

DIPLOMA COURSE IN 3D ANIMATION

REGULATIONS AND SYLLABUS

REGULATIONS

1. Description of course/objective of the course

This course is designed to prepare technicians with specialized skills, knowledge and attitude to work in Animation field.

The program will be conducted at any Centre recognized by Sri Ram Vidyapeeth under the Collaborative Program.

2. Eligibility

A pass in 10+2 Examination/PUC/Equivalent to H.S.C

3. Duration of the Course

The Course shall extend over a period of 12 months.

4. Practical Training

Being a practical oriented program, the focus will be more on practical training. The candidate shall undergo practical training of the computer laboratory of that Center or other computer laboratories of Sri Ram Vidyapeeth affiliated institutions.

5. Requirement to appear for examination

Candidate should put in a minimum of 75% attendance to appear for the examinations

6. Passing minimum

A candidate shall secure a minimum of 50% in the Vidyapeeth examination for practical and theory and overall 50% in each of the paper (Internal + External) to pass the examination. A candidate failing in any one of the components has to reappear for that particular component in the supplementary examinations.

7. Classification of successful candidate

- A candidate who obtains 75% and above, aggregate in theory and practical examinations, in the first attempt shall be deemed to have passed the examination with distinction.



- A candidate who obtains from 60% to 74% of the aggregate in theory and practical examinations, in the first attempt shall be deemed to have passed the examination in the first class.
- Other Successful candidates shall be declared to have passed the examination in the Second class.

8. Conferment of degree

A candidate who has passed all the examination as prescribed shall be eligible to receive the “DIPLOMA COURSE IN 3D ANIMATION” from Sri Ram Vidyapeeth.

9. Revision of Regulation and syllabus

The syllabus and regulations of the courses are subject to modification by the Vidyapeeth whenever necessary.

Course Overview

The 3D Animation program is designed to develop the artistic temperament and technical skills that makes one a professional in the field of Computer Generated Imagery. This program combines the artistic as well as the technical aspect of Computer Generated Imagery. Student develops a range of visual and tactile exploration skills by working on a range of creative process. Visual research forms an integral part of the program and students are taught and then encouraged to apply them throughout the program. Figure drawing, Gesture drawing, Character Design, Location and Prop design, Posing for Animation, Storytelling, Storyboarding, Camera and Lighting techniques are key study elements. These provide the foundation to work within the computer assisted 3D environment and help in creating believable movements that utilize core animation principles. The Digital Media curriculum includes Modeling in 3D, Texturing, Lighting, Rigging, Animating, creating effects, Compositing and Editing. The course offers a wide range of opportunities for individuals to develop both practical and theoretical skills in any specialist area of animation. The course aims to address the demand for animators with creative vision and artistic talent.



SYLLABUS

Course I - Foundation Study

This module introduces the Students to a range of creative process that will aid them in their visual enquiry and self expression. Using these processes and strategies student generate ideas and concepts to design briefs. Students also learn a series of Digital Media Techniques which are deployed to generate Digital Media output.

You Will Learn

- Ideation through Mind map, Mood board, Semiotics, Metaphor, Themes and Styles
- Researching, Referencing and applying the history and theory of design to design practice
- Elements and Principles of Design
- Photography and detail texture
- Working in Photoshop
- Symbol and Icon Design and Construction
- Digital Manipulation techniques such as enlargement, reduction, Transformation and reshaping
- Understanding Colour & Colour Correction
- Creating Digital Painting / Matte painting
- Interpreting & responding to a brief
- Apply the design process to 2-dimensional & 3-dimensional work in response to a brief.

Suggested Readings

1. Paul Steed : Modeling a Character in 3Ds Max 7, Published by dreamtech, Second Edition – 2005.
2. John Kundert – Gibbs, Eric : Mastering Maya 7, Wiley Kunzen Dort, Dariush Derakhshani, Publishing Edition 2006. Mick Larkins, Eric Keller, Boaz Livny, Mark E.A. de Souza



Course II - Pre - Visualisation

This module begins by introducing the student to the broad concept of visualization in terms of Shapes and Forms, Light & Shadow, Perspective and Composition. Later student learn to apply these skills for Visual exploration, Expression of moods, create Concept Art, Character Design and 2D Animation (electives).

You Will Learn

- Developing Visual observation through Drawing
- Exploration of Volume, Perspective, Structure and Form
- Colour, colouring and shading methods
- Set Designing
- Drawing the human figure with emphasis on gesture, proportions and form development
- Basic structural and anatomical concepts
- Design of Costume and Standard props
- Sketching and Composing a scene
- Character and Set Design
- Basic Animation
- StoryBoard
- Material and Process

Suggested Readings

1. John Kundert – Gibbs, Mick Larkins, : Mastering Maya 8.5 2007 Dariush Derakhshani, Eric Kunzendort, Published by Wiley Inc. Eric Keller, Boaz Livny, Mark E. A.de Soursa, with Ed Siomacco.
2. Kelly L.Murudock : 3ds Max 9 Bible. Published by Wiley, Inc. 2007.



Course III - Media Production

This module exposes students to a variety of non Digital approaches of film making so as to widen the scope of a visual research base. The Media Production module encourages students to analyse and explore forms of communication and media through a variety of Media disciplines. Through Film Theory and by learning film techniques such as Direction, Cinematography, Acting, Storytelling, screenplay students are taught to explore the relationship between what is being communicated and target audience/viewer and apply them to their field of study.

You Will Learn

- Dramatic tension in the stories
- Characters and dialogues
- Introduction to Film Theory & Production
- Introduction to Cinematography
- Basic Composition
- Introduction to Direction
- Story telling
- Writing Story for Animation, film language
- Experimental Animation

Suggested Readings

1. Boaz Livny and Eric Keller : 3ds Max 9 Essentials First Printed in India 2007. Published by Elsevier, a divisions of Elsevier India Pvt Ltd.2007.
2. John Kundert – Gibbs, Mick Larkins, : Mastering Maya 8.5 2007 Dariush Derakhshani, Eric Kunzendort, Published by Wiley Inc. Eric Keller, Boaz Livny, Mark E. A.de Soursa, with Ed Siomacco.



Course IV - Digital Media Technique I (Basic 3D)

This Module exposes students to the fundamental of 3d. Which covers the tools and techniques covers everything from the Maya interface, how to use and position cameras, modeling NURBS and polygons right through to texturing, lighting, rigging, Animation and rendering your objects.

You Will Learn

- Inorganic & Props modeling using techniques of NURBS & Polygon
- Applying Materials and creating Textures
- Basic lighting and Camera movements
- Rigging Based on parenting Method. Rigging Based on parenting Method.
- Basic Animation using Key frame animation technique and editing in graph editor.
- Project planning and implementation.

Suggested Readings

1. Boaz Livny and Eric Keller : 3ds Max 9 Essentials First Printed in India 2007. Published by Elsevier, a divisions of Elsevier India Pvt Ltd. 2007.
2. John Kundert – Gibbs, Mick Larkins, : Mastering Maya 8.5 2007 Dariush Derakhshani, Eric Kunzendort, Published by Wiley Inc. Eric Keller, Boaz Livny, Mark E. A. de Sousa, with Ed Siomacco.



Course V - Digital Media Technique II (POST PRODUCTION)

This hybrid – theory and practical module will provide students with the opportunity to investigate and practice rendering, editing and compositing the three essential parts of Post Production. Students will get learn both the theoretical and well as practical aspects of editing, compositing and rendering in order to understand the cultural, social and cognitive effects of the editor's/compositor's art on the cinematic form.

You Will Learn

- Standards and Principles of Editing.
- Editing Techniques and Tools
- Audio Editing Techniques
- Compositing
- Rotoscopy
- Colour Correction
- Tracking and Stabilization
- Keying

Suggested Readings

1. Boaz Livny and Eric Keller : 3ds Max 9 Essentials First Printed in India 2007. Published by Elsevier, a divisions of Elsevier India Pvt Ltd.2007.
2. John Kundert – Gibbs, Mick Larkins : Mastering Maya 8.5 2007 Dariush Derakhshani, Eric Kunzendort, Published by Wiley Inc. Eric Keller, Boaz Livny, Mark E. A.de Soursa, with Ed Siomacco.



Course VI - Digital Media Technique III (ADVANCE 3D)

This module further develops the students Computer assisted design and development knowledge, and extends the students awareness and technical understanding by introducing the student to advance techniques of 3D Modeling and Animation as applicable to the design of Computer generated Characters. The students are allotted electives (subject to quorum) and specialize in a particular area.

You Will Learn

- Advance Modeling
- Character Creation
- Digital Sculpting
- Advance Texturing
- Advance Lighting
- Advance Rigging
- Advance Character Animation
- Rendering
- Dynamics
- Mel scripting
- Matchmoving
- Advance Previzualization.

Suggested Readings

1. Boaz Livny and Eric Keller : 3ds Max 9 Essentials First Printed in India 2007. Published by Elsevier, a divisions of Elsevier India Pvt Ltd.2007.
2. John Kundert – Gibbs, Mick Larkins, : Mastering Maya 8.5 2007 Dariush Derakhshani, Eric Kunzendort, Published by Wiley Inc. Eric Keller, Boaz Livny, Mark E. A. de Soursa, with Ed Siomacedo.

