SEMICONDUCTOR TEST

TRAINING at TERADYNE

BE THE BEST IN TEST

TERADYNELiNK

DISCOVER THE MEANING OF SEMICONDUCTOR TEST

YOUR STEPS TO SUCCESS

TRAINING @ TERADYNE

YOUR SUCCESS IS OUR GOAL

Knowledge is key to your success in the semiconductor industry. Teradyne Training is committed to maximizing your potential in semiconductor device testing with our wide range of training offerings, all delivered by experts in their discipline.

This brochure will give you the curriculum appropriate for your role.

Our courses are organized in three categories:

- Core
- Advanced
- Specialized

Core courses provide fundamental information. Advanced courses offer ways for students to develop their skills beyond the core level; specialized courses focus on a specific facet of the semiconductor test cell.

Introductory courses are also available; these courses may be prerequisites for core courses or may be for students who want to develop their general knowledge. A list of introductory courses is on page 6.

And, you can always rely on the support and mentoring of your local Teradyne expert for the specialized training that you need at the time you need it.

Semiconductor Test Training
Teradyne, Inc.

ABOUT OUR COURSE OFFERINGS

Our course offerings include:

- **A variety of semiconductor test introductory courses**
  If you need a better understanding of semiconductor test basics, attend one of our classes for all skill levels to acquire an acute insight of the semiconductor test environment.

- **Instructor-Led Online training**
  If time away from work isn't practical, ILO training delivers the interactive environment of an instructor-led class with no travel. ILO courses are scheduled and taught on a particular day and time and delivered via your computer. See page 4 for more information and for a list of ILO training courses.

- **A rich selection of hands-on semiconductor test classes**
  Learn about our platforms and instruments in a classroom setting that also includes a hands-on laboratory experience.

- **On-demand custom workshops**
  If you need to learn a specific skill or option, or you need training on one of our test platforms, contact us and we will create a workshop delivered at your site or at one of our locations.

- **A Training Camp program**
  If you need to bring a new engineer up to speed in a short time, join our Training Camp program.

HOW TO REGISTER

To register for training on Teradyne and Eagle Test System platforms:

On the Web —

Go to **Semiconductor Test Training Registration** at: Teradyne.com/Support/Training > Semiconductor Test

On the phone —

Call **Customer Training** at 1-800-TERADYNE (1-800-837-2396) (for USA, Canada, and most countries)

Note: If 1-800-TERADYNE does not work in your country, find the phone number for your country at: Teradyne.com/Support/Customer-Care > Training > Customer Care Center Contact by Country.

YOUR STEPS TO SUCCESS

Take Teradyne's training steps to reach the highest levels of knowledge and success both for you professionally and for your company in semiconductor device test. We provide both instructor-led courses in a classroom and instructor-led online training for times when travel is not convenient.

It is easy - just:

1. Find your role.
2. Find your tester.
3. Select your curriculum.
4. Go to the Training Web site for full course descriptions.
5. Register.
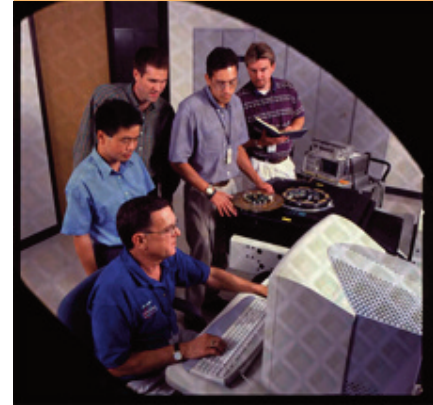
FIND YOUR TESTER   PAGE

FLEX/microFLEX.................8-9
UltraFLEX.........................10-11
J750...................................13
D750Ex.............................14
IP750.................................14
ETS..................................15-16

3. SPECIALIZED

2. ADVANCED

1. CORE

YOUR CURRICULUM

FIND YOUR ROLE   **FIND YOUR TESTER**

In your role, do you:	All IG-XL Testers	All ETS Testers	D750Ex	FLEX/ microFLEX	IP750	J750	UltraFLEX
Administer test systems	page 7						
Create Design for Test (DFT) solutions	page 7						
Develop/support test solutions		page 15	page 14	pages 8-9	page 14	page 13	pages 10-11
Manage products or teams	page 12						
Maintain and perform diagnostics		page 16		page 9		page 13	page 11
Supervise a device from design to shipment	page 12						
Support test production	page 7	page 7					

FIND YOUR CURRICULUM - GO TO PAGE(S) INDICATED IN THE TABLE.

The list of courses for all Teradyne platforms is available at: www.Teradyne.com/Support/Training > Semiconductor Test, or contact your local Teradyne representative.

ABOUT INSTRUCTOR-LED ONLINE TRAINING

We deliver ILO training courses on a wide spectrum of topics and more are in development.

Designed specifically for online delivery, each ILO training course focuses on one particular facet of semiconductor test with a maximum runtime of four hours.

All our instructors are both experienced trainers and subject-matter experts.

BENEFITS OF INSTRUCTOR-LED ONLINE TRAINING

- **High Quality**
  Same high quality content and instructors as our classroom courses but designed for ILO delivery.

- **No Travel**
  Training without traveling — shorter time, lower cost.

- **Flexible**
  Modest connectivity requirements mean you can participate from almost anywhere.

- **Interactive**
  Live interaction with instructors and peers; exercises reinforce concepts learned.

- **Cost Effective**
  Registration fee is based on a per-connection basis; any number of attendees can participate from one connection.

- **Access to Subject-Matter Experts**
  Connect to Teradyne SMEs for answers to your technical questions at your desktop.

TODAY'S ILO TRAINING CURRICULUM

Benchmarking Computer Performance

Customizing Characterization with the CharAPI on UltraFLEX

Customizing a Simple IG-XL Operator Interface

Difference in Eagle Vision and Eagle Vision-MST

Differences in SW and HW on ETS-364 and ETS-88*

Digital Undersampling on UltraFLEX

DSP Throughput Tips

Easy Button for Test Time Analysis on UltraFLEX

Electrostatic Discharge*

ETS-364/600 Digital Programming Refresher

ETS Digital Debugging Skills

ETS Refresher on Pattern-Based Test Techniques

FLASH Memory Testing*

FLEX Multisite Variables

Foundations of Test: Test Time Optimization

Introduction to Convertor Testing Using Mixed-Signal-Timing

Introduction to RF*

Introduction to WLAN EVM, Mask Test Using VSA

J750 Refresher*

Jitter Measurements & Digital Undersampling on UltraFLEX (Taught in Mandarin)

Magnum2 Codeless Programming

Memory Test Basics

Multisite Load Board Design Techniques for Mixed Signal/RF, FLEX and UltraFLEX

Pattern-Oriented Programming

Prober/Handler Interface Overview

Revision Control for Test Program

Rise/Fall Time Measurements with QTMU…How Low Can You Go?*

SB6G captures High Speed Serial ADC Data*

S-Parameter on UltraFLEX

Signal Integrity and Time Measurement Techniques

Signal Integrity (TDR) and Measurement Accuracy

Statistics for Test Engineers

Test Time Optimization on UltraFLEX

Time Measurement Techniques

UltraFLEX Best Programming Practices

UltraFLEX Hints and Tips

UltraFLEX Introduction to Protocol Aware Programming*

UltraPAC80 Programming*

UltraPin1600 DDR PA Programming*

UltraPin1600 nWire PA Programming*

UltraPin1600 Programming Basics

UltraSerial10G PCIe PA Programming*

UltraVI80 Programming Basics

Understanding UltraFLEX 2X Mode

Using Cross-Correlation to Improve Accuracy of Noise Measurements*

ONE-ON-ONE INTERACTION WITH A TERADYNE SUBJECT-MATTER EXPERT

HOW DOES IT WORK —
WHAT DO I NEED TO PARTICIPATE?

- **Computer** — ILO delivery lets you participate from your computer.

- **Broadband Internet Connection** — You connect to a virtual classroom where you will interact directly with the instructor and your peers.

- **Register** — All you need to do is choose an ILO course and register either online or by calling Customer Training at 1-800-TERADYNE.

*Check for updates on Teradyne.com/Support/Training > Semiconductor Test

To begin, you may want to register for one of the introductory courses below before participating in any core courses or to broaden your general knowledge about semiconductor test.

DISCOVER THE MEANING OF SEMICONDUCTOR TEST
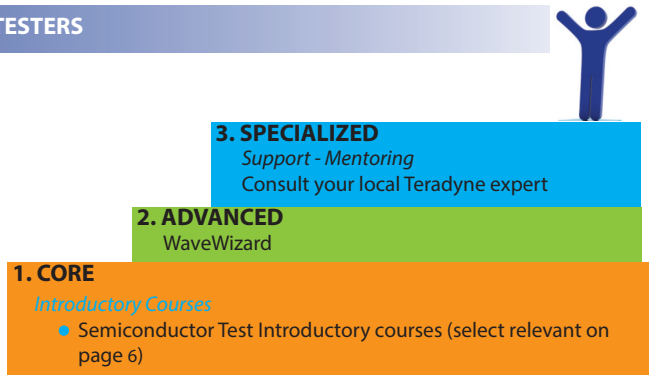
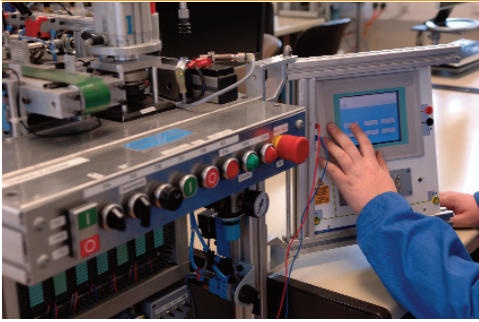## SEMICONDUCTOR TEST INTRODUCTORY COURSES

Fundamentals of Testing Using ATE

Introduction to Testing Using ATE

RF Circuit and System Test Fundamentals
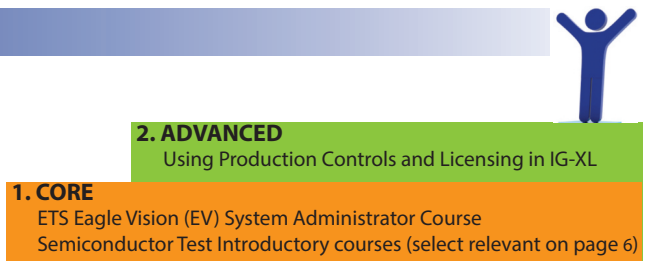
RF Fundamentals

VBA Fundamentals
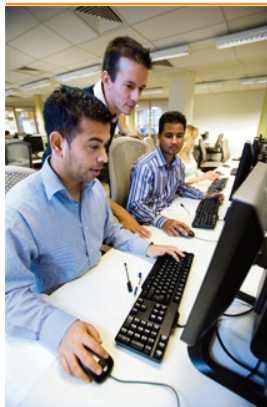
ROLES AND CURRICULA — DESIGN FOR TEST/ADMINISTER/SUPPORT

Identify your role in the table on page 3 and take the steps to reach the highest levels of knowledge and success.
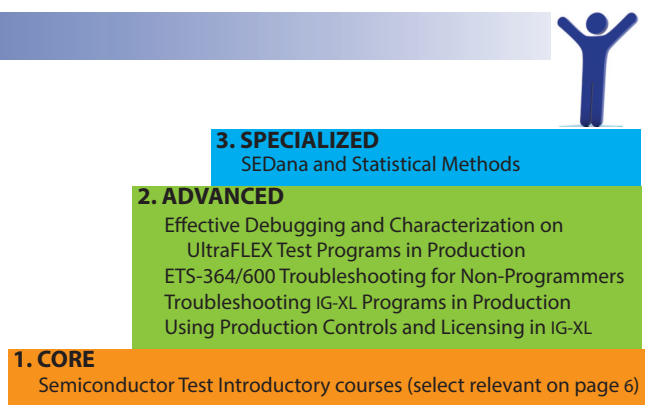
YOU CREATE DESIGN FOR TEST (DFT) SOLUTIONS — ALL TESTERS

3. SPECIALIZED
Support - Mentoring
Consult your local Teradyne expert

2. ADVANCED
WaveWizard

1. CORE
Introductory Courses
- Semiconductor Test Introductory courses (select relevant on page 6)

YOU ADMINISTER TEST SYSTEMS

2. ADVANCED
Using Production Controls and Licensing in IG-XL

1. CORE
ETS Eagle Vision (EV) System Administrator Course
Semiconductor Test Introductory courses (select relevant on page 6)

YOU SUPPORT TEST PRODUCTION

3. SPECIALIZED
SEDana and Statistical Methods

2. ADVANCED
Effective Debugging and Characterization on UltraFLEX Test Programs in Production
ETS-364/600 Troubleshooting for Non-Programmers
Troubleshooting IG-XL Programs in Production
Using Production Controls and Licensing in IG-XL

1. CORE
Semiconductor Test Introductory courses (select relevant on page 6)

ROLES AND CURRICULA – FLEX/MICROFLEX

YOU DEVELOP TEST SOLUTIONS ON FLEX/MICROFLEX FOR MIXED SIGNAL

3. SPECIALIZED

SEDana and Statistical Methods

1. CORE

Introductory Courses
- Fundamentals of Testing Using ATE
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals

1. FLEX/microFLEX Programming Fundamentals
2. FLEX/microFLEX Mixed Signal Programming

YOU DEVELOP TEST SOLUTIONS ON FLEX/MICROFLEX FOR AUTOMOTIVE AND DC

3. SPECIALIZED

SEDana and Statistical Methods

2. ADVANCED

FLEX/microFLEX HDPMU Programming
FLEX/microFLEX HVO2000 Programming
FLEX/microFLEX POOL2 Programming
FLEX/microFLEX PVI-300 Programming

1. CORE

Introductory Courses
- Fundamentals of Testing Using ATE
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals

1. FLEX/microFLEX Programming Fundamentals (requires knowledge of VBA)
2. FLEX/microFLEX Power/Automotive/DC Programming (includes HVD, not POOL2)
   or FLEX/microFLEX Power Management DC Programming (includes POOL2, not HVD)

ROLES AND CURRICULA – FLEX/microFLEX

YOU DEVELOP TEST SOLUTIONS ON FLEX/microFLEX FOR DIGITAL

3. SPECIALIZED
SEDana and Statistical Methods

2. ADVANCED
FLEX Memory Test Option Programming
FLEX/microFLEX SCAN Programming

1. CORE
Introductory Courses
- Fundamentals of Testing Using ATE
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals

FLEX/microFLEX Programming Fundamentals (requires knowledge of VBA)

YOU DEVELOP TEST SOLUTIONS ON FLEX/microFLEX FOR RF/MICROWAVE

3. SPECIALIZED
SEDana and Statistical Methods

2. ADVANCED
FLEX/microFLEX Microwave Programming

1. CORE
Introductory Courses
- RF Fundamentals
- RF Circuit and System Test Fundamentals
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals
1. FLEX/microFLEX Programming Fundamentals (requires knowledge of VBA)
2. FLEX/microFLEX Mixed Signal Programming

YOU MAINTAIN AND PERFORM DIAGNOSTICS ON FLEX/microFLEX
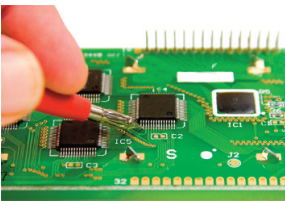
2. ADVANCED
FLEX RF Maintenance
Troubleshooting IG-XL Programs in Production

1. CORE
FLEX/microFLEX Maintenance
Semiconductor Test Introductory courses (select relevant on page 6)

ROLES AND CURRICULA — U<small>LTRA</small>FLEX

YOU DEVELOP TEST SOLUTIONS ON U<small>LTRA</small>FLEX FOR MIXED SIGNAL

3. SPECIALIZED
SEDana and Statistical Methods

2. ADVANCED
Concurrent Test Programming
UltraPAC80 Programming
UltraVI80 Programming

1. CORE
Introductory Courses
- Fundamentals of Testing Using ATE
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals

For users without FLEX experience:
1. UltraFLEX Programming Fundamentals (requires knowledge of VBA)
2. UltraFLEX Mixed Signal Programming

For users with FLEX experience:
UltraFLEX Programming for FLEX Programmers

YOU DEVELOP TEST SOLUTIONS ON U<small>LTRA</small>FLEX FOR DIGITAL

3. SPECIALIZED
SEDana and Statistical Methods

2. ADVANCED
Concurrent Test Programming
UltraFLEX Advanced Digital
UltraFLEX Digital Characterization
UltraFLEX Introduction to Protocol Aware Programming
UltraFLEX Memory Test Option Programming
UltraFLEX SB6G Programming
UltraPin1600 DDR PA Programming
UltraPin1600 nWire PA Programming
UltraPin1600 Programming
UltraPin4000 Programming
UltraSerial10G PCIe PA Programming
UltraSerial10G Programming

1. CORE
Introductory Courses
- Fundamentals of Testing Using ATE
- Semiconductor Test Introductory courses (select relevant on page 6)
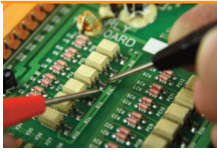- VBA Fundamentals

For users without FLEX experience:
1. UltraFLEX Programming Fundamentals (requires knowledge of VBA)
2. UltraFLEX Digital Programming

For users with FLEX experience:
UltraFLEX Programming for FLEX Programmers

ROLES AND CURRICULA — ULTRAFLEX

YOU MAINTAIN AND PERFORM DIAGNOSTICS ON ULTRAFLEX

2. ADVANCED
UltraWave Maintenance

1. CORE
UltraFLEX Basic Maintenance
Semiconductor Test Introductory courses (select relevant on page 6)

YOU DEVELOP TEST SOLUTIONS ON ULTRAFLEX FOR RF/MICROWAVE

3. SPECIALIZED
SEDana and Statistical Methods

2. ADVANCED
Concurrent Test Programming
UltraFLEX Microwave Programming
UltraFLEX Programming for FLEX Programmers
UltraVI80 Programming
UltraWave 12G Embedded Signal Analyzer Toolkit Programming
UltraWave 12G for Experienced Gen4 Programmers including Embedded Signal Analyzer Tookit (2 days)
UltraWave 12G for Experienced Gen4 Programmers (1 day)
UltraWave 12G Wireless Programming including Embedded Signal Analyzer Tookit (4 days)
UltraWave 12G Wireless Programming (3 days)
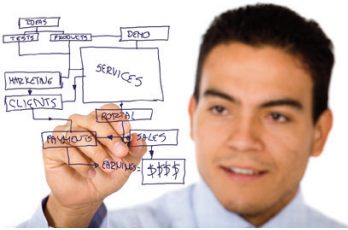
1. CORE
Introductory Courses
- RF Fundamentals
- RF Circuit and System Test Fundamentals
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals

For users without FLEX microwave experience:
1. UltraFLEX Programming Fundamentals (requires knowledge of VBA)
2. UltraFLEX Mixed Signal Programming

ROLES AND CURRICULA — MANAGE/SUPERVISE

YOU SUPERVISE A DEVICE FROM DESIGN TO SHIPMENT

3. SPECIALIZED
See Develop Test Solutions role that corresponds to your tester.

2. ADVANCED
See Develop Test Solutions role that corresponds to your tester.

1. CORE
See Develop Test Solutions role that corresponds to your tester.

YOU MANAGE PRODUCTS OR TEAMS

3. SPECIALIZED
Select courses of interest in other semiconductor test roles.

2. ADVANCED
Select courses of interest in other semiconductor test roles.

1. CORE
Semiconductor Test Introductory courses (select relevant on page 6)

BE THE BEST IN TEST

WWW.TERADYNE.COM/SUPPORT/TRAINING > SEMICONDUCTOR TEST

ROLES AND CURRICULA — J750

YOU DEVELOP TEST SOLUTIONS ON J750 FOR DIGITAL

3. SPECIALIZED
Select courses of interest in other semiconductor test roles.

2. ADVANCED
J750 Test System MTO Programming
J750 Test System RFID Options Programming
J750Ex MTO Programming
VBT Essentials for J750

1. CORE
Introductory Courses
- Fundamentals of Testing Using ATE
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals
J750 Test System Programming

YOU DEVELOP TEST SOLUTIONS ON J750 FOR MIXED SIGNAL

3. SPECIALIZED
Select courses of interest in other semiconductor test roles.

2. ADVANCED
J750 HDVIS Programming
J750 Mixed Signal Options Programming
J750 Test System CTO Programming
VBT Essentials for J750

1. CORE
Introductory Courses
- Fundamentals of Testing Using ATE
- Semiconductor Test Introductory courses (select relevant on page 6)
- VBA Fundamentals
J750 Test System Programming

YOU MAINTAIN AND PERFORM DIAGNOSTICS ON J750

CORE
J750 Test System Maintenance
Semiconductor Test Introductory courses (select relevant on page 6)

ROLES AND CURRICULA — D750Ex / IP750

YOU DEVELOP TEST SOLUTIONS ON D750Ex FOR LCD DRIVERS

3. SPECIALIZED
Select courses of interest in other semiconductor test roles.

2. ADVANCED
Select courses of interest in other semiconductor test roles.

1. CORE
D750Ex Basic Programming
Semiconductor Test Introductory courses (select relevant on page 6)

YOU DEVELOP TEST SOLUTIONS ON IP750 FOR IMAGE SENSORS

3. SPECIALIZED
Select courses of interest in other semiconductor test roles.

2. ADVANCED
Select courses of interest in other semiconductor test roles.

1. CORE
IP750 Test System Programming
Semiconductor Test Introductory courses (select relevant on page 6)

ROLES AND CURRICULA — EAGLE TEST SYSTEMS

YOU DEVELOP TEST SOLUTIONS ON ETS-88

3. SPECIALIZED
ETS Eagle Vision (EV) System Administrator Course
ETS Integrated Handler/Prober Advanced Programming

2. ADVANCED
ETS Advanced Digital
ETS Advanced Analog DUT Board Design

1. CORE
ETS-88 Programming [Eagle Vision]
ETS-88 Programming [Eagle Vision MST]
Semiconductor Test Introductory courses (select relevant on page 6)

YOU DEVELOP TEST SOLUTIONS ON ETS-200/300

3. SPECIALIZED
ETS Eagle Vision (EV) System Administrator Course

2. ADVANCED
Select courses of interest in other semiconductor test roles.

1. CORE
ETS-200/300 Programming
Semiconductor Test Introductory courses (select relevant on page 6)

YOU DEVELOP TEST SOLUTIONS ON ETS-364/600

3. SPECIALIZED
ETS DAC/ADC Testing With QPLU
ETS Eagle Vision (EV) System Administrator Course
ETS Integrated Handler/Prober Advanced Programming
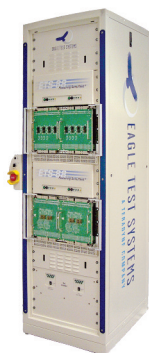
2. ADVANCED
ETS Advanced Digital
ETS Advanced Analog DUT Board Design
ETS Digital Audio Analyzer Unit Resource Training

1. CORE
ETS-364/600 Programming
Semiconductor Test Introductory courses (select relevant on page 6)

ROLES AND CURRICULA — EAGLE TEST SYSTEMS

YOU MAINTAIN AND PERFORM DIAGNOSTICS ON ETS-88

2. ADVANCED
Select courses of interest in other semiconductor test roles.

1. CORE
ETS-88 Maintenance
Semiconductor Test Introductory courses (select relevant on page 6)

YOU MAINTAIN AND PERFORM DIAGNOSTICS ON ETS-200/300

2. ADVANCED
Select courses of interest in other semiconductor test roles.

1. CORE
ETS-200/300 Maintenance
Semiconductor Test Introductory courses (select relevant on page 6)

YOU MAINTAIN AND PERFORM DIAGNOSTICS ON ETS-364/600

2. ADVANCED
ETS-364/600 Troubleshooting for Non-Programmers

1. CORE
ETS-364/600 Maintenance
Semiconductor Test Introductory courses (select relevant on page 6)

Custom Equipment Shown

IG·XL

J750Ex
D750Ex
IP750