

# BLACK BOX SOFTWARE TESTING



Kaner, Fiedler, & Associates offers these courses to companies who want to sharpen their testing group's skills in just three months.

- **Fully online**
- **Available anywhere**
- **24/7, worldwide**

BBST courses use instructional materials developed during 10 years of National Science Foundation funded research.

## BBST Foundations of Testing

Organized around four critical challenges in software testing:

- (a) What is the mission of this testing effort and how does project strategy help achieve that mission?
- (b) How can a tester determine whether or not the program has passed a test?
- (c) What are the key challenges in developing and using software metrics?
- (d) How can we measure the amount of testing that has been done and estimate the amount of testing that remains? How should we decide when to stop testing?

Refresh your learning skills and apply those to working effectively with online workgroups.

*"If you are a newcomer to testing or have been at it for years, this course is well worth your time. Foundations provides a deep dive into what Systems Testing is all about."*

-- Dan McKenzie, March 2011

## Courses offered by

Kaner, Fiedler, & Associates, LLC in Palm Bay, Florida and on the World Wide Web.

## BBST Bug Advocacy

Helps develop skills in effective bug reporting. Some of these skills are primarily technical, such as troubleshooting failures and isolating failure-producing configurations. However, many bugs are left unfixed because they were not presented persuasively.

The course applies lessons from sales, psychology and law to help you understand how to present your reports more credibly and more persuasively and how to assess the quality of troubleshooting and communication of reports written by your staff or colleagues.

*"I was amazed to find how learning to write useful, persuasive bug reports also helped me sharpen my actual testing skills. The rewards from this class are numerous and immediate."*

-- Jeremy Wenisch, June 2011

## Contact information

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## BBST Test Design

Our courses teach context-driven testing. Rather than relying on a few "best practices", we encourage you to adopt approaches and techniques most applicable to your project. To do this, you need to know a variety of techniques, with insight into their comparative strengths and blind spots.

Surveying about 75 testing techniques, we emphasize six (function testing and testing tours; risk-based testing; scenario testing; spec-based testing; domain testing; and combinatorial testing). This lays a solid foundation for context-appropriate test planning.

*"BBST Test Design is an excellent course full of useful and interesting techniques combined with the insights of the foremost educators, authors, and practitioners in the field of software testing AND an excellent example of online asynchronous education done right."*

-- Unattributed, October 2011

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# Changing Emphases Across the BBST Courses

In the *Foundations* course, we place a heavy emphasis on **course skills** and **learning skills**. Students needed to (re)learn how to get value from online video instruction, how to take tests, how to give peer-to-peer feedback, etc.

The second course, *Bug Advocacy*, emphasizes specific **testing skills**—but the specific skills are the ones involved in bug investigation and reporting. Even though these critical thinking, research, and communication skill have strong application to testing, they are foundational for knowledge-related work.

Test Design is much more about the content (**testing knowledge**). We survey (depends on how you count) 70 to 150 test techniques. We look for ways to compare and contrast them. We consider how to organize projects around combinations of a few techniques that complement each other (make up for each other’s weaknesses and blindnesses). The **learning skills** component is **active reading**—This is certainly generally useful, but its context and application is specification analysis.

Test Design is more like the traditional Software Testing Course fire hose. There is too much material in too little time, with lots of reference material to help students explore the underemphasized parts of the course when they need it on the job. In the Test Design course, we rely on the students’ improved learning skills to help them cope with it.

	Foundations	Bug Advocacy	Test Design
Greatest emphasis	Course skills	Testing skills	Testing knowledge
	Testing knowledge	Testing knowledge	Learning skills
	Social skills	Social skills	Testing skills
	Computing fundamentals	Learning skills	Course skills
	Learning skills	Course skills	Social skills
	Least emphasis	Testing skills	Computing fundamentals

## Definitions

- **Course Skills:** How to be an effective student. Working effectively in online courses. Taking tests. Managing your time.
- **Social Skills:** Working together in groups. Peer reviews. Using collaboration tools (e.g. wikis).
- **Learning Skills:** How to gather, understand, organize and be able to apply new information. Using lectures, slides, and readings effectively. Searching for supplementary information. Using these materials to form and defend your own opinion.
- **Testing Knowledge:** Definitions. Facts and concepts of testing. Structures for organizing testing knowledge.
- **Testing Skills:** How to actually do things. Getting better (through practice and feedback) at actually doing them.
- **Computing Fundamentals:** Facts and concepts of computer science and computing-relevant discrete mathematics.

\*These courses were supported by NSF Grants EIA-0113539 ITR/SY+PE: “Improving the Education of Software Testers” and CCLI-0717613 “Adaptation & Implementation of an Activity-Based Online or Hybrid Course in Software Testing.” Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.