

# IPC-WHMA-A-620 REQUIREMENTS AND ACCEPTANCE OF CABLE AND WIRE HARNESS ASSEMBLIES TRAINING & CERTIFICATION

Monday, April 9 – Thursday, April 12, 2018

NTS Baltimore

Monday, August 13 – Thursday, August 16, 2018

NTS Baltimore

Monday, December 10 – Thursday, December 13, 2018

NTS Baltimore

TRAINING FOR *THE* STANDARD GOVERNING CABLE AND WIRE HARNESS FABRICATION!

*Registration closes two (2) weeks ahead of each class!*

Training can also be performed at your location or at an NTS facility in your area!

If interested, please contact [ipctraining@nts.com](mailto:ipctraining@nts.com).

## WHO IS THIS COURSE FOR?

This course is designed for anyone along the PCB/PCA supply chain – manufacturers, suppliers, OEM’s, etc. – that is associated with the quality and / or reliability of electronic assemblies.

## COURSE DETAILS

### Registration Fees

\$1,995 per student for CIT training

\$1,495 per student for CIS training

### Locations

NTS Anaheim, 1435 Allec Street, Anaheim, CA 92805

(714) 999-1616

NTS Baltimore, 5 North Park Drive, Hunt Valley, MD 21030

(410) 584-9099

## CONTACT INFORMATION

To reserve your seat please contact:

**William Graver**  
(410) 229-4372

[william.graver@nts.com](mailto:william.graver@nts.com)

**Russell Shepherd**  
(714) 999-1616

[russell.shepherd@nts.com](mailto:russell.shepherd@nts.com)

Or you can contact [ipctraining@nts.com](mailto:ipctraining@nts.com) or visit NTS’s Events page at <https://www.nts.com/resourcecenter/events>

## WHAT’S INCLUDED

- Hard copy of IPC-WHMA-A-620
- CD copy of IPC-WHMA-A-620 (CIT only)
- IPC Certificate
- Snacks, refreshments, and lunch each day

## OVERVIEW

This is a four-day course with the curriculum broken down as follows:

<i>Modules</i>	<i>Hands-On Modules - Optional</i>
M1 - P&P, General / Applicable Docs	H1 - Prep (requires M1)
M2 - Crimping	H2 - Crimp (requires M1 & M2)
M3 - Soldering to Terminals	H3 - Soldering Term (requires M1 & M3)
M4 - Connectors / Molding	H4 - Connectorization (requires M1, M2, & M4)
M5 - Splices	H5 - Splices (requires M1 & M5)
M6 - Marking / Securing / Final Assembly	H6 - Coax (requires M1 & M7)
M7 - Coax	
M8 - Solderless Wrap	

## ABOUT THE INSTRUCTOR(S)



### **William Graver**

Mr. William Graver has over 30 years of experience in the PCB and PCA manufacturing industry. Currently, Mr. Graver is a Senior Analyst at NTS's facility in Hunt Valley, MD (NTS-Baltimore).

His main areas of focus are PCB/PCA Failure Analysis and IPC training, for which Mr. Graver holds the following certifications:

- MIT (Master IPC Trainer) IPC-A-600
- MIT (Master IPC Trainer) IPC-A-610
- MIT (Master IPC Trainer) IPC-6012
- MIT (Master IPC Trainer) IPC/WHMA-A-620



### **Russell Shepherd**

Mr. Russell Shepherd has over 30 years of experience in the PCB test industry along with over 20 years of training experience. Currently, Mr. Shepherd is the Operations Manager at NTS's

facility in Anaheim, CA (NTS-Anaheim) and in addition to his decades of test and training experience, Mr. Shepherd is also the chair of IPC's Flexible Circuits Test Methods and Microsection committees and is the vice chair of IPC's SIR/ECM and CAF task groups. Currently, Mr. Shepherd also holds the following certifications:

- MIT (Master IPC Trainer) IPC-A-600
- MIT (Master IPC Trainer) IPC-6012