

### स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

"ज्ञानतीर्थ" परिसर, विष्णुपूरी, नांदेड - ४३१६०६ (महाराष्ट्र)

#### SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED

"Dnyanteerth", Vishnupuri, Nanded - 431606 Maharashtra State (INDIA)
Established on 17th September 1994 – Recognized by the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'A' Grade



#### ACADEMIC (1-BOARD OF STUDIES) SECTION

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आंतर—विद्याशाखीय अभ्यास विद्याशाखेतील विविध पदवी व पदव्युत्तर विषयांचे सी.बी.सी.एस. पॅटर्नचे अभ्यासक्रम शैक्षणिक वर्ष २०१९—२० पासून लागू करण्याबाबत.

#### य रियत्रक

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, दिनांक ३० एप्रिल २०१९ रोजी संपन्न झालेल्या ४३व्या मा. विद्या परिषद बैठकीतील ऐनवेळचा विषय क्र.७/४३—२०१९ च्या ठरावानुसार प्रस्तुत विद्यापीठाच्या संलिग्नत महाविद्यालयांतील आंतर—विद्याशाखीय अभ्यास विद्याशाखेतील पदवी व पदव्युत्तर स्तरावरील खालील विषयांचे C.B.C.S. (Choice Based Credit System) Pattern नुसारचे अभ्यासक्रम शैक्षणिक वर्ष २०१९—२० पासून लागू करण्यात येत आहेत.

- 1) B.A.-I Year Physical Education
- 2) M.P.Ed.-I Year
- 3) B.Ed.-I & II Year
- 4) M.Ed.- I Year
- 5) B.A.-I Year-Music)
- 6) B.A.-I Year-Journalism & Mass Communication) (Optional I, II, III)
- 7) M.A.-I Year-Journalism & Mass Communication) (MA MCJ, I & II)
- 8) M.A./M.Sc.-I Year-Electronic Media
- 9) B.A.- I Year-Computer Animation and Web Designing
- 10) Master in Computer Animation, Vfx & Web
- 11) B.A.-I Year-Library and Information Science
- 12) B.A.-I Year-Home Science
- 13) B.A.-I Year-Fashion Design
- 14) M.A.-I Year- Fashion Design
- 15)B.S.W.-III Year

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी.

'ज्ञानतीर्थ' परिसर,

विष्णुप्री, नांदेड - ४३१ ६०६.

**जा.क.:** शैक्षणिक—०१/परिपत्रक/पदवी व पदव्युत्तर—सीबीसीएस

अभ्यासक्रम / २०१८—१९ / ३८६१

**दिनांक :** २३.०५.२०१९.

प्रत माहिती व पुढील कार्यवाहीस्तव :

- १) मा. कुलसचिव यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- २) मा. संचालक, परीक्षा व मूल्यमापन मंडळ, प्रस्तुत विद्यापीठ.
- ३) प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तृत विद्यापीठ.
- ४) उपकुलसचिव, पदव्युत्तर विभाग, प्रस्तुत विद्यापीठ.
- ५) साहाय्यक कुलसचिव, पात्रता विभाग, प्रस्तुत विद्यापीठ.
- ६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ.

स्वाक्षरित/—

उपकुलसचिव

शैक्षणिक (१-अभ्यासमंडळ विभाग)



# SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

# Faculty of Interdisciplinary Studies B.A Computer Animation & Web Designing Syllabus

B.A First Year
Semester Pattern
(Choice Based Credit System)

[Effective from June 2019-20]

#### **CBCS** - Paper Pattern in the subject of

#### **B.A Computer Animation & Web Designing**

#### **B.A First Year Semester Pattern-2019-20**

#### **B.A First Year Computer Animation & Web Designing Syllabus**

#### **Contents**

#### $Semester-I^{st}$

Paper No.	Title of Paper	CA Marks	ESE Marks	Practical Marks
1	Compulsory English	35	40	
2	Graphic Design	35	40	
3	Art Foundation	35	40	
4	Matte Painting	35	40	
5	Graphic Design Practical			75
6	Art Foundation Practical			75
7	Matte Painting Practical			75
8	Clay Modeling Practical			75

#### $Semester-II^{nd}$

Paper No.	Title of Paper	CA Marks	ESE Marks	Practical Marks
9	Compulsory English	35	40	
10	Industrial Visualization	35	40	
11	Architectural Visualization	35	40	
12	2D Digital Animation	35	40	
13	Industrial Visualization Practical			75
14	Architectural Visualization Practical			75
15	2D Digital Animation Practical			75
16	2D Animation Short Film Project Practical			75

#### S.R.T.M. UNIVERSITY, NANDED

#### **Choice Based Credit System (CBCS)**

**Course Structure (New Scheme)** 

Faculty of Interdisciplinary Studies

B.A First Year Semester Pattern-2019-20

#### **B.A Computer Animation & Web Designing**

#### $Semester-I^{st} \ \& \ II^{nd}$

Semest er	Core Course	Pape r No	Name of Paper	Lecturer / Week	Total No. of Lectur ers	CA	ESE	Practic al	Total Mark s	Cre dits
	BAAW 1	1	Compulsory English	5	60	35	40		75	3
	BAAW 2	2	Graphic Design	6	72	35	40		75	3
	BAAW 3	3	Art Foundation	6	72	35	40		75	3
Semest er-I	BAAW 4	4	Matte Painting	6	72	35	40		75	3
	BAAW 5	5	Graphic Design Practical	6	72			75	75	3
	BAAW 6	6	Art Foundation Practical	6	72			75	75	3
	BAAW 7	7	Matte Painting Practical	6	72			75	75	3
	BAAW 8	8	Clay Modeling Practical	6	72			75	75	3
			Total-I	47	564	140	160	300	600	24
	BAAW 9	9	Compulsory English	5	60	35	40		75	3
	BAAW 10	10	Industrial Visualization	6	72	35	40		75	3
	BAAW 11	11	Architectural Visualization	6	72	35	40		75	3
Semest	BAAW 12	12	2D Digital Animation	6	72	35	40		75	3
er-II	BAAW 13	13	Industrial Visualization Practical	6	72			75	75	3
	BAAW 14	14	Architectural Visualization Practical	6	72			75	75	3
	BAAW 15	15	2D Digital Animation Practical	6	72			75	75	3
	BAAW 16	16	2D Animation Short Film Project Practical	6	72			75	75	3
		-	Total-II	47	564	140	160	300	600	24
			Total-I&II	94	1128	280	320	600	1200	48

#### Note:

- Total Credit for First Year: 48
- Continue Assessment : 35 Marks
- End of Semester Examination: 40 Mark
- End of Semester Practical Examination: 75 Marks
- Each Theory is of 3 Credits
- Each Practical is of 3 Credits

#### **B.A Computer Animation & Web Designing (BAAW)**

It is an Undergraduate (UG) Programme of 3 Years (6 Semesters) duration.

#### **Eligibility for Admission:**

A candidate for being eligible for admission to the first year. Degree in B.A Computer Animation & Web Designing must have passed the Higher Secondary Examination (10+2) of Maharashtra State Board or any Examination of any Statutory University with Science, Arts, Commerce or Vocational streams.

#### **EXAMINATION PATTERN**

#### CA (Continue Assessment) - 35 Marks

#### Marks Distribution

- 20 Marks for Test (10+10=20)
- 15 Marks for home assignment

#### ESE - Theory Paper - 40 Marks

#### Marks Distribution

- Question No 1 is compulsory = 10 Marks
- Question No 2 to 6 solve any 3 = 30 marks

#### Practical's 75 Marks

#### Marks Distribution

- 40 Marks for Practical 2 Questions (20 + 20)
- 10 Marks for Oral
- 25 Marks for Practical Record Submission (CD/DVD/ONLINE)

(CBCS)

#### **B.A Computer Animation & Web Designing**

#### Semester – I<sup>st</sup> BAAW 1

#### **Compulsory English**

#### **Theory Paper**

Total Credits 03 No. of Lectures 60

CA	ESE	Total
35	40	75

As per the syllabus prescribed by S.R.T.M.U., Nanded for the first year of Degree Course

(CBCS)

#### **B.A Computer Animation & Web Designing**

#### Semester – I<sup>st</sup> BAAW 2

#### **Graphic Design**

#### **Theory Paper**

Total Credits 03 No. of Lectures 72

CA	ESE	Total
35	40	75

#### **Learning Objective:**

- The designer should have the skill to use and combine several things to come up with a final product that showcases the right result.
- o A good graphic design can be created by a designer with real talent and a clear goal of the message that should be expressed to the target audience.

#### **Utility:**

- O Students will be able to demonstrate a basic understanding of three important design elements: color, shape, and space.
- o Design original commercial art, combining text and images to successfully communicate messages to a target audience.

Pre-requisites: Basic Computer Knowledge

- **Unit 1: Graphic Design Process:** Create idea for Graphic Design Project, Photos for Graphic Design Project, Decide Title and Copy Matter for Graphic Design, Draw Composition and Layout Sketches, Select and Use Color Themes for Graphic Design, Paper Sizes.
- **Unit 2: Principles of Graphic Design** Alignment, Hierarchy, Contrast, Repetition, Proximity, Balance, Color, Space, Basic Elements of Graphic Design Line, Shape, Repetition, Color, Texture, Size, Emphasis, Space, Negative Space, Value
- **Unit 3: Photoshop:** Understanding Raster Graphics, Understanding Pixels, Understanding Image, Understanding Layers, Image Size and Resolution, Brushes, Styles and Textures, Using Filters for effects, Color Adjustment, Image Editing for Print Projects, Image Editing for Web.
- **Unit 4: Illustrator / Corel Draw:** Understanding Vector Graphics, Draw and Edit Line and Shapes, Understanding Object, Understanding Colors, Basic Transformations, Create Perfect

Shapes, Advance Transformations, Layout & Composition Tools, Create Various Vector Effects, Advance Color Study, Object Drawing and Painting.

Unit 5: Branding - Live Study Projects: Logo Design Corporate ID (V Card, Letterhead & Envelope), Stationery (Invoice, Receipt etc.), Invitation or Greeting Card, Newspaper Ad, Magazine Ad, Brochure, Leaflet (Flyer) or Folder. Hoarding Design, Book Publication Design, Web Layouts

**Software:** Adobe Photoshop, Adobe Illustrator, Corel Draw.

#### **References Books:**

- o Graphic Design Visionaries
- o Grid Systems in Graphic Design
- o The Graphic Design Idea Book
- o Paula Scher: Works Editors: Tony Brook & Adrian Shaughnessy
- o The Visual History of Type Author: Paul McNeil
- o How To Author: Michael Bierut
- o Draplin Design Co: Pretty Much Everything Author: Aaron Draplin
- o Logo: The Reference Guide to Symbols and Logotypes (mini)
- New Perspectives in Typography
- o Designing Brand Identity: An Essential Guide for the Whole Branding Team
- o The Elements of Typographic Style (v4)
- o How to do great work without being an asshole
- o 50 Best Logos Ever

#### **Career Option:**

- Advertising Art Director
- Creative Director
- o Production Designer
- o Graphic Designer
- o Illustrator
- Printmaker

(CBCS)

# B.A Computer Animation & Web Designing Semester – I<sup>st</sup> BAAW 3

#### **Art Foundation**

#### **Theory Paper**

Total Credits 03 No. of Lectures 72

CA	ESE	Total
35	40	75

#### **Learning Objective:**

- o Exploring different approaches in computer animation.
- To enable students to manage Animation Projects from its Conceptual Stage to the final product creation.
- To train students in applying laws of human motion and psychology in 2-D or 3-D characters.
- o To develop expertise in life-drawing and related techniques.

#### **Utility:**

- To familiarize the students with various approaches, methods and techniques of Animation Technology.
- o To develop competencies and skills needed for becoming an effective Animator.
- o Mastering traditional & digital tools to produce stills and moving images.

#### Pre-requisites: No

**Unit 1:** Introduction of Drawing - Fundamentals of Art, Basic Techniques about figure drawing, Cartooning, Composition of a Scene or Background and Designs. Basic Drawing Practice - Basic Shape, Basic drawing technique, Free Hand Practice

**Unit 2:** Understanding Lights, Shading and Shadow - Study of light and shade in pencil of still life object, drawing still life objects in outline by pen and pencil, Study of still life objects in pen and ink to trace the light and shade

**Unit 3:** Introduction of Perspective - One Point Perspective, Two Point Perspective, Learning three point perspectives, Background designs with perspective - Drawing outdoor scenes showing one point perspective, drawing outdoor scenes showing two point perspectives, drawing outdoor scenes showing three point perspectives

**Unit 4:** Character Anatomy - Drawing the male figure with proper proportion, Drawing the female figure with proper proportion, Drawing the male face with proper proportion, Drawing the child face with proper proportion

Unit 5: Scripting & Story Board Design, Model Sheet, Character Turnaround Sheet

Software: No software required

#### **References Book:**

- o The Complete Animation Course: The Principles, Practice and Techniques of Successful Animation by Chris Patmore
- o Anatomy for The Artist by Sarah Simblet
- o Cartoon Animation by Preston Blair

#### **Career Options:**

- Storyboard Artist
- o 2D Animator
- o Project Coordinator
- Character Concept Artist
- Concept Artist

(CBCS)

# B.A Computer Animation & Web Designing Semester – I<sup>st</sup> BAAW 4

### Matte Painting

#### Theory Paper

Total Credits 03 No. of Lectures 72

CA	ESE	Total
35	40	75

#### **Learning Objective:**

 A matte painting is a painted representation of a landscape or other distant location used in movies to create an environment that would be either too expensive or impossible to build - such as alien worlds or fairytale lands.

#### **Utility:**

To learn create matte paint in computer programs with the live action composited digitally, and using matte paintings to double exposure of the film to create the illusion of the live action happening in the painted scene.

**Pre-requisites:** Basic Computer Knowledge

- **Unit 1:** Introduction of Matte-Painting Learning history of matte painting, learning importance of matte painting in animation field, Future of Matte painting
- **Unit 2:** Basics of Software (Adobe Photoshop) Understanding Interface of Photoshop, Understanding Basic Tools of Photoshop, Marquee Tool, Crop Tool, Lasso Tool, Magic Wand, The Move Tool
- **Unit 3:** Understanding lights, shading and shadow Preview Lights and to choose its Colors, Point light and its properties, Direction light and its properties
- **Unit 4:** Colours and textures Introduction to Colours, About color, color modes, Converting between color modes, Choosing colors, Making color and tonal adjustments, Viewing histograms and pixel values, Understanding color adjustments, Adjusting image color and tone
- **Unit 5:** Background designs using Software Creating a Background on a New Workspace, Creating a New Background for an Existing Image, Duplicate and Change color of image, Layer Mask

**Unit 6:** Character Anatomy - Learning to think in simple volumes, Learning to observe and adapt to figures unique build, Understanding proportions and anatomy, Using various references understanding 'How To Draw People'

**Unit 7:** Mixing of images for requirement of story, Start a new photo composite in Photoshop Mix, Combine photos, Blend images together, Combine more subjects into the photo with layers

**Software:** Adobe Photoshop

#### **References Book:**

- o Digital Painting Tricks and Techniques- By (author) Gary Tonge
- o Master the Art of Speed Painting: Digital Painting Techniques

#### **Career Options:**

- o Digital matte painter
- o 3D Texture artist
- Concept Artist
- o Compositing Artist

(CBCS)

# B.A Computer Animation & Web Designing Semester – I<sup>st</sup> BAAW 5

# Graphic Design Practical Practical Paper

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

- A good graphic design can be created by a designer with real talent and a clear goal of the message that should be expressed to the target audience.
- The designer should have the skill to use and combine several things to come up with a final product that showcases the right result.
- o Professionalism is necessary for good graphic designers in as much as their artistic skills are important too.

#### **Utility:**

- Students will be able to demonstrate a basic understanding of three important design elements: color, shape, and space.
- Design original commercial art, combining text and images to successfully communicate messages to a target audience.

Pre-requisites: Basic Computer Knowledge

#### **Practical List:**

- o Books, Magazine, News papers
- Visual Identity such as Letterhead, business card, Brand Guide, Logos
- o Marketing Materials: Pamphlet, Brochures, Postcard, one-sheet, Posters
- o Product Packing and Labels
- Presentations
- Typography
- o Web Layouts

**Software:** Adobe Photoshop, Adobe Illustrator, Corel Draw.

#### **References Books:**

- o Graphic Design Visionaries
- o Grid Systems in Graphic Design

- o The Graphic Design Idea Book
- o Paula Scher: Works Editors: Tony Brook & Adrian Shaughnessy
- o The Visual History of Type Author: Paul McNeil
- o How To Author: Michael Bierut
- o Draplin Design Co: Pretty Much Everything Author: Aaron Draplin
- o Logo: The Reference Guide to Symbols and Logotypes (mini)
- o New Perspectives in Typography
- o Designing Brand Identity: An Essential Guide for the Whole Branding Team
- o The Elements of Typographic Style (v4)
- o How to do great work without being an asshole
- o 50 Best Logos Ever

#### **Career Option:**

- o Advertising Art Director
- o Creative Director
- o Production Designer
- o Graphic Designer
- o Illustrator
- o Printmaker

(CBCS)

# B.A Computer Animation & Web Designing Semester – I<sup>st</sup> BAAW 6

# Art Foundation Practical Practical Paper

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

- o Exploring different approaches in computer animation.
- o To enable students to manage Animation Projects from its Conceptual Stage to the final product creation.
- To train students in applying laws of human motion and psychology in 2-D or 3-D characters.
- To develop expertise in life-drawing and related techniques.

#### **Utility:**

- To familiarize the students with various approaches, methods and techniques of Animation Technology.
- o To develop competencies and skills needed for becoming an effective Animator.
- o Mastering traditional & digital tools to produce stills and moving images.

Pre-requisites: Basic Computer Knowledge

#### **Practical List:**

- o Drawing of anatomy
- o Drawing of perspective
- o Scripting of Movie
- o Story Board
- o Model Sheet
- Character Turnaround Sheet

**Software:** No software required

#### **References Book:**

 The Complete Animation Course: The Principles, Practice and Techniques of Successful Animation by Chris Patmore

- o Anatomy for The Artist by Sarah Simblet
- o Cartoon Animation by Preston Blair

#### **Career Options:**

- o Storyboard Artist
- o 2D Animator
- o Project Coordinator
- o Character Concept Artist
- o Concept Artist

(CBCS)

#### **B.A Computer Animation & Web Designing**

#### Semester – Ist BAAW 7

#### **Matte Painting**

#### **Practical Paper**

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

 A matte painting is a painted representation of a landscape or other distant location used in movies to create an environment that would be either too expensive or impossible to build - such as alien worlds or fairytale lands.

#### **Utility:**

 To learn create matte paint in computer programs with the live action composited digitally, and using matte paintings to double exposure of the film to create the illusion of the live action happening in the painted scene.

**Pre-requisites:** Basic Computer Knowledge

#### **Practical List:**

- Setting up your Photoshop workspace
- o Toning the plate with adjustment layers
- o Examining transfer modes
- o Drawing internal forms
- o Creating a custom brush for clouds
- o Painting the sky and Land

**Software:** Adobe Photoshop

#### **References Book:**

- o Digital Painting Tricks and Techniques- By (author) Gary Tonge
- o Master the Art of Speed Painting: Digital Painting Techniques

#### **Career Options:**

o Digital matte painter

- o 3D Texture artist
- o Concept Artist
- Compositing Artist

(CBCS)

# B.A Computer Animation & Web Designing Semester – I<sup>st</sup> BAAW 8

# Clay Modeling Practical Practical Paper

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

- o Continue to effectively manipulate the elements and principles of three-dimensional design to create non-objective, abstract, and representational compositions.
- o Continue and refine the use different idea generation strategies effectively; idea tree, Like / dislikes, logical progressions.
- O Continue to build on the basic understanding of structural and compositional strategies used in the creation of sculptural form

#### **Utility:**

- This course will encompass the sculptural process of clay modeling of the human form. Students will continue to explore sculpture skills including life modeling, artistic anatomy, armature design, portraiture, and relief clay modeling.
- o A series of small sculptures in clay will be produced

Pre-requisites: No software required

#### **Practical List:**

- Concept and context strategies and applications.
- o Principles of Art: harmony, variety, balance, proportion, dominance, movement, and economy and their effective application to form creation.
- o Material properties, processes and their applications for sculpture.

(CBCS)

#### **B.A Computer Animation & Web Designing**

#### Semester – II<sup>st</sup> BAAW 9

#### **Compulsory English**

#### **Theory Paper**

Total Credits 03 No. of Lectures 60

CA	ESE	Total
35	40	75

As per the syllabus prescribed by S.R.T.M.U., Nanded for the first year of Degree Course

(CBCS)

# B.A Computer Animation & Web Designing Semester – II<sup>st</sup> BAAW 10

# Industrial Visualization Theory Paper

Total Credits 03 No. of Lectures 72

CA	ESE	Total
35	40	75

#### **Learning Objective:**

- This course is meant to introduce the student to the world of 3D. In this course, the student will learn about how to work in 3D space, model, and texture, apply lights and finally take a render output of creation.
- o To develop the skill & knowledge in 3D Modelling

#### **Utility:**

- Create 3d visualizations for their designs.
- o The software has capabilities to render designs using photo- realistic models.
- o It provides controls you need to create highly realistic models.

**Pre-requisites:** Photoshop

**Unit 1:** Introduction: Introduction to 3D graphics, 3D Object's Coordinate System: X, Y and Z axis, 3DS MAX Overview, Interface, 3DS MAX Basic, Navigation, Creating Basic Objects, Selecting, Moving, Rotating and Scaling Objects, Transforming Objects, Pivoting, Aligning and Snapping, Grouping, Linking and Parenting Objects

**Unit 2:** 3DS MAX Modeling Tools: Extrude, Bevel, Bridge, Connect, Chamfer, Target Weld, Pivot Point Modifiers, Object duplication, Measurement Units, Scene Management, Scene Explorer

- **Unit 3:** Modeling: Step-by-Step Modeling Exercises, Primitives Modeling Techniques, Polygon Modeling Techniques, Spline Modeling Techniques, Surface Modeling Techniques
- **Unit 4:** Texturing: Using the material editor & the material explorer, creating & applying standard materials, adding material, details with maps, creating compound materials & material modifiers, using atmospheric & render effects
- **Unit 5:** Cameras, Lighting & Rendering: Configuring and Aiming Cameras, Basic Lighting Techniques, Render Parameters light setup, rendering settings, Final render setting.

Software: 3Ds Max, Adobe Photoshop

#### **References Books:**

 3ds Max 2018 - Getting Started with Modeling, Texturing, and Lighting by Elizabeth VT and Ravi Conor

#### **Career Options for a Subject:**

- o 3D Designer
- o 3D Max Artist
- o 3D Visualizer

(CBCS)

# B.A Computer Animation & Web Designing Semester – II<sup>st</sup> BAAW 11

# Architectural Visualization Theory Paper

Total Credits 03 No. of Lectures 72

CA	ESE	Total
35	40	75

#### **Learning Objective:**

- Architectural rendering, of architectural illustration, is the art of creating twodimensional images or animations showing the attributes of a proposed architectural design.
- Still renderings, 3D Walk through and fly by animations (movie), Virtual Tours, Floor Plans, Photo realistic 3D Rendering

#### **Utility:**

- This technique uses sophisticated software to approximate accurate lighting and materials.
- o This technique is often referred to as a "Photo Real" rendering.
- Renderings are usually created for presentation, marketing and design analysis purposes.

**Pre-requisites:** Photoshop

**Unit 1:** Introduction of Architectural Visualization - Understanding the visualization process, Getting acquainted with all primary data elements and defining more precisely the final outcome, detailed selection for 3d modeling and visualization due to customers references, Organize the work process

**Unit 2:** Basics of Software (Google Sketch up, 3ds Max) - How to prepare your workspace and get started, How to draw basic 2D shapes (lines, rectangles, circles, arcs), How to turn a 2D shape into a 3D object, How to move, push, pull, cut, rotate, scale, copy and delete objects, Modeling Technique

**Unit 3:** Interior & exterior designs using Software - Making Interior Scene, Editable poly for Interiors, Creating the Floor & Ceiling, Complete Modeling Of interior and exterior using tools

**Unit 4:** Understanding lights, shading and shadow - practicing with light multipliers and shadow density, Negative multiplier parameter of light changes the light to be a shadow, Understanding shadow density, The second bounce and sub-ambient, Placing Omnis or other lights

**Unit 5:** Architectural Post Production- Adding a sky background to the basic rendering, Adding perspective grass photo texture, Merging grass with scene by using brush technique, Adding vegetation like shrubs and vine, Adding a trees in the foreground or baground, Add smooth, shadows with Vray render element, Adding diffrent effects

#### **Software:**

- Google Sketch Up
- o 3Ds max
- o V ray
- Adobe Photoshop

#### **References:**

- Architectural Rendering with 3ds Max and V-Ray: Photorealistic Visualization Hardcover
- o Realistic Architectural Rendering with 3ds Max and V-Ray

#### **Career Options for a Subject:**

- o Architectural Designer
- o 3D Environments Designer
- o 3D Render Artist

(CBCS)

# B.A Computer Animation & Web Designing Semester – II<sup>st</sup> BAAW 12

#### 2D Digital Animation

#### **Theory Paper**

Total Credits 03 No. of Lectures 72

CA	ESE	Total
35	40	75

#### **Learning Objective:**

- o Understand and apply techniques about flash animation
- o Acquire knowledge about various principles of animation and its usage.
- Will gain the knowledge of handling a project at industrial requirement.

#### **Utility:**

- o To provide a comprehensive introduction to Adobe Flash as an animation tool
- o To understand and explore drawing and basic animation within the Flash interface

**Prerequisites:** Knowledge of Drawing, Photoshop

- **Unit 1:** Introduction to animation, History of animation, Types of animation: case study, Understanding and learning the Principles of animation through the view of different animation films: case study
- **Unit 2:** Understanding the Flash interface, setting stage dimensions, Drawing tools, pen tools and other necessary tools to create any drawing in the frames.
- **Unit 2:** Drawings to symbols, Different types of symbols, Organizing library, Organize character to different symbols
- **Unit 3:** Introduction to timeline, Classic tween, Shape tween, Keyframes, Ease in and Ease out using edit ease graph, Document setup, Layers, Layer properties, Mask layer, Guide layer.
- Unit 4: Import sound to flash, Lip sync cartoon character to dialogue
- Unit 5: Basic walk cycle, Run cycle, Jump cycle using cartoon character symbols

Software: Adobe Flash. Adobe Animate

#### **Reference Book:**

- o The Animator's Survival Kit by Richard Williams
- o The Art of Flash Animation: Creative Cartooning by Mark Smith
- o Flash Cartoon Animation: Learn from the Pros by Glenn Kirkpatrick and Kevin Peaty
- o Tradigital Animate CC: 12 Principles of Animation in Adobe Animate by Stephen Brooks

#### **Career Options:**

- o 2D Flash Animator
- o Character Animator
- o Graphic Animator
- o White Board Animator
- o 2D Game Animator

(CBCS)

# B.A Computer Animation & Web Designing Semester – II<sup>st</sup> BAAW 13

# Industrial Visualization Practical Practical Paper

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

- This course is meant to introduce the student to the world of 3D. In this course, the student will learn about how to work in 3D space, model, and texture, apply lights and finally take a render output of creation.
- To develop the skill & knowledge in 3D Modelling

#### **Utility:**

- o Create 3d visualizations for their designs.
- o The software has capabilities to render designs using photo- realistic models.
- o It provides controls you need to create highly realistic models.

**Pre-requisites:** Photoshop

#### **Practical List:**

- o Practical I Primitives Modeling
- o Practical II Primitives Modeling
- o Practical III Polygon Modeling
- o Practical IV Polygon Modeling
- o Practical V Spline Modeling
- o Practical VI Spline Modeling
- o Practical VII Surface Modeling
- Practical VIII Surface Modeling

**Software:** 3Ds Max, Adobe Photoshop

#### **References Books:**

 3ds Max 2018 - Getting Started with Modeling, Texturing, and Lighting by Elizabeth VT and Ravi Conor

#### **Career Options for a Subject:**

- 3D Designer3D Max Artist
- o 3D Visualizer

(CBCS)

#### B.A Computer Animation & Web Designing Semester – II<sup>st</sup> BAAW 14

# Architectural Visualization Practical Practical Paper

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

- o Architectural rendering, is the art of creating two-dimensional images or animations showing the attributes of a proposed architectural design.
- Still renderings, 3D Walk through and fly by animations (movie), Virtual Tours, Floor Plans, Photo realistic 3D Rendering

#### **Utility:**

- This technique uses sophisticated software to approximate accurate lighting and materials.
- o This technique is often referred to as a "Photo Real" rendering.
- Renderings are usually created for presentation, marketing and design analysis purposes.

Pre-requisites: Basic Computer Knowledge

#### **Practical List:**

- 1. Drawings of plan
- 2. Setting up your workspace
- 3. Adjustments of Cad plan
- 4. Detail 3D Modeling of plan
- 5. Creating texture for 3D model
- 6. Applying material with required characteristics
- 7. Rendering & Post production

**Software:** Google Sketch Up, 3Ds max, V ray, Adobe Photoshop

#### **References:**

- Architectural Rendering with 3ds Max and V-Ray: Photorealistic Visualization Hardcover
- o Realistic Architectural Rendering with 3ds Max and V-Ray

#### **Career Options for a Subject:**

- o Architectural Designer
- o 3D Environments Designer
- o 3D Render Artist

(CBCS)

# B.A Computer Animation & Web Designing Semester – II<sup>st</sup> BAAW 15

# 2D Animation Practical Practical Paper

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

- Understand and apply techniques about flash animation
- o Acquire knowledge about various principles of animation and its usage.
- o Will gain the knowledge of handling a project at industrial requirement.

#### **Utility:**

- o To provide a comprehensive introduction to Adobe Flash as an animation tool
- o To understand and explore drawing and basic animation within the Flash interface

Prerequisites: Knowledge of Drawing, Photoshop

#### **Practical List:**

- Drawing Basic Objects in Adobe Flash
- Draw a cartoon character in Adobe Flash
- o Drawing Basic Scenes in Adobe Flash
- o Creating simple animation with shape, classic & motion tweening
- o Make a cartoon character using symbols for animation
- o Bouncing ball animation in Adobe Flash
- Do dialogue animation of 10 seconds
- o Basic walk cycle, Run cycle using cartoon character symbols
- o Creating Effect in Adobe Flash
- o Rendering Some Animation Scenes in Adobe Flash

Software: Adobe Flash, Adobe Animate

#### **Reference Book:**

- o The Animator's Survival Kit by Richard Williams
- o The Art of Flash Animation: Creative Cartooning by Mark Smith
- o Flash Cartoon Animation: Learn from the Pros by Glenn Kirkpatrick and Kevin Peaty

o Tradigital Animate CC: 12 Principles of Animation in Adobe Animate by Stephen Brooks

#### **Career Options:**

- o 2D Flash Animator
- o Character Animator
- o Graphic Animator
- White Board Animator
- o 2D Game Animator

(CBCS)

# B.A Computer Animation & Web Designing Semester – II<sup>st</sup> BAAW 16

# 2D Animation Short Film Project Practical Practical Paper

Total Credits 03 No. of Lectures 72

Practical	Total
75	75

#### **Learning Objective:**

- Will gain the knowledge of handling a complete 2D animation film project at industrial requirement.
- Students have to prepare 2D animation film project in campus under the supervision of concerned

#### **Utility:**

o To understand and explore complete 2D animation film using Flash

Pre-requisites: Basic Computer Knowledge

#### **Practical List:**

Will have to follow the following steps while preparing the project:

- Write the Script
- o Model Sheet
- o Character Turnaround Sheet
- o Story Board
- o Voice Recording
- o Final Animation

#### **AJ-11-2019**

#### FACULTY OF INTERDISCIPLINARY STUDIES

#### **B.A** (First Semester) **EXAMINATION**

#### MARCH/APRIL 2019

#### B.A COMPUTER ANIMATION & WEB DESIGNING

(Graphic Design)

(Wednesd	ay, 20,03,2019)	Time: 10.00 a.m. to 12.00 noon
Time-2 I	Hours	Maximum Marks – 40
N.B. :- (i)	Q. No. 1 is compulsory.	
(i)	Solve any three questions from Q. 2 to Q. 6.	
1.		10
2.		10
3.		10
4.		10
5.		10
6.		10