



## UNIX Shell Programming

**Duration: 2 Days**    **Course Code: SP**    **Delivery Method: Company Event**

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### Overview:

This Unix Shell Programming training course is designed to give delegates practical experience in developing and writing UNIX shell scripts. Most of the built-in shell commands are introduced together with the main program control structures. This course is not suitable for C shell programmers.

#### Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

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### Target Audience:

Programmers, administrators and support personnel who need to understand existing shell scripts, automate procedures and write their own utilities.

The UNIX Shell Programming course assumes knowledge of the UNIX Operating System to the level covered in the Introduction to UNIX Course. Some programming experience may also prove advantageous.

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### Objectives:

- To provide the skills needed to develop and customise UNIX shell programs.
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### Prerequisites:

The UNIX Shell Programming course assumes knowledge of the UNIX Operating System to the level covered in the UNIX Introduction course. Some programming experience may also prove advantageous.

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### Follow-on-Courses:

- UNIX System Administration (USA)
  - Oracle SQL (OSP)
  - UNIX Advanced Shell Programming Tools (UT)
  - TCP/IP Networking (TN)
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## Content:

### UNIX Shell Programming Training Course Course Contents - DAY 1

#### Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

#### Session 1: UNIX COMMAND REVIEW

- Basic Unix commands
- General commands
- File and directory handling commands
- Filename generation and regular expressions characters
- I/O Redirection features
- Other commands

#### Session 2: GETTING STARTED

- What is a shell script?
- Development guidelines
- Creating and editing shell scripts
- Naming and storing shell scripts
- Executing shell scripts
- Exercise: Write a simple shell script

#### Session 3: USING VARIABLES

- Environment variables
- Local variables
- Assigning values to variables
- Assessing variable values
- Using quotes
- Delimiting variable names
- Echo control sequences
- Exercise: Add variables to a script

#### Session 4: INTEGER ARITHMETIC

- Using the expr command
- Using the (( )) notation
- Exercise: Add integer arithmetic to a shell script

#### Session 5: HANDLING RUN TIME DATA

- The read command
- Command line arguments
- Exercise: Writing a generic shell script
- Exercise: Writing an interactive shell script

#### Session 6: CONDITIONAL EXECUTION

- The if statement
- The test command
- Exercise: Adding validation to previous scripts

#### Session 7: ADDITIONAL KORN,BASH ; POSIX SYNTAX

- Other test notations
- Default and substitute variables
- Exit status codes
- Exercise UNIX Shell Programming Training Course Course Contents - DAY 2

#### Session 8: LOOP CONSTRUCTS

- The while loop
- The until loop
- The for loop
- The while true and until false loops
- Loop control commands
- Exercise: Enhancing the previously written scripts
- Exercise: Writing a script to copy files using a 'for' loop
- Exercise: Writing a script to generate numbers with the 'while' loop

#### Session 9: MULTI-BRANCH DECISIONS

- The case statement
- Menu driven applications
- Exercise: Developing and writing a menu system

#### Session 10: FUNCTIONS

- What is a function?
- Syntax
- Examples
- Creating a Function Library
- Exercise: Add a function to a script

#### Session 11: INTERRUPT HANDLING

- Interrupt signals
- Trapping interrupts
- Exercise: Adding traps to the menu script

#### Session 12: ADDITIONAL FEATURES AND FACILITIES

- The exec commands
- The includes notation
- More about loops
- Arrays
- Here Documents
- Exercise: Create a here script

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## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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