SACRED HEART COLLEGE (AUTONOMOUS), THEVARA

KOCHI, KERALA, 682013

CURRICULUM AND SYLLABI

CHOICE BASED CREDIT SYSTEM

(CBCS-PG)

MA DIGITAL ANIMATION PROGRAMME

INTRODUCED FROM 2016 ADMISSION ONWARDS

BOARD OF STUDIES IN DIGITAL ANIMATION

SACRED HEART COLLEGE, THEVARA, KOCHI, KERALA

OBJECTIVE

The Animation program prepares graduates for a wide range of careers in the industry such as Traditional animation, Illustration, CGI, 3D animation Film making.

The skills taught in the courses encompass craft at a technical level; yet also include design, drawing, critical thinking, creativity, daring, collaboration, and a fundamental awareness of theory and history. Throughout the program, students are engaged in all aspects of animation/post production, from concept development and production design to the completion of finished segments.

INTRODUCTION

The program begins with design/animation history, theory and traditional hand skills, then progresses to current design/animation practices and technology. Students create script, storyboard, drawings, clay models,2d animations, virtual models, 3d animations and lot more. The program encourages innovation while stressing strong technical and presentation skills. Students gain a background in design/animation history and theory and then experiment and develop their own creative approaches. The Candidates become eligible for a Post-graduation after four semesters of study, spanning over a period of 2 years and successful completion of the Examination.

1. Course Structure

  The programme has symmetrical approach – that is, four semesters. Emphasis is   laid on practical and projects. Every semester has practical courses. The course ends with course ending practical projects.

2. Eligibility

Basic academic qualification is a graduation in Animation or a graduation in any field and a Diploma in Multimedia (However preference will be given to candidates with the following qualification: -Any Degree and a Diploma in Multimedia, Animation, Graphics, Communication, Visual Arts, Painting, Theatre, Architecture and Music

II. Candidates will be finally selected after a qualifying examination and an interview.

III. Merit list will be drawn on the basis of the qualifying examination and an interview. (That is 50:50)

Course Summary

COURSE/PAPER

1-1   2D Design
1-2   History of Animation
1-3   Film Techniques

1-4   Concept, Layout & Storyboarding
1-5   Traditional Animation
2-1   Object Animation & Pixilation
2-2   CG Foundation
2-3   History of Computer Animation
2-4   2D Digital Animation
2-5   3D Design
3-1   3D Advanced Studies
3-2   Compositing
3-3   Editing
3-4   3D Animation I
3-5   Post Production
4-1   3D Animation Project
4-2   Portfolio
4-3   Research

Internship I

4. Evaluation

The evaluation scheme for each course shall contain two parts; (a) internal evaluation and (b) external evaluation. 50% weightage shall be given to internal evaluation and the remaining 50% to external evaluation and the ration and weightage between internal and external is 1:1. Both internal and external evaluation shall be carried out using direct grading system. Internal evaluation: The Internal evaluation shall be based on predetermined transparent system periodic written tests, assignments, seminars and attendance in respect of practical courses. The weightage assigned to various components for internal evaluation is a follows.

EVALUATION AND GRADING

Evaluation: The evaluation scheme for this course shall contain two parts; (a) internal evaluation (ISA) and (b) external evaluation (ESA). 50 marks shall be given to internal evaluation and 50 marks to external evaluation so that the ratio between internal and external mark is 1:1. Both internal and external evaluation shall be carried out in mark system. Both internal and external marks are to be mathematically rounded to the nearest integer.

Internal evaluation: The internal evaluation shall be based on predetermined transparent system involving periodic written tests, assignments, seminars/viva/field survey and attendance in respect of theory courses and based on written tests, lab skill/records/viva and attendance in respect of practical courses. The marks assigned to various components for internal evaluation is a follows.

Components of Internal Evaluation

All the components of the internal evaluation are mandatory.

a)   **For Theory**

	Components	Marks
	Attendance	5
Ii	Seminar/ exhibition/ screening	10
Iii	Assignments	15
iv	A written tests (2x5)	10
v	Workshops	10
	Total	50

b)   **For Practical**

	Components	Marks
	Attendance	5
ii.	Seminar/ exhibition/ screening	10
iii.	Assignments	15
iv.	A written tests (2x5)	10
v.	Workshops	10
	Total	50

c)   guidelines for projects shall be provided with conduct of each course
     Evaluation of,

Attendance

% of attendance	Marks
Above 90%	5
Between 85 and < 90	4
Between 80 and below 85	3
Between 76 and below 80	2
75	1

Assignment

Components	Marks
Punctuality	2
Content	7
Research	3
Presentation	3
Total	**15**

Seminar   .

Components	Marks
Content	5
Presentation	2
Research	3
Total .	**10**

To ensure transparency of the evaluation process, the internal assessment marks awarded to the students in each course in a semester shall be published on the notice board at least one week before the commencement of external examination. There shall not be any chance for improvement for internal mark.

The course teacher and the faculty advisor shall maintain the academic record of each student registered for the course which shall be forwarded to the controller of examinations through the Principal and a copy should be kept in the college for at least two years for verification.

External Evaluation: The external examination in theory courses shall be conducted by the college with question papers set by external experts/ question bank. The evaluation of the answer scripts shall be done by the examiners based on a well defined scheme of evaluation given by the question paper setters. The external evaluation shall be done immediately after the examination preferably through the centralised valuation.

The question paper should be strictly on the basis of model question paper set by BoS with due weightage for each module of the course and there shall be a combined meeting of the question paper setters and experts for scrutiny for finalisation of question paper. Each set of question should be accompanied by its scheme of valuation.

For all courses (theory & practical), Letter grades and grade point are given on a 10-point scale based on the total percentage of marks, (ISA+ESA) as given below:-

Percentage of Marks	Grade	Grade Point (GP)
95 and above	O Outstanding	10
85 to below 95	A$^+$ Excellent	9
75 to below 85	A Very Good	8
65 to below 75	B$^+$ Good	7
55 to below 65	B Above Average	6
45 to below 55	C Average	5
40 to below 45	D Pass	4
Below 40	F Fail	0
	Ab Absent	0

Grades for the different semesters and overall programme are given based on the corresponding GPA as shown below:

GPA	Grade
Equal to 9.5 and above	O Outstanding
Equal to 8.5 and below 9.5	A+ Excellent
Equal to 7.5 and below 8.5	A Very Good
Equal to 6.5 and below 7.5	B+ Good
Equal to 5.5 and below 6.5	B Above Average
Equal to 4.5 and below 5.5	C Average
Equal to 4.0 and below 4.5	D Pass
Below 4.0	F Failure

A **separate minimum of 40% marks** (D grade) required for a pass for both internal evaluation and external evaluation for every course.

A candidate who has not secured minimum marks/credits in internal examinations can re-do the same registering along with the end semester examination for the same semester, subsequently.

A student who fails to secure a minimum marks/grade for a pass in a course will be permitted to write the examination along with the next batch.

There will be no supplementary/improvement examinations

After the successful completion of a semester, Semester Grade Point Average (SGPA) of a student in that semester is calculated using the formula given below. For the successful completion of semester, a student should pass all courses and score a minimum SGPA of 4.0 However, a student is permitted to move to the next semester irrespective of her/his SGPA.

Credit Point (CP) of a course is calculated using the formula
CP = Cr x GP, where Cr = Credit; GP = Grade point
Semester Grade Point Average (SGPA) of a Semester is calculated using the formula
SGPA = TCP/TCr, where

TCP = Total Credit Point of that semester $= \sum_1^n \mathrm{CP}i$;

TCr = Total Credit of that semester $= \sum_1^n \mathrm{Cr}i$

Where n is the number of courses in that semester
Cumulative Grade Point Average (CGPA) of a Programme is calculated using the formula

$$CGPA = \overline{\sum}(TCP \times TCr) \Big/ \sum TCr$$ *GPA shall be round off to two decimal places*

Pattern of questions

Questions shall be set to assess knowledge acquired, standard, and application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. The question setter shall ensure that questions covering all skills are set. He/ She shall also submit a detailed scheme of evaluation along with the question paper.

A question paper shall be a judicious mix of, multiple/objective, short answer type, short essay type /problem solving type and long essay type questions.

Pattern of questions for external examination for theory paper

Type of Questions	Total no. of questions	Number of questions to be answered	Marks of each question	Total marks
Section A – Short Answer	8	5	2	10
Section B- Short essay/ Problems	8	4	5	20
Section C- Long essay	3	2	10	20
	19	**11**		**50**

Pattern of questions for external examination of practical papers will decided by Practical exam board chairman as per the guidelines of Board of Studies.

6. End Semester Examination (ESE)

The End Semester Examination (ESE) shall be of 3/5-hour duration for written/practical respectively. The minimum required attendance for each semester shall be 80%. Those who do not attain the minimum attendance will not be eligible to register for the ESE.

7. Internship (On the Job Training)

Internship is on the job training to assimilate the professionalism in a career. The students will have to undergo an Internship at Production Studio at the end of the fourth semester. The students would prepare individual reports after the Internship and the same should be attested by the organization under which the student did the Internship. The student's comprehensive report will be submitted to the HOD for evaluation. A faculty member will monitor the students during the Internship

8. Pass Requirements

i. The aggregate marks (external + internal) required for a pass in each paper including Internship shall be 40%. The pass minimum for External (Written/Practical) shall be 35% and 40% for internal evaluation. All the components of the internal evaluation will be considered as a single unit.

ii. The candidates failing in any papers in the semester examinations will have to reappear for the same along with the junior batch. (There will be no separate supplementary examination for the failed candidates). Internal marks secured by the candidate will be carried over to the supplementary appearance. The candidates will have to re-do/re-appear only the part in which he/she has failed to secure the minimum. In case a candidate fails in the internal evaluation he/she will have to re-do the same altogether with the subsequent batch, as a supplementary candidate.

Course Title	Hours Per Week	Credits
2D Design	4	4
History of Animation	3	4
Film Techniques	3	4
Concept, Layout & Storyboarding	6	4
Traditional Animation	6	4
		20
Object Animation & Pixilation	4	4
CG Foundation I	3	4
History of Computer Animation	5	4
2D Digital Animation	4	4
3D Design	5	4
		20
3D Advanced Studies	5	4
Compositing	4	4
Editing	3	4
3D Animation I	5	4
Post Production	3	4
		20
3D Animation Project		4
Viva		2
Port folio		3
Viva		2
Research		3
Viva		2
Internship		4
		20
Total Credits		**80**

Course | Subject | Code	|Exam Type (*Theory/Practical*)	|Revision
Semester I		
History of Animation	T	
2D Design	P	
Film Techniques	P	
Concept, Layout & Storyboarding	P	
Traditional Animation	P	
Semester II		
History of Computer Animation	T	
Object Animation & Pixilation	P	
CG Foundation I	P	
2D Digital Animation	P	
3D Design	P	
Semester III		
3D Advanced Studies	P	
Compositing	P	
Editing	p	
3D Animation I	P	
Post Production	P	
Semester IV		
3D Animation Project	P	
Port folio	P	
Research	P	
Internship I		

SYLLABUS

Semester I

HISTORY OF ANIMATION (Theory)

OBJECTIVE

This course focuses on the history and aesthetics of animation, with references to related arts such as live-action cinema, puppetry and comics. Screenings include a wide range of commercial and experimental works produced throughout the world.

UNIT I   A brief prehistory – Phenakistoscope, Praxinoscope , Kinetsocope, Zoetrope, Thaumatrope, Early comic strips.

UNIT II   Pioneers in animation - Winsor McCay, Otto Messmer, Max Fleischer, Walt Disney, John Bray. Use of cels, peg system.

UNIT III   The Disney feature films – development of the Disney style, evolution of the principles of animation.

UNIT IV   Experimental animations from the National Film Board of Canada

UNIT V   Study of different styles of animation: Manga, European

REFERENCE

1. Leonard Maltin,   Of Mice and Magic: A History of American Animated Cartoons, Plume (2 October 1980)

2. Charles Solomon, The History of Animation, Random House Value Publishing; Revised edition (16 October 1994)

3. Jonathan Clements & Helen McCarthy, The Anime Encyclopedia: A Guide to Japanese Animation Since 1917, Titan Books Ltd (27 April 2007)

4. Charles Solomon, Enchanted Drawings: The History of Animation , Knopf (14 November 1989)

2D DESIGN (Practical)

OBJECTIVE

Introduction to Figure drawing, use observational gesture and expressive drawings to demonstrate: proportion & measurement; volume, space, basic anatomy, composition; balance & movement; one, 2 & 3 point perspective drawings.

UNIT I   Introduction to Figure drawing, anatomy sketches.

UNIT II   Use observational gesture and expressive drawing Study of proportion and measurement; volume and space

UNIT III   Basic anatomy; format and composition

UNIT IV   Balance and movement; focus and edge; relation of figure to environment.

UNIT V   Perspective Drawing: One point, two & three point perspective

REFERENCE

1. Preston Blair **,** Cartoon Animation (Collector's Series) Walter Foster Publishing (1 January 1994)

2. Richard Williams , Animator's Survival kit, Faber; Main - Revised Edition edition (5 November 2009)

3. Andrew Loomis, Drawing the Head and Hand, Titan Books (25 October 2011)

4. Victor Perard , Anatomy and Drawing, New Enlarged Edition edition (1 December 2006)

FILM TECHNIQUES (Practical)

OBJECTIVE

Fundamental components of Sound, Camera basic techniques
Students learn to use creative thinking

UNIT I	Visual Grammar and Aesthetics of Frame Composition: Study of Camera angles and movements
UNIT II	Methods and Techniques of Digital Imaging: Photography, ISO, Shutter speed
UNIT III	Creating Visual arts, technology of imaging moving objects Cinematography
UNIT IV	Types, Methods, Design of Light and Art of Lighting, Changing trends in Film Lighting Setup
UNIT V	Creating the visual space for Screen, Elements of film screen, Art Direction

REFERENCE

1. David Stump ,Digital Cinematography : Fundamentals, Tools, Techniques, and Workflows , Focal Press (16 May 2014)

2. Michael Rabiger, Directing : Film Techniques and Aesthetics , Focal Press; 5 edition (18 February 2013)

3. David Landau, Lighting for Cinematography: A Practical Guide to the Art and Craft of Lighting for the Moving Image, Continuum Publishing Corporation; Reprint edition (14 August 2014)

4. Henry Horenstein , Digital Photography: A Basic Manual , Little, Brown and Company; 1 edition (November 2, 2011)

CONCEPT, LAYOUT & STORYBOARDING (Practical)

OBJECTIVE

Students learn process through the practice of research, critical analysis, brainstorming and improvisational techniques to create ideas for effective animation.
Material created in this class will form a foundation for subsequent conceptual work in the animation project.

UNIT I   Conceptualizing a story – storytelling methodologies.

UNIT II   Story development, character, and the content in relation to the animated short.

UNIT III   Storytelling methods - dramatic structure, character and visual effectiveness.

UNIT IV   Composition and frame, directing methodologies, editing principles and sound elements.

UNIT V   Students create simple storyboards, work with other visual media and write short story treatments and scripts.

REFERENCE

1. David Harland Rousseau**,** Storyboarding Essentials: SCAD Creative Essentials, Watson-Guptill (June 25, 2013)

2. Ed Ghertner, Layout and Composition for Animation, Focal Press; 1 edition (July 7, 2010)

3. Francis Glebas, Directing the Story: Professional Storytelling and Storyboarding Techniques for Live Action and Animation, Focal Press; 1 edition (October 9, 2008)

4. Fraser MacLean, Setting the Scene: The Art & Evolution of Animation Layout , Chronicle Books (November 16, 2011)

TRADITIONAL ANIMATION (Practical)

OBJECTIVE
This course concentrates on study and analysis of human and animal movement.

UNIT I   Study of gestures – analysis of human and animal gestures.

UNIT II   Planning an animation, Using exposure sheets, Timing and spacing.

UNIT III   Applying motion principles in animation – exaggerating natural motion for animation.

UNIT IV   Study of skeletal pivot points, figure weight, balance and momentum.

UNIT V   Analysis of the two legged and four legged walk and run.

REFERENCE

1. Eadweard Muybridge , The Human Figure in Motion, Dover Publications
   (June 1, 1955)

2. Eadweard Muybridge,Animals in Motion, Dover Publications; 1st edition
   (June 1, 1957)

3. Osamu Tezuka ,Tezuka School of Animation, Watson-Guptill; First Edition
    edition (September 1, 2003)

   4. Tony White, How to Make Animated Films: Tony White's Complete
       Masterclass on the Traditional Principals of Animation , Focal Press; 1 edition
       (May 12, 2009)

Semester II

HISTORY OF COMPUTER ANIMATION (Theory)

OBJECTIVE

This course focuses on the history and aesthetics of computer animation, with references to related arts such as CGI, 3D animation movies & Visual effects.

Screenings include a wide range of commercial and experimental works produced throughout the world.

UNIT I	History on the origin of Computer graphics
UNIT II	Study on the films related to American computer animation studios
UNIT III	Short Study on the films related to European & Canadian computer animation studios
UNIT IV	Overview on the recording techniques and animation hardware
UNIT V	Analysis on the new age of computer technology in the field of Animation

REFERENCE

1. Terrence Masson, CG 101: A Computer Graphics Industry Reference, New Riders Press; 1 edition (August 26, 1999)

2. Tom Sito , Moving Innovation: A History of Computer Animation , The MIT Press (August 21, 2015)

3. Christopher Finch, The CG Story: Computer-Generated Animation and Special Effects , The Monacelli Press (December 3, 2013)

4. Garth Gardner PhD, Computer Graphics and Animation: History, Careers, Expert Advice , Garth Gardner Company (July 2002)

OBJECT ANIMATION & PIXILATION (Practical)

OBJECTIVE

Different methods for creating animation are explored in this course.

UNIT I   Introduction to animation techniques – drawn, cutout & stop motion.

UNIT II   Creating a cutout animation

UNIT III   Creating a flip book using drawings

UNIT IV   Creating a stop motion animation- pixilation/ sand /time lapse/ clay

UNIT V   Exploring other methods in animation

REFERENCE

1. Preston Blair **,** Cartoon Animation (Collector's Series) Walter Foster Publishing
     (1 January 1994)

2. Richard Williams , Animator's Survival kit, Faber; Main - Revised Edition edition
      (5 November 2009)

3. Ollie Johnston, & Frank Thomas, Disney Animation - The Illusion of Life, Disney
     Editions; Rev Sub edition (October 5, 1995)

4. John Halas Harold Whitaker, Tom Sito ,Timing for Animation, Focal Press; 2
     edition (September 4, 2009)

CG FOUNDATION I (Practical)

OBJECTIVE

This course is designed to help texturing artist and compositing artist to master professional studio techniques—including custom typographic treatments and special photographic effects—in Adobe Photoshop.

UNIT I Introduction to raster images – Image resolution - RGB, CMYK Indexed colour modes and their applications, Basic drawing in Photoshop – Using airbrush, pencil, paint brush tools.

UNIT II Concept of layers in Photoshop – Transparency and blending modes – creative use of layers and blending modes.

UNIT III Using the selection tools, using the path tool to create selections – Type tools in Photoshop. Introduction – Bitmap Painting and Vector Drawing, colours, colour variability and gradients, file types, formats, resolution and size.

UNIT IV Channels – using alpha channels to save selections – Colour correction in Photoshop – adjusting hue, saturation and value of images. Paint packages – Photoshop, painter. Selections and masks, custom brushes, working with layers.

UNIT V Creation of Textures for Unwrapping and Digital Painting

REFERENCE

1.Adobe Creative Team, Adobe Photoshop CS6 Classroom in a Book, Adobe
   Press; 1 edition (June 1, 2012)

2. Ben Willmore & Dan Ablan , Adobe Photoshop CS Studio Techniques , Adobe
    Press; 1 edition (March 20, 2009)

3. Adobe Creative Team, Adobe Illustrator Classroom in a Book, Adobe Press;
   1 edition (June 6, 2012)

4. Luanne Seymour Cohen, Adobe Illustrator CS Creative Studio, Adobe Press
   (April 29, 2004)

2D DIGITAL ANIMATION (Practical)

OBJECTIVE
Students are introduced to 2D Animation softwares with which they learn the production techniques like animation, colouring, keyframe, tweening

UNIT I   Basic tools , tweening, guide layer, Masking

UNIT II   Symbols, greeting card animation, Walk cycle

UNIT III   Run: Anticipation, Path of run &Spacing and Timing

UNIT IV   Drop, Jump, Lip-Sync, Action

UNIT V   Four legged animal walk: Anatomy & Bone structure of 4 legged Animals

REFERENCE

1. Barry Kelly, Tim Jones, David Wolfe, Allan Rosson, Foundation Flash Cartoon Animation, Apress; 2007 edition (November 28, 2007)

2. Chris Jackson, Flash Cinematic Techniques: Enhancing Animated Shorts and Interactive Story telling , Focal Press; 1 edition (January 25, 2010)

3. Preston Blair **,** Cartoon Animation (Collector's Series) Walter Foster Publishing (1 January 1994)

4. Richard Williams , Animator's Survival kit, Faber; Main - Revised Edition edition (5 November 2009)

3D DESIGN

OBJECTIVE
Students are introduced to 3D software with which they learn the production techniques like modelling, texturing, lighting and camera

UNIT I   Modelling using polygons and sub divisional surfaces.

UNIT II   Basic shaders, Maps, Designing materials using textures from various sources.

UNIT III   Basic lighting concepts, Mentalray rendering

UNIT IV   Architectural modeling -developing a 3D model from AutoCAD file

UNIT V   B G modeling for Games and 3Dfilms

REFERENCE

1.   Jeremy Birn ,Digital Lighting and Rendering, New Riders Press (July 17, 2000)

2.   William Vaughan , Digital Modeling, New Riders; 1 edition (January 2, 2012)

3.   Kelly Murdock, Kelly L. Murdock's Autodesk 3ds Max 2016 Complete Reference Guide, SDC Publications (August 12, 2015)

4.   Kelly L. Murdock , Autodesk 3ds Max 2014 Bible, Wiley; 1 edition (November 4, 2013)

Semester III

3D ADVANCED STUDIES (Practical)

OBJECTIVE

Students learn to create 3d character models used for 3D Animation Films and 3d games. They learn particle effects, to fix bones and Basic character animation using biped

UNIT I	Creating different styles of Character models
UNIT II	Rigging, Creating bone setup, Controllers IK and FK connections
UNIT III	Dynamics, Different Particle system, Instancing, Spawning, Linking particles to forces
UNIT IV	Skinning, fixing gizmo of influential area
UNIT V	Character Studio, figure mode, footstep mode, motion flow mode, mixer mode. Physique modifier

REFERENCE

1. Andrew Gahan, 3ds Max Modeling for Games: Insider's Guide to Game Character, Vehicle, and Environment Modeling, Focal Press; 2 edition (June 17, 2011)

2. Matt Chandler , Pawel Podwojewski, Jahirul Amin , Fernando Herrera , 3ds Max Projects: A Detailed Guide to Modeling, Texturing, Rigging, Animation and lighting , 3DTotal Publishing; 1st New title edition (April 1, 2014)

3. Stewart Jones, Digital Creature Rigging: The Art and Science of CG Creature Setup in 3ds Max, Focal Press; 1 edition (November 7, 2012)

4. Michele Bousquet, Rigging (3ds Max 2010 Architectural Visualization (Advanced to Expert)), CGschool (Formerly 3DATS) (October 31, 2012)

COMPOSITING (Practical)

OBJECTIVE
This course trains students in the to combine multiple elements such as photographs, videos, 3d objects to create an integrated output

UNIT I   Exploring the Transform Properties, Keyframing
             Interpolation Techniques Layer Compositing

UNIT II   Masking , Rotoscoping and Painting FX

UNIT III   Keying, Stabilizing & Tracking, Chroma key, Particles

UNIT IV   3D Compositing and FX, Audio Editing, Time Remapping

UNIT V   Title Graphics and Using the Render Queue, Mixing

REFERENCE

1. Doug Kelly, Digital Compositing In Depth: The Only Guide to Post Production for
    Visual Effects in Film

2. Lee Lanier, Compositing Visual Effects in After Effects: Essential Techniques, **Focal**
    Press (November 6, 2015)

3. Mark Christiansen, Adobe After Effects CC Visual Effects and Compositing Studio
    Techniques, Adobe Press; 1 edition (July 31, 2013)

4. Jon Gress , Visual Effects and Compositing, New Riders; 1 edition (November 1,
    2014)

EDITING (Practical)

OBJECTIVE
Students learn different film editing techniques.

UNIT I   Basic Editing Terminologies, NLE editing

UNIT II   Editing Principles

UNIT III   Transitions, Effects, Contrast

UNIT IV   Exploring Time Controls and Audio, Parallelism, Symbolism

UNIT V   Simultaneity, Leit motiff, Formats, Render and Export

REFERENCE

 1. Sergei Eisenstein, Film Form And Film Sense, Harcourt; Edition Unstated edition
    (March 19, 1969)

2. Robert M. Goodman, Patrick McGrath, Editing Digital Video: The Complete
    Creative and Technical Guide, **McGraw**-Hill Education TAB; 1 edition (October 1,
    2002)

3. Adobe Creative Team, Adobe Premiere Pro CC Classroom in a Book, Adobe Press;
    1 edition (July 28, 2013)

4. Michael Hughes, Digital Filmmaking for Beginners A Practical Guide to Video
    Production, McGraw-Hill Education TAB; 1 edition (April 23, 2012)

3D ANIMATION (Practical)

OBJECTIVE

Students are introduced to advanced 3D animation techniques

UNIT I   Creating Facial Expressions

UNIT II   Lip Sync, Dialogue animation

UNIT III   Basic walk cycle, run cycle, Push/Pull, Jump

UNIT IV   Applying animation Principles in Character Animation

UNIT V   Acting sequence, 2 character interaction scenes

REFERENCE

1. George Maestri ,Digital Character Animation 2, Essential Techniques:
    New Riders Press (August 26, 1999)

  2. Jason Osipa, Stop Staring: Facial Modeling and Animation Done Right,
       Sybex; 3 edition (October 12, 2010)

  3. Frederic I. Park, Keith Waters, Computer Facial Animation, Second Edition,
       A K Peters/CRC Press; 2 edition (September 25, 2008)

  4. Yancey Clinton, Game Character Modeling and Animation with 3ds Max,
      Focal Press; Pap/Cdr edition (August 31, 2007)

POST PRODUCTION (Practical)

OBJECTIVE

Students develop a skill to combine CG and live shots in order to create a Film scene, were both virtual characters are introduced along with real characters. They master in visual effects which is a processes by which imagery is created and/or manipulated outside the context of a live action shot. Visual effects involve the integration of live-action footage and generated imagery to create environments which look realistic, but would be dangerous, expensive, impractical, or simply impossible to capture on film. They will be using Matte paintings and stills: digital or traditional paintings or photographs which serve as background plates for keyed and rotoscoped elements.

Project submission as mentioned by Instructor

Semester IV

3D ANIMATION SHORT MOVIE (Practical)

OBJECTIVE

Students develop an innovative body of work making use of the skills and knowledge acquired during the previous courses. This guided project culminates in a final presentation accompanied by a written component.

Working closely with the professor, students define specific production goals to explore or complete an animation project of their choosing. Emphasis is on the conceptual, aesthetic and technical processes. Students are encouraged to share their specific areas of expertise while producing individually directed projects.

They will be experiencing the 3D Animation Film Production techniques which involves all three sectors, ie. Pre-Production, Production and Post-Production.

Portfolio (Practical)

OBJECTIVE

They get to showcase their ability as an artist in their discipline. The employers want to know how skilled you are right now, and that's why when you have the opportunity to show them your talent, you better choose the works that show that talent wisely. It's easier to stand out for people with a portfolio because ostensibly the work you are showcasing is your own and no one else's.

Research (Practical)

OBJECTIVE

Research is an important part of the Animation programme's activity. Animation welcomes research applications to contribute to the development of an innovative Animation Research environment. Research is seen as a conduit for ideas that is complementary to the exploration of ideas through process and practice. The programme's research strategy aims to engage with a more philosophical approach towards understanding the role of communication and film theory and practice in culture and society, and the ways in which filmmakers, artists and designers work.

Internship

OBJECTIVE:

To acquire practical industry based experience. Internship is on the job training to assimilate professionalism in one's career. The students will have to undergo an Internship at a T V Studio/Channel/Animation Studio for a fortnight during the fourth semester. The students would prepare individual reports after the Internship and the same should be attested by the organization under which the student did the internship. The students' comprehensive report will be submitted to the HOD for evaluation. A faculty member will monitor the students during the internship.