

Basic Solder Training

Hosted by:



The AIAA Greater Huntsville Section is hosting a 3 hour basic solder training class. This class will be held at STI Electronics in Madison, AL, an electronics assembly and training facility for commercial and aerospace applications. The class will be taught by STI training personnel, experienced in teaching professionals how to solder. This class is not for certification.

The class includes a one hour lecture followed by two hours of hands-on experience. A full agenda is provided on the next page. AIAA has hosted this same course multiple times with great success.

Three (3) Professional Development Hour credits are available to AIAA Members taking this class.

Course Location: STI Electronics, 261 Palmer Rd, Madison, AL 35758

Course Date: Friday, March 18, 2016, 4pm - 7pm.

Register By: Wednesday, March 16, 2016

The prices for this class will be as follows:

AIAA Member: \$55

AIAA Student Member: \$35

General Public: \$100

All participants must be 18 or older. Registration is first come, first serve according to RSVP and payment. Classroom seating is limited to 10 person blocks.

RSVP at <https://www.surveymonkey.com/r/K3M2MRN> . Once 10 people have registered, the link will be provided to pay the registration fee.

The team at AIAA looks forward to your participation in this class.

Training: The Basic Soldering program consists of the following modules for a total of 3-hours (1 Hr. Lecture/2 Hours Hands-On Lab):

Module One: Materials Lecture (0.5-hours)

- Terms and Definitions
- Solder (J-STD-006)
 - Definition
 - Forms (bar, wire, paste, preforms)
 - Eutectic Solder
- Flux (J-STD-004)
 - Types
 - Rosin Flux (R, RMA, RA)
 - Water Soluble
 - Low Residue/No-Clean
 - Purpose
 - Definition
 - Cleaning Methods
- Cleaning Agents

Module Two: Preparing to Solder Lecture (0.5-hours)

- Terms and Definitions
- Solderability
- Fundamental Requirements for a good solder joint
 - Thermal Requirements
 - Solderability Requirements
- Materials Selection
 - Solder wire diameter
 - When to use external flux
 - Flux – Choosing the right one for the job
 - Liquid
 - Paste
- Soldering Iron Tip/Temperature Selection
 - Thermal mass
 - Temperature selection
- Solder Wetting
 - Capillary flow
 - Solder flow
 - Flux flow

Module Three: Soldering Lab (2 Hours)

- Component Preparation and Soldering Demo
- Soldering
 - Skills Demonstration (Through-Hole Assembly and Soldering)