



IAASS Space Safety Academy **Quality Assurance for Space Projects**

26th – 28th June 2018
Midlands Innovation Centre,
Athlone Institute of Technology,
Athlone,
Co. Westmeath,
Ireland.

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Target Audience

- An introductory course in Quality Assurance for managers and engineers new to quality principles and processes, and for QA practitioners with no previous space projects experience. The participants will acquire an overall understanding of quality principles and requirements and how to apply them for achieving product conformity, customer satisfaction and increase productivity in space projects.
- The course is organised in two main sessions: a plenary session lasting 1 day and half covering general QA topics, and a specialised session lasting 1 day and half addressing respectively H/W QA. For the specialised session, familiarity with the hardware development environment is required.



Course Scope

- Scope:

The course is designed to provide the participant with an understanding of:

- Key role of management in setting quality objectives for the organisation, how to establish policy, organisation and allocate responsibilities. Measuring the quality and promoting improvements;
- Formal quality systems. International standard (ISO 9001-EN 9100). European space requirements, NASA requirements standards;
- Need for a Quality Manual and relationship to contractual QA Plans;
- Quality in hardware developments. Specifications, qualifications, procurement control, support to project reviews, configuration management, verification and formal acceptance;
- Quality in manufacturing, integration, testing and storage. Quality records, process control, workmanship standards, traceability, inspections, calibration system;
- How to conduct internal and external quality audits;
- Managing non-conformities. The importance of alerts systems;
- Statistical methods in brief.



Why, What, How & Who

Why You Need to Know this:

- To understand QA significance and processes
- To prepare and implement cost-effective QA Plans
- To identify and justify resources for QA
- To convince your management of the benefits
- To know what the Customer expects from you

What You will Take Away
-The course binder with all course material & shoulder bag
-A selected set of documents
-Certificate of Course Completion

What you will Learn:

- Why Quality is important
- The Quality culture, philosophy and organisation
- Basic principles and techniques
- The Quality standards
- How to satisfy the Customer
- How to avoid common mistakes

Who leads You Through the Maze
-Best-in-Class instructors with long experience in the management and engineering aspects of complex space projects

How You Will Learn It:

- Verbal instruction using Power Point
- Videos and Photographs
- Case studies
- Group exercises & problem solving



Course Outline

- ❖ Evolution of Quality concepts
- ❖ Basic Values and Principles
- ❖ QA Organisation models
- ❖ Establishing the QA Documentation
- ❖ Conducting Audits
- ❖ Training
- ❖ Qualification/Certification
- ❖ QA during major project phases
- ❖ Standards evolution
- ❖ Non-conformance Control
- ❖ H/W Quality Assurance (Inspection, Metrology and Calibration, Statistical Methods, etc.)
- ❖ Cost of Quality



Instructors



- ***Tommaso Sgobba***
International Association for the Advancement of Space Safety
- *Tommaso Sgobba*
- *Executive Director*

- *Previous Position:*
Head of PA & Safety Office,
International Space Station Utilisation Dept.,
ESA Human Spaceflight, Microgravity & Exploration Directorate.



Registration



- **Course Date: 26th to 28th June 2018**
- **Time:** Start 09:00 hrs, Tuesday 26th June ending 17:00 hrs, Thursday 28th June
- Risk Management for Space Projects – Optional
9:00 to 13:00 hrs Friday 29th June 2018.
- **Location: Midlands Innovation Centre,**
- **Address:** Athlone Institute of Technology, Athlone, Co. Westmeath, Ireland.
- **Registration on-line:** www.spaceskills.net
- **Contacts:**
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