3D Visualization in 3DS Max

About The Course

This course is designed to help you get a good knowledge of the features found in 3ds Max & for those who are looking to begin and working in 3ds Max. The course is step by step and helps you to understand the basics and advance features of this very powerful program. By the end of this course, we want you to be at a point where you can feel very comfortable using 3ds Max to create amazing and photorealistic renderings.

Course Breakdown
Duration : 40 classes (2 hours each class)

1- Understanding 3D, its scope and usability.

2- Introduction to 3D Studio Max

- Introduction to 3D Studio Max - understanding the user interface
- Understanding the 3d file formats. Exporting/importing files and project management.

3- Introduction to modelling

- Understanding standard primitives/extended primitives and compound objects.
- Creating and modifying geometry
- Understanding the concepts of polygonal and spline modelling

4- Spline modelling

- Creating a tyre and rim using lathe
- Creating and editing texts
- Modelling a bottle and glass

5- Polygon modelling

- Modeling a chair
- Organic modelling overview
- Modeling an interior scene
- Modeling an exterior scene

6- Texturing

- Materials and texturing overview
- Introduction to material editor
- Parameters of material editor
- Understanding the Procedural maps
- UVW mapping
- Exploring the Unwrap technique
- Exporting UVW maps
- Creating and editing maps in Photoshop
- Creating maps for Diffuse, Bump, Specular, Reflection, Opacity & Displacement

7- Introduction to basic Rigging & Animation

- Rigging overview
- Wire parameters
- Adding key frame and getting started with basic object animations.
- Constrains & Path animation
- Camera animation- useful in rendering walkthroughs
- Introduction to Biped system and using BIP files

8- Introduction to Dynamics/FX

- Creating Particles in 3ds max
- Creating fountain with super spray
- Understanding forces
- Introduction to Cloth
- Understanding cloth modifier and simulating various types of cloths
- Creating a basic pillow with cloth modifier
- Rigid and soft bodies
- Understanding 3ds Max reactors

9- Introduction to Lighting, Shading & Rendering

- Lighting and rendering overview
- Overview of various type of rendering engines

10-Getting started with 3ds Max default rendering engine- Scanline

- Understanding and using standard lights
- Parameters of standard lights
- Understanding photometric lights
- Understanding the types of shadows in 3ds Max
- Advance controls of lights
- Rendering properties of individual objects
- Introduction to Environment effects- Volumetric light and Effects
- Exterior Lighting using skylight
- Lighting with 3ds max Daylight system
- Using Light lister
- Introduction to Shading
- Understanding the material types
- Material parameters and properties
- Creating wood, glass , metal, fabric and other shading materials

11- Introduction to Mental Ray

- Mental ray material and shaders
- Introduction to Global/Indirect illumination & Final gather
- Mental ray daylight system with Mr Physical sky
- Mental ray lights
- Mental ray caustics
- Rendering an Ambient Occlusion
- Rendering in Multiple passes and layers
- Rendering sequences- Exporting video

12- Compositing

- Introduction to compositing
- Understanding the concept of Multi pass compositing- its need and importance
- Compilation of rendering passes in Photoshop/After Effects

13- Vray

- Introduction to Vray in 3ds Max
- Basic settings and overview
- Understanding Linear and Non linear workflow
- Understanding the various types of image sample and anti aliasing filters in Vray
- Vray environment and global/indirect illumination

- Introduction to vray lights
- Understanding Vray shadows and parameters
- Understanding Vray atmospheric effects
- Introduction to Vray materials
- Creating realistic liquid, fabric, glass, metal, wood and other shaders using vray materials.
- Sub surface scattering in Vray
- Vray physical camera
- Vray caustics
- Using vray fur to create realistic rug
- Creating grass with Vray displacement method
- Vray proxies and scattering
- Understanding Vray sun & sky
- Studio lighting for rendering products in Vray
- Rendering realistic interiors in 3ds Max and Vray
- Exterior lighting setup in Vray
- Vray rendering in Passes
- Adding final details to the renders in Photoshop
