



Course Title: Maya – Advanced: Modeling & Rigging

Duration: 36 hours

Autodesk Maya Objective:

Maya is the best animation software for creating lifelike realistic animation. This course will give the students all the skills they need to create a complex 3d character using Maya's specialized character modeling features. Students will also learn how to animate their model by learning how to create the skeleton for the model, a process known by: rigging and skinning.

Course Outline:

Tools Used in Character Modeling

- Using smooth preview
- Using the extrude tool
- Using the power for soft selection
- Using the sculpt geometry tool
- Working symmetrically
- Setting up the image planes

Modeling the Head

- Modeling basic face structure
- Making the head and neck
- Refining the mouth
- Forming the eyes
- Building the nose
- Crafting the ears
- Making the eyes brows

Modeling the Body

- Modeling the upper torso
- Working from the waist down to the feet
- Constructing the palm and the thumb
- Making fingers and finishing the hands
- Applying artistic principles to the body

Modeling the rest of the character

- Modeling the hair using Nurbs and polygons
- Modeling the pants
- Modeling the shoes
- Refining Creases
- Cleaning up problem areas

Building the Skeleton

- Prepare the scene
- Build the skeleton using joints
- Adding a hip bone



IK handles

- Using IK handles
- Mirror the arm and the leg chain
- Using the Ramp Shader
- Using the 3d paint tool

Rigging the body

- Creating the Reverse foot bones
- Constraining the reverse foot bones
- Setting up foot controls
- Rigging the knees
- Setting controls for the upper body
- Establishing a center of gravity control

Animation tools

- Creating Custom Attributes
- Set driven key controls

Rigging the head

- Rigging the neck and head
- Rigging the eye lids
- The eye controls
- Working on brow controls
- Creating animation Cycles

Finishing the body rig

- Establishing a center of gravity control
- Building arm controls
- Starting on the finger rig
- Adding a global control
- Finalizing the control rig

Finalizing the complete character

- Interactive Skinning Method
- Volume manipulator and Component editor
- The paint tool weight