Solid Edge Customization
Language: **VB 6.0 / C# / VB.Net**

1: The Solid Edge Object Model
Understand the Solid Edge object model in-depth and how to use the object browser to explore the Solid Edge API.

Start-Show-Hide-Stop Solid Edge – Learn to control Solid Edge at will. Learn to invoke, hide, show Solid Edge, read-write properties of various Solid Edge objects and quit Solid Edge.

2: Detecting the Environment
Learn to detect which document type is currently open and the current environment within the document.

3: Open, Create, Save & Export Solid Edge Documents
Learn all about handling Solid Edge documents and various Solid Edge API constants.

4: File Handling using WinAPI & Solid Edge API
Solid Edge standard file dialogs with preview – Learn to invoke Solid Edge's standard file open and save dialogs and Windows standard file dialogs in your applications.

5: Managing Sheets In Drawings
Learn to create new sheets, switch between & count sheets in a drawing, list all sheets, export sheets to various formats.

6: Creating Drawing Views
Learn to automatically create 4 standard views from parts/assemblies which is a dream for every design department. Also learn also critical stuff like spacing between views, various view settings, etc.

7: Handling Dimensions
Handling Dimensions In Drawings – How to access dimension in a draft sheet, check dimension type and manipulate dimensions.

8: Extracting Entity data
Cost Calculation of Glow Sign Shapes – Learn to extract geometric information from 2D entities and automate routine Solid Edge jobs.

9. Layers
Learn to deal with layers. Learn to iterate through all layers and purge layers which are unused. Also learn how to make a selected object's layer current. Learn how to handle selection sets and restrict user input.

10: Handling Text In Drawings
Title Block Updation – Learn to handle and access text objects in a drawing document and how to update text in a title block to maintain consistent font and spacing across drawings.

11: Mastering Solid Edge Features
Learn to traverse through all features of a part and access the feature properties.

12: Harnessing Solid Edge Part Data
Creating a Basic Hole Coster – Learn to acquire feature data and check types of features. This is a classic example of what the industry needs - develop applications that calculates cost directly from the 3D model.

13: Parametric Parts
Designing a Shaft with a Keyway – Learn to parametrically control a Part - the most widely used Solid Edge technique in design automation.

14: Morphing Parts - Creating Family of Parts
Creating a Super Shaft – Learn to intelligently build required features of a family of parts into a model and how to manipulate them to get the desired configuration of a part.

15: SheetMetal Automation
Learn to handle SheetMetal features. Lab shows how to build a SheetMetal coster.

16: Solid Edge Summary Information - File Properties
Learn about the Solid Edge File Properties dialog and how to access all file properties programmatically.

17: Solid Edge Assemblies and Recursive Functions
Learn about recursive functions and how to use them to traverse the Solid Edge assembly structure.

18: Solid Edge Assemblies and Custom File Properties
Learn to traverse through all components of a Solid Edge assembly and extract custom properties to build an assembly cost estimator program.

19: Solid Edge Assembly Generation
Learn to build a Solid Edge assembly from scratch by placing existing parts. Also learn to move parts within the assembly.

20: Product Configurator
Creating a Solid Edge Product Configurator - Product configurators are multifunctional, computer-aided systems that function as an interface between sales and product design. It automatically generates product documents, for example, bills of material, production drawings, product cost, virtual 3D models, quotations, routings, product images, reports & catalogs, sales & approval drawings and so on.

21: Batch Processing Techniques
A Batch View Creator. Learn to use the Windows standard 'Browse for Folder' dialog, learn to gather all files of a specified extension into a collection and how to run a desired set of commands on the file.

Other eBooks and Training Programs from CADVertex:

1. **CATIA CAA:** VBA, VB 6, VB.Net CSharp, C++, MFC
2. **SolidWorks API:** VBA, VB 6, VB.Net CSharp, C++, MFC
3. **Solid Edge API:** VB 6, VB.Net CSharp, C++, MFC
4. **NX Open:**, VB.Net CSharp
5. **Knowledge Fusion**
6. **Inventor API:** VB 6, VB.Net CSharp, C++, MFC
7. **AutoCAD API:** VB 6, VB.Net CSharp, Visual LISP, DCL
8. **Open CASCADE:** Programming using C++ and MFC
9. **cMayoCAD:** Learn to build a new CAD program using a Geometric Modeling Kernel.