

# Perl Intermediate (4 days)

A comprehensive Perl course designed for those who are already using basic Perl

## Relevant Platforms:

- Perl on Win32
- Perl on Unix
- Perl on Linux

## You will learn how to

- Use many features of the Perl language
- Create modular and maintainable code
- Create modules, and work comfortably within a project team
- Work with complex data structures and references
- Handle errors and exceptions
- Program network application with FTP, HTTP and Email
- Connect to Win32::ODBC and DBI databases
- Create simple CGI web pages

## Course Benefits

This Perl course is designed for delegates who have a basic understanding of Perl and wish to progress to using more advanced features of the Perl language. In this course delegates begin to use more advanced features of Perl. In particular delegates make use of advanced data structures, modules, file handling, database interfaces and networking.

## Who Should Attend

This course is intended for delegates who have:

- Attended an Introduction to Perl course
- Experience of creating basic Perl scripts and wish to enhance their understanding of Perl
- Extensive experience of other similar programming languages, such as shell scripts, C and awk, and a very basic knowledge of Perl

## Course Contents

### Variables and Expressions

- A revision section covering:
  - Types
  - Arrays
  - Hashes

### Working with Arrays and Hashes

- Arrays to Hashes
- Hashes to Arrays
- Hash and Array functions
- Looping through hashes
- Defined or undefined
- Slicing and sorting.

### Loops

- Refresh of loops
- The foreach loop
- While loop
- Variable scope
- Exiting early
- Unless and until
- Conditional operators

### Advanced File I/O and File Handling

- Opening and reading files
- Working with loops and files
- Command line arguments
- Filesystem manipulation
- Globbing

### Modules

- Perl subroutines revisited
- Creating and using modules
- How to use Modules in projects

### Advanced Array Functions

- Mapping
- Searching
- Splicing

### Regular Expressions

- Character mapping
- Searching and replacing text

### References

- Creating references in Perl
- Using references
- Complex data structures

### Handling Errors and Exceptions

- Detecting errors in Perl
- Returning error codes
- The eval function
- %SIG
- Making your Perl programs more resilient

### Using the Network

- Perl file transfers with the FTP module
- HTTP communication with Perl
- Email with Perl

## Interfacing with Databases

- Using Win32::ODBC
- The DBI module
- Communicating with Windows and Unix databases

## Introduction to CGI Programming

- What is CGI programming?
- How CGI works
- CGI test scripts
- HTML form handling in Perl
- Using cookies in Perl CGI
- HTTP file uploads in Perl CGI

## Practicals

The course work is based around a 40/60 split between lectures and practicals. Where possible the practicals use real world examples and useful code that can be integrated into new or existing projects after the course.

## The Trainers

All our trainers are practising Perl consultants with extensive experience with Perl programming on Windows, Unix and Linux in large commercial environments. They are ideally suited to bring you the highest quality of training.

## The Company

For further information about the training and our company see our web-site at [www.erion.co.uk](http://www.erion.co.uk)