

# VIRTUAL CITIES

# TRAINING

## INTRODUCTION TO TWINMOTION 2023

### Foundations Workshop

**Duration:** 1 day (5-6 hours)

**Audience:** Architects, designers, visualisers working with Revit

**Level:** Beginner

#### Training Focus

This hands-on introductory session provides the core skills needed to bring Revit models into Twinmotion to create compelling architectural visualisation quickly and effectively.

#### Key Topics

- Revit to Twinmotion Workflow – Direct Link & Synchronising
- Navigation & User Interface – Scene Management essentials
- Materials & Lighting – Assigning, customising, and editing
- Vegetation, People & Context – Adding entourage and landscapes
- Cameras & Media Creation – Still images, panoramas and landscapes
- Collaboration & Presentation Tools – Exporting, sharing, and client review

#### Learning Outcomes

- ❖ Import and manage Revit models efficiently
- ❖ Apply and edit materials, lighting and entourage
- ❖ Create static renders, animated sequences, and presentations
- ❖ Share visualisations with clients and collaborators
- ❖ Understand best practices for integrating Twinmotion into architectural workflows

# Morning Session (Fundamentals & Workflow)

## 1. Introduction to Twinmotion 2023 (30 min)

- Overview of real-time visualisation for architecture
- Key differences vs. static rendering & BIM tools
- What's new in Twinmotion 2023 (e.g., improved material system, AI-assisted tools, updated asset library)
- Positioning Twinmotion within the Revit > Twinmotion > Unreal Engine pipeline

## 2. Revit-to-Twinmotion Workflow (1 hr)

- Setting up Revit models for smooth export (layers, materials, families)
- Direct Link Dialogue including Collapse options, Sync & Autosync – when to use each
- Maintaining BIM data inside Twinmotion
- Hands-on: Importing a sample Revit model into Twinmotion

## 3. Twinmotion Navigation & UI Basics (30 min)

- Viewports, navigation, scene organisation
- Scene graph & object hierarchy
- Tools for moving, scaling, and rotating assets
- Managing project settings (units, geolocation, time of day, lighting defaults)

## 4. Materials & Lighting Essentials (1 hr)

- Assigning and customising materials
- Using the Material Editor (physically based properties, decals, displacement & Unreal Engine's Megascan Library)
- Importing Revit materials vs. Twinmotion materials
- Lighting basics: Sun/sky, HDRI, artificial lights
- Hands-on: Apply custom materials and lighting to the imported Revit model

**LUNCH**

## Afternoon Session (Visualisation & Presentation)

### 5. Vegetation, People & Context (1 hr)

- Using Twinmotion's asset library (furniture, entourage, vegetation, vehicles)
- Path tools (animated people & cars)
- Contextual tools (urban, natural environments, weather, seasons)
- Hands-on: Add entourage and landscaping to create a compelling scene

### 6. Cameras & Media Creation (1 hr)

- Setting up viewpoints & camera paths
- Working with media modes (images, panoramas, videos, presentations)
- Animations: simple flythroughs, time of day, weather transitions
- Hands-on: Create a short animation sequence of the architectural project

### 7. Collaboration & Presentation Tools (30 min)

- Presenter mode for client meetings
- VR walkthrough setup (if hardware available)
- Export options: stills, 360 panoramas, videos, presentations
- Cloud sharing & stakeholder collaboration

### 8. Best Practices & Q&A (30 min)

- Workflow optimisation tips for large Revit projects
- Avoiding common pitfalls (performance, scale, materials)
- When to move from Twinmotion to Unreal Engine for advanced workflows
- Open discussion of firm's typical project needs