# Programming in Perl Technologies

**COURSE DESCRIPTION**

This course teaches both the programming interface and the techniques that can be used to write procedures in **Perl** (Practical Extraction and Report Language). **Perl** is now available for all system platforms, and is usually provided by the system's distributor (except **Windows**).

**COURSE OBJECTIVES**

Each student will be able to use **Perl** techniques and commands to write scripts to perform various user and administrative tasks.

**COURSE TOPICS**

**Overview of Perl**

- Purpose of the language
- History of the development of **Perl**
- Control capabilities:
- files
- processes
- network
- obtaining **Perl** and building / installing
- obtaining modules from CPAN

**Writing Perl Scripts**

- Layout of a **Perl** procedure
- Execution methods
- Types of variables
  - scalars
  - lists (arrays)
  - associative arrays (hashes)
  - **Perl** built-ins
  - globals
- Pragmas
  - usage in **Perl** scripts
  - documentation
  - implementation

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## COURSE TOPICS

**Operators**

- precedence
- arithmetic
- increment/decrement pattern matching
- relational
- conditional
- assignment

**Perl Programming Constructs**

- Looping statements
- Decision statements

**Perl Expressions**

- Regular expressions review
- Expressions common to Perl/Unix
- Expressions unique to Perl

**Perl File I/O**

- Using ARGV value(s)
- Using Filehandles

**Interfacing Perl with the Operating System**

- System calls
- Process control
- File manipulation
- Adding and using (contributed) Perl modules

**Subroutines in Perl procedures**

- Using as functions
- Passing arguments (scalars)
- Passing arguments (arrays)
- Introduction to references

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## COURSE TOPICS

### Using Perl Extension Functions

- Location of procedures
- Types of extensions
- The **require** statement
- The **use** statement

## COURSE DURATION

This course normally requires **three** (3) days, approximately 50% lecture and 50% lab time.

## COURSE PREREQUISITES

Completion of the **Fundamentals of Unix (or Linux)** course is assumed (if working on a **Unix** / **Linux Perl** platform. Usage of **NOTEPAD** for **Windows**-based **Perl** is assumed. A knowledge of **awk** is useful but not mandatory.