Autodesk® 3ds Max® Design Fundamentals

Course Length: 4 days

The Autodesk® 3ds Max® Design Fundamentals training course provides a thorough introduction to Autodesk 3ds Max Design 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 course are geared towards real-world tasks encountered by the primary users of Autodesk 3ds Max Design: professionals in the Architecture, Interior Design, Civil Engineering, and Product Design industries.

Topics Include:
- Introduction to Autodesk 3ds Max Design
- Autodesk 3ds Max Design Interface and Workflow
- Assembling Files by importing, linking, or merging
- 3D Modeling with Primitives and 2D Objects
- Using Modifiers to create and modify 3D objects
- Materials
- Autodesk 3ds Max Design Lighting
- Lighting with Autodesk 3ds Max Design mental ray
- Rendering and Cameras
- Animation for Visualization

To see the current course schedule and to register for this course:
Go to imaginit.com/schedule3DSFUND
Prerequisites:
Experience with 3D modeling is recommended.

Table of Contents

Chapter 1 Introduction to Autodesk 3ds Max Design
- 1.1 Overview
- 1.2 Visualization Workflow
- 1.3 The Autodesk 3ds Max Design Interface
- 1.4 Preferences
- 1.5 Setting the Project Folder
- 1.6 Configure Paths
- 1.7 Display Drivers
- 1.8 Viewport Display and Labels

Chapter 2 Autodesk 3ds Max Design Configuration
- 2.1 Viewport Navigation
- 2.2 Viewport Configuration
- 2.3 Object Selection Methods
- 2.4 Units Setup
- 2.5 Layer and Object Properties

Chapter 3 Assembling Project Files
- 3.1 Data Linking and Importing
- 3.2 Linking Files
- 3.3 References

Chapter 4 Basic Modeling Techniques
- 4.1 Model with Primitives
- 4.2 Applying Transforms
- 4.3 Sub-Object Mode
- 4.4 Reference Coordinate Systems and Transform Centers
- 4.5 Cloning and Grouping
- 4.6 Polygon Modeling Tools in Ribbon
- 4.7 Statistics in Viewport

Course description shown for Autodesk 3ds Max Design 2015. Topics, curriculum, and/or prerequisites may change depending on software version.
Chapter 5 Modeling From 2D Objects

• 5.1 3D Modeling from 2D Objects
• 5.2 The Lathe Modifier
• 5.3 2D Booleans
• 5.4 The Extrude Modifier
• 5.5 Boolean Operations
• 5.6 Using Snaps for Precision
• 5.7 The Sweep Modifier

Chapter 6 Materials

• 6.1 Introduction to Materials
• 6.2 Understanding Maps and Materials
• 6.3 Managing Materials
• 6.4 Standard Materials
• 6.5 Material Shaders
• 6.6 Assigning Maps to Materials
• 6.7 Opacity, Bump, and Reflection Mapping
• 6.8 mental ray Materials
• 6.9 The Material Explorer

Chapter 7 Mapping Coordinates and Scale

• 7.1 Mapping Coordinates
• 7.2 Mapping Scale
• 7.3 Spline Mapping

Chapter 8 Introduction to Lighting

• 8.1 Local vs. Global Illumination
• 8.2 Standard Lighting
• 8.3 Types of Standard Lights
• 8.4 Shadow Types

Chapter 9 Lighting and Rendering

• 9.1 Photometric Light Objects
• 9.2 Exposure Control
• 9.3 Daytime Lighting

Chapter 10 mental ray Rendering

• 10.1 Fundamentals of mental ray
• 10.2 mental ray Interior Rendering
• 10.3 Controlling mental ray Quality
• 10.4 mental ray Proxies
Chapter 11 Rendering and Cameras
- 11.1 Rendering Options
- 11.2 Rendering Presets
- 11.3 Single vs. Double-Sided Rendering
- 11.4 State Sets
- 11.5 Cameras
- 11.6 Background Images
- 11.7 The Print Size Wizard

Chapter 12 Animation
- 12.1 Animation and Time Controls
- 12.2 Walkthrough Animation
- 12.3 Animation Output

Appendix A Optional Topics
- A.1 Getting Help with Autodesk 3ds Max Design
- A.2 Compact Material Editor
- A.3 Architectural Materials
- A.4 Object Substitution
- A.5 Lighting Analysis
- A.6 Creating Hierarchies
- A.7 Customizing the User Interface

Appendix B Optional Practices

Appendix C Autodesk 3ds Max Certified Professional Exam Objectives
Cancellation Policy

The following cancellation policy shall apply to all training engagements, Live Online, Consulting Services and Dedicated/ Custom Training:

- Company reserves the right to reschedule or cancel the date, time and location of its class at any time. In the event that a Training Class is cancelled by Company, Customer is entitled to a full refund. Company shall not be responsible for any other loss incurred by Customer as a result of a cancellation or reschedule.

- For Customer cancellations when written notice is received (i) at least ten (10) business days in advance of the class, the Customer is entitled to a full refund of its payment or reschedule enrollment, (ii) less than ten (10) business days, Customer shall not be entitled to a refund, but shall receive a class credit to be used within three (3) months of the date of the original class.

- Student substitutions are acceptable with at least two (2) days prior notice to the class, provided substitution meets course prerequisites and is approved by Company’s Training Coordinator (trainingcoordinator@rand.com).

- For all Training orders, cancellation notices must be submitted to trainingcoordinator@rand.com. Company is not responsible for any error in the delivery of the email notice. In the event of any reschedule of Consulting Services and/or Dedicated/Custom Training by Customer, Company will invoice Customer for all non-cancellable travel expenses.

For full terms and conditions, go to imaginit.com/TrainingTC.

To request more information or to see training locations, visit imaginit.com/contact.