Programmatic Development Using Apex and Visualforce (DEX 450).

Module 1: Introduction to Salesforce Apex and Visualforce Pages

•Overview of Salesforce Platform

•Introduction to Apex Programming

•Introduction to Visualforce Pages

•Overview of Salesforce Data Model and Objects

•Apex and Visualforce Integration

Module 2: Salesforce Apex Fundamentals

•Understanding Apex Programming Language

•Apex Syntax and Data Types

•Variables, Collections, and Constants in Apex

•Flow Control and Error Handling in Apex

•Apex Classes, Methods, and Triggers

•Understanding Governor Limits in Apex

•Apex DML Operations (Insert, Update, Delete, Upsert)

•Handling Bulk Data Processing in Apex

•Writing Test Classes for Apex Code

•Debugging Apex Code and Logs

Module 3: Working with Apex Triggers

•Introduction to Apex Triggers

•Trigger Syntax and Structure

•Trigger Events and Context Variables

•Best Practices for Writing Triggers

•Bulkifying Triggers

•Managing Trigger Execution Order

•Trigger Scenarios and Real-life Use Cases

Module 4: Salesforce Visualforce Pages

•Introduction to Visualforce Pages

•Visualforce Page Syntax and Structure

•Visualforce Components and Tags

•Using Apex Controllers with Visualforce Pages

•Standard and Custom Visualforce Pages

•Visualforce Page Layouts and Design

•Visualforce Pages with Dynamic Content

•Using Visualforce with Salesforce Data (Standard & Custom Objects)

Module 5: Advanced Apex Concepts

•Working with Asynchronous Apex (Batch Apex, Queueable Apex, Future Methods)

•Integration with External Systems via Web Services

•Apex Scheduler and Scheduled Jobs

•Writing Complex Queries with SOQL and SOSL

•Security in Apex Code (Field-Level Security, Object Permissions)

•Apex for Large Data Volume Management

Module 6: Visualforce Page Enhancements

•Visualforce Page Customization and Styling

•Using JavaScript with Visualforce Pages

•Integration with Lightning Components

•Responsive Visualforce Pages Design

•Working with Visualforce

Module 7: Apex and Visualforce Best Practices

•Apex and Visualforce Best Practices Overview

•Managing Governor Limits and Performance Optimization

•Effective Use of Test Classes and Code Coverage

•Handling Errors and Exceptions Gracefully

•Security Considerations for Apex and Visualforce

•Code Version Control and Deployment

•Debugging and Monitoring Tools for Apex and Visualforce

Module 8 : Apex Testing & Debugging

•Writing Test Classes for Apex

•Code Coverage and Best Practices

•Debugging Apex Code Using Developer Console