



Testing Software Intensive Systems Course

Reach better confidence with less testing effort

By Dr. Leah Goldin

Introduction:

The more software is pervasive the more customers demand the use of quality standards as part of the software development process. Software testing and quality assurance processes are highly interleaved in the software development lifecycle, from planning until final product delivery.

This course introduces the concepts and methods required for effective and efficient testing of large software intensive systems and products. It aims to develop a broad understanding of software testing processes from planning until execution, and complements this with a detailed knowledge of techniques in an appropriate engineering and management context.

Objectives:

At the end of this course attendees will be able to:

- Understand testing goals and test levels
- Design good test cases for software test coverage
- Understand Verification & Validation (V&V) concept and software integrity levels

Audience:

Project Managers, System and Software Engineers, R&D Managers, SQA & Test Engineers, V&V Managers

Challenges & Methods:

- Testing concepts and principles
Good testing results in low-risk software without much testing effort.
- Test design and planning
The goal for test design process is to create a set of test cases that are effective in discovering software defects and in showing that the system meets its requirements
- Verification and Validation (V&V) Processes
V&V is the name given to the checking and analysis processes that ensure software conforms to its specification and meets the needs of its customers



Agenda:

- Software Testing in Context
- Verification & Validation (V&V)
- V&V Models and Standards
- Software Test Planning
- Deriving Test Case & Automation
- Test Coverage & Results
- Taxonomy of Bugs & Quality Evaluation

About the Instructor:

Leah Goldin, CEO of Golden Solutions <http://thegoldensolution.com/>

Dr. Goldin is an independent consultant specializing in Requirements Engineering, System Engineering and Software Engineering, Process and Quality.

In her career, Dr. Leah Goldin developed embedded systems, and filled various management and technical roles, including development, verification and integration, SQA and process improvement. The companies she has worked for include Rafael, IAI, MBT, Comverse, NICE Systems, NDS, Sapiens, Mercury/HP, Given Imaging, Orbotech, etc.

Dr. Goldin divides her time between consulting to high-tech companies and teaching; she is a senior lecturer in Afeka College at the Software Engineering and System Engineering departments, and was the Head of the Software Engineering Department at Shenkar College.

Dr. Goldin received her Ph.D. from the Technion Computer Science department, where her research focused on Requirements Engineering. She is a senior member of IEEE, and currently serves as the Chair of the Israeli Chapter of the IEEE Computer Society