

UNIVERSITY OF PUNE

Certificate Courses in Animation

- 1) Certificate Course in Animation using Flash**
- 2) Certificate Course in Animation Using Photoshop**
- 3) Certificate Course of Animation using Maya**

(To be established from Academic Year 2013- 2014)

Preamble :-

Considering the latest job scenarios, the **Faculty of Science** finds it necessary to design short term certificate courses in Animation. Board of Studies in animation has prepared following certificate courses viz.

- 1)Certificate Course in Animation using Flash**
- 2)Certificate Course in Animation Using Photoshop**
- 3)Certificate Course of Animation using Maya**

This certificate course will provide a basic foundation in the fundamentals of Artistic Design, Digital Content Creation and Portfolio Development. This course will help to gain skills in Computer Animation . This will also help to learn how to complete a Portfolio of student work which will help them to sell their skills to employers in the fast paced industry. The contents of this certificate courses are dynamic and are based upon the industry trends.

The consumer demand of high quality animation and visuals has fueled the growth of the animation industry in this decade. The visual artist with excellent design and computer animation skills and a firm understanding of animation technology. They are producing stunning visuals for games, multimedia, web, television and documentaries. This proposed certificate courses are useful for developing students creativity and the skills in the areas of design, computer animation, , advertisement etc. using cutting edge software.

Objectives of the Course :-

The objectives of Certificate Courses shall be as follows :-

1. To familiarize the students with various software approaches and techniques of Animation Technology.
2. To develop competencies and skills.
3. Exploring different approaches in computer animation.

Eligibility :-

Higher Secondary School Certificate (10+2) or its equivalent Examination

Medium of Instruction :-

The medium of instruction for the course shall be English.

Duration :-

The duration of certificate courses viz.

- 1)Certificate Course in Animation using Flash - **120 Hours** (Expected to Complete in Max.3 Months)
- 2)Certificate Course in Animation Using Photoshop-**120 Hours**(Expected to Complete in Max. 3 Months)
- 3)Certificate Course of Animation using Maya-**160 Hours** (Expected to Complete in Max.4 Months)

Fees :- BOS is recommending the fees by considering the required resources as follows.

- 1)Certificate Course in Animation using Flash - **Rs. 10,000/- per student**
- 2)Certificate Course in Animation Using Photoshop - **Rs. 10,000/- per student**
- 3)Certificate Course of Animation using Maya - **Rs. 15,000/- per student**

University authorities may review the fees of the certificate courses . University have right to decide Fees of the courses.

Detail course content of the certificate courses is as follows :-

Certificate Course in Animation Using Flash

Duration: 120 Hours (3 Months)

Module I: Introduction to Animation

- a) Concept of Animation, History of Animation
- b) Principle of Animation
- c) Types of Animation & Animation Tech.
- d) Classical Animation, Stop Animation, Clay Animation, Frame Animation
- e) Cell Animation
- f) Components used for designing Animation such as light box, live shooting, Live photography, Chrome shoot
- g) Techniques of story boarding for digital film making
- h) Understanding vector Animation
- i) Application of Animation in Industries
- j) Concept of 2D, 3D Animation

Module II: Working with Graphics using Flash

- a) Grouping of elements
- b) Working with Text
- c) Creating a static text field, creating a dynamic text field, creating a input text field, Editing text field-scrolling the text, breaking apart the Text
- d) Working with Library
Importing Library, Library properties, Common Library, Creating Library
- e) Working with Colors
Color mixer, Creating gradients, opacity of gradients, creating custom gradients
- f) Working with graphics importing & working with Bitmaps, Jpeg, gif, etc. Break apart
Creating Flash Elements:
 - a) Working with Object
 - i) Drawings, creating, moving, drag, cutting, copying and selecting objects.
 - b) Transforming Objects
 - i) Transforming an object freely, Distorting an object, modifying an object with envelope modifier, scaling an object, Rotating and skew an object, flipping an object, restoring a transformed object.
 - c) Working with symbol and Instances
 - d) About the symbol, creating and deleting symbols, duplicate and modify an instance of a symbol
 - i) Types of symbol-Movie clip, Button, Graphic
 - ii) Creating Dynamic Buttons, editing buttons, converting an existing into a movie clip, placing movie clip symbol inside the button symbol.
 - e) Marking Positions- What is Onion Skinning & its Types & uses.

Module III: Working with Layers:

- a) Introduction to layers, hides and show layers, lock a layer, add and name layer, change the order of Layers, organize layers in folder.
- b) Types of Layers- guide layer, mask layers, layer properties, masking animation, masking frame by Frame.

Indicative list Practical Assignments:

- 1) Creating scene with a cartoon drawing.
- 2) Demonstration use of frame by frame Animation.
- 3) Demonstration use of symbols.
- 4) Drawing a house with a pencil.
- 5) Demonstration use of guide layer and mask layer.
- 6) Creating an e-Card of Birthday wishes.

Reference Books:

- 1) Flash CS3 in simple Steps-Cogent Learning Solution- Dreamtech Press
- 2) Flash 8-Straight to Point by Dinesh Maidasani –Firewall Media Publisher
- 3) Macromedia Flash 8: A Tutorial Guide, author- Jay Armstrong, Jen deHaan-BPB Publisher.

Certificate Course in Animation using Photoshop

Duration: 120 Hours (3 Months)

Module I: Introduction to Animation

- a) Concept of Animation, History of Animation
- b) Principle of Animation
- c) Types of Animation & Animation Tech.
- d) Classical Animation, Stop Animation, Clay Animation, Frame Animation
- e) Cell Animation
- f) Components used for designing Animation such as light box, live shooting, Live photography, Chrome shoot
- g) Techniques of story boarding for digital film making
- h) Understanding vector Animation
- i) Application of Animation in Industries
- j) Concept of 2D, 3D Animation

Module II: Introduction

Exploring the Adobe Photoshop CS4 Environment
Explore the photoshop interface
Explore the navigation Tools
Customize the workspace
Explore Adobe Bridge
Use Photoshop help
Determining Resolution and Graphic Type
Differentiate between Raster and Vector Graphics
Understand Image resolution

Module III: Working with photoshop

Working with selections

Create a selection, Save, Modify
Apply Color to a selection

Working with layers

Create Layers
Work with Type Layers, Transform Layers, Apply Layer Styles, Manage Layers
Enhancing Images with Paint and Filters
Paint on an Image
Apply Filter Effects
Exploring Image Modes and Color Adjustments
Explore Grayscale and Bitmap Modes
Explore Color Modes

Practical Assignment:

1. Study of Photoshop Interface and Various Tools.
2. Create a Photoshop design based on Resolution and sizes
3. Create a Photoshop design with Multiple Layers, Apply effects like transparency, Feather effects.
4. Create a Design in Photoshop with mixed contents from multiple images.
5. Create a design in Photoshop and Change the actual colors. (Black and White Image to Color Image)

Reference

Photoshop CS4 in Simple Steps- Dramatic Press

Certificate Course in Animation using MAYA

Duration: 160 Hours (4 Months)

Module I: Introduction to Animation

- a) Concept of Animation, History of Animation
- b) Principle of Animation
- c) Types of Animation & Animation Tech.
- d) Classical Animation, Stop Animation, Clay Animation, Frame Animation
- e) Cell Animation
- f) Components used for designing Animation such as light box, live shooting, Live photography, Chrome shoot
- g) Techniques of story boarding for digital film making
- h) Understanding vector Animation
- i) Application of Animation in Industries
- j) Concept of 2D, 3D Animation

Module II :3D Beginners for MAYA

- a) Introduction to 3D World**
- b) 3D design with Modeling**
- c) Texturing in surface**
- d) CG Lighting & Rendering**
- e) Basic Animation & Creative Workshop**

a) INTRODUCTION TO 3D WORLD

- Computer Graphics
- The Production Work Flow
- Navigating in Maya

b) 3D DESIGN WITH MODELING

- Introduction with Polygon & Nurbs Modeling
- Editing with Modeling tools
- Model with objects : The Stream Locomotive

c) Texturing in Surface

- Introduction with Maya Shaders
- Shader Attributes
- Texture with images in polygon

d) CG Lighting & Rendering

- Basic Maya Lighting Concepts
- Adding Shadows
- Rendering setup with camera
- Basic introduction in Mental Ray

e) Basic Animation & Creative Workshop

- Introduction in Maya Animation
- Keyframe Animation – Bouncing a Ball
- Take a workshop and demonstrate a Character Walkcycle

Recommended Assignments of 3D Beginners in MAYA

Modeling

1. Model an Pepsi CAN in Nurbs
2. Model an Computer Table, chair and a PC

Texturing

1. Texture the Pepsi Can model with Basic colour with Introduce Photoshop
2. Texture any one object (computer table /chair / PC) with semi-realistic
3. Take a Texture workshop of Game Design

Lighting

1. Create a environment (computer table, chair and PC) with Shadow effect.
2. Create a wine glass with semi-realistic effect.

Rendering

1. Render the lighting environment (computer table, chair and PC) with Maya Software.
2. Render that wine glass with basic Mental Ray.

Animation

1. Demonstrated the Animation Principal and give a workshop with acting.
2. Create a animation of Bouncing Ball.