

This three-day course addresses the Object-Oriented features of Perl and provides students with the knowledge to create Object-Oriented Perl scripts.

**Audience:** Perl programmers or developers wanting to fully understand Perl's OO aspects.

**Prerequisites:** Programming experience in a structured language, such as C, C++, Java, or COBOL, is required as well as an in-depth knowledge of the Perl language.

**Number of Days:** 3 days

- 1. Perl Essentials Review**
  - Topics Not Reviewed (But Essential to Understand OOP in Perl)
  - References
  - Advanced Data Types
  - Typeglobs
  - Packages
  - Modules
  - Additional Resources
- 2. OO Primer**
  - Introduction to OOP in Perl
  - Objects
  - Methods
  - Classes
  - Additional OO Terminology
  - Additional Resources
- 3. OO In Perl Essentials**
  - The Basis of OOP in Perl
  - Class Creation
  - Method Creation
  - Object Creation
  - Calling Methods
  - Constructors
  - Accessors
  - Mutators
  - Affordances
  - Class Data
  - Class Modules
  - Using AUTOLOAD
  - Destructors
  - Additional Resources
- 4. Using Bless on Arrays and Scalars**
  - Why Use Other Data Types?
  - Blessing Arrays
  - Pseudo-Hashes
  - Blessing Scalars
  - Additional Resources
- 5. Using Bless on REs, Subroutines and Typeglobs**
  - Blessing Things Other Than Variables
  - Blessing Regular Expressions
  - Blessing Subroutines
  - Blessing Typeglobs
  - Additional Resources
- 6. Inheritance**
  - Overview of Inheritance in Perl
  - Determining a Method's Location
  - The @ISA Array Works
  - Inheritance in Other Languages
  - Perl "Built-In" Methods
  - Handling DESTROY Methods with Inheritance
  - The SUPER Class
  - Abstract Methods
  - Polymorphism
  - Additional Resources
- 7. Automating Class Creation**
  - Automating Class Creation Essentials
  - Using Class::Struct to Create Classes
  - Using Arrays Instead of Hashes
  - Attribute Types
  - Other Tools to Create Classes
  - Additional Resources
- 8. Ties**
  - What are Ties?
  - Making a Tied Scalar
  - Making a Tied Array
  - Making a Tied Hash

Making a Tied Filehandle  
Ties and Inheritance  
Additional Resources

**9. Installing CPAN Modules**

Introduction to the Concept of  
Overloading  
Using overload.pm  
How Your Overload Subroutines Will  
Be Called  
Magic Autogeneration  
Fallback  
Additional Resources

**10. Encapsulation**

Overview of Encapsulation  
Private Identifiers  
Using Closures to Enforce Encapsulation  
Other Methods of Encapsulation  
Additional Resources