

## Autodesk Tandem for Digital Twin Builders

### Course Objectives

- To provide a comprehensive understanding of the Autodesk Tandem platform and its role in digital twin creation and management.
- To enable learners to create, configure, and manage facilities, assets, and data within Tandem effectively.
- To develop skills in integrating, visualizing, and organizing asset data, documents, and IoT connections.
- To equip participants with the ability to standardize workflows using templates, classifications, and custom parameters.

### Course Outcomes

- Participants will be able to confidently create and manage digital twin facilities in Tandem.
- Learners will gain the ability to structure and manage asset data, including documents and source files.
- Participants will be capable of configuring connections, visualizing IoT data, and setting performance thresholds.
- Learners will understand how to implement templates, customize classifications, and manage project collaboration and handover processes.

### Target Audience

- BIM professionals, digital twin engineers, and facility managers involved in asset lifecycle management.
- Engineers, architects, and construction professionals transitioning into digital twin workflows.
- Project managers and asset owners seeking to improve data-driven facility operations.
- Individuals interested in learning Autodesk Tandem for smart building and infrastructure management.

**Course Outline:** The course comprises **16-hours** of theory and labs and is divided into **12 different chapters**. Each chapter will be followed by hands-on lab exercises to reinforce learning and gauge understanding of the topics covered.

## **Table of Contents**

### **Module 1: Introduction to Tandem for Twin Builders**

- Overview of Autodesk Tandem Platform
- Role of Twin Builders in Digital Twin Ecosystem
- Key Features and Use Cases

### **Module 2: Getting Started with Tandem**

- Navigating the Tandem Home Page
- Creating a New Facility
- Understanding Facility Structure

### **Module 3: Data & File Management**

- Uploading and Managing Source Files
- File Organization Best Practices
- Attaching and Linking Documents

### **Module 4: Asset Data Configuration**

- Specifying Data Requirements for Assets
- Asset Information Standards
- Data Validation and Quality Control

### **Module 5: User, Team & Account Management**

- Managing Teams and Roles
- Account Settings Configuration
- Collaboration Workflows

### **Module 6: Facility Setup & Interface Navigation**

- Navigating Facility UI
- Understanding Settings and Controls
- Data Visualization Features

### **Module 7: Views and Visualization**

- Creating and Managing Views
- Customizing Views for Stakeholders
- Visualization Techniques

### **Module 8: IoT Integration & Data Connections**

- Creating Connections in Tandem
- Configuring Data Sources
- Viewing and Interpreting IoT Data

### **Module 9: Customization in Tandem**

- Creating Custom Parameters
- Developing Custom Classification Systems
- Structuring Asset Data Models

### **Module 10: Templates & Standardization**

- Creating Facility Templates
- Applying Templates to Projects
- Benefits of Standardization

### **Module 11: Advanced Configuration**

- Creating and Configuring Connections
- Setting Performance Thresholds
- Monitoring and Alerts

### **Module 12: Facility Management & Handover**

- Transferring Ownership of a Facility
- Managing Lifecycle Data
- Best Practices for Digital Twin Handover