drawings
- Perform battery standby calculations.
- Perform voltage drop calculations.
- Perform circuit loading calculations.
- Confirm that power supply for the proposed layout and any related existing conditions comply with codes, standards, project specifications, and manufacturers' requirements.
- Determine the minimum wire size and maximum distance for the application.

2.1.7 Identify applicable codes, standards, and listings.

Knowledge:

- Purposes and applications of the IBC, IFC, and IRC, and NFPA 1, 70, 72, 101, and 170
- Roles of authorities having jurisdiction and industry professions in enforcing codes and standards
- Purposes and applications of NRTLs (Nationally Recognized Testing Laboratories) and associated standards
- Methods for review and testing of fire alarm signaling equipment

Skills:

- Identify the common codes and standards that address specific project activities or scopes of work.
- Identify and interpret the principles and requirements of standards for system alarm initiating devices, system control functions, and fire suppression systems.
- Identify requirements and listings for various system components.

2.2 Installation Tasks

Questions related to these tasks make up 44 - 49% of the exam.

2.2.1 Read fire alarm and other building system plans.

Knowledge:

- Construction symbols and terminology
- Elements of shop drawings
- Information contained in architectural, fire protection, mechanical, electrical, and structural site plans, and related design drawings and specifications

Skills:

- Review various plans (fire alarm and other trades) that may impact the fire alarm system installation to identify any changes, modifications, special conditions, or requirements that affect the project.
- Recognize the full scope of work at the site, and its impact on the fire alarm project.
- Identify all types of new and existing fire alarm equipment and initiating devices shown on plans.
- Identify the equipment installed by construction industry trades, such as architectural, mechanical, electrical, and structural, and its impact on fire alarm system installation.
- Determine the locations of structural obstructions and mechanical systems shown on plans.

2.2.2 Develop an installation plan based upon field conditions and project requirements.

Knowledge:

- NFPA 70 and 72
- Names, functions, and requirements of the types of fire alarm systems (including cabling requirements, initiating devices, control functions, alarm notification appliances, type of power required, signaling services, and automatic detectors in use)
- Names and functions of the types of fire alarm signaling systems
- Types of mounting devices and fasteners, and their applications
- Structure and types of information in shop drawings
- Structure and types of information in the project schedule

Skills:

- Coordinate contracted work with the project manager.
- Coordinate labor requirements with the project supervisor.
- Identify critical project milestones with the project supervisor.
- Communicate changed site conditions to the project supervisor.
- Use standard plans and specifications of jobs to identify dimensions, type of materials, elevations, and locations.
- Plan the installation requirements for manual fire alarm boxes, automatic fire detection devices, audible signaling appliances, visible signaling appliances, control components, and annunciators.
- Plan the installation requirements for terminations at the control panel for electrical, initiation, and NAC circuits, and for supervising station communication pathways in order to connect components.
- Communicate the project plan to the project supervisor.



Level II Content Outline

2.2.3 Accept delivery of materials.

Knowledge:

- Basic logistics terminology
- Documents used in the delivery, acceptance, and storage of materials

Skills:

- Coordinate delivery schedule and storage requirements with other trades or projects.
- Determine where, and how urgently, the materials are needed.
- Confirm the delivery of materials and record them as inventory.
- Coordinate the storage of delivered materials on-site and off-site.
- Follow established procedures from order placement to installation of equipment.
- Communicate with supervisor relative to project needs.

2.2.4 Install fire alarm systems.

Knowledge:

- NFPA 70 and 72
- Types of fire alarm systems (including electrical requirements, initiating devices, control functions, alarm indicating appliance, power requirements, signaling services, and automatic detectors in use)
- Names, functions, and requirements of the types of fire alarm systems (including cabling requirements, initiating devices, control functions, alarm notification appliance, type of power required, signaling services, and automatic detectors in use)
- Names and functions of the types of fire alarm signaling systems
- Types of mounting devices and fasteners, and their applications
- Listing requirements and limitations
- Information obtained from contract documents
- Information obtained from the project schedule

Skills:

- Coordinate installation requirements with the project supervisor.
- Read and interpret manufacturers' literature.
- Determine conduit, raceway, and conductor requirements in accordance with project specifications, installation documents, and standards.
- Connect fiber-optic cable.
- Verify the correct cable type, or substitution, for the application.
- Use standard plans and specifications of jobs to identify dimensions, type of materials, elevations, and locations.
- Oversee the mounting of devices and appropriate fasteners to mount control panels and other system components.
- Install manual fire alarm boxes, automatic fire detection devices, audible signaling appliances, visible signaling appliances, control components, and annunciators.
- Perform functional terminations at the control panel for electrical, initiation, and NAC circuits, and for telephone wiring in order to connect components.
- Use bar-code readers, dip switches, rotary switches, and configuration IR tools to address field devices.

2.2.5 Conduct a system start-up and diagnostics.

Knowledge:

- NFPA 72
- Roles of owner, authorities, other professions and stakeholders
- Operation and functions of various system components
- Required documentation

Skills:

- Read and interpret manufacturers' requirements.
- Read and interpret project specifications, drawings, and other contract documents.
- Read and interpret a sequence-of-operations matrix.
- Prepare a testing checklist and criteria.
- Read and follow manufacturers' specifications.
- Perform the tasks on the pre-power-up checklist.
- Use diagnostic tools, such as ohmmeters, VOMs, and manufacturers' software, to confirm power-up and operation of system components.
- Monitor functionality and response of fire alarm system components.
- Provide required notifications and documentation.
- Coordinate start-up requirements with project supervisor.

2.2.6 Use computer applications to program a system.

Knowledge:

- NFPA 72
- Fire Alarm System devices and their functions
- Basic programming concepts
- System manufacturer's programming certifications, where applicable
- Matrix of operation, project specifications and related project documents
- Site's environmental and operational conditions
- Requirements for acceptance testing and maintenance that may affect programming
- Computer/device connections, interfaces, and I/O port designations

Skills:

- Read and interpret manufacturers' software specifications and instructions.
- Interpret system drawings, specifications, and sequence-of-operations matrices.
- Use project specifications and AHJ (Authority Having Jurisdiction) communications to determine functional requirements, including sensitivity settings.
- Assign and document addresses of field devices.
- Coordinate programming, download, and Pre-Test requirements with project supervisor.
- Perform site-specific programming.
- Use programming tools to adjust the sensitivity of units.
- Coordinate proper operation of all interfaced equipment and building systems of other trades.
- Provide required programming documentation.



Level II Content Outline

2.2.7 Troubleshoot system problems.

Knowledge:

- NFPA 70
- NFPA 72
- Functions and operation of control and field devices
- Connection, operation, and application of basic test equipment

Skills:

- Determine the characteristics of specific field service components.
- Interpret system drawings, specifications, and sequence-of-operations matrices.
- Read and follow manufacturers' specifications and instructions for cleaning, inspecting, operating, testing, and adjusting the system and/or its components for continuing, maximum operability.
- Calculate equivalent resistances and voltage, current, and resistance in/across components or branches of series and parallel circuits.
- Operate the system's controls.
- Use diagnostic tools such as ohmmeters, VOMs and software.
- Select basic electrical and electronic tests; apply them at the correct points in the system to determine the cause of a system problem.
- Test equipment and circuits for expected operation and nominal electrical characteristics.
- Identify and correct fire alarm system troubles.

2.2.8 Task renumbered as 2.5.6

2.2.9 Perform system commissioning.

Knowledge:

- NFPA 72
- Roles of owner, stakeholders, authorities, and other professions
- Types of information found in manufacturer's literature
- Types of information found in project specifications, drawings, and other contract documents
- Operation and functions of various system components
- Required documentation
- Operation and application of testing devices and equipment

Skills:

- Implement established commissioning procedures.
- Read and interpret a sequence-of-operations matrix.
- Prepare a testing checklist and criteria.
- Read and follow manufacturers' specifications.
- Monitor functionality and response of fire alarm system components.
- Provide required notifications and documentation.
- Coordinate testing requirements with project supervisor.

2.2.10 Compile test completion data.

Knowledge:

- NFPA 72
- Roles of owner, authorities, and other stakeholders, and what test results should be communicated to them
- Types of system documentation and the types of information recorded in each

Skills:

- Provide content of test results in legible, industry format in accordance with fire codes, standards, and guidelines.
- Record test results in the appropriate document.
- Identify code deficiencies and inform the owner and AHJ in writing.
- Complete a Record of Completion form.
- Provide required documentation to the appropriate individuals at the appropriate time.

2.2.11 Create as-built documentation.

Knowledge:

- NFPA 72 requirements for as-built documentation
- Purpose and types of information included on fire alarm system as-built drawings
- Representation of information on fire alarm system as-built drawings

Skills:

- Determine variations of the installation that deviate from the layout or design drawings.
- Use correct symbols and techniques to represent the current state of the system.
- Mark up (redline) drawings on site.
- Prepare, compile, and distribute as-built documentation.
- Maintain accurate records on site.

2.2.12 Provide training to the customer/end user.

Knowledge:

- NFPA 72
- Types of documents and information that should be conveyed and explained to the end user

Skills:

- Identify the relevant design details that are applicable to the project.
- Determine the inspection, testing, maintenance, and records retention requirements for the system.
- Determine the training needs of the customer/end user, in accordance with the equipment manufacturer's specifications and the AHJ's requirements and procedures, including approval authorities, location of system components, and care and maintenance procedures.
- Develop and conduct a training course, using appropriate resources and communication formats.
- Post instructions for the fire alarm system.
- Document end user training.
- Communicate clearly and accurately, both verbally and in writing.



Level II Content Outline

2.2.13 Apply firestopping practices.

Knowledge:

- NFPA 72
- IBC
- Firestopping requirements, principles, and techniques for various applications such as fire doors, fire walls, partitions, etc. and for each penetration size and type

Skills:

- Read and interpret manufacturers' published and NRTL-listed installation instructions and testing procedures.
- Apply firestopping for all fire alarm related penetrations of fire rated construction.
- Provide required documentation of firestopping installation, including sign off and AHJ approval.
- Communicate about firestopping requirements with project supervisor.

2.2.14 Mitigate worksite safety hazards.

Knowledge:

- Typical safety practices derived from OSHA
- OSHA 1910.164 (Fire Detection Systems)
- OSHA 1910.165 (Employee Alarm Systems)
- Employ specific safety standards and requirements
- Classification of fires and fire extinguishers
- Appearance and meaning of a lockout device/tag
- Hazards associated with confined spaces

Skills:

- Identify potential hazards in the workplace.
- Identify safety features of equipment and verify that these are in place and the equipment is in good condition.
- Select appropriate personal protective equipment for specific tasks and worksite conditions, and verify that it is in good condition.
- Verify electrical safety at the project site.
- Prepare proper documentation.
- Communicate safety issues with project supervisor.

2.3 Maintenance Tasks

Questions related to these tasks make up 21 - 26% of the exam.

2.3.1 Follow applicable maintenance standards and procedures.

Knowledge:

- IFC
- NFPA 72
- Manufacturer's requirements
- Owner's site-specific operational procedures
- Procedures and test equipment associated with required maintenance testing of fire alarm systems, components, power supplies, and cables

Skills:

- Determine inspection, testing, and maintenance requirements stated in NFPA standards or in manufacturers' specifications.
- Verify current calibration of equipment.
- Operate specialized test equipment.
- Identify potential problems or failures and report them to the appropriate individual.
- Notify appropriate parties of impairments.
- Follow impairment procedures established by authorities, owner, and supervisor.
- Document inspection, testing, and maintenance activities and results, and communicate record retention requirements to document holders.

2.3.2 Troubleshoot and repair system faults.

Knowledge:

- NFPA 70 and 72
- Functions and operation of system components
- Actions or conditions required for correct operation of system components

Skills:

- Determine requirements and procedures for conducting tests per manufacturer's published instructions.
- Perform periodic equipment and circuit testing according to standards and/or manufacturer's specifications.
- Perform basic electrical and electronic tests for circuitry and component function.
- Operate the system's controls.
- Identify problems that arise in a fire alarm system.
- Determine the cause of the problem and take correct actions.
- Identify potential issues and refer to the appropriate person.



Level II Content Outline

2.3.3 Prepare, distribute, and maintain documentation.

Knowledge:

- NFPA 72 requirements for documentation
- Responsibilities of owners, contractors, authorities, and other professions for the preparation, distribution, and retention of documentation

Skills:

- Prepare technical reports.
- Communicate to the document holder the requirements for retention.
- Gather applicable job documentation.
- Communicate status of documents with supervisor.

2.4 Education and Communication Tasks

This exam does not contain questions based upon this domain.

2.4.1 Train and mentor Level I technicians.

Knowledge:

- Standard business practices
- Applicable codes and standards

Skills:

- Communicate standard business practices to subordinates.
- Convey the requirements of codes and standards to subordinates.

2.5 Management and Supervision Tasks

Questions related to these tasks make up 10 - 15% of the exam.

2.5.1 Provide on-site coordination for simultaneous installation activities.

Knowledge:

- Hierarchy of authority on the job site
- Reasons for performing certain installation tasks before others, and before or after work performed by other trades

Skills:

- Gather information about personnel and resource availability, worksite status, and progress of work.
- Prioritize and coordinate project tasks.
- Communicate with Level I technicians, the project supervisor, and the project manager.

2.5.2 Provide on-site coordination of available personnel to maintain established schedules.

Knowledge:

- Hierarchy of authority on a project
- Skills and qualifications needed for various fire alarm system installation tasks

Skills:

- Coordinate tasking with staff on-site.
- Communicate with on-site personnel.
- Communicate staffing needs to supervisor.
- Coordinate project timing and scheduling.

2.5.3 Coordinate the technical aspects of a job on-site.

Knowledge:

- Responsibilities of owners, contractors, authorities, and other professions for system plans and installation procedures.
- Computer terminology and basic operations.

Skills:

- Prepare basic technical reports.
- Operate a computer (navigate directories; download, install, and back-up software; prepare simple text documents and enter data into spreadsheets; and prepare email correspondence).
- Recognize technical issues in need of resolution.
- Communicate with supervisor(s) to resolve technical issues.
- Explain the scope of the fire alarm job and any other work being performed at the site.

2.5.4 Identify and report personnel issues.

Knowledge:

- Indicators of drug or alcohol abuse, lack of job qualifications, lack of initiative, unreliable attendance, insubordination, harassment, or interpersonal conflict

Skills:

- Identify on-site personnel issues.
- Recommend action to immediate supervisor.

2.5.5 Promote a safe work environment.

Knowledge:

- Typical safety practices derived from OSHA
- OSHA 1910.164 (Fire Detection Systems)
- OSHA 1910.165 (Employee Alarm Systems)
- Sources of MSDS and worksite safety information
- Work site hazards and their mitigation

Skills:

- Distinguish between safe and unsafe practices.
- Explain worksite safety requirements and practices to team members.
- Gather pertinent MSDS information and ensure that all OSHA regulations and site safety guidelines are adhered to.

2.5.6 Identify and report on-site problems or conflicts that impact the project schedule. (Formerly 2.2.8)

Knowledge:

- Roles and responsibilities of various contractors, professionals, and authorities on a typical job site
- Factors that can impact work progress

Skills:

- Establish communication with all project trades.
- Determine the impact that a change in some part of a fire alarm project's planning, permitting, resources, performance, or completion is likely to have on the project schedule.
- Determine the impact that a change in another contractor's work plans or work product is likely to have on a fire alarm project schedule.
- Determine the individual who can resolve the problem and/or the individual to whom the problem should be reported.



Fire Alarm Systems

Level III Content Outline

The skills and knowledge listed under each task are suggestive of those involved in that task, but are not intended to constitute an exhaustive listing.

3.1 Submittal Preparation and Layout Tasks

Questions related to these tasks 23-28% of the exam.

3.1.1 Analyze project requirements for the subject occupancy type.

Knowledge:

- IBC, IFB, IRC
- NFPA 1, 70, 101

Skills:

- Read and interpret codes and standards.
- Communicate with architects, engineers, clients, AHJs, and the layout team to establish compliance needs.
- Verify project requirements.
- Verify proper compliance of the project's requirements with codes and standards.

3.1.2 Identify contractual criteria.

Knowledge:

- Contract terminology
- NFPA 72, 101

Skills:

- Read and interpret contract documents.
- Review documentation for compliance with requirements of the AHJ and applicable fire and life safety codes and standards.
- Identify the scope of a contract.
- Identify conflicts in project documents.
- Document conflicts and offer corrected or alternate approaches.
- Navigate through documents to find system requirements.

3.1.3 Coordinate project requirements with customer.

Knowledge:

- Purpose of various project documents
- Responsibilities of various project stakeholders for project documents

Skills:

- Communicate with customer to verify project requirements.
- Coordinate documentation with customer.
- Review plans with the customer and contractors.

3.1.4 Coordinate project requirements with design professionals.

Knowledge:

- Purpose of various project documents
- Roles of architects and engineers
- Contractual relationships
- AIA A201

Skills:

- Communicate with all design professionals to verify project requirements.
- Coordinate the implementation of the design.
- Obtain approval for the submittal.
- Propose any alternative approaches or substitutions.

3.1.5 Identify site conditions.

Knowledge:

- IBC, IFB, IRC, IMC
- NFPA 70, 72, 101
- Occupancy classifications

Skills:

- Identify and record site conditions and any existing fire alarm detection equipment that may affect the fire alarm system.
- Establish contact with stakeholders who have a role in the site visit or project.
- Confirm current, specific site conditions for proper functionality of existing and/or newly proposed equipment of the fire alarm system.
- Identify any conflicts between as-built drawings and/or current site conditions and the new drawings.

3.1.6 Identify the AHJs and approval process for a project.

Knowledge:

- IBC, IFB, IRC, IMC
- NFPA 70, 72, 101

Skills:

- Identify appropriate AHJs.
- Communicate with the appropriate AHJs.
- Recognize and apply all relevant code enforcement requirements of specific AHJs.
- Explain system design criteria to appropriate AHJs.



3.1.7 Coordinate the creation of shop drawings.

Knowledge:

- NFPA 72
- Fire Alarm Signaling Systems Handbook
- Contents of shop drawings

Skills:

- Exhibit supervisory responsibility over the creation of shop drawings.
- Review drawings for compliance with codes, standards, manufacturers' specifications, AHJ requirements, and contractual requirements.
- Coordinate the revisions and requirements with the CAD operator.
- Develop fire detection and signaling system architecture.
- Prepare shop drawings for submittal to AHJs.
- Apply the project requirements to the creation of shop drawings.

3.1.8 Calculate power, battery, and other requirements.

Knowledge:

- NFPA 72
- Basic electricity
- Power calculations
- Ohm's and Kirchoff's laws

Skills:

- Calculate power requirements and battery standby times for all types of fire alarm systems.
- Calculate voltage drops, resistance, and current loads.
- Identify required primary, secondary, and trouble power supply sources.

3.1.9 Analyze specifications and drawings for installation criteria.

Knowledge:

- NFPA 70, 72
- IBC
- Construction Specifications Institute (CSI) MasterFormat®
- AIA A201

Skills:

- Recognize and apply knowledge of adopted building codes and fire alarm codes and standards to shop drawings.
- Apply manufacturers' specifications for equipment operation and system installation.
- Determine fire alarm system requirements by performing an analysis of the specifications and drawings.
- Identify conflicts between the project requirements and the project documents.
- Apply drawing conventions.
- Select fire alarm system equipment for compliance.

3.1.10 Research codes and standards.

Knowledge:

- NFPA 70, 72, 101
- IBC
- Aspects of projects for which government agencies have special requirements

Skills:

- Identify appropriate codes and standards.
- Guide subordinates in identifying appropriate codes and standards.
- Understand the development process for codes and standards.
- Review plans for compliance with the jurisdiction's fire and life safety code requirements.
- Identify special requirements of governmental agencies and other AHJs.
- Identify any requirements for variances to the applicable codes and standards.

3.1.11 Prepare written technical reports.

Knowledge:

NFPA 72

- Standard business communications practices

Skills:

- Accurately convey fire alarm science, technology, codes, and standards in technical reports.
- Review plans for compliance with applicable jurisdictions' fire and life safety code requirements and summarize findings.
- Develop correspondence for dissemination to stakeholders and the AHJs.
- Evaluate and follow standard business communications practices.

3.1.12 Implement contractual requirements.

Knowledge:

- Contract concepts, practices, and terminology
- Typical contract sections and provisions
- Contract processes, including but not limited to submittal procedures

Skills:

- Interpret contract requirements.
- Coordinate documentation as determined by requirements.
- Direct and/or assist in application of the contractual requirements during the production of submittal documentation.
- Write and/or assist in the creation of the scope of work.
- Identify inclusion and exclusions to meet contract requirements.



3.1.13 Develop a project schedule.

Knowledge:

- Common factors that can impact a project schedule (including but not limited to sequence of construction, labor regulations, and so forth)
- Project schedule formats
- Labor estimation standards
- Project budgets and payment schedules (for example, schedule of values)

Skills:

- Identify sources of information required for job scheduling.
- Identify critical milestones for the project, including but not limited to construction schedule, labor requirements, deliverables, and payment schedule.
- Identify project-specific factors that impact project scheduling.
- Develop a project schedule based on relevant information.
- Coordinate project schedule with all relevant trades.

3.2 Installation Tasks

Questions related to these tasks 28-33% of the exam.

3.2.1 Develop an installation strategy for a project.

Knowledge:

- NFPA 70, 72
- Project management concepts
- Sequence of construction
- Project budgeting processes

Skills:

- Review shop drawings and project specifications for development of installation strategy.
- Identify the type, location, and quantities of equipment required for the project.
- Develop a strategy for all phases of project.
- Coordinate proposed strategy with the project schedule.

3.2.2 Order installation materials.

Knowledge:

- NFPA 72
- Equipment and materials distribution logistics
- Phases of an installation project and the materials required for each
- Purchasing procedures
- Project management concepts

Skills:

- Identify specified equipment and materials.
- Identify supplier policies (such as pricing, repair, replacement policies, and technical assistance options).
- Confirm equipment and materials available meet project requirements.
- Resolve any conflicts with availability of equipment and materials.
- Coordinate delivery of equipment and materials with the job-site schedule.

3.2.3 Establish installation criteria for fire alarm system components.

Knowledge:

- NFPA 70, 72
- Installation procedures
- Manufacturers' requirements for specific equipment
- Project specifications and shop drawings

Skills:

- Ensure that relevant personnel are familiar with the products ordered.
- Identify sequence for pulling cables, mounting devices, and running conduit that comply with codes and standards.
- Determine the type of wire, cable, or conduit required for the fire alarm system application.
- Define and use the correct method for field wiring of system components.

3.2.4 Coordinate programming of the system.

Knowledge:

- NFPA 72
- Programming concepts
- Boolean logic
- Fire alarm system types
- Methods for inputting programs to fire alarm systems

Skills:

- Identify specified sequence of operation.
- Determine programming strategy to meet project specifications.
- Confirm correct software version and compatibility with site.
- Identify qualified technician to perform on-site programming.



3.2.5 Resolve on-site scheduling conflicts.

Knowledge:

- Scheduling responsibilities of individuals in the job-site chain of command
- Knowledge of typical construction contracts and schedules
- Basic understanding of meetings and meeting conduct
- Communication documents (for example, Letter of Transmittal, Request for Information, Change Order forms, Request for Proposal, and so forth) and protocols
- Understanding of other trades and their roles on the job site

Skills:

- Follow and distribute written policies and procedures for project scheduling conflicts.
- Communicate with stakeholders to resolve issues.
- Use proper documentation for specific tasks.

3.2.6 Establish the procedures for inspection and testing of a fire alarm system.

Knowledge:

- NFPA 13, 25, 72, 90A, 90B, 92A, 92B
- ASME A17.1
- Project specifications documents
- Testing tools and procedures

Skills:

- Establish procedures for the inspection and testing of a fire alarm system in accordance with adopted building and fire codes and standards.
- Coordinate testing with other trades.

3.2.7 Document test completion.

Knowledge:

- NFPA 13, 25, 72, 90A, 90B, 92A, 92B
- ASME A17.1
- Project specifications documents
- Standard inspection and testing form
- Record of Completion form

Skills:

- Document testing and completion in accordance with adopted building and fire codes, standards, and the AHJ.
- Properly organize documentation and records of testing.

3.2.8 Direct the development of as-built documents.

Knowledge:

- NFPA 72, 170
- Installation practices and procedures
- Requirements and procedures for developing and recording as-built documents
- As-built drawings (terminology, symbols, notes, and so on)
- Purpose and function of as-built drawing information

Skills:

- Collect the necessary data from the installers to create as-builts.
- Convey technical information to the CAD operator.
- Translate and record all necessary changes from original design onto as-built documents.
- Review and approve the final version of as-built documents.

3.2.9 Identify fire-stopping requirements.

Knowledge:

- NFPA 70, 101
- ICC
- Characteristics and applications of fire-stopping materials and devices
- Building construction
- Fire ratings of walls and fire-rated assemblies

Skills:

- Identify conditions that require fire-stopping.
- Confirm that firestop devices, materials and methods used comply with adopted building codes and AHJ requirements.

3.2.10 Supervise work-site safety.

Knowledge:

- 29 CFR Parts 1904.1 and 1926
- Army Corps of Engineers EM 385-1-1
- Safety documentation, including records and reports

Skills:

- Communicate effectively the safety standards, procedures, and practices.
- Supervise and/or delegate supervision of work-site safety.
- Identify situations that may require additional resources, such as specialists to manage unusual risks (for example, fall protection).
- Follow and enforce specific safety standards and requirements.
- Create, organize, and maintain safety records.
- Recognize when improvements in practice are needed and implement those improvements.



3.2.1.1 Interface with other systems and trades.

Knowledge:

- NFPA 72, 101
- ICC
- ASME A17.1
- BACnet® (Building Automation and Control Network)
- Computer port protocols
- Engineered smoke control systems (UL 864, UUKL listing)
- Project schedule

Skills:

- Identify and analyze other building systems, and select compatible interface(s) to use with those systems.
- Communicate with other trades to coordinate the project schedule among different trades.
- Coordinate with other trades and/or contractors, or both, to test and implement the interface(s) to meet the project schedule

3.3 Testing and Maintenance Tasks

Questions related to these tasks 15-20% of the exam.

3.3.1 Establish maintenance and testing procedures and standards.

Knowledge:

- NFPA 72
- Manufacturers' published instructions
- How to use test equipment

Skills:

- Communicate testing procedures and requirements to technicians.
- Identify system deficiencies and/or issues reported by subordinates.
- Coordinate testing results documentation and reporting.
- Communicate testing results to stakeholders.

3.3.2 Oversee troubleshooting and repairing of system deficiencies.

Knowledge:

- NFPA 70, 72
- Manufacturers' published instructions
- System functions and operations
- Procedures for troubleshooting equipment and circuit problems

Skills:

- Recognize and respond to indicators of problems in equipment or the system.
- Investigate the feasibility of repair(s) or replacement(s).
- Identify and investigate abnormal test results.
- Resolve system deficiencies and/or issues reported by subordinates.

3.4 Education and Communication Tasks

Questions related to these tasks 5-10% of the exam.

3.4.1 Train and mentor Level I and Level II coworkers.

Knowledge:

- Basic methods for planning, conducting, and evaluating training
- Characteristics of effective mentors
- Adult learning principles
- Performance appraisal and feedback principles

Skills:

- Communicate effectively with subordinates.
- Convey proper company and job-site procedures and the requirements of codes and standards to subordinates.

3.4.2 Determine basic training needs of subordinates.

Knowledge:

- Preparation of basic shop drawings and installations
- Requirements for performing work-site tasks

Skills:

- Analyze skill gaps of subordinates.
- Develop and organize training to meet needs of subordinates.

3.5 Management and Supervision Tasks

Questions related to these tasks 17-22% of the exam.

3.5.1 Manage simultaneous projects.

Knowledge:

- Resource management and potential trade-offs among multiple and/or simultaneous projects
- Principles of project management
- Project specifications for each project
- General construction principles
- Project scheduling methods using documentation and/or software
- Documentation and/or software used to measure progress

Skills:

- Multitask to manage multiple projects.
- Analyze and maintain project schedules (for example, quantify and record progress and delays).
- Coordinate on-site staff regarding project schedules.



3.5.2 Manage staff.

Knowledge:

- Principles of project management
- Basic labor cost concepts
- Project specifications
- Resource management principles
- Safety management principles
- Labor wage regulations

Skills:

- Coordinate with other trades.
- Communicate with project teams.
- Communicate staff and resource needs to management.
- Communicate safety requirements to project teams.
- Analyze and document labor costs to project budget.
- Document labor wage regulations.
- Report project progress including labor and material costs.

3.5.3 Oversee the technical aspects of a job.

Knowledge:

- NFPA 70, 72
- ICC
- ASME A17.1, ANSI A117.1
- Current fire alarm systems technology
- Codes, standards, specifications, and applications of fire alarm systems
- Manufacturers' published instructions
- Project specifications

Skills:

- Analyze and resolve technical issues.
- Identify resources necessary when resolving technical issues.
- Confirm and communicate proper application of codes, standards, specifications for project requirements.

3.5.4 Resolve interpersonal conflicts.

Knowledge:

- Best practices for handling and documenting interpersonal conflicts
- Basic principles of negotiation

Skills:

- Communicate with affected parties.
- Negotiate settlements of conflicts.
- Document conflicts and actions taken to resolve them.

3.5.5 Communicate ethical standards and resolve ethics-related issues.

Knowledge:

- NICET Code of Ethics
- NFPA 72
- Employer code of ethics
- Government regulations regarding ethics

Skills:

- Communicate ethical standards and expectations to subordinates.
- Review personnel issues and recommend action.
- Respond to possible ethical or legal violations in a fair and ethical manner.
- Communicate and document personnel issues with Human Resources and/or management, or both.

3.5.6 Oversee adherence to rules promoting safe work environment.

Knowledge:

- 29 CFR Parts 1904.1, 1904.7, 1910, 1926, 1960.28
- Army Corps of Engineers EM 385-1-1
- Manufacturers' safety requirements
- Employer's safety requirements
- Safety documentation, including records and reports

Skills:

- Follow safety procedures and protocols to ensure safety requirements are met.
- Communicate safety procedures and processes to subordinates.
- Oversee and enforce adherence to safe practices.
- Alert proper parties to unsafe situations.
- Instruct subordinates in ways to promote a safe working environment.
- Recognize and correct unsafe work practices.

3.5.7 Monitor adherence to budgets.

Knowledge:

- Basic budget concepts
- Basic math skills
- Budget tracking methods
- Costs of labor, material, and other resources needed
- Project specifications

Skills:

- Calculate a preliminary budget estimate, including projected labor and material costs.
- Monitor project expenditures and compare with budget projections.
- Calculate actual labor and material costs.
- Communicate budget status via project reports.
- Calculate costs for project changes and the impact on the budget and schedule.
- Alert proper parties to any budget changes or modifications to the scope of work.



Fire Alarm Systems

Level IV Content Outline Standard Model/CBT

The skills and knowledge listed under each task are suggestive of those involved in that task, but are not intended to constitute an exhaustive listing.

4.1 Submittal Preparation and Layout Tasks

Questions related to this task make up 23 - 28% of the exam.

4.1.1 Determine the project occupancy and requirements.

Knowledge:

NFPA 101

IBC

Roles of various stakeholders

AIA A201

Construction Specifications Institute (CSI)

MasterFormat®

Skills:

Determine the codes and standards applicable to a project.

Correctly interpret applicable codes and standards.

Identify the correct stakeholders for consultation in developing aspects of the fire protection requirements.

Analyze and interpret the project documents.

4.1.2 Evaluate and confirm contractual criteria.

Knowledge:

NFPA 72, 101

Purposes of standard clauses in business contracts

Scope of work documents

Skills:

Ensure compliance with requirements of the AHJ and applicable fire and life safety codes and standards.

Review project documents for special conditions.

Notify stakeholders and request clarification regarding conflicts or special conditions.

Document deficiencies and offer corrected or alternate design options.

Evaluate scope of work.

4.1.3 Coordinate project requirements with end-user stakeholders.

Knowledge:

Roles of end-user stakeholders, such as contractors, clients, owners, insurance companies, and others

Process of establishing project requirements and documentation

Skills:

Identify end-user stakeholders for the specific project.

Coordinate project requirements with end-user stakeholders.

Review submittals with AHJ and end-user stakeholders.

Document all changes or modifications.

4.1.4 Coordinate with design stakeholders.

Knowledge:

Roles of design stakeholders, such as architects, engineers, construction managers, and others

Process of establishing project requirements and documentation

Skills:

Negotiate a schedule for an on-time, on-budget project.

Coordinate with design stakeholders to resolve conflicts that arise.

Review submittals with AHJ and design stakeholders.

Document all changes or modifications.



4.1.5 Identify and resolve conflicts during site visits.

Knowledge:

NFPA 70, 72, 101

IBC

Basic building geometry, features, structural elements, and materials

Skills:

Communicate and coordinate with stakeholders.

Read and interpret project documents.

Read and interpret manufacturers' equipment specifications.

Confirm the selected equipment is listed for the site's occupancy(ies) and conditions.

Apply relevant codes and standards to site conditions and occupancies.

Verify the project scope is appropriate for the entire life cycle of the fire alarm system, including installation, inspection, testing, maintenance, monitoring, and future expansion possibilities.

Resolve conflicts among site conditions, project specifications, and/or codes and standards.

Prepare written report documenting conflicts, submittal revisions, stakeholders, and applicable project requirements.

4.1.6 Confirm identity of AHJ or other authority.

Knowledge:

IBC

Skills:

Identify the AHJ or other authority for a proposed scope of work.

Resolve code variance issues with governing authorities or approval agencies.

Where applicable, provide a formal code variance request to the AHJ.

4.1.7 Review and approve shop drawings and documentation.

Knowledge:

IBC

NFPA 72

Skills:

Review plans for compliance with the jurisdictions' fire and life safety code requirements.

Lay out an evacuation system to ensure adequate occupant notification and instruction.

4.1.8 Confirm results of power and battery calculations and system requirements.

Knowledge:

NFPA 70, 72

ANSI/UL 864

ANSI/UL 1971

Skills:

Confirm the power requirements.

4.1.9 Analyze specifications and drawings for complex or unusual projects.

Knowledge:

NFPA 72, 101

IBC

Skills:

Apply expert knowledge of adopted building codes and fire alarm standards to shop drawings for installation.

Review plans for compliance with the jurisdictions' fire and life safety code requirements to ascertain system or equipment connections.

Interpret manufacturer's specifications for system-wide operation.

Read and explain intent of specifications.

Resolve discrepancies in specifications.

Approve drawing conventions.

4.1.10 Interpret codes and standards.

Knowledge:

NFPA 70, 72, 101

IBC

Skills:

Ensure that a plan complies with the jurisdictions' fire and life safety code requirements.

Consult with stakeholders and the AHJ to establish compliance with codes and standards, including any special requirements of government agencies, and variances as needed.

Document any and all changes.



4.1.11 Write and issue technical reports.

Knowledge:

NFPA 72

IBC

Skills:

Ensure that plans comply with the jurisdictions' applicable fire and life safety code requirements.

Document any and all changes.

Apply expert communication protocols in the dissemination of correspondence.

4.1.12 Confirm legal authority.

Knowledge:

NFPA 72

Skills:

Determine and conform to legislated requirements of local, state, and federal regulations related to the project.

Resolve conflicts between contractual obligations and project conditions.

4.1.13 Coordinate the project schedule.

Knowledge:

Types of resources required during the course of a project

Skills:

Confirm that the project schedule and documentation are complete.

Approve the project schedule.

Monitor the development and implementation of the schedule and identify potential conflicts with the work of other trades or with resource availability.

Negotiate the schedule with other trades and stakeholders to ensure that all time, budget, workforce, and material requirements are met.

4.2 Installation Tasks

Questions related to this task make up 13 - 18% of the exam.

4.2.1 Review, revise, and approve installation strategies.

Knowledge:

NFPA 72, 101

Skills:

Coordinate and resolve design conflicts and related special circumstances.

Determine whether changes in schedule warrant change orders.

4.2.2 Analyze, modify, and approve purchase orders.

Knowledge:

Schedule and budget impacts of purchase orders

Skills:

Determine material needs.

Issue purchase orders.

Resolve major exceptions.

Note: The former "4.2.3 Resolve on-site scheduling conflicts" has been renumbered as 4.5.2, and the former "4.2.4 Develop written policies and procedures for personnel conflict resolution" has been renumbered as 4.5.7. The former 4.2.5 and 4.2.6 have been renumbered as 4.2.3 and 4.2.4.

4.2.3 Review and approve as-builts.

Knowledge:

NFPA 70, 72, 101

ICC codes

ANSI/ASME standards

Construction drawings

Computer-aided design (CAD) standards and drawing concepts

Skills:

Confirm the accuracy of the as-built drawings.

Identify and resolve conflicts among drawings and project documents.

Coordinate with CAD personnel.

Distribute completed as-built drawings to authorities as needed.

4.2.4 Develop a schedule of work involving combination and integrated systems and other trades.

Knowledge:

Work scheduling concepts and practices

Factors that impact a schedule of work, including but not limited to labor rates, construction requirements and material distribution

Combination system concepts

Functional concepts of HVAC systems, building automation systems (BAS), fire safety functions, and other systems

NFPA 70, 72, 101

ICC codes

ANSI/ASME standards

Skills:

Identify combination and integrated system requirements with other trades.

Develop a coordinated schedule of work with other trades.

Coordinate the installation of combination systems with other trades.

Coordinate the installation of integrated systems with other trades.



4.3 Maintenance Tasks

Questions related to this task make up 13 - 18% of the exam.

4.3.1 Oversee inspection, testing, and maintenance program(s).

Knowledge:

NFPA 72

IBC

IFC

ANSI/UL 864

Manufacturers' published instructions

Procedures for troubleshooting equipment and circuit problems

Requirements for documentation

Requirements and methods for testing of system components and devices

Skills:

Identify changes to existing conditions and/or the system environment that affect system performance.

Oversee inspection, testing, and maintenance tasks, and assist with the identification, troubleshooting, and repair of problems as needed.

Develop inspection, testing, and maintenance procedures.

Prepare written documentation of inspection, testing, and maintenance results.

Develop corrective action plan to resolve system deficiencies.

Communicate inspection, testing, and maintenance results to the appropriate stakeholders.

4.4 Education/Communication Tasks

Questions related to this task make up 13 - 18% of the exam.

4.4.1 Train and mentor subordinates.

Knowledge:

Communication skills for target audience

Codes and standards

Project requirements (including project documents)

Standard construction practices

Roles of stakeholders

Documentation procedures

Company policies and procedures

Safety codes, standards, and practices

NICET Code of Ethics

Skills:

Communicate effectively with subordinates in understanding and applying all industry- and project-related knowledge.

Communicate with subordinates and analyze training needs.

Provide hands-on demonstrations and presentations.

Organize information for training purposes.

Coordinate training opportunities.

Analyze subordinate performance and provide constructive feedback.

Evaluate the readiness of subordinates for additional responsibilities.

4.4.2 Educate staff.

Knowledge:

Common training methods

Communication skills for target audience

Performance appraisal criteria and procedures

Codes and standards

Project requirements (including project documents)

Standard construction practices

Roles of stakeholders

Documentation procedures

Company policies and procedures

Safety codes, standards, and practices

NICET Code of Ethics

Skills:

Identify training needs of company and staff.

Analyze needs and develop training plan(s).

Create plan(s) to evaluate training effectiveness.

Develop method(s) to monitor staff performance after training.

Deliver training.

Evaluate staff performance and training effectiveness.

Document the results of training.



4.4.3 Present information verbally and in writing.

Knowledge:

Standard English, business, and technical language usage

Communication protocols according to contract specifications, codes and standards, company policies, and common industry practice

Presentation methods (such as use of computer software to create and provide documents, spreadsheets and visual aids)

Proper documentation methods and formats (such as letters, memos, Letters of Transmittal, Request for Information, spreadsheets, and charts)

Fire Alarm and construction industry terminology

Skills:

Evaluate the audience's need for information.

Evaluate external factors (such as stakeholders, pending deadlines, and contract requirements).

Identify best communication method for each situation to satisfy audience needs.

Communicate clearly using the appropriate format and proper English, business, and technical language.

4.4.4 Communicate with AHJs and other authorities.

Knowledge:

Approval processes and criteria

Procedures for requesting formal interpretations from codes and standard governing bodies

Standard English, business, and technical language usage

Communication protocols according to contract specifications, codes and standards, company policies, and common industry practice

Proper documentation methods and formats (such as letters, memos, Letters of Transmittal, Request for Information, spreadsheets, and charts)

Construction industry protocols for communicating with stakeholders

Regulatory agencies' policies and procedures for communication

(Task continued in next column)

(Task 4.4.4 continued)

Skills:

Identify issues which require the AHJ or other authorities to be involved.

Evaluate the roles of the AHJ and other authorities, and their need for information.

Identify best communication method for each situation to satisfy the needs of the AHJ and other authorities.

Accurately present the issue(s) in the proper context with supporting code interpretations and authoritative research.

Communicate clearly using the appropriate format and proper English, business, and technical language.

Clarify and interpret any issues for the AHJ or other authority using the appropriate communication format.

Educate the AHJ on the latest technology available.

4.4.5 Communicate code requirements to nontechnical stakeholders.

Knowledge:

Fire Alarm and construction codes, standards, and regulations

Liability, life safety, civil and legal penalties, and other ramifications of code violations

Standard English, business, and technical language usage

Communication methods

Process of codes and standards development by governing bodies

Proper documentation methods

Skills:

Explain code requirements to nontechnical stakeholders.

Document code issues according to industry standards and project requirements.

Explain code issues to nontechnical stakeholders.

Communicate the potential ramifications of code violations to nontechnical stakeholders.



4.5 Management/Supervision Tasks

Questions related to this task make up 25 - 30% of the exam.

4.5.1 Oversee management of simultaneous projects.

Knowledge:

Methods for scheduling and monitoring multiple projects in complex work environments
Software or other project management tools
Advanced project management principles
Communication protocols according to contract specifications, codes and standards, company policies, and common industry practice
Proper documentation methods and formats (such as letters, memos, Letters of Transmittal, Request for Information, spreadsheets, and charts)
Construction industry protocols
Regulatory agencies' policies and procedures
Basic business financial principles

Skills:

Develop and monitor schedules for simultaneous projects.
Organize and prioritize project tasks and schedules.
Communicate schedules and any changes to all staff and stakeholders.
Coordinate project schedules and changes with other trades.
Develop system for project documentation.
Disseminate project documentation to all stakeholders.
Oversee profit and loss (P&L) statements.

Note: The task numbers below have been changed from the October 8, 2008 version due to the insertion of tasks 4.2.3 (now task 4.5.2) and 4.2.4 (now task 4.5.7).

4.5.2 Resolve on-site scheduling conflicts.

<<Previously 4.2.3>>

Knowledge:

Sources of, and ways to reduce, liability related to performance and payment bonds, liquidated damages, hold harmless clauses, and insurance coverage
Powers and responsibilities of various project personnel and stakeholders related to scheduling

Skills:

Negotiate scheduling procedures so as to find solutions to various issues that may arise during installation.
Document conflicts, their resolutions, and any third-party assistance or intervention.

4.5.3 Determine personnel requirements.

Knowledge:

Skills and abilities required for various fire alarm systems roles
Labor estimating principles
Labor resources (provided by company employees and outside contractors)
Project specifications
Installation requirements for project completion
Labor laws and regulations

Skills:

Analyze a scope of work to determine personnel needs.
Analyze labor requirements for each job, applying appropriate time elements and unit cost factors.
Match skills required for project tasks with personnel knowledge, personality and capabilities.
Coordinate with other project leadership (such as the General Contractor) regarding labor decisions.
Engage the required and qualified personnel.
Document personnel decisions.
Track labor utilization to meet project budget.



4.5.4 Prepare a response to an RFP (Request for Proposal) or RFQ (Request for Quotation).

Knowledge:

Special requirements, such as bonds, federal and state labor standards, affirmative action, Buy America clauses, and their potential impacts on a project's costs and liabilities

Project systems and applications

Construction standards

Labor and materials estimating

Installation criteria of requested systems and applications

Typical insurance and bonding requirements

Sources of insurance and bonding information

Sources of information about national and locally-adopted codes and standards

Regulatory authorities (such as the local AHJ and insurance underwriters)

Skills:

Review and analyze RFP or RFQ documentation to determine project specification requirements.

Assemble a team or teams to assist with proposal or quotation development.

Interpret the requirements of all national and locally-adopted building codes and standards as they apply to project.

Identify all special requirements that may affect cost and company liability (such as bonds, federal and state labor standards, affirmative action, and Buy America clauses).

Review insurance and bonding requirements and their impacts on project costs.

Develop project plan and scope of work.

Develop supporting budgetary information.

Identify and resolve conflicts between general specifications, mechanical specifications, and fire protection requirements.

Assemble the proposal package with all required documentation.

4.5.5 Oversee the technical aspects of a job (those related to system components, applications, and configurations).

Knowledge:

System logic of computer-based fire alarm systems

Building- or campus-wide systems integration (as a function of interfacing with other technologies and as a function of the physical installation of the different systems)

Compatibility requirements of different systems

Basic performance-based design concepts

Functions of complex systems (for fire alarms and other integrated systems)

Technical documentation procedures

Procedures for revising and/or adapting system functionality

Skills:

Document technical issues and resolutions.

Read and interpret construction and systems integration schedules for a single building or a campus.

Coordinate system integration tasks and requirements with other trades and all stakeholders.

Analyze and communicate programming requirements for a fire alarm system for a stand-alone configuration, or for a networked systems integration project.

Translate technical requirements for nontechnical staff and stakeholders.

4.5.6 Manage the resolution of interpersonal conflicts.

Knowledge:

Methods for documenting conflicts and resolutions

Company, contract, and/or project procedures for handling interpersonal conflicts

Basic interpersonal conflict resolution concepts

Basic concepts of personnel management

Legal requirements and liabilities regarding personnel management

Skills:

Identify, analyze, and monitor any interpersonal conflicts.

Identify and analyze potential legal and liability issues.

Communicate effectively with impacted parties and with staff regarding sensitive personnel issues.

Document interpersonal conflicts, actions taken to resolve them, and the results.

**4.5.7 Develop written policies and procedures for personnel conflict resolution.** <<Previously 4.2.3>>**Knowledge:**

Types of conflicts that can occur among employees

Skills:

Investigate existing conflict resolution policies and determine whether additional policies are needed.

Gather information about the potential consequences to individuals and companies related to various types of personnel conflicts.

In consultation with appropriate professionals and managers, develop conflict reporting, escalation, and resolution procedures.

Ensure the documentation and distribution of any new policies or procedures.

4.5.8 Review and document resolution of contractual, regulatory, and ethical issues.**Knowledge:**

Best practices for identifying, handling, and documenting ethical problems that arise during the execution of contracts

Legal bid practices and procedures

Contract standards

Federal laws and regulations applicable to fire alarm system contracting and construction

Resources for determining state and local laws, codes, and regulations applicable to fire alarm system contracting and construction

NICET Code of Ethics

Best practices for maintaining proper records

Skills:

Analyze contract documents to meet any regulatory requirements.

Review and determine actions necessary based upon any recommendations provided by the site foreman.

Review and implement any regulatory requirements.

Document actions taken and maintain records.

Establish reporting channels with stakeholders and regulatory agencies relative to conforming to requirements of federal, state, and local laws and regulations.

4.5.9 Develop and implement company-specific and contract-specific policies to ensure a safe work environment.**Knowledge:**

NFPA 70E

OSHA CFR 29 Part 1910

Federal, state, and local safety regulations

Work-site equipment safety requirements

Work-site materials safety requirements (specifically, special handling procedures)

Work-site incident documentation procedures for safety issues

First aid procedures and safety requirements

Skills:

Develop safety-conscious culture for work environments.

Implement and oversee work-site safety programs.

Coordinate and oversee regular safety review meetings.

Document results of safety review meetings.

Document all cases of safety violations, including their resolution.

Determine the safety equipment needed for a specific site.

4.5.10 Develop, manage, and document project budgets.**Knowledge:**

Contract standards (e.g., AIA, CSI)

Project requirements

Impact of equipment, materials, scheduling, and staffing requirements on the project budget

Contract modification documentation and procedures

Contract schedules, time lines and schedule of values

Project management principles

Skills:

Develop project scope and budget.

Identify and manage project costs throughout the project.

Identify and manage contractual requirements for billing.

Manage and supervise materials purchasing and handling.

Manage equipment and installation warranty issues.

Ensure staffing and materials meet project needs within budget.

Coordinate project closeout procedures.

Document all necessary budget changes.

Negotiate contract modifications.



Fire Alarm Systems

Level I Selected General References

Candidates are permitted to bring only the following two references into the test center:

<u>Title</u>	<u>Edition*</u>
NFPA 70	2011
NFPA 72	2013

*The test questions are based on the standard editions listed above; therefore, candidates are strongly urged to bring these editions to the exam. Note: candidates may bring older or newer editions—instead of the editions listed above—at their own risk.

Note: An NFPA Handbook will NOT be accepted as a substitute for any of the titles listed above.

Note: References must be bound or secured in a three-ring binder with a title page. They may have highlighted text and self-adhesive index tabs or dividers, however they must be permanently attached. No other additions or modifications to the references are allowed. References with loose paper or pages and freestanding tabs (e.g., repositionable sticky notes/tabs of any kind) are not permitted into the testing centers.

In addition to the references listed above, the following publications can provide some of the job knowledge required by a fire alarm systems technician. While these books may help you prepare for the exam, they are NOT permitted in the test center.

29 CFR 1910: Occupational Safety and Health Standards.

29 CFR 1926: Safety and Health Regulations for Construction.

Fire Alarm Signaling Systems. Richard W. Bukowski, National Fire Protection Association.

First Aid/CPR/AED Participant's Manual. American Red Cross, StayWell Health & Safety Solutions.

IBC 2012: International Building Code, International Code Council.

Low Voltage Wiring. Terry Kennedy, McGraw-Hill Professional.

NFPA 101 (2012): Life Safety Code, National Fire Protection Association.

NFPA 170 (2012): Fire Safety and Emergency Symbols, National Fire Protection Association.

Safety Training Methods. Jack B. ReVelle, Wiley-Interscience.

Ugly's Electrical References. George V. Hart, Burleson Distributing Group.

UL 864 (2003): Control Units and Accessories for Fire Alarm Systems, Underwriters Laboratories.

➤ This listing is not intended to be complete or representative.

April 30, 2014



Fire Alarm Systems

Level II Selected General References

Candidates are permitted to bring only the following three references into the test center:

<u>Title</u>	<u>Edition*</u>
NFPA 70	2011
NFPA 72	2013
IBC	2012

*The test questions are based on the standard editions listed above; therefore, candidates are strongly urged to bring these editions to the exam. Note: candidates may bring older or newer editions—instead of the editions listed above—at their own risk.

Note: An NFPA Handbook will NOT be accepted as a substitute for any of the titles listed above.

Note: References must be bound or secured in a three-ring binder with a title page. They may have highlighted text and self-adhesive index tabs or dividers, however they must be permanently attached. No other additions or modifications to the references are allowed. References with loose paper or pages and freestanding tabs (e.g., repositionable sticky notes/tabs of any kind) are not permitted into the testing centers.

In addition to the references listed above, the following publications can provide some of the job knowledge required by a fire alarm systems technician. While these books may help you prepare for the exam, they are NOT permitted in the test center.

29 CFR 1910: Occupational Safety and Health Standards.

29 CFR 1926: Safety and Health Regulations for Construction.

Active Training. Mel Silberman, Jossey-Bass.

AIA Contract Documents, The American Institute of Architects.

Construction Contracting. Richard H. Clough, Wiley-Interscience.

Construction Management – Jumpstart. Barbara J. Jackson, Sybex.

Fire Alarm Signaling Systems. Richard W. Bukowski, National Fire Protection Association.

Guide to Contract Documents. Waller S. Poage, Construction Publishers and Consultants.

NFPA 101 (2012): Life Safety Code

Project Management. Harold Kerzner, Wiley.

Project Management. Michael S. Dobson, Adams Media Corporation.

Safety Training Methods. Jack B. ReVelle, Wiley-Interscience.

UL 864 (2003): Control Units and Accessories for Fire Alarm Systems, Underwriters Laboratories.

➤ This listing is not intended to be complete or representative.

April 30, 2014



Fire Alarm Systems

Level III Selected General References

Candidates are permitted to bring only the following four references into the test center:

<u>Title</u>	<u>Edition*</u>
NFPA 70	2011
NFPA 72	2013
NFPA 101	2012
IBC	2012

*The test questions are based on the standard editions listed above; therefore, candidates are strongly urged to bring these editions to the exam. Note: candidates may bring older or newer editions—instead of the editions listed above—at their own risk.

Note: An NFPA Handbook will NOT be accepted as a substitute for any of the titles listed above.

Note: References must be bound or secured in a three-ring binder with a title page. They may have highlighted text and self-adhesive index tabs or dividers, however they must be permanently attached. No other additions or modifications to the references are allowed. References with loose paper or pages and freestanding tabs (e.g., repositionable sticky notes/tabs of any kind) are not permitted into the testing centers.

In addition to the references listed above, the following publications can provide some of the job knowledge required by a fire alarm systems technician. While these books may help you prepare for the exam, they are NOT permitted in the test center.

29 CFR 1910: Occupational Safety and Health Standards.

29 CFR 1926: Safety and Health Regulations for Construction.

Active Training. Mel Silberman, Jossey-Bass.

AIA Contract Documents, The American Institute of Architects.

Construction Contracting. Richard H. Clough, Wiley-Interscience.

Construction Management – Jumpstart. Barbara J. Jackson, Sybex.

Fire Alarm Signaling Systems. Richard W. Bukowski, National Fire Protection Association.

Guide to Contract Documents. Waller S. Poage, Construction Publishers and Consultants.

Project Management. Harold Kerzner, Wiley.

Project Management. Michael S. Dobson, Adams Media Corporation.

Safety Training Methods. Jack B. ReVelle, Wiley-Interscience.

UL 864 (2003): Control Units and Accessories for Fire Alarm Systems, Underwriters Laboratories.

➤ This listing is not intended to be complete or representative.

April 30, 2014



Fire Alarm Systems

Level IV Selected General References

Candidates are permitted to bring only the following three references into the test center:

<u>Title</u>	<u>Edition*</u>
NFPA 72	2013
NFPA 101	2012
IBC	2012

*The test questions are based on the standard editions listed above; therefore, candidates are strongly urged to bring these editions to the exam. Note: candidates may bring older or newer editions—instead of the editions listed above—at their own risk.

Note: An NFPA Handbook will NOT be accepted as a substitute for any of the titles listed above.

Note: References must be bound or secured in a three-ring binder with a title page. They may have highlighted text and self-adhesive index tabs or dividers, however they must be permanently attached. No other additions or modifications to the references are allowed. References with loose paper or pages and freestanding tabs (e.g., repositionable sticky notes/tabs of any kind) are not permitted into the testing centers.

In addition to the references listed above, the following publications can provide some of the job knowledge required by a fire alarm systems technician. While these books may help you prepare for the exam, they are NOT permitted in the test center.

29 CFR 1910: Occupational Safety and Health Standards.

29 CFR 1926: Safety and Health Regulations for Construction.

Active Training. Mel Silberman, Jossey-Bass.

AIA Contract Documents, American Institute of Architects.

Construction Contracting. Richard H. Clough, Wiley-Interscience.

Construction Management – Jumpstart. Barbara J. Jackson, Sybex.

Fire Alarm Signaling Systems. Richard W. Bukowski, National Fire Protection Association.

Guide to Contract Documents. Waller S. Poage, Construction Publishers and Consultants.

NFPA 70 (2011): National Electrical Code. National Fire Protection Association.

Project Management. Harold Kerzner, Wiley.

Project Management. Michael S. Dobson, Adams Media Corporation.

Safety Training Methods. Jack B. ReVelle, Wiley-Interscience.

UL 864 (2003): Control Units and Accessories for Fire Alarm Systems, Underwriters Laboratories.

➤ This listing is not intended to be complete or representative.

April 29, 2014

Tips for Taking NICET Exams

While no single test-taking technique will work for everyone, there are some general tips and preparation ideas that can help almost anyone perform well on test day. Hopefully, you have already heard that NICET is transitioning all of our certification exams from the Work Elements format to the Standard Model/Computer-Based Testing (CBT) format. Each test is laid out a little differently, so some of these tips will be format specific.

Be healthy. Physical health can affect mental performance. You have probably already heard about the importance of getting adequate rest, eating right, staying hydrated, and exercising regularly. Improving your health will help you perform better but it is probably best to avoid making drastic changes close to your test day.

Understand the test content. Download and review the Content Outline (CBT exams) or the Program Detail Manual (Work Element exams). These serve as guides to the work on which the test questions will focus. If some areas are less familiar, then additional prep work in those areas might improve your test scores. Some of the resources listed as “Selected General References” or as “Reference Materials” may be useful.

Understand testing procedures and tools. Review the information about test day procedures in your exam confirmation letter from NICET. Download and work through the CBT [testing tutorial](#) that is available from Pearson VUE, including the on-screen calculator in the “practice exam.”

Use your test time efficiently to maximize your score. No question is worth more points than another, so capture points for the questions that you know how to solve on your first pass through the test. Flag those that will be more of a stretch for later review. After your first pass, return to those questions that you marked. Continue to focus on those questions that you have the best shot at answering correctly in the least amount of time. Finally, if your remaining exam time is running out and you still have an unanswered question, remember:

- There is no penalty for guessing.
- If you can logically eliminate one or two of the answer options, then the odds of guessing correctly are improved.

Most importantly: Read each question carefully. Don't rush! Pay attention to words, numbers, and punctuation in the question and in the answer choices to accurately understand the meaning of each. Questions are not written to be “tricky”; however, correct solutions do require understanding BOTH what is being asked (including the effects of any given conditions or details) AND each of the answer choices.

Double-check your answers. Time permitting, you can revisit questions of which you might be a little unsure. If you have reason to think that you answered incorrectly the first time, then don't hesitate to change your answer to the one you now feel is correct. (It is only a myth that your first choice is always the best choice; most often, if you think of a good reason to change your answer, then you should change it.)

Develop a personal testing strategy: Are you a “good test-taker”? If your answer is anything less than an enthusiastic “YES!” then it will be worth a few minutes to ask yourself what it is about testing that stands between you and optimal performance. Once a problem is properly identified, you should be able to plan an approach to testing that will reduce its troublesome impact. Here are suggestions for dealing with three common issues:

“The test environment is unnatural.”

Problem: Test centers. Waiting rooms. Lockers. Identification and verification. Test rooms. Other people. Proctors. QUIET. While most people like the test centers, for some they can seem confining or impersonal or, well . . . unnatural.

Suggested Test Strategy: Sometimes, very simple things can help to reduce that vague sense of unease with a place, such as a short, friendly conversation with someone in the waiting room; finding the bathroom or a drinking fountain, or looking at other people and room features and imagining something funny. The general idea is to find ways to connect with the people and the facility, and to find specific features that either remind you of something or just seem familiar.

“Taking a test is not like doing a job.”

Problem: A job includes lots of activities, people, documents, locations, resources, etc. that are all interrelated, while a test is a bunch of unrelated, “out-of-the-blue” multiple-choice questions.

Suggested Test Strategy: A test can never duplicate the experience of performing a job, but the questions are pulled from the kinds of knowledge and thinking skills that you would use in doing the work. Some folks can use their awareness of this to shift their mental landscape; that is, to think of the test as just another type of job that requires the same know-how as any other job. Each question then becomes something that may call to mind flash memories of other jobs, people, locations, documents, and so on. It’s still just a multiple-choice test question but it begins to feel less alien – and some of those flash memories may help you to recognize the correct answer.

“Time pressure makes it hard to focus and think.”

Problem: The awareness that the time available to complete the exam is limited creates a pressure that can distract from the job of working through the test questions.

Suggested Test Strategy: If you have this reaction to timed tests, then prepare yourself to deal with it. Know that there will be a clock (for work element tests) or a “time-remaining” timer in the upper right-hand corner of the test screen (for CBT tests). Make a decision that you will ignore it throughout the exam, or at least until some point near the end. Often, time worries come from uncertainty about the upcoming questions and your ability to answer them. To deal with this, you might:

- Have a plan for how to tackle the test (see tips below) – and stick to it.

- Take a practice test, if one is available.

“Some questions take too long.”

Problem: Some questions take so long to solve that there is not enough time to complete the exam.

Suggested Test Strategy: After carefully reading a test question, do you feel ready to either answer it or immediately start to work through the solution steps? Or, do you think, “I think I maybe can solve it, if I can just remember . . .” or “I’ve seen something like this before . . . somewhere . . . somewhere . . .”, or, “Is there really enough information to answer this? Let me think about this a little . . .”? If it’s the latter, then flag the question for later review and move on. The key to this strategy is to plan it ahead of time and remind yourself immediately before starting the exam.

Choosing the Right Program

NICET has over 25 specialty certifications. There are two main things to consider when choosing the program to pursue. First, which one best matches your knowledge and experience? Second, which one matches your employer's criteria, any contract specifications, and any possible jurisdictional requirements as conditions of employment? Go to <http://www.nicet.org/become-certified/what-certifications-are-available> and find the certification program title that best matches your knowledge and experience. Then, click through to the program pages and review the exam documentation and experience requirements.

Standard Model/CBT

The exam documentation is listed in the Content Outlines and Reference Material sections of the program page. The Content Outline can be used for on the job preparation and to determine areas of study on which to focus? The experience requirements can be found in the exam application.

Currently these programs are available in the Standard Model/CBT: Electrical Power Testing, Fire Alarm Systems, Inspection and Testing of Fire Alarm Systems, Inspection and Testing of Water-Based Systems, Special Hazards Suppression Systems, Water-Based (formerly Automatic Sprinkler System) Layout, Video Security Systems Designer, and Video Security Systems Technician.

How the Testing Tools Work:

- Pearson VUE's website (<http://www.pearsonvue.com/athena/athena.asp>) has a free download of the exam interface. You can use it to familiarize yourself with the navigation within the exam and practice with the on-screen calculator
- When selecting answers during your exam, you will be directed to select either the open circle or open squares. Any selections outside the open circle or open squares will not be recognized as answers.

What to Expect for the test day:

- NICET sends a confirmation notice that contains test day instructions. It is important to read it carefully.
- Prior to beginning your exam, read each tutorial carefully.

There is a set 10 minutes to review the tutorials. This time is NOT included in the exam time, so not using the full 10 minutes does NOT leave more time for the exam.

Once you begin, questions will appear as either multiple choice (one correct answer) or multiple response (between two and three correct answers). The number of correct answers will be provided in the exam question twice (i.e., "Which two of the following (Choose two).") A multiple-response question is only counted as correct if all answers selected are correct. Partial credit is not awarded on NICET exams.

After the exam, you will receive an unofficial score report. A passing score is determined by the number of correct answers compared to the minimum correct answers that are required to pass as set using an

established scientific method. The method statistically analyzes input from subject-matter experts (SMEs) to match exam results with the levels of knowledge that are expected of the testing candidates. NICET uses scaled scores for consistency across all of our exams.

Scaled scores are assigned on a sliding scale between 0 and 700, with 500 as the lowest passing score. Scores of below 200 are reported as 200; scores of 500 or above are reported as “pass.”

Scores of 500 or above are indicated with a “pass.” Scores of below 500 include the scaled score for the exam and, for multiple-domain exams, the percent correct for each domain or section. NICET will mail an official score report within two weeks of your exam date.

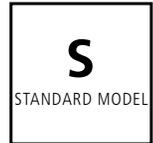
Work Element Exams

All other exams are administered in the Work Element format. However, within the next two years, they will be converted to the Standard Model/CBT format. The exam documentation and experience requirements are listed in the Program Detail Manuals.

What to expect for the test day:

- NICET sends a confirmation notice that contains test day instructions. It is important to read it carefully.
- Test takers should arrive early and follow the proctor’s instructions. The proctor distributes test booklets that contain the selected Work Element, an answer sheet and starts the exam. Each Work Element has a set of questions that is graded independently of the other Work Elements. Questions are multiple choice.
- At the end of the test session, the proctor will collect the test booklets and answer sheets, and then return them to NICET.

After the exam, NICET will send an official score report within two weeks.



EXAM RESCHEDULING REQUEST: PEARSON VUE

To reschedule your exam – **FREE OF CHARGE** – to another date within your eligibility date range, you must have time remaining within your eligibility date range and call Pearson VUE at 1-866-880-0048 a minimum of 24 hours before the originally scheduled test date.

If you need to reschedule within 24 hours (up to 5 days after) of your scheduled exam, the following conditions must be met:

- 1. Submit the Exam Rescheduling Request Form.** Please e-mail this form to reschedule@nicet.org OR mail the form to:

Via U.S. Postal Service:

NICET
c/o Bank of America
PO Box 4188651
Boston, MA 02241-8651

Via FedEx, UPS:

NICET
c/o Bank of America Lockbox Services
Lockbox 418651
MA5-527-02-07
2 Morrissey Blvd.
Dorchester, MA 02125

- 2. Submit the rescheduling fee.** To find out the appropriate fee due, please visit [NICET's Fee page](#). You must submit the appropriate exam fee due, as listed under the pricing guide for your CBT Examination **IF**:
 - Submitting a rescheduling request within 24 hours (up to 5 days after) the originally scheduled exam, and/or
 - Scheduling the exam for a date outside of the original assigned eligibility date range.

The maximum number of NICET-rescheduled exams is two per exam. See [NICET Policy #24](#).

Name: _____ NICET ID¹: _____

Confirm e-mail: _____ Program Name & Level: _____

I would like to reschedule to the following testing window: _____

Please note you may only schedule an exam up to six months from submission date of this form.

Once the conditions above are satisfied, NICET will send you a new eligibility notice to schedule your exam with Pearson VUE. If you submitted your Experience Application Package with your original application to test, no other forms are due at this time. If you did not submit the Experience Application Package, please visit NICET's website for further information, <http://www.nicet.org/candidates/forms.cfm>.

By submitting this form electronically, you are agreeing that you have read and understood all instructions and accept conditions set forth within. For the purpose of electronic processing, an electronic signature constitutes the same as a handwritten signature. Individuals who are mailing the form must sign and date below.

Signature²

Date

¹Found on your eligibility notice.

²Forms submitted by mail must include your signature and date (preferably in blue ink); otherwise this application will not be accepted.

Fire Tech Productions

...training that makes a difference

Need Additional information?

- ✓ **NICET.org**
- ✓ **Firetech.com**
- ✓ **Fire Tech's Free Success With NICET webinar:**

<https://attendee.gotowebinar.com/register/200000000025732278>

Begin Your Journey to Success!

firetech.com

