

Inspector Training Course to ECSS Specifications ECSS-Q-ST-70-08, Q-ST-70-38, Q-ST-10-09

Fact Sheet E02A & E02B European Space Agency Training Centre (UK)

This ESA-approved course develops an understanding of, and an ability to interpret specifications covering high-reliability and high quality electronic assemblies, and ensures that sufficient knowledge is gained to make confident decisions within the parameters of the specifications.

This fully-documented course is intended for Inspectors, Quality and Product assurance Personnel.

The course has practical hands-on experience at every opportunity. All necessary tools and equipment are supplied, although delegates are welcome to bring their own hand tools if desired.

This course is held simultaneously with the Hand Soldering Course E01.

Course aims

- To understand the requirements of ESA specifications ECSS-Q-ST-70-38 & ECSS-Q-ST-70-08
- To identify the factors which influence the quality, reliability and performance of a solder joint
- To make a range of solder joints and understand hand-assembly methods necessary to produce reliable assemblies in accordance with ECSS-Q-ST-70-38 & ECSS-Q-ST-70-08, Q-ST-70-38
- To be able to inspect and evaluate electronic assemblies according to ECSS-Q-ST-70-08, Q-ST-70-38 & Q-ST-10-09

Course content

The theory of soft soldering * Practical work in the achievement of a high reliability joint * Examples of good and bad joints * The interpretation of standards * Work on joint failures with examples * Mounting components and component structure * Stress relief * Inspection and evaluation of connections *

The course includes continuous assessment of the delegates' workmanship and concludes with a multi-choice question paper based on the ESA specification.

Award

In accordance with ESA-STR-258, an ESA approved, Category 2 Certificate, valid for 2 years, will be awarded on successful completion of the course.

The 'Inspector-only' (E02A) certificate is intended for those not required to perform operator functions.

An 'Operator-Inspector' (E02B) certificate is available to those undertaking the 3-day upgrade.

Experience and pre-requisites

- Normally two years industrial soldering / operator experience required, certified by the employer.
- Familiarity with electronic components and assembly processes for space electronics
- Excellent observational skills
- A positive attitude to high quality workmanship
- A visual acuity certificate according to ESA-STR-258
- E02B delegates must have a valid E01 Hand Soldering certificate

Duration, schedule and fees

- E02A: 5 days
- E02B: 3 days (for holders of an ESA Hand Soldering Operator's certificate)
- See the current course calendar for dates and fees

Course content, duration, dates and venue are negotiable to meet the special requirements of small groups of delegates from individual clients. This course can be combined with other courses to create an integrated, cost effective training package.

Recertification

To renew certification for a further 2 years, a 2-day recertification course (E92) is available.

Enquiries are welcome – please use the website [contact form](#) for security.

