

Maya Core

Introduction to Maya

Maya Fundamentals Using the Maya Interface
Understanding Projects and Scenes
Transform Tool Basics
Pivot Points
Grouping and Parenting
Modelling with Primitives

Curve Modelling and NURBS
Procedural Texturing Polygons and Component Mode
Curve Modelling
Image Planes
Construction History
Introduction to Texturing with Procedural Textures
The Renderview

Polygon Modelling Understanding Maya
Polygonal Components
Polygonal Modelling
Box Modelling
Shell modelling

Texturing Texture Mapping
Creating and Editing UV's
Colour, Bump and Specular Textures

Lighting and Rendering Introduction to Lighting and Rendering
Depth Map Shadows
Cameras
Batch Rendering an Animation
Viewing an Image Sequence

Introduction to Animation

The Graph Editor and Introduction to Animation
Key Framing Key Framing
Using the Graph Editor
Animation Curves and Tangents

Deformer and Path Non Linear Deformers
Animation Modelling with Animation Tools and Commands
Path Animation

Clusters, Blendshapes Applying and Animating Blendshapes
and Connections Animating Pivot Points
Connections and Expressions

Rigging Introduction to Constraints
Introduction to Rigging
Joints and IK





Lamp Animation Creating and Cycling an Animation
Cameras and Composition
Raytrace Shadows

Introduction to NURBS Modelling

NURBS Coliseum NURBS Modelling using Curves
Tools to Modify Curves
Tools to Build and Modify Surfaces from Curves
Duplicating with Animation Tools

NURBS Sandal NURBS Modelling using Projected Curves
Offsetting Surfaces
Trimming
Working with Trim Edges

NURBS Kettle NURBS Modelling
Birail
Tangency Reinforcing Tools and Processes used in Last
Two Modules whilst Introducing Addition Surface Tools for
Curve and Surface Editing

Introduction to Polygonal Modelling, UV Mapping and Skinning

Efficient Modelling Advanced Selection and Manipulation of Polygonal
Components

Organic Modelling Deconstruction of Existing Organic Topology
Understanding use of Edge Loops and Edge Flow for
Organised Meshes

Hard Surface
Polygonal Modelling
Part 1 Hard Surface Modelling Techniques
Subdivisional Modelling with a Smooth Proxy

Hard Surface
Polygonal Modelling
Part 2 Hard Surface Modelling Techniques
Subdivisional Modelling with a Smooth Proxy

Non Organic UV
Mapping Non-Organic UV Mapping
The UV Texture Editor
Quick Select Sets

Organic UV Mapping Organic UV Mapping
Unfolding and Relaxing

Skinning Introduction to Skinning Geometry
Smooth Bind
Painting Weights
Set Driven Keys
Component Editor



Introduction to Texturing

Texture Mapping	Materials and their Attributes Texture Mapping Colour Specularity Bump Translucency, Reflectivity and Texture Resolution
Photoshop basics	Introduction to Photoshop and Common Processes used in Image Manipulation and Texture Creation
Tiling and Layering Textures	Creating and Tiling a Texture in Photoshop Creating a Bump Map Creating a Specular Map Layered Shader
Block Texturing a Non-Organic Object	Projecting and Baking Textures UV Snapshot Editing a Texture in Photoshop
Texture Distressing	Texture Distressing Techniques in Photoshop Layer Management in Photoshop Texture Creation for Final Colour Bump & Reflection Spec Map

Introduction to Lighting and Rendering

Lighting and Shadows	Subjectively Lighting a Scene Light Decay & Light Fog Adjusting Shadows Gobos Light Glow
Ray Tracing and Depth of Field	Mental ray Reflections Reflection Blur Refractions Fresnel Effect Depth of Field
Final Gather and Image Based Lighting	IBL & HDRI Introduction to Final Gather Motion Blur for Mental Ray
Render Layers and Compositing	Camera Mapping HDRI and IBL Rendering Layers Including Occlusion Depth Pass Shadows Compositing in Photoshop
Photon Mapping and Caustics	Global Illumination with Photon Mapping Final Gather Caustics with Photon Mapping