

Course Code	Course Title	L	T	P	C
1156EC409	PERL SCRIPTING	0	0	0	2

a) Course Category

Independent Learning – Self Learning Course

b) Preamble

PERL scripting training course imparts skills to use a strong object oriented scripting language for automating repetitive and time consuming tasks in the design process. PERL programming is an advance level essential tool for the professionals contributing in VLSI design process. Learning PERL scripting enables the candidates to gain text processing capabilities required for VLSI development. Participants explore the techniques to analyze and automate files of moderate to large line-of-codes, interlink different domains, and set performance parameter for automation.

c) Prerequisite

d) Related Courses

e) Course Outcomes

CO Nos.	Course Outcomes	Knowledge Level (Based on Revised Bloom's Taxonomy)
CO1	Develop the basic knowledge on data types of Perl	K2
CO2	Compare and contrast different regular expressions using operators and control structures.	K2
CO3	Develop the knowledge of detailed Lists, Associative Arrays and Pattern Matching datatypes	K2
CO4	Develop the knowledge of standard input , output and files in programming	K2
CO5	Develop substantial knowledge on Modules and CGI Programming.	K2

f) Course Content

UNIT I Basics and Built-In Data Types

Introduction:History & Uses,Philosophy & Idioms,Resources. Perl Basics:Script Naming, Language Properties,Invocation, Built-In Data Types:- Scalars, lists, & hashes,Variable contexts,Special variables

UNIT II Scalars, Basic Operators and Control Structures

Scalars:Numbers,Strings.Basic Operators:Basic Operators,Operator precedence, Control Structures:If-elseif-else, unless, Loops,Labels,The infamous goto

UNIT III Lists, Associative Arrays and Pattern Matching

Lists:Initializing,Accessing elements,Special operators.Associative Arrays:Keys and values,Initializing, Initializing,Sorting.Pattern Matching:Regular expressions, Matching and substitution, Atoms and assertions

UNIT IV Subroutines and Functions, Files and I/O

Subroutines and Functions:Structure & Invocation, Parameter passing, Scope .Files and I/O: Understanding file handles, Predefined file handles (STDIN, STDOUT, STDERR), Opening, closing, reading, writing, Formats, Manipulating files

UNIT V Modules and CGI Programming

Modules: Extending Perl functionality, Obtaining and installing, Object-oriented Perl. GI Programming:CGI Concepts, Generating HTML, Passing parameters, Simple Forms, Using the CGI.pm module.

g) Learning Resources

Online Resource

1. Textbook: Learning Perl on Win32 Systems (Schwartz, Olson & Christiansen).
2. www.perl.org
3. www.alison.com/topic/learn/35894/active-per
4. www.perltutorial.org
5. www.cs.unc.edu/~jbs/resources/perl/perl-basics
6. www.nptel.ac.in/courses/106105084/22
7. www.perlmaven.com/perl-tutorial