	SCHEDA / SHEET **PROGRAMMA DELLE LEZIONI /** **TRAINING COURSES PROGRAM**	**Scheda FEL n./** Sheet FEL n.	**E 15**
		Revisione / Revision	0
		Pagina / Page	1 di 6
Denominazione del corso / Type of Training Course	**CORSO PER LA CERTIFICAZIONE E RICERTIFICAZIONE PER CERTIFIED STANDARD EXPERT (CSE) IN ACCORDO ALLO STANDARD IPC-7711/7721** **CERTIFICATION AND RECERTIFICATION TRAINING COURSES ACCORDING TO IPC-77117721 STANDARD FOR CERTIFIED STANDARD EXPERT (CSE)**		
Standard di riferimento / Reference Standard	**IPC Policies and procedures**		
Regolamento di riferimento / Reference Regulation	**IIS_FEL 007 R**		

OBIETTIVI / AIMS AND OBJECTIVES

I corsi per lôottenimento della Certificazione da **Certified Standards Expert (CSE)** in accordo allo Standard IPC-7711/7721 si pongono lôobiettivo di creare soggetti in grado di avere unôelevata conoscenza e comprensione dello Standard.
The **Certified Standards Expert (CSE)** Certification Training courses according to IPC-7711/7721 has the objective to create a subject matter professional with a high level of knowledge and understanding of the Standard.

Il ruolo **Certified Standards Expert (CSE)** può variare a seconda dellôAzienda, ma egli sarà in grado di:

- agire come esperto dello Standard IPC-7711/7721 in Azienda, rispondendo a domande relative ad esso;
- fornire un supporto a vari livelli dell'organizzazione interpretando lo standard IPC-7711/7721;
- giudicare i conflitti tra differenti interpretazioni dello Standard IPC-7711/7721;
- svolgere la funzione di intermediario tra la propria Azienda e i vari esperti di altre Aziende;
- svolgere la funzione di intermediario tra la propria Azienda e lo staff IPC fornendo anche eventuali suggerimenti nei comitati per lo Standard IPC-7711/7721;
- aggiornare lôAzienda in merito agli ultimi aggiornamenti dello Standard;
- interfacciarsi con progettisti e ingegneri di processo per sviluppare processi di assemblaggio.

The role of the **Certified Standards Expert** may vary by organization, but the CSE will be able to:

- Act as a subject matter expert for their organization, answering IPC-7711/7721standard 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 regarding IPC-7711/7721;
- Act as the intermediary between the organization and IPC staff and/or industry experts on standards questions.
- Update the organization on the latest IPC-7711/7721 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.

REQUISITI DI ACCESSO / EXPERIENCE AND ACCESS CONDITIONS

Eô**raccomandato** che i candidati ai corsi abbiano già frequentato il corso da **Certified IPC Specialist (CIS)** in accordo allo Standard IPC-7711/7721.

It Is **recommended** that the Certification Training Courses candidates has participated to **Certified IPC Specialist (CIS)** certification training course conforming to IPC 7711/7721.

Inoltre, per partecipare ai corsi è richiesto che i candidati prendano visione delle **IPC Policies and procedures** e del regolamento **IIS_FEL007R**.

Furthermore, to participate at the Certification Training Courses, Candidates must take overview of IPC Policies and Proceduresò and the Document **PRO_FEL007R**.

Denominazione del corso / Type of Training Course	**CORSO PER LA CERTIFICAZIONE E RICERTIFICAZIONE PER CERTIFIED STANDARD EXPERT (CSE) IN ACCORDO ALLO STANDARD IPC-7711/7721** **CERTIFICATION AND RECERTIFICATION TRAINING COURSES ACCORDING TO IPC-77117721 STANDARD FOR CERTIFIED STANDARD EXPERT (CSE)**
Standard di riferimento / Reference Standard	**IPC Policies and procedures**
Regolamento di riferimento / Reference Regulation	**IIS_FEL 007 R**

DURATA DEL CORSO / TRAINING COURSE DURATION

Il corso per la Certificazione da **Certified Standard Expert (CSE)** ha una durata minima di n°36 ore (comprensive degli esami finali).
Certified Standard Expert (CSE) Certification training Course minimum duration is 36 hours (comprehensive of final exams).

Il corso per la Ricertificazione da Il corso per la Certificazione da **Certified Standard Expert (CSE)** ha una durata minima di n°20 ore (comprensive degli esami finali).
Certified Standard Expert (CSE) Recertification training Course minimum duration is 20 hours (comprehensive of final exams).

*Il **Candidato** può comunque accedere agli esami finali per la Ricertificazione (Challenge Test), della durata massima di n°4 ore, senza dover partecipare al corso.*
*The **Candidates** may perform Recertification Exams (Challenge Test), maximum 4 hours, without training course participation.*

MATERIALE DIDATTICO / TRAINING COURSE MATERIAL

I partecipanti al corso riceveranno una copia cartacea in versione originale dello Standard IPC-7711/7721
The Student will receive an original copy of IPC-7711/7721.

PROGRAMMA DIDATTICO (CERTIFICAZIONE) / TRAINING COURSE CONTENT (CERTIFICATION)

1ª Giornata (8 ore) / First Day (8 Hours)

- Policies and Procedures ï 1,5 ore
- Policies and Procedures ï 1,5 hours

Modulo 1: IPC 7711/7721 Procedure comuni ï 3 ore - Teoria
Module 1: IPC 7711/7721 Common Procedures ï 3 hours - Lecture

Modulo 2: Giunzione di fili ï 0,5 ore ï Teoria + 3,0 ore Pratica
Module 2: Wire Splicing ï 0,5 hours ï Lecture + 3,0 hours Practical

2ª Giornata (8 ore) / Second Day (8 Hours)

Modulo 3: Conformal Coating ï 0,75 ore ï Teoria + 1,25 ore Pratica
Module 3: Conformal Coating ï 0,75 hours ï Theory + 1.25 hours (practical exercitation)

Modulo 4: Foro passante ï 0,75 ore ï Teoria + 4,5 ore Pratica
Module 4: Through hole ï 0,75 hours ï Lecture + 4,5 hours - Practical

Modulo 5: Chip e MELF ï 0,75 ore - Teoria
Module 5: Chip & MELF ï 0,75 hours - Theory

3ª Giornata (8 ore) - Third Day (8 Hours)

Modulo 5: Chip e MELF ï 2,5 ore - Pratica
Module 5: Chip & MELF ï 2,5 hours - Practical

Modulo 6: Reofori a ñGull Wingò - 1,0 ore ï Teoria + 4,0 ore Pratica
Module 6: Gull Wing Lead ï 1,0 hours ï Theory + 4,0 hours Practical

Modulo 7: J-Lead ï 0,5 ore - Teoria
Module 7: J-Lead ï 0,5 hours - Theory

4ª Giornata (8 ore) - Fourth Day (8 Hours)

Modulo 7: J-Lead ï 1,5 ore - Pratica
Module 7: J-Lead ï 1,5 hours - Practical

Modulo 8: BGA ï 0,5 ore ï Teoria + 0,5 Pratica
Module 8: BGA ï 0.5 hours ï Theory + 0,5 Practical

Modulo 9: Riparazione del laminato base ï 0,5 ore ï Theory+ 4,5 ore Pratica
Module 9: Laminate repair ï 0,5 hours ï Theory + 4,5 hours practical

Modulo 10: Riparazione del circuito stampato ï 0,5 ore - Teoria
Module 10: PWB Circuit repair ï 0,5 hours - Theory

5ª Giornata (4 ore) - Fifth Day (8 Hours)

Esami Finali (Closed Book test - Open Book test) ï 4 ore
Final Exams (Closed Book test - Open Book test) - 4 hours

Gli esami finali per lôottenimento della certificazione sono teorici
Certification final exams are theoretical.

Gli esami finali per lôottenimento della certificazione consistono in:
- esame su IPC policies and procedures (20 domande a risposta multiple a libro chiuso);
- esame sulle conoscenze generali (20 domande a risposta multiple a libro chiuso);
- esame di approvazione (70 domande a risposte multiple a libro aperto).

Certification final exams are composed by;
- exam on IPC policies and procedures (20 multiple choice questions with a closed book);
- examination of general knowledge (20 multiple choice questions with a closed book);
- standard endorsement exam (70 multiple choice questions with open book).

Gli esami saranno in modalità on-line sul profilo personale del corsista creato su **IPC EDGE 2.0**
The exams will be on-line through the personal profile created in **IPC EDGE 2.0**.

Se il candidato risponde correttamente ad almeno *lô80%* delle domande proposte per ciascun esame allora ha superato lôesame per lôottenimento della certificazione.
The student shall answer correctly at least *80%* of average of questions enclosed in each written test examination.

Denominazione del corso / Type of Training Course	**CORSO PER LA CERTIFICAZIONE E RICERTIFICAZIONE PER CERTIFIED STANDARD EXPERT (CSE) IN ACCORDO ALLO STANDARD IPC-7711/7721 CERTIFICATION AND RECERTIFICATION TRAINING COURSES ACCORDING TO IPC-77117721 STANDARD FOR CERTIFIED STANDARD EXPERT (CSE)**
Standard di riferimento / Reference Standard	**IPC Policies and procedures**
Regolamento di riferimento / Reference Regulation	**IIS_FEL 007 R**

Table: Calendar of training courses

	Morning (4 hours)	Afternoon (4 hours)
Monday	Introduction, Policies and Procedures (theory) Module 1: Common procedures (theory)	Module 1: Common procedures (theory) Module 2: Wire Splicing (theory) Wire Splacing (practical exercitation)
Tuesday	Module 3: Conformal coating (theory) Conformal coating (practical demonstration) Session 29: Conformal coating (practical exercitation) Module 4: Through hole (theory) Through hole (practical demonstration)	Module 4:Through hole (practical demonstration) Module 5: Chip & MELF (theory)
Wednesday	Module 5: Chip & MELF (practical exercitation) Module 6: Gull Wing Lead (theory) Gull Wing Lead (practical demonstration)	Module 6: Gull Wing Lead (practical demonstration) Module 7: J-Lead (Theory)
Thursday	Module 7: J-Lead (practical exercitation) Module 8: BGA (theory+practical) Module 9: Laminate Repair (theory) Module 9: Laminate Repair (practical exercitation)	Module 9: Laminate Repair (practical exercitation) Module 10: PWB Circuit Repair (theory) PWB Circuit Repair (practical exercitation)
Friday	Module 10: PWB Circuit Repair (practical exercitation) CLOSED BOOK + OPEN BOOK TEST	
Saturday		

PROGRAMMA DIDATTICO (RICERTIFICAZIONE) / TRAINING COURSE CONTENT (RECERTIFICATION)

1ª Giornata (8 ore) / First Day (8 Hours)

IPC Policies and Procedures ï 1,5 ore
IPC Policies and Procedures ï 1,5 hours

Modulo 1: IPC 7711/7721 Procedure comuni ï 1,5 ora - Teoria
Module 1: IPC 7711/7721 Common Procedures ï 1,5 hour - Lecture

Modulo 2: Giunzione di fili ï 0,5 ore ï Teoria + 1,0 ore Pratica
Module 2: Wire Splicing ï 0,5 hours ï Lecture + 1,0 hours Practical

Modulo 3: Conformal Coating ï 0,5 ore ï Teoria + 1,00 ore Pratica
Module 3: Conformal Coating ï 0,5 hours ï Theory + 1.00 hours (practical exercitation)

Modulo 4: Foro passante ï 0,5 ore ï Teoria + 1,0 ore Pratica
Module 4: Through hole ï 0,5 hours ï Lecture + 1,0 hours - Practical

Modulo 5: Chip e MELF ï 0,5 ore ï Teoria
Module 5: Chip & MELF ï 0,5 hours ï Theory

2ª Giornata (8 ore) / Second Day (8 Hours)

Modulo 5: Chip e MELF ï 1,0 ore Pratica
Module 5: Chip & MELF ï 1,0 hours Practical

Modulo 6: Reofori a ñGull Wingò - 0,5 ore ï Teoria + 1,0 ore Pratica
Module 6: Gull Wing Lead ï 0,5 hours ï Theory + 1,0 hours Practical

Modulo 7: J-Lead ï 0,25 ore ï Teoria + 1,0 ore Pratica
Module 7: J-Lead ï 0,25 hours ï Theory + 1,0 hours Practical

Modulo 8: BGA ï 0,5 ore ï Teoria + 0,5 Pratica
Module 8: BGA ï 0.5 hours ï Theory + 0,5 Practical

Modulo 9: Riparazione del laminato base ï 0,5 ore ï Theory+ 2,75 ore Pratica
Module 9: Laminate repair ï 0,5 hours ï Theory + 2,25 hours practical

3ª Giornata (8 ore) - Third Day (6 Hours)

Modulo 10: Riparazione del circuito stampato ï ï Teoria + 2,0 ore Pratica
Module 10: PWB Circuit repair ï + 2,0 hours Practical

Esami Finali (Closed Book test ï Open Book test) ï 4 ore
Final Exams (Closed Book test ï Open Book test) - 4 hours

Table: Calendar of training courses

Denominazione del corso / Type of Training Course	**CORSO PER LA CERTIFICAZIONE E RICERTIFICAZIONE PER CERTIFIED STANDARD EXPERT (CSE) IN ACCORDO ALLO STANDARD IPC-7711/7721** **CERTIFICATION AND RECERTIFICATION TRAINING COURSES ACCORDING TO IPC-77117721 STANDARD FOR CERTIFIED STANDARD EXPERT (CSE)**
Standard di riferimento / Reference Standard	**IPC Policies and procedures**
Regolamento di riferimento / Reference Regulation	**IIS_FEL 007 R**

	Morning (4 hours)	**Afternoon (4 hours)**
Monday		
Tuesday		
Wednesday	Introduction, Policies and Procedures (theory) Module 1: Common procedures (theory) Module 2: Wire Splicing (theory) Wire Splacing (practical exercitation) Module 3: Conformal coating (theory) Conformal coating (practical demonstration)	Module 4: Through hole (theory) Module 4:Through hole (practical demonstration) Module 5: Chip & MELF (theory)
Thursday	Module 5: Chip & MELF (practical exercitation) Module 6: Gull Wing Lead (theory) Gull Wing Lead (practical demonstration) Module 6: Gull Wing Lead (practical demonstration) Module 7: J-Lead (Theory) Module 7: J-Lead (practical exercitation)	Module 8: BGA (theory+practical) Module 9: Laminate Repair (theory) Module 9: Laminate Repair (practical exercitation) Module 10: PWB Circuit Repair (theory) Module 10: PWB Circuit Repair (practical exercitation)
Friday	CLOSED BOOK+ OPEN BOOK TEST	
Saturday		