



Professional Certificate in Building Design And Animation

DURATION: 300 Hours

TOTAL CREDITS: 10

COURSE SYLLABUS

Objective

A spectacular designing & animation course embedded in building design.
Enthralling beautiful building's, simply animated through soft touch fingers.

Exit Profile

- 2D Drafting
- 3D modeling
- 3D interior and exterior modeling
- Video editing
- Walkthrough creation

Career Path

- 2D draughtsman
- Building designer
- 3D visualizer
- Interior designer
- Project architect
- Architectural Drafter
- Architectural visualizer

Course Outline

Course Name:	Professional Certificate in Building Design and Animation	Duration:	300 H
Module	Topic	Duration	Total Duration
Module-1	AutoCAD 2D	35	300H
	AutoCAD 3D	35	
	Adobe Photoshop	30	
	3ds MAX	40	
	V-ray	40	
	Adobe premiere pro	40	
	Revit architecture	40	
	Sketchup	40	

Course In Detail

AUTOCAD 2D

INTRODUCTION TO ENGINEERING DRAWINGS

- Projections (First & Third angle)
- Views (Orthographic, Isometric & Perspective)
- Various types of drawings

2D DESIGNING

INTRODUCTION TO AUTOCAD CIVIL

- Introduction to civil engineering drawings
- Understanding the basic and important terminology in civil engineering
- Understanding the symbols used in civil drawing
- Understanding
- Exploring GUI
- Workspaces
- Co-ordinate systems
- Display control
- File management
- Units
- Limits
- Drafting settings
- Ortho
- Polar
- Grid
- Snap
- Polar Tracking
- Object snap
- Dynamic
- Inputs
- Quick Properties
- Selection Cycling

UNDERSTANDING AUTOCAD TOOLS

- **Drawing tools**

- Line
- Circle
- Arc
- Ellipse
- Donut
- Polygon
- Rectangle
- Point
- Multiline
- Pline
- Spline
- Xline
- Ray

MODIFY TOOLS

- Wipeout
- Revision cloud
- Erase
- Oops
- Undo
- Redo
- Explode
- Move
- Copy
- Rotate
- Mirror
- Offset
- Array
- Align
- Scale
- Stretch
- Lengthen
- Trim
- Extend
- Break
- Join
- Chamfer
- Fillet

- Blend curves
- Divide
- Measure
- Point Style
- Mlstyle
- Mledit
- Pedit
- Splinedit
- Edit Array
- Grip Editing

OBJECT PROPERTIES

- Property window
- Color command
- Linetype command
- Lt scale
- Line weight command
- Match Properties command
- Transparency
- List

LAYER MANAGEMENT

- Layer Properties Manager
- Layer command
- Layer state command
- Layers and Layer Properties
- New Property Filter
- New Group Filter
- Layer State Manager
- Layer management option
- New layer
- New layer frozen VP in all viewports
- Delete layer
- Set current
- Sort
- Column order
- Status
- Layer list option
- Search for layer

- Drawing the floor plan of the building and select the outer and inner walls as different layers

ANNOTATION TOOLS

- Dimension
- Dimension style manager
- DIMREASSOCIATE command
- DIMINSPECT command
- DIMJOGLINE command
- UPDATE command
- Linear
- Aligned
- Radial dimension
- Diameter
- Center Mark
- Angular dimension
- Arc length dimension
- Baseline and continued dimension
- Tolerance
- Linear dimension
- Dimension Space command
- Dimension Break
- Quick dimension command
- Jogged radius
- Ordinate dimensions
- Dimension style manager
- Centre
- Mark
- Centreline
- Dimension Style
- Dimension Edit
- Leader
- Qleader command
- Mleader (multi leader command)
- Mleader style
- add leader
- Align leader command
- Leaderlines
- Collect Leader
- Text annotation
- Text command

- Style command
- Mtext command
- Scaletext
- Spell
- Table
- Tablestyle
- Tabledit

HATCHING OBJECTS

- Introduction: Purpose for hatching in drawing
- Application of hatching
- Standard hatching styles for stone, concrete, glass, wood, insulation, bricks, paving, floor
- tiles, roofing etc.
- Understanding hatch pattern
- Hatch command
- Hatch and gradient option
- HATCHEDIT command
- Island concept in hatching, fill command
- Gradient

USEFUL TIPS AND PRACTICES IN CIVIL DRAWING

- Learn How to Start Drawing of House Map in AutoCAD
- Drafting Tips for House Map in AutoCAD
- Inset Doors in Drawing. Tips for Block Reference and More
- Learn How to Draw Toilets, Furniture Blocks & Some More Tips
- Learn About Dynamic Blocks, Staircases, Draw & Insert Windows
- Learn How to Draw Walls, Doors, Window, Toilet, Floor etc.

OBJECT SELECTION METHODS

- Select
- Qselect
- Filter
- Block command
- Block editor
- Base command
- Wblock
- Dynamic blocks
- Insert

- Divide command
- Attribute (Attdef, Attedit, Eattedit, Attdisp, Attdia, Atttext, Eatttext)

PARAMETRIC MODELING

- Geometric Constraint
- Dimensional Constraint
- Design Centre
- Tool
- Palette

CLIPBOARD

- Copy
- copy base
- Copy link
- Paste clip
- Paste special
- Paste block
- Paste original

EXTERNAL REFERENCES

- XREF introduction
- XREF command
- REFEDIT command
- Xbind command
- Etransmit

LAYOUT PLOT AND PUBLISH

- Introduction to layout
- PAGESETUP command
- VPORTS command
- MSPACE command
- PSPACE command
- PLOT command
- PUBLISH command
- Publish to Web
- Introduction to plotting
- Layout
- Viewports
- Mview

- Page setup
- Plot Styles
- Plot

AUTOCAD 3D

GETTING STARTED WITH 3D

- Starting 3D model in AutoCAD
- Types of 3D models
- Visual style manager
- Wireframe, surface, solid models
- Conventions followed in AutoCAD
- Changing the view point
- Tools in 3D
- Creating 3D faces
- Creating predefined solid primitives like cone, sphere, cylinder, helix, wedge, polysolid etc.
- 2D hide-occluded lines
- Controlling the settings of edges, controlling the face display, backgrounds
- Creating complex solid models
- Checking interference in solids
- Dynamic UCS, Defining the UCS using view cube and ribbon
- Creating extruded solids, along normal, along a direction, along a path
- Extruding with a taper angle
- Creating swept solids
- Alignment, base point, scale, twist
- Creating lofted solids
- Join multiple edges, guide

EDITING SOLID MODELS

- Filletting
- Chamfering
- Mirroring
- Creating arrays in 3D space
- Aligning solid models
- Converting surface to solids
- Converting objects to surfaces
- Slicing solid models
- Creating the cross section of solids
- Editing faces of solid models

- Generating drawing views of a solid model
- Generating section views
- Adding material to a drawing
- Assembly of the mechanical parts

SURFACE MODELLING

- Creating wireframe elements
- Spline CV, spline fit, spline free hand
- Creating surface by using profiles
- Creating a revolved, loft, sweep surface
- Creating surface from other surface
- Patch surface, offset surface
- Editing surfaces: trimming and untrimming, extending and sculpting the surfaces
- NURBS surfaces
- Performing surface analysis: analysis curvature, analysis draft, zebra analysis

ANALYSIS, RENDERING AND MOTION

- Rendering basics
- The render panels
- Calculating the mass properties of solid model
- Concepts of light
- Working with lights
- User created lights
- Point light
- Spot light
- Weblight
- Distant light
- Sunlight
- Using luminaire objects
- Controlling the location and properties of light
- Working with material
- Applying materials to object and faces
- Creating and modifying materials
- Using texture maps
- Procedural maps
- Modifying map properties
- Creating the camera
- Rendering with a background
- Creating animation

- Using show motion for presentation, playing the animation

DRAWING PRACTICES AND PROJECTS

ADOBE PHOTOSHOP

GETTING STARTED

- Introduction to Photoshop and image editing
- Exploring Adobe Photoshop
- Explore the Photoshop Interface
- How to customize the toolbar in Photoshop
- Adobe Photoshop cc 2021 tools
- Understanding the tools
- Magic wand tool
- Move tool
- Rectangular marquee tool and elliptical marquee tool
- Lasso tool, polygonal lasso tool and magnetic lasso tool
- Quick selection tool
- Magic eraser
- Clone stamp tool
- Healing tool
- Dodge and burn tool
- Hand tool
- Zoom tool
- Foreground and background color in the toolbar
- Customize the Workspace
- Different Types of File Format – PSD, JPEG, PNG, TIFF, GIF
- Undo and history
- Panels and menu
- Rulers
- Default keyboard shortcuts
- File management

LAYERS IN PHOTOSHOP

- Concept of Layers
- Transforming Layers

- Arranging Layers
- Setting Transparency of Layers
- Selecting Multiple Layers
- Locking and Hiding Layers
- Creating a Blank Layer
- Deleting Layers
- Apply smart filters
- Mask layers with vector mask
- Layer effects and styles
- Reveal layers with clipping masks

WORKING WITH PHOTOSHOP

- Creating a New Image
- Understanding Resolution and Pixels
- Understanding Color Modes
- Importance of CMYK in Printing
- Viewing of Image
- Zooming and Scrolling Images
- Print Size and Actual Pixels
- Different types of Screen Modes
- Working with Rulers and Guides
- Opening Images
- Working with Adobe Bridge
- Compositing Images
- Working with Selections
- Adding Subtracting, Intersecting Selections
- Modifying Selections
- Transforming Selections
- Moving Selected Pixels using Move tool
- Cropping an Image
- Painting in Photoshop
- Using Color/Swatch Palettes, Color Picker and Eyedropper
- Brush, Pencil, Erasers, Pattern Stamp
- Setting Transparency for Painting Tools
- Creating Brushes and Patterns (By Defining Pattern and by Pattern Maker)
- Working with Libraries
- Adjusting brush's properties with Brush Palette
- Changing the color images by using Color Replacing Tool
- Filling Color
- Solid Color
- Working with Gradient

- Gradient Library
- Creating and Editing Gradient
- Transparency
- Retouching in Photoshop
- Working with Clone Stamp, Healing Brush, Spot Healing Brush, Patch Tool
- Removing Red Eye from an Image
- Blurring, Sharpening and Smudging an Image
- Using Smudge tool as a Painting tool
- Working with History Brush and History Palette
- History Brush and Art History
- Setting Source for History Brush
- Creating new Snapshots
- Differences between Type Tools and Type Mask Tools
- Working with Vector Shapes
- Differentiating Vector and Raster Objects
- Using Shape Tools
- Creating User Defined Vector Objects Using Pen Tool
- Parts of a Vector Object
- Anchor Point
- Path
- Bezier Curve
- Working with Path Palette
- Converting and Text into Path
- Applying Styles to Layers
- Using Style Presets
- Creating and Saving New Styles
- Creating Layer Groups
- Artistic and Painting Effects
- Understanding Other Filters
- Working with additional Plug-ins
- Adjusting the Color Tone of the Image
- Changing the Mode of Image
- Working with Adjustment Layers
- Working with Channels
- Resizing and Rotating Images
- Changing Images Size, Canvas Size
- Understanding Re sampling
- Automating Tasks with Actions and Batch
- Other Automation Tasks
- Creating Contact Sheet
- Creating Panorama with Photo merge
- Creating a Web Photo Gallery

- Scanning Images
- Creating Registration Marks and Crop Marks
- Fine Tuning Photoshop Using Preferences
- Understanding Scratch Disk

TEXT

- Work with OpenType SVG fonts
- How to create type effects
- Edit text
- Line and character spacing
- Fonts
- How to add and edit text in Photoshop

FILTERS AND EFFECTS

- Use Liquify filter
- Filter basics
- Add lighting effects
- Layer effects and styles
- Smudge image areas
- Use the blur gallery

IMAGE ADJUSTMENTS

- Perspective warp
- Reduce camera shake blurring
- Healing brush
- Export color lookup tables
- Adjust image sharpness and blur
- Understand color adjustments
- Applying brightness/contrast adjustment
- Adjust shadow and highlight detail
- Levels adjustment
- Hue and saturation

ADOBE CAMERA RAW

- Introduction to camera raw
- Create panoramas
- Supported lenses
- Vignette, grain and dehaze effects in camera raw
- Automatic perspective correction in camera raw

- How to make nondestructive edits in camera raw
- Radial filter in camera raw
- Manage camera raw settings
- Open, process and save images in camera raw
- Repair images with the enhanced spot removal tool in camera raw
- Adjust color renderings in camera raw

3DS MAX

GETTING STARTED WITH 3DS MAX

- Basics of 3D modeling
- Project workflow
- Setting up your scene
- Modeling objects
- Using materials from material editor
- Placing lights and cameras
- Animating your scene
- Rendering your scene
- The 3ds max interface
- Managing files
- Importing, merging, replacing and externally referencing scenes
- Using the asset browser
- Startup files and default
- The initialization file
- Backing up and archiving scenes
- Crash recovery system

VIEWING AND NAVIGATING IN 3D SPACE

- General viewport concepts
- Home grid: views based on the world coordinate axes
- Understanding the views: axonometric or perspective
- Setting viewport layout
- Controlling viewport rendering
- Controlling display performance
- Using standard view navigation
- Zooming panning and orbiting views
- View cube
- Steering wheels
- Using walkthrough navigation

- Navigate camera and light views
- Progressive display/ adaptive degradation
- View handling commands
- Controlling object display

SELECTING OBJECTS

- Introducing object selection
- Basics of selecting object
- Selecting by region
- Using select by name
- Using named selection sets
- Using selection filters
- Selecting with track view
- Selecting with schematic view
- Freezing and unfreezing objects
- Hiding and unhiding objects by selection
- Hiding and unhiding objects by category
- Isolate selection
- Introduction to sub object selection
- Selection commands
- Edit commands

OBJECT PROPERTIES

- Object properties dialog panel
- Rename object tool
- Custom attributes
- Parameter collector
- Expression techniques

CREATING GEOMETRY

- Basics of creating and modifying objects
- Geometric primitives
- Architectural objects
- Mental ray object
- Shapes
- Compound objects
- Systems

MOVING ROTATING AND SCALING OBJECTS

- Using transforms
- Transform commands
- Transform coordinates and coordinate center
- Transform tools
- Using modifiers
- World space modifiers
- Object space modifiers

CREATRING COPIES AND ARRAYS

- Overview of copies, instances and references
- Techniques for cloning objects
- Arraying object
- Mirroring objects
- Using the spacing tool

SURFACE MODELLING

- Working at the sub object level
- Subdivision surfaces
- Soft selection rollout
- Collapse utility
- Graphite modeling tools
- Editable mesh surface
- Editable poly surface
- Patch objects
- NURBS modeling
- Tools for low polygon modeling

PRECISION AND DRAWING AIDS

- Tools for precision
- Using units
- Using grids
- Alignment
- Using snaps
- Helpers
- Drawing assistants

SPACE WARPS AND PARTICLE SYSTEM

- Space warp objects
- Particle systems

ANIMATION

- Animation concepts and methods
- Working with controllers
- Animation controllers
- Animation constraints
- Wire parameters
- Hierarchies and kinematics
- Track view
- Motion mixer
- Saving and loading animation
- Animation utilities

LIGHTS AND CAMERAS

- Lights
- Lighting analysis assistant
- Cameras

MATERIAL EDITOR, MATERIALS AND MAPS

- Designing materials
- Material editor
- Material/map browser
- Type of materials
- Material, mapping and vertex color utilities

RENDERING

- Render setup dialog
- Rendered frame window
- R5ender output file dialog
- View image file
- Rendering commands
- Common panel
- Renderers
- Rendering elements separately
- Render to texture
- Rendering previews and grabbing viewports
- Network rendering

- Batch rendering
- Command line rendering

EFFECTS AND ENVIRONMENT

- Environment and effects dialog
- Rendering effects
- Environment and atmosphere effects

VIDEO POST

- Video post queue
- Video post status bar/view controls
- Troubleshooting video post
- Useful video post procedures
- Video post toolbar
- Filter events
- Layer events

WORKING WITH AUTOCAD, REVIT AND AUTOCAD ARCHITECTURE

- File handling commands
- File handling utilities
- Geometry file formats
- Image file formats
- External references to object and scenes
- Scene explorer
- Organizational tools
- Scene states
- Schematic view
- Workspaces
- State sets
- Container
- Groups and assemblies
- File handling commands
- File handling utilities
- Internet access: which can locate locally or network stored materials, textures, geometry that can be dropped into workspace
- Geometry file formats
- Image file formats
- Scene explorer
- Schematic view

- Using layers to organize a scene

AUTODESK CIVIL VIEW

- Geometry import
- Swept object styles
- Object placement styles
- Road marking object styles
- Rail object styles
- Building object styles
- Feature interpretation style
- Sight checker tool
- Traffic import
- Initializing civil view
- Civil view object categories
- Civil view parametric and static objects
- Civil view preferences
- Civil view explorer
- Civil view geometry imports panels
- Creating objects in civil view
- Civil view object and material libraries
- Traffic import panels
- Managing imported traffic data
- Dynamic markers
- Wildcards and regular expressions
- Tips and tricks with civil view
- Troubleshooting

V-RAY

V-RAY TOOLBARS AND INTERFACE

- Concepts of V Ray
- Understanding VRAY render toolbar
- V-ray Objects toolbar
- V-ray lights toolbar
- Toolbars
- V-ray asset editor
- Frame buffer
- Change rendering Method

- Assign Render
- Concepts of Mapping
- Using HDR images
- Using .mat file

APPLYING MATERIALS

- Materials overview
- Applying materials
- Scaling/resizing materials
- Material render preview
- For practice: download or make symbol model and apply variety of materials to each
- V-Ray Light material
- V-Ray material

OBJECT

- Objects- infinite plane
- Objects - proxies
- Objects-proxies-Laubwerk
- Objects- fur

ENVIRONMENT

- Environment – Sunlight
- Environment – dome light/HDRI

LIGHTING

- Concepts of Lighting
- Point of lighting
- Lighting- visibility, color & intensity
- V-Ray light
- V-Ray Sun
- Rendering method
- Set V-Ray Environment
- V-Ray color Mapping

OUTPUT

- Output-options
- Output comparison

- Saving

ADOBE PREMIERE PRO

GETTING STARTED WITH PREMIERE PRO

- Introduction to post production
- Concepts of editing & Compositing
- Explore premiere pro panels
- Importing files
- Linear & non-Linear editing
- Editing tools & software
- Stabilizing the footage
- Lumetri curve controls
- Concepts of effects
- Effect controls and keying
- Animating the text and titles
- Plug-ins
- Working with images
- Tilt shift
- Zoom transition, dolly zoom, panning
- Working with animations
- Keying & other compositing methods
- Speed, duration & Timing
- File formats
- Tools & Menu
- Crop, Slide, Roll
- Masking
- Video effects
- Color grading
- Video transitions
- Working on manual transitions
- Video rendering
- Working with audio
- Reduce noise and reverbs
- Exporting the video

REVIT ARCHITECTURE

INTRODUCTION TO BIM AND REVIT ARCHITECTURE

- Building Information Modelling (BIM)
- Design with Building Forms
- Design with Building Components

THE REVIT ARCHITECTURE USER INTERFACE

- Design Bar
- Launch screen and how to access recent projects
- Ribbon menu
- Properties palette
- Project browser
- Drawing area
- 2D and 3D navigation
- Menus, Toolbars, Options Bar
- View Controls
- System Families
- Content Families

STARTING A DESIGN

- Select a Template
- Set Units
- Parameters in revit
- Difference between instance and type parameters
- About Levels, how to create, how to use levels
- Relationship between views and levels
- Reference planes
- About Grids
- Structural grids
- Model Vs detail elements
- Modify a Dimension Style
- Create a New Sheet
- Create a Title block
- Insert a Title block
- Create a Template
- Drawing aids

THE BASICS OF BUILDING MODEL

- Place Walls
- Modify Walls
- Doors and windows
- Curtain walls
- Floors
- Creating sloped floors
- Shaft openings
- Ceilings
- Add fixtures to ceilings
- Roofs: roofs by footprint
- Roofs: roofs by extrusion
- Stairs: stair by component
- Stairs: stair by sketch
- Railings
- Ramps
- Columns
- Model line and model text
- Learn how to load third party components
- Define a Wall Structure
- Design a Complex Wall Structure

EDITING AND MODIFYING ELEMENTS

- Selecting and filtering elements
- Moving elements
- Copying elements
- Rotating elements
- Mirroring elements
- Arrays (linear and radial)
- Aligning elements
- Splitting elements
- Trimming and extending elements
- Offsetting elements
- Pinning elements

CREATING VIEWS

- Duplicating views: learn three different methods of duplicating your model
- Elevations: learn how to create and control internal and external elevation
- Sections
- Callouts: create callouts to better explain the detail in your model
- Drafting views: uses and how to create them

- The default 3D view
- Camera views: Learns how to create camera views including changing camera and target height
- Legend views: what is Revit's legend and how to create
- Section boxes: 3D cutaway section view part of the model
- Schedules: create complex schedule of any component

GRAPHICS AND VISIBILITY SETTINGS

- View scales
- Detail levels
- Visual styles
- Crop regions
- Hide/ override graphics in view
- Reveal hidden elements
- Temporary hide/ isolate
- Visibility / graphic overrides
- View templates
- View properties
- View range

ANNOTATION AND DETAILING

- Dimensions
- Text
- Detail lines
- Symbols
- Detail components
- Repeating details
- Filled regions
- Rooms
- Tags

BONUS TOPICS

- Phases: learn to use Revit's phasing for existing and proposed building projects
- Design options: explore different configuration and design using Revit 's design options tool
- Working with CAD files: learn to import/ link DWG file and use them as the template
- Placing views onto sheets: learn how to place your finished project views onto sheets

- Printing: learn how to print single/multiple views and sheets
- Importing Vector Files

IMPORTING AND EXPORTING

- Working with Imported Files
- Importing Raster Image Files
- Exporting Files
- Exporting for Energy Analysis
- About Temporary Dimensions
- About Permanent Dimension
- About constraints
- Applying and Removing constraints

CREATING RENDERINGS AND BUILDING WALKTHROUGH

- About Renderings
- About Walkthroughs
- Sun and shadow settings
- Export to VIZ from Building Model
- Render a Model in Revit Building
- Create Walkthrough in Revit Building

PROJECT

- Create Plan, elevation, sectional and 3D Model of a building

SKETCHUP

INTRODUCTION

- Installing SketchUp
- Getting started
- Setting up the template
- Toolbox description

GETTING TO KNOW THE INTERFACE

- Interface basics
- Introduction to tools and entities
- Adding toolbars
- Standard toolbar

- Large toolset
- Modification toolbar
- Camera toolbar
- Walkthrough toolbar
- Face style toolbar
- Views toolbar
- Shadow toolbar
- Principal tool bar
- Navigating
- Changing perspective
- Walking around
- Creating camera views
- Shading faces and edges
- Creating shadows and fog
- Creating Scenes
- Setting preferences

MANIPULATING OBJECTS

- Selecting and moving objects
- Scaling and rotating objects
- Manipulating faces and edges
- Advanced selection tools
- Sketchup coordinate system
- Dividing and healing geometry
- Manipulating connected faces
- Autofold
- Intersection
- Sketchup tools
- Paint bucket tool
- Drawing tool: line, arc, rectangle, freehand tool, circle...

DRAWING

- Line tool fundamentals
- Refining objects with the Line tool
- Using the Rectangle tool
- Pushing and pulling faces into 3D
- Creating circles and polygons
- Creating arcs

- Offset tool
- Creating complex geometry: Intersect with model tool, position texture tool,
- Using the O-set tool to create outlines
- Using the Follow, Me tool
- Softening round edges
- Creating 3D text

MEASURING AND LABELING

- Using the Tape Measure tool
- Using the Protractor tool
- Creating text labels
- Axes tool
- Using the Dimension tool
- Creating sections

WORKING WITH COMPONENTS

- The Component windows
- Creating components
- Using the 3D Warehouse
- Importing from Google Earth
- Using the Interact tool
- Using the Component Options window

ORGANIZING SCENES

- Grouping objects
- Working with layers
- Creating layers
- Using the Outliner
- Hiding and unhiding objects
- Locking and unlocking objects
- Camera tool
- Position camera tool
- Look around tool
- Standard views

CREATING TEXTURES AND MATERIALS

- Using the Materials Browser
- Applying materials

- Editing materials
- Creating materials
- Adjusting materials
- Applying bitmap images
- Mapping curved objects
- Projecting maps on curved objects
- Importing floor plans
- Modeling with floor plans
- Rendering and Animating
- Outputting 2D bitmaps
- Basic animation
- Advanced animation

CREATING TERRAIN USING SANDBOX

- Creating terrain from contours
- Modeling objects with contours
- Creating terrain from scratch
- Sculpting with the Smoove tool
- Stamping and draping objects on terrain
- Stamp tool
- Drape tool
- Add detail tool
- Creating smooth area
- Flip edge toolbar

USING PHOTO MATCH AND GOOGLE EARTH

- Geolocation with Google Maps
- Using Photo Match to align cameras
- Modeling in Photo Match

SKETCHUP PRO: WORKING WITH THE SOLID TOOLS

- Creating solids
- Using Boolean operations (Union, Intersect, Subtract)
- Working with Trim and Split
- Creating outer shells

SKETCHUP PRO: IMPORTING AND EXPORTING

- Importing objects from AutoCAD
- KMZ file to use in google earth

- Export as 2D graphic image
- Exporting as animation
- Exporting as section slice
- Importing other 3D objects
- Exporting objects
- Exporting as STL file

PROJECT AND PORTFOLIO

- Project
- Create a portfolio using your own works
- Create a resume with the help of the trainer

PROJECT DETAILS

PROJECT 1: 2D DESIGNING

- Develop Plan, Elevation and Sectional views using AutoCAD

PROJECT 2: 3D MODELING AND WALKTHROUGH CREATION

- Create interiors and exteriors and generate walkthrough.

PROJECT 3: VIDEO EDITING

- Edit images with Photoshop and edit videos using Premiere.