

**GSAW 2007 Tutorial I:**

Software Testing for Mission-Critical Ground Systems

**Length:** Half day

**Overview:**

Testing is one of the most critical development activities from a mission assurance perspective. This tutorial will define the various levels of software testing from software unit testing through ground system testing and will describe the characteristics of those levels of testing that are necessary for a robust software test program. Exit criteria for each level of software testing will be described, as will best practices from the field of software testing and requirements of the new “Software Development Standard for Space Systems”. Software and system life cycle models will be described, and how software testing fits into these life cycle models will be highlighted.

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