

Certificate Standard Expert(CSE)

Latest Policies and Procedure

Version: 7.1 Effective Date: April 22, 2019

Certified Standards Expert (CSE)

The Certified Standards Expert (CSE) is a subject matter professional with a high level of knowledge and understanding of a specific IPC standard or group of standards. The role of the Standards Expert may vary by organization, but the CSE may:

- Act as a subject matter expert for their organization, answering standard related questions, providing support to various levels of the organization, and, interpreting the standard for their organization.
- Judge organizational conflicts in opinion of a viewed condition.
- Act as the intermediary between the organization and IPC staff and/or industry experts on standards questions.
- Update the organization on the latest standards and best practices from industry.
- Provide feedback to standards committees on updates to the process for inclusion in the standards.
- Interface with designers and process engineers to develop assembly processes.

Senior Certified Standards Expert (SCSE) ***

The Senior Certified Standards Expert (SCSE) is a subject matter professional with a high level of knowledge and understanding of a variety of IPC standard or group of standards. The role of the Standards Expert may vary by organization, but the CSE may:

- Act as a subject matter expert for their organization, answering standard related questions, providing support to various levels of the organization, and, interpreting the standard for their organization.
- Judge organizational conflicts in opinion of a viewed condition.
- Act as the intermediary between the organization and IPC staff and/or industry experts on standards questions.
- Update the organization on the latest standards and best practices from industry.
- Provide feedback to standards committees on updates to the process for inclusion in the standards.
- Interface with designers and process engineers to develop assembly processes.

Criteria for Initial Certification

Certified Standards Expert (CSE)

To qualify for Certified Standards Expert certification, a candidate shall fulfill the following requirements:

❖ Personal Identifying Information

IPC requires that all candidates complete a Certification Profile, that includes, but is not limited to, their legal name, home address, and date of birth. This information is utilized by IPC to confirm the identity of Candidates and Certificants.

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Candidates shall complete their Certification Profile on the IPC EDGE Learning Management System, regardless of assessment method.

Candidates can access their Certification Profile from their IPC EDGE user dashboard or from any certification program hosted on the IPC EDGE Learning Management System.

❖ Certification Exam(s)

A candidate shall successfully complete the Enhanced Policies and Procedures Exam with a minimum score of 80%.

A candidate shall successfully complete the General Knowledge Exam with a minimum score of 80%.

A candidate shall successfully complete the required Standard Specific Exam(s) with a minimum score of 80%.

Senior Certified Standards Expert (SCSE)

The Senior Certified Standards Expert (SCSE) certification supersedes and replaces a certificant's Certified Standards Expert (CSE) certification. A certificant may not hold both a Certified Standards Expert (CSE) certification and a Senior Certified Standards Expert (SCSE) certification simultaneously.

To qualify for Certified Standards Expert certification, a candidate shall fulfill the following requirements:

❖ Certification and Endorsements

To obtain a Senior Certified Standards Expert (SCSE) certification, a candidate must hold an active Certified Standards Expert (CSE) certification in good standing, with endorsements in at least three different IPC standards. For example, a CSE with endorsements in J-STD-001, 610, and 620 may apply to become a Senior Certified Standards Expert (SCSE).

❖ Experience and Employment

The Senior Certified Standards Expert (SCSE) shall only be granted if the CSE possesses 10 years of experience in the electronics industry in a role that utilizes IPC standards regularly.

❖ Application

To obtain a Senior Certified Standards Expert designation, the Certified Standards Expert (CSE) shall submit a completed Senior Certified Standards Expert Application, supporting documentation, and all applicable fees to IPC.

❖ Supporting Documentation

In addition to a Senior Certified Standards Expert application, a candidate will submit the following:

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- A resume detailing 10 years of experience in the electronics industry in a role that utilizes IPC standards regularly.
- A letter from current employer on letterhead identifying their current role, length of time in the role, and how their role utilizes IPC standards. If self-employed, a candidate may submit a personal statement on their company's letterhead providing a description of the current role, the type of work done by their company, and how they utilize IPC standards.

Certification Exam Overview

❖ Exam Descriptions

❖ Enhanced Policies and Procedures Exam

The Enhanced Policies and Procedures Exam contains 10 multiple-choice questions that evaluate a candidate's understanding of:

- The Policies and Procedures for the certification program that the candidate is attempting to complete.
- The history of the electronics industry and how standards help improve the industry.
- The key steps in the production of a circuit board and electronics assembly.
- How standards are developed, revised, and documented, and how you can help improve those standards.
- How to apply standards certification to increase the quality for your company, your customers, and the electronics industry.
- How to get assistance in solving your technical challenges.

❖ General Knowledge Exam

The General Knowledge Exam is a closed-book test with 30 multiple-choice questions.

Candidates must complete the exam within 1-hour and attain a minimum score of 80% to pass.

This exam assesses an individual's knowledge of the following areas:

- Component Identification
- General Terms and Definitions
- Order of Precedence
- Document Handling
- Classification
- Measurements, Units, and Applications
- Definition of Requirements
- Appendixes
- Requirements Flowdown
- Health and Safety
- Personnel Proficiency
- Acceptance Requirements
- Assembly Requirements

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❖ Standard Specific Endorsement Exam

A CSE may choose to test to any of the following standard-specific endorsement exams. The required exams for each endorsement are listed below:

- **J-STD-001 Endorsement**
 - 70 Multiple Choice Questions
 - Open book exam
 - 2 Hours and 30 Minutes Time Limit
- **IPC-A-600 Endorsement**
 - 70 Multiple Choice Questions
 - Open book exam
 - 2 Hours and 30 Minutes Time Limit
- **IPC-A-610 Endorsement**
 - 70 Multiple Choice Questions
 - Open book exam
 - 2 Hours and 30 Minutes Time Limit
- **IPC-6012 Endorsement**
 - 70 Multiple Choice Questions
 - Open book exam
 - 2 Hours and 30 Minutes Time Limit
- **IPC/WHMA-A-620 Endorsement**
 - 70 Multiple Choice Questions
 - Open book exam
 - 2 Hours and 30 Minutes Time Limit
- **IPC-7711/7721 Endorsement**
 - 70 Multiple Choice Questions
 - Open book exam
 - 2 Hours and 30 Minutes Time Limit

Exam Results and Certificates

❖ Exam Results

All IPC exams are pass/fail assessments designed to measure a minimum level of competence. The time frame and method of obtaining exam results will vary based on the type of assessment utilized.

❖ Online Exams

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The results of any exam taken on the IPC EDGE Learning Management System are available as soon as the candidate submits the exam, or the exam time expires.

Certificate Issuance

Candidates that successfully complete the requirements of an IPC certification program will receive a certificate verifying completion of that program. IPC certificates are issued directly to the candidate via their IPC EDGE Learning Management System account.

Candidates can download and print their certificate from the IPC EDGE Learning Management System. Instructors and proctors are not granted access to candidate certificates on the IPC EDGE Learning Management System.

Instructors, proctors, and any other third party may request and obtain copies of certificates directly from the certificant. IPC will only verify the authenticity of certificates and provide summary reports for instructor record keeping. IPC does not provide copies of certificates to any individual other than the certificant.

Certification Endorsements

Certification endorsements in the CSE and SCSE program are revision specific. The CSE and SCSE certificate will list the program and revision to which the certificant is endorsed. Certificate Information & Ownership A candidate's certificate will bear the candidate's name, certification number, certification expiration date, optional modules or endorsements completed, the name of the candidate's instructor, and the instructor's employer.

Candidates may print copies of their certificate for personal and professional use, in compliance with this document.

All certificates remain the property of IPC, which may withdraw, cancel, revoke, change the scope of, or otherwise annul the certification for cause.

Failure

Candidates that fail to pass a certification exam may attempt to **retake the exam after the cool down period** specified in the certification program's Policies and Procedures. Candidates are afforded one complimentary retest of the Enhanced Policies and Procedures Exam. Any additional attempts are subject to the retest fee.

Candidates that fail the General Knowledge or Standard Specific Endorsement exam (IPC Essential Exam) are subject to a retest fee.

Cool Down Period

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The certification exam cool down period is used to protect the integrity of certification exam items and to ensure that candidates are afforded the opportunity to obtain additional training as necessary.

❖ First Failure

In the event that a candidate fails his or her first attempt to pass a certification exam, the candidate shall wait a minimum of **14 calendar day** before attempting a retest.

❖ Second Failure

In the event that a candidate fails his or her second attempt to pass a certification exam, the candidate shall wait a minimum of **30 calendar days** before attempting a retest.

❖ Third Failure

In the event that a candidate fails his or her third attempt to pass a certification exam, the candidate shall wait a minimum of **365 calendar days** before attempting a retest.

Candidates may opt to retest only the failed portion(s) of the certification written examination or the workmanship project, if completed within 90 calendar days following the initial failed exam.

Certification Term

The certification term for the **CSE program is 2 years**. The certification term begins on the date a candidate successfully completes all the program's minimum certification requirements.

Certifications only reflect the expiration month and year. Certifications expire the last day of the expiration month, regardless of the day of the month the certification was granted.

CSE standard endorsements expire on the same date as the initial certification, regardless of when the endorsement was earned.

Certification Renewal Requirements and Process

General Policy

CSEs and SCSEs that recertify, prior to their certification expiration date, automatically extend the expiration date of all endorsements. Since endorsements are attached to a certification, all endorsements to a certification expire on the same date as the initial certification regardless of when the endorsement was added to the CSE certificate. When a certification is extended through the recertification process, then all endorsements are also extended.

Renewal through Renewal Testing

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❖ Certified Standards Expert (CSE)

A CSE or CSES may renew his or her certification through retesting. In order to renew their certification, a CSE must successfully complete the CSE certification renewal exam prior to their certification expiration date.

❖ General Renewal through Retesting Policies

To renew their certification through testing only, Certificants shall follow all of the certification program's application procedures and schedule the certification renewal exam with an active IPC MIT.

All retests follow the same policies and procedures as initial certification testing, including the cool down period after failures.

Certificants are responsible for all recertification testing fees.

Certification Renewal Period

The IPC recertification program helps to ensure the continued competence of certificants as tools, processes, and technologies evolve. Prior to the conclusion of the certification term, certificants shall demonstrate they have successfully met the requirements of one of the renewal methods listed in this section.

CSE certification renewals shall occur within **6 (six) calendar months prior to the expiration of an existing certification**. When Certificants renew their certification **within 6 months of the certification expiration date**, the renewed certification will be valid for an additional 2 years from the expiration date of their currently held certification.

Committee Participation

CSEs and SCSEs that have participated in IPC standards committees may opt to complete the CSE Recertification Application, pay the recertification fee, and provide a letter from the committee's staff liaison attesting to their participation in lieu of testing.

The CSE or SCSE must provide documentation attesting to at least 25 hours of committee participation to utilize this recertification method. All 25 hours of committee participation must occur during the most recent certification period.

A CSE or SCSE may only utilize this recertification method if they participate in a technical committee which corresponds with an endorsement they have earned.

Senior Certified Standards Expert Renewal Policy

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Senior CSEs may recertify utilizing the same criteria as the CSE, but with the following additional requirements:

- If a Senior CSE is recertifying through either the testing or committee participation methods, they must also submit the Senior CSE Recertification application form.
- The Senior CSE Recertification application must be accompanied by an updated resume and a letter from their current employer on company letterhead indicating their current role and their continued use of IPC standards.

Recertification Compliance

Failure to comply with recertification requirements will result in the expiration of certification, removal of the Certificant's credential, and a revocation of the rights afforded program certificants.