

# NASA JSC Level B Workmanship Training Center

## IPC-J-STD-001, H/HS Certified IPC Specialist (CIS) Training

NASA Workmanship Standards provide uniform engineering and technical requirements for processes, procedures, practices, and methods that have been endorsed as standard for NASA programs and projects.

The RITF Training Facility provides the associated training to contractor personnel and civil servants alike.

The RITF trains approximately 800 to 1000 students per year.

### **Workmanship Standard for Crimping, Interconnecting Cables, Harnesses, and Wiring**

Instructors utilize lectures, demonstrations, and student application to develop required knowledge and skills for soldering and crimping stranded wires, and cable fabrication.

*Length: 40 hours*

### **Electrostatic Discharge (ESD) Control Training**

There are three levels of ESD classes that cover general ESD issues, learning to develop ESD control program techniques, and developing skills for performing an Electrostatic Protective area (EPA) audit.

*Length: 4 hours for each level*

### **Workmanship Standard for Fiber Optic Terminations, Cable Assemblies, and Installation**

Instructors utilize lectures, demonstrations, and student application to develop NASA Workmanship Standard required knowledge and skills for fiber optic termination and fusion splicing.

*Length: 24 hours*

### **IPC-J-STD-001, H/HS Certified IPC Specialist (CIS) Training**

Instructors utilize lectures, demonstrations, and student application to develop understanding of soldered electrical and electronic assemblies.

*Length: 40 hours*

### **Lithium Battery Handling Familiarization**

Instructors utilize lectures and demonstrations about the hazards associated with lithium batteries.

*Length: 2 hours*

### **Workmanship Standard for Polymeric Application on Electronic Assemblies**

Instructors utilize lectures, demonstrations, and student application to develop required knowledge and skills for conformal coating and component and wire harness staking. These coatings help protect the components and board assembly.

*Length: 24 hours*

### **IPC/WHMA-A-620 D/DS Requirements for the manufacture of cable, wire and harness assemblies Certified IPC Specialist (CIS)**

"The IPC/WHMA-A-620 standard prescribes practices and requirements for the manufacture of cable, wire and harness assemblies. The standard describes materials, methods, tests and acceptability criteria for producing crimped, mechanically secured and soldered interconnections, and the related assembly activities (corresponding lacing/restraining criteria) associated with cable and harness assemblies." - WHMA

*Length: 64 hours*

### **Torque & Safety Wiring Inspection**

Instructors utilize lectures and demonstrations to provide students an introduction to basic torque calculations, terminology, and application of torque wrenches. It also includes the use of Safety Wire to maintain torque values.

*Length: 4 hours*

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# Request Training

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For those with access to the JSC network, training can be requested at the following link:

[Failure Analysis Training Link](#)