

The Instructors

Andrea MUSONE has more than twenty years experience in software engineering and software quality. He contributed to the definition of software standards for large Space programs. Consultant to International Organizations and other relevant Companies. Teacher of ECSS and DO-178B standards. Team member for CMMI appraisals. He has also a large technical experience in several software domains, such as GIS, and Earth Observation. Several years consultant to Air Navigation Services in the frame of European Projects.



Silvia MAZZINI has more than twenty years of experience in the Software Engineering field. She is involved both in technical and management activities in the context of several international industrial and research projects. She participates to the ECSS E40 and Q80 working groups. She is Methodologies and R&D Manager at Intecs. Mrs. Mazzini took his degree in computer science at Pisa University in Italy.



The Company

Since 1974, INTECS has been operating at the forefront of the software market, where safety, reliability, innovation, and quality are essential ingredients for success. INTECS provides leading-edge software technologies to support the major European and Italian organisations in the design and implementation of advanced electronic systems for Defence, Space, and Civilian markets.

Intecs is ISO-9000 certified since 1994. Currently it holds **ISO 9001:2008** quality certification for software development in Defense, Space, and Civilian domains. Moreover, Intecs Defence and ATC Divisions were positively appraised at **CMMI® Maturity Level 3**.



General Information

Location

Courses may be arranged in-house at the customer site upon request.

Contact

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the Brainware company

ECSS Q80

Software Product Assurance Standard

One-day course



The course material has been prepared by Intecs under ESA/ESTEC contract

ECSS Software Product Assurance Standards

In June 1994, the ESA Council adopted resolution ESA/C/CXIII/Res 1 (Final), confirming the Agency's commitment to the transfer of the PSS system of ESA space standards to the new set of standards prepared by the European Cooperation for Space Standardization (ECSS).

Software is addressed by two standards: ECSS-E-40 for Software Engineering and ECSS-Q-80 for software Product Assurance. They are both based on ISO/IEC 12207 and available at the ECSS Web site: <http://www.ecss.nl>. They are applicable to software activities of ESA projects.

The Course

The objective of the course is to give the understanding of the ECSS-Q-80 standard to the managers and the engineers of projects involving software, in the view of applying them in their project.

The course includes a general introduction to the ECSS standards and presents in detail the requirements related to software product assurance in the Q-80 standard. It provides a good understanding of the deliverables associated with the software processes and the required outputs in process and product assurance implementation.

Intended audience

The course addresses project managers, system engineers and product assurance engineers who need to understand how the software product assurance standards can help them to manage the software part of their project or system, as well as software project managers, software engineers and software product assurance engineers who want to have in addition a deeper understanding of the content of the Q-80B standards.

Prerequisites

The participants are expected to be familiar with the fundamental concepts of software engineering, project management, software standardization, other than the most basic familiarity with software life cycle and modern software development techniques. Experience as a practicing software product assurance engineer is also assumed.

Benefits

The course will primarily familiarize the attendees with the specific approach and terminology found in the ECSS standards. Then they will understand the most important activities to implement quality assurance both of the process and the product in the context of a real project execution.

Methods and Media

Classroom presentations with Power Point slides and practical exercises.

Material

The participants are provided with copy of the course handouts.

Course Outline

An Overview of the ECSS Standards	9.00
Introduction to the Q80 Standard	9.30
Software PA Process Implementation (part 1)	10.00
Break	10.30
Software PA Process Implementation (part 2)	11.00
Software Process Assurance (part 1)	11.30
Break	12.30
Software Process Assurance (part 2)	14.00
Break	15.30
Software Product Assurance	16.00
Documentation	16.30