# **Course Curriculum** Learn a complete SketchUp workflow

# Lesson 1 - SketchUp Introduction & Settings Main Topic: SketchUp Introduction & Settings

- Software introduction
- The program settings
- Model info & preferences
- SketchUp toolbars
- SketchUp default tray & styles
- Project Tags & Project Browser
- SketchUp template for architectural work

# Lesson 2 - Urban Plan & Reference files Main Topic: Project Urban plan & Reference files

- Manage SketchUp default tray
- Urban plan reference files
- Import DWG format
- Import jpeg format
- Drawing 2D urban plan in SketchUp

# Lesson 3 - Topography & 3D Urban plan Main Topic: Project Topography & 3D Urban Plan

- Project SketchUp location
- Topography contour lines
- Topography by using SandBox tool
- Topography by using Topo Shaper
- 3D urban plan

# Lesson 4 - Building Elements: Floorplan Reference & Structural Slab Main Topic: Building Elements: Floorplan Reference & Structural Slab

- Planning of work
- Floorplan reference files
- Reference lines
- Floorplan structural slab

# Lesson 5 - Building Elements: Groundfloor Walls Main Topic: Building Elements: Groundfloor Walls

- SketchUp extension for walls
- Structural layer of the wall
- Interior layer of the wall
- Exterior layer of the wall







### Lesson 6 - Building Elements: Doors & Door Openings Main Topic: Building Elements: Doors & Door Openings

- SketchUp extension for openings
- Create door openings
- SketchUp extension for doors
- Create Doors

# Lesson 7 - Building Elements: Windows & Window Openings Main Topic: Building Elements: Windows & Window Openings

- Reference lines for openings •
- Window openings
- SketchUp extension for windows
- Windows

# Lesson 8 - Building Elements: Floor finishes & Ceilings Main Topic: Building Elements: Floor finishes & Ceilings

- Floor finishes by using SketchUp base tools
- Floor ceilings by using SketchUp base tools

### Lesson 9 - Building Levels - Part 1 Main Topic: Project Levels

- Reference files for building levels •
- Reducing work by SketchUp tool: Move-Copy mode
- Level walls adjustments
- Wall layers

### Lesson 10 - Building Levels - Part 2 Main Topic: Project Levels

- Reference files
- Doors & Windows
- Floor finishes & Ceilings
- Project Roof

# Lesson 11 - Building Levels - Part 3 Main Topic: Project Levels

- Reference files for building levels .
- Reducing work by SketchUp tool: Move-Copy mode
- Level walls adjustments
- Wall lavers
- Floor finishes, Doors, Windows & Ceilings







# Lesson 12 - Building Levels - Part 4 Main Topic: Project Accessory Elements

- SketchUp base tool: Follow me
- Project Accessory frames
- Additional project elements & finishes

# Lesson 13 - Building Levels - Part 5 Main Topic: Project Railings & Outdoor lights

- Project reiling base
- Glass railings
- Reference lines for outdoor building lights
- Building outdoor lights

### Lesson 14 - Bulding Positioning Main Topic: Project Site Planning & Positioning

- Project site planning and landscape elements
- Project positioning on site
- Building pads

### Lesson 15 - Landscape Design - Part 1 Main Topic: Project Landscape Design

- Project site elements: routes & pedestrian •
- Landscape garden elements, pads & retaining walls

# Lesson 16 - Landscape Design - Part 2 Main Topic: Project Landscape Design

- Project axeses orientation
- Outdoor staircase
- Finishes, frames & additional retaining walls

### Lesson 17 - Landscape Design - Part 3 Main Topic: Project Landscape Design

- Garage floor adjustments
- Garage ramp & connection to the main route
- Planning the swimming pool
- Swimming pool design
- Outdoor finishes







# Lesson 18 - Landscape Design - Part 4 Main Topic: Project Landscape Design

- Garage floor adjustments
- Garage ramp & connection to the main route

# Lesson 19 - Landscape Design - Part 5 Main Topic: Project Landscape Design

- Project swimming pool lights
- Garden lights

# **Lesson 20 - Building Materials** Main Topic: Project Materials

- Using reference guides
- Create custom materials
- Assigning materials

### Lesson 21 - Building Interior Design - Part 1 Main Topic: Project Interior Design

- SketchUp Warehouse
- Windows blinds
- Wooden decoration & wall cabinets.

### Lesson 22 - Building Interior Design - Part 2 Main Topic: Project Interior Design

- Kitchen & apliances
- Dining table & chairs
- TV set & accessories
- Living area arrangements
- Lobby arangements

# Lesson 23 - Building Interior Design Main Topic: Interior Staircase Design

- Reference lines & Stair calculations
- Staircase & elements by using base SketchUp tools

# Lesson 24 - Building Interior Design Main Topic: Interior Staircase Openings

- Floor openings for staircase
- Staircase placement by building levels .







### Lesson 25 - Building Interior Design - Part 3 Main Topic: Project Interior Design

- Interior design master bedroom
- Interior design master bedroom closet

### Lesson 26 - Building Interior Design - Part 4 Main Topic: Interior Design & Lighting

- Interior lightings
- Interior materials
- Outdoor furniture

### Lesson 27 - SketchUp Layout Main Topic: Introducing SketchUp Layout

- Layout interface
- Layout settings & trays
- SketchUp scenes for Layout presentation

#### Lesson 28 - Project Drawings - Part 1 Main Topic: Project Drawings

- SketchUp & Layout collaboration
- Project Layout representation, pages & layers
- Project Layout drawings set

#### Lesson 29 - Project Drawings - Part 2 Main Topic: Project Drawings

- Project drawings representation & style
- Project Interior furniture representation
- Project doors representation

#### Lesson 30 - Project Drawings - Part 3 Main Topic: Project Drawings & Dimensions

- **Project dimensions**
- Project references, elements & grids •

#### Lesson 31 - Project Drawings - Part 4 Main Topic: Project Drawings Hatches & Patterns

- Project patterns & hatches
- Project patterns & hatches by building levels







### Lesson 32 - Project Drawings - Part 5 Main Topic: Rooms & Areas

Rooms & Areas

# Lesson 33 - Project Vizualizations - Model Preparation Main Topic: Model Preparation for Vizualizations

- Project browser check
- Purge operation

# Lesson 34 - Twinmotion Introduction Main Topic: Twinmotion Introduction

- Program installation & interface
- Tools, menus & settings

### Lesson 35 - Twinmotion Exterior Visualizations - Part 1 **Main Topic: Twinmotion Exterior Visualizations**

- Synchronization between SketchUp & Twinmotion
- Project positioning & terrain map
- Terrain manipulation

### Lesson 36 - Twinmotion Exterior Visualizations - Part 2 **Main Topic: Twinmotion Exterior Visualizations**

- Options for changing materials with PBR ones
- Project scenes for visualizations
- Adjusting the scene lights, exposure, sun and sky

### Lesson 37 - Twinmotion Exterior Visualizations - Part 3 Main Topic: Twinmotion Exterior Visualizations

- Project environment
- Project green areas
- Project reflection options

### Lesson 38 - Twinmotion Exterior Visualizations - Part 4 Main Topic: Twinmotion Exterior Visualizations

- Project materials replacement & adjustments
- Project lighting
- Project visualization settings & export







### Lesson 39 - Interior Rendering with V-Ray 5 - Part 1 **Main Topic: Interior Visualizations**

- V-Ray 5 short introduction
- Interior scenes for visualization
- Scenes settings & tools

### Lesson 40 - Interior Rendering with V-Ray 5 - Part 2 **Main Topic: Interior Visualizations**

- V-Ray Cosmos library
- V-Ray asset editor
- V-Ray frame buffer

### Lesson 41 - Interior Rendering with V-Ray 5 - Part 3 **Main Topic: Interior Visualizations**

- Interior scene lighting & shadows
- Interior test rendering & frame buffer using

### Lesson 42 - Interior Rendering with V-Ray 5 - Part 4 Main Topic: Interior Visualizations

- V-Ray materials & textures
- Interior rendering settings

### Lesson 43 - Interior Rendering with V-Ray 5 - Part 5 Main Topic: Interior Visualizations

- Final rendering in frame buffer
- Using V-ray Light mix for post production

### Lesson 44 - Interior Rendering with V-Ray 5 - Part 6 Main Topic: Interior Visualizations

- Post production in V-ray 5
- Interior scenes of the building





