



## Autodesk® 3ds Max - Fundamentals

### Brief Synopsis of Class Contents:

The Autodesk 3ds Max Fundamentals training provides a thorough introduction to Autodesk 3ds Max software that will help new users make the most of this sophisticated application, as well as broaden the horizons of existing, self-taught users. The practices in this training are geared towards real-world tasks encountered by the primary users of Autodesk 3ds Max: professionals in the Architecture, Interior Design, Civil Engineering and Product Design industries.

### Learning Objectives:

- Be familiar with Autodesk 3ds Max
- Understand the 3ds Max User Interface and Workflow
- Be able to assemble Project Files – Link, Import and Merge
- Create 3D Models from 2D Objects
- Create Materials
- Add Photometric lighting
- Create Renderings using mental ray and Advanced Ray Tracing
- Produce Animations for Visualization

### Courseware:

Ascent 3ds Max Fundamentals

### Number of Days:

5 Half Day Sessions

### Continuing Education Hours:

18 hours

### Who Should Attend:

Architects, Engineers and Master Planners

### Prerequisites:

3D fundamentals knowledge and experience

### System and Software Requirements:

<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-System-Requirements>

### FAQs and Cancellation Policy:

<http://www.asti.com/LiveLab-Learning-amp-Training/LiveLab-FAQS>

## Class Outline and Topics:

### 3ds Max Concepts and Interface

- Introduction to Autodesk 3ds Max
- Visualization Workflow
- User Interface and Project Setup
- Menus and Toolbars, Command Panel and Modeling Ribbon
- Status Bar
- Project Folder and Assembling Project Files
- Preferences
- Configure User Paths
- Units Setup
- Customizing the User Interface
- Viewport Configuration and Navigation
- Creating Cameras

### Basic Modeling

- Object Selection
- Modeling with Primitives
- Applying Transforms
- Editable Poly and Editable Mesh
- Sub-Object Mode
- Poly-Modeling with Graphite Tools
- Reference Coordinate Systems and Transform Centers
- Cloning and Grouping

### Modeling from 2D Objects

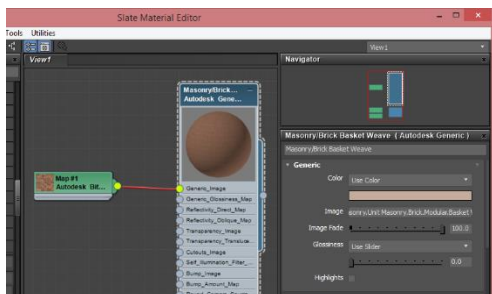
- Drawing 2D Lines
- Using Snaps for Precision
- Editing 2D Lines
- 2D Booleans
- Lathe Modifier
- Extrude Modifier
- Sweep Modifier

### Data Linking and Importing

- DWG Link and Import Options
- Linking Revit Models
- Layer and Object Properties

### Materials

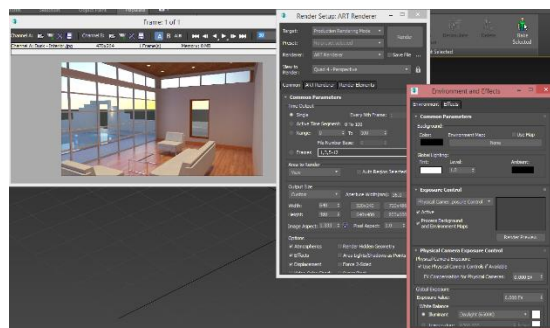
- Overview Materials Concepts
- Slate Material Editor
- Managing Materials
- Assigning Materials to Objects
- Material Types and Parameters
- Shaders
- mental ray Materials
- Physical Materials
- Multi-Sub-Object Materials
- Sub-Object Material IDs
- Autodesk Materials Library
- Understanding Maps and Materials
- Map Coordinates and Scale
- UVW Map Modifier
- MapScaler Modifier





## Lighting

- Lighting Overview
- Lighting Strategy
- Standard vs. Photometric Lighting
- Daylight and Sunlight Systems
- Target and Free Lights
- Light Distribution
- Lighting Templates
- Attenuation and Intensity
- Global Illumination



## Rendering

- Scene Preparation
- Render Settings
- Controlling Quality
- Output Size
- Iterative Rendering
- Background Images
- Print Size Wizard
- Rendering Presets
- Render Output
- RAM Player



## Basic Animation

- Time Configuration
- Keyframes
- Using Auto-Key
- Path Animations
- Animation Output
- Video Post

