

## 3D Character Creation Diploma

### Introduction

This diploma focuses on characters in 3D. It covers the stages of creating 3D characters starting from building the basic models till lighting and rendering.

The diploma starts with sculpting and creating cartoon character and goes through the steps of creating character from head sculpting with details and components to clothes and texturing

### Things to know before entering this diploma

General knowledge of modeling and texturing is required for this diploma or attending 3D animation introduction course

**Diploma Duration:** 28 classes, 3 hours per class

**Diploma offering frequency:** This diploma is offered 3 times per year.

### Diploma contents

#### Sculpting Basics:

Class 1:

- Intro to sculpting and zbrush
- Basic UI
- LightBox
- Brushes
- Strokes
- Alphas
- Textures
- Hotkeys
- Standard Menus

Class 02:

- Basic of creating a geometry
- Sculpting Techniques

Class 03:

- Character design theory
- Character Blocking

Class 04:

- Head Sculpt

Class 05:

- Making the hair

Class 06:

- Cloth Modeling

Class 07:

- Polypainting

**Class 08:**

- Posing the character
- Rendering using keyshot

**Creating Hyper Realistic Characters:**

**Class 09:**

- Anatomy of the nose
- Creating the nose base
- Adding the "Nasal Bones"
- Adding the "Lateral Cartilage"
- Adding the "Alar Cartilage"
- Adding the "FattyTissue"
- Finishing the nose sculpt
- Different nose shapes

**Class 10:**

- Structure of the mouth
- Blocking in the lip shapes
- Defining the Vermilion border
- Detailing the surrounding area
- Finishing the mouth sculpt
- Different mouth shapes

**Class 11:**

- Anatomy of the ear
- Creating the ear base
- Adding the ear structures
- Detailing the ear sculpt
- Finishing the ear sculpt
- Different ear shapes

**Class 12:**

- Examining the eye area
- Building the flesh around the eyeball
- Defining the border of the eyelids
- Adding the flap over the eye
- Detailing the eye area
- Finishing the eye sculpt
- Different eye shapes

**Class 13&14:**

- Analyzing the male and female skull
- Discussing the similarity between faces (male and female)
- Analyzing different types of male faces
- Analyzing different types of female faces
- Difference Proportions between male and female face
- Sculpting the male head
- Detailing the male head

- Finishing the male head
- Sculpting the female head
- Detailing the female head
- Finishing the female head

Class 15:

- Anatomy of the torso (male and female)
- Discussing the difference between male and female torsos
- Blocking in the male torso
- Defining the male torso
- Detailing the male torso
- Finishing the male torso

Class 16:

- Reviewing the female torso anatomy
- Blocking in the female torso
- Defining the female torso
- Detailing the female torso
- Finishing the female torso

Class 17:

- Anatomy of the arm (with hand)
- Discussing the differences between male and female arms
- Blocking in the male arm base
- Defining the male arm
- Detailing the male arm
- Finishing the male arm sculpt (with hand)

Class 18:

- Reviewing the female arm anatomy
- Blocking in the female arm base
- Defining the female arm
- Detailing the female arm
- Finishing the female arm sculpt (with hand)

Class 19:

- Anatomy of the legs (male and female)
- Discussing the differences between male and female legs
- Blocking in the male legs base
- Defining the male legs
- Detailing the male legs
- Finishing the male legs

Class 20:

- Reviewing the female legs anatomy
- Blocking in the male legs base
- Defining the male legs
- Detailing the male legs
- Finishing the male legs

Class 21:

- Analyzing the male and female proportions
- Discussing the differences between male and female proportions
- Building out the male body using the sculpted parts from previous classes
- Refining the male body and fix proportions
- Detailing the male body

- Finishing the sculpt

**Class 22:**

- Reviewing the female proportions
- Building out the female body using the sculpted parts from previous classes
- Refining the female body and fix proportions
- Detailing the female body
- Finishing the sculpt

**Class 23:**

- Discussing different types of male and female body
- Using the full body sculpt to make different types of body (tall, short, fat , thin,etc..)

**Class 24:**

- Retopology tools
- Unwrapping

**Class 25:**

- Making realistic skin details
- Texturing using (Mari,Substance painter,and Zbrush)

**Class 26:**

- Making cloth (marvelous designer)
- Retoplogy and Unwrapping
- Detailing the cloth
- Texturing the cloth (Zbrush and Substance painter)
- Creating hair using Fibermesh inside of Zbrush

**Class 27:**

- Organizing and Renaming every object
- Exporting maps for rendering
- Importing into 3D rendering application
- Creating lighting setup
- Adding materials and shading
- Finalizing model for final render

**Class 28:**

- Final Project Review

**Attendance policy**

Being absent more than 15% percent of the diploma classes is an automatic fail

**Grading Policy**

Attendance: **10 %**

Assignments: **15 %**

Class Work: **15%**

Character Project: **30%**

Environment project: **30%**