

CADVertex Solutions

A-16. Whispering Wind . Pashan-Baner Link Road . Pashan . Pune . 411021 www.CADVertex.com <u>info@cadvertex.com</u> Phone :+91 9890611694

Creo VB Toolkit

Language: VB.Net

Training Structure

Module 1: VB.Net Programming. **Module 2**: Creo Toolkit Programming.

Training Highlights



Online Training



Flexible Timings



Trainer: 25 yrs Exp.



Duration: 6 Wks



1 Hour Daily



Basic to Advanced



5 Industry Projs



Certificate



Support after Training CuttingEdge Tech

List of Projects (Automation)

- 1. Geometric Calculator
- 2. Create Drawing Views
- 3. Batch Processor
- 4. Title Blocks and Annotations
- 5. Parametric Parts
- **6**. Build Assembly

Module 1: VB.Net or CSharp.Net Programming

1. Installing Visual Studio

- Installing Visual Studio Community version.
- Setting the default language.
- Customizing the layout.
- Solution Explorer, Toolbox and the Properties windows.

2. Introduction to Programming

- Selecting a project template.
- Setting up user interaction and collecting inputs.
- Variable types Double, Integer, and String.
- Acquiring user input from textboxes into variables.
- Calculations and display outputs.
- Using the .Net Math library functions.
- Various files and their meaning in the project structure.
- Separating source code from the executable.

3. Creating a Windows Forms Application

- Setting dialog box properties.
- Adding controls: Button, TextBox, Label, Checkbox, RadioButton.
- Adding images to PictureBox and other controls.
- Aligning text and images on controls.
- Composite controls: ListBox and ComboBox.
- Adjusting various properties for each type of control.

4. Arrays and Loops

- Filling arrays and reading array elements.
- Filling ListBoxes with array elements.
- ForEach loop.

5. Functions and Subroutines

- Arguments.
- Return Types.
- Return Values in Functions.
- Function Overloading.

6. Multi-Form Projects

- Adding Forms to a project.
- Form Constructor and object variables.
- Form objects and invoking Forms.
- Exchanging data between Forms.

7. Object Oriented Programming

- Creating a class.
- Adding member functions.
- Public and Private methods.
- Adding member variables.
- Encapsulation.
- Polymorphism.

Module 2: CAD Automation

8. Creo Documents

- Connect to Creo.
- Creo model and window objects.
- Disconnect a Creo session.
- Change the working directory.
- Determine active model type.
- Create new Creo files Part and Assembly.
- Open, Close, Export, and Save Creo files.
- ❖ Access all Creo models in session.

9. Batch Processing

- ❖ Industry Project Create a Batch Processor for Handling Creo Documents
- Gather files into a .Net collection, selectively remove unwanted files from the list
- ❖ Export the batch of documents to formats like STP, etc.

10. Drawing Views

- Create drawings using templates
- Create drawing views side view and top view.
- ❖ Industry Project Creating standard views of a model in Creo.

11. Handling Texts and Geometric Entities

- Create 2D entities like lines and points.
- ❖ Industry Project Creating a Title Block with Notes.

12. Part Features

- Traversing the features of a Creo model.
- Determine the name and type of features.

13. Part Physical Properties

- ❖ Determine the physical properties of a model in Creo.
- ***** Extract mass, volume, and other information.
- Industry Project Material estimation for spray painting

14. Parametric Parts

- Control parametric part in Creo.
- Parameter description and types.
- Accessing existing parameters.
- Modify parameters.
- Model regeneration options.
- ❖ Industry Project Update Parametric Shaft, Keyway, etc.

15. Creo Assembly Components

- List components of a Creo assembly.
- ❖ Industry Project Determine interference in assemblies.

16. Build Assembly

- **❖** Assemble parts.
- ❖ Industry Project Create a Creo assembly from scratch.

Subscribe:

CADVertex - Newsletter

- ✓ CAD API
- ✓ BIM API
- ✓ Python Programming Tips
- ✓ Dynamo Programming Tips
- ✓ Grasshopper Tips
- ✓ CSharp Programming Tips
- ✓ VB.Net Programming Tips
- ✓ ML and AI Programming Tips



CADVertex Software

A-16 . Whispering Wind . Pashan-Baner Link Road Pashan . Pune . 411021

www.CADVertex.com info@cadvertex.com

WhatsApp/Telegram/Call: +91 9890611694

Other eBooks and Training Programs from CADVertex:

- CATIA Automation: VB.Net or CSharp or Python
- ❖ SolidWorks Automation: VB.Net or CSharp or Python
- ❖ Solid Edge Automation: VB.Net or CSharp or Python
- ❖ Inventor Automation: VB.Net or CSharp or Python
- NX Open: VB.Net or CSharp with Win Forms
- NX Open: VB.Net or CSharp with Block UI Styler
- Knowledge Fusion
- Knowledge Fusion with Block UI Styler
- Revit API Plugin creation using CSharp and Python, Dynamo
- Tekla Open API programming
- cMayoCAD: Learn to build a new CAD program from scratch using a Geometric Modeling Kernel and CSharp
- ❖ Machine Learning for Engineers with Python
- ❖ CATIA Automation with Python and Machine Learning
- NX Automation and Machine Learning with Python
- ❖ Solid Edge Automation with Python + Machine Learning
- ❖ SolidWorks Automation with Python + Machine Learning
- ❖ Inventor Automation with Python + Machine Learning
- ❖ Fast track course in Python with Machine Learning for VB.Net experts
- ❖ Fast track course in Python with Machine Learning for CSharp experts



CAD-BIM Automation Group WhatsApp



CAD-BIM Automation Group
Telegram



Follow

CADVertex on LinkedIn



Follow

CADVertex on Facebook



Follow

CADVertex on Instagram

Phone & Chat

+919890611694

eMail

info@CADVertex.com

Website

www.CADVertex.com