

Table of Contents

Autodesk VIZ 2008 Fundamentals

Module 1: Introduction to Autodesk VIZ 2008

Section 1: Overview

Overview

Visualization Workflow

Section 2: The Autodesk VIZ Interface

Menus and Toolbars

Status Bar

The Command Panel

Configuring User Paths

Viewport Configuration and Navigation

Object Selection

Section 3: Basic Functions

Modeling with Primitives

Applying Transforms

Sub-Object Mode

Box Modeling

Statistics in Viewport

Reference Coordinate Systems and Transform Centers

Cloning and Grouping

Module 2: Starting a Visualization Project

Section 1: Autodesk VIZ Configuration

Video Modes

Preferences

Configure Paths

Units Setup and Global Coordinate System

Customizing the User Interface

Section 2: Assembling Project Files

Data Linking and Importing

DWG Link and Import Options

Layer and Object Properties

Section 3: 3D Modeling from 2D Objects

Drawing 2D Lines

The Lathe Modifier
2D Booleans
Terrain Objects
The Extrude Modifier
Boolean Operations
The Sweep Modifier (Optional)
Loft Objects
Using Snaps for Precision

Module 3: Materials

Section 1: Introduction to Materials

How Materials Work
Understanding Maps and Materials
Materials and Material Libraries
Materials and Tool Palettes
Managing Materials

Section 2: Material Types and Parameters

Standard Materials
Architectural Materials
Multi/Sub-Object Materials
Opacity, Bump, and Reflection Mapping
mental ray Shaders and Materials
Other Material Types

Section 3: Mapping Coordinates and Scale

Mapping Coordinates
Mapping Scale

Module 4: Introduction to Autodesk VIZ Lighting

Section 1: Autodesk VIZ Lighting Overview

Local vs. Global Illumination
Choosing a Lighting Strategy

Section 2: Standard Lighting

Fundamentals of Standard Lighting
Types of Standard Lights
Shadow Types
Daytime Lighting with Standard Lights

Module 5: Lighting with Autodesk VIZ Radiosity and mental ray

Section 1: Scene Preparation for Radiosity

- Fundamentals of Radiosity
- Photometric Light Objects
- Configuring Materials for Radiosity
- Exposure Control

Section 2: Applying Radiosity

- Radiosity Workflow
- Initial Distribution
- Adjusting Radiosity Solutions
- Rendering Quality Options for Radiosity
- Daylight and Radiosity (Optional)
- mental ray Daylight

Module 6: Rendering and Animation

Section 1: Rendering

- Single vs. Double-Sided Rendering
- Camera Parameters
- Background Images
- The Print Size Wizard
- Selected Rendering Options
- Rendering Presets
- mental ray Interior Rendering

Section 2: Animation

- Animation Controls
- Walkthrough Assistant
- Animation Output

Appendix

- Getting Help with Autodesk VIZ
- Object Substitution
- Customizing Tool Palettes
- Completing the Interior Scene
- Camera Matching (recommend Help tutorial)
- Lighting Analysis
- Creating a Shadow Study Animation
- Creating Hierarchies
- Animating Visibility