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# Advanced Programming for HP 947X

## Technical Data

### Course Overview

This course teaches how to use significant programming features of the HP 947X system. It covers major features of the system with special concentration on designing and implementing component test programs. Design of loadboards is included along with special considerations for high voltage testing and low current testing.

### Course Features

- How to use significant programming commands
- Loadboard Design
- Effective Sorting & Binning Strategies
- Performance and accuracy of system instruments
- Discussion of special requirements for high voltage, high current and low current testing
- Creating tests, Jobs and Job Execution Files (JEX)
- SUE programming
- Data Extraction

### Specifications

#### Course Length

5 days

#### Audience

HP 947X programmers and test engineers.

#### Prerequisites

Course HP 947X Operating, Programming and User Training (E3811B+24D; familiarity with PC operation, DOS and C language; knowledge of semiconductor device testing.

#### Delivery Method

Classroom, Dedicated

#### Format

Instruction consists of approximately 45% lecture and 55% hands-on labs and exercises.

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### Classroom Training Benefits

#### Experienced HP Instructors

Learn from an experienced HP instructor who is an expert in using and applying instrument systems to meet your measurement needs.

#### Available at HP Classrooms

Take advantage of HP's learning facilities, equipment, and interactive learning environment by attending class at an HP facility.

#### Regularly Scheduled Classes

Plan training months in advance.

#### Extensive Hands-on Practice

HP classroom training is characterized by extensive hands-on experience and interactive class discussion. HP classroom training pays off immediately because it is geared to real-world solutions.

#### Comprehensive Student Materials

Copies of course materials are provided for future reference on the job.

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## Advanced Programming for HP 947X (E3811B+24P)

### Course Agenda

#### Day 1

- System Review & Macros
- Debuggers
- Command Set details
- Command Set labs

#### Day 2

- Command Set details continue
- Command Set Labs
- Designing Loadboards
- Time Measurement with lab  
Compiling and Linking BAT  
files

#### Day 3

- Waveform Generator lab
- Sorting & Binning with lab
- SUE Programming with lab

#### Day 4

- High voltage testing
- Low & high current testing
- Developing external  
variables
- Developing global functions
- File structures

#### Day 5

- Hardware capability and  
limitations
- Data Extraction with lab
- Labs continue
- Wrap-up and Feedback

### At the completion of this class the student will be able:

- to write test programs using  
commands for any system  
resource
- to design loadboards using  
proper 3-wire connections
- to implement complex  
binning strategies using Job  
level binning
- to write programs to extract  
data from datalogs

### Ordering Information

To order Advanced  
Programming for HP 947X  
(E3811B+24P) course in the  
U.S. call 1-800-HPCLASS  
(800-472-5277).

HP's Customer registration  
Center can provide you with  
prices, scheduling, and  
enrollment information as  
well as provide information  
about a dedicated delivery.

Outside the U.S., contact  
your nearest local HP sales  
office.

### Region Sales Headquarters:

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