



SCHOOL OF MEDIA COMMUNICATION DESIGN AND ARTS
DEPARTMENT OF ANIMATION AND GRAPHIC
Bachelor of Science in Animation and Graphic



SISTER NIVEDITA UNIVERSITY

A Satyam Roychowdhury initiative

Undergraduate course structure for Mass Communication and Journalism

(As per NEP 2020 regulation and according to UGC-CBCS)

Course structure for

B.A in Mass Communication and Journalism

&

B.A. Honours in Mass Communication & Journalism / B.A Honours with Research in Mass Communication & Journalism

Category Definition with Credit Breakup

MPSC-Major Program Specific Course; NMPSC- Non-Major Program Specific Course; MDC – Multidisciplinary courses; AEC – Ability Enhancement Courses; SEC – Skill Enhancement Courses; VAC – Value Added Courses; INT – Internship; Project – Industry Based Training Program



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| Semester | Major Program Specific Courses (110/98 Credits) | | Elective From Non-Major Discipline(16 Credits) | Vocational Education (12 Credits) | | | Multi Disciplinary Courses | Skill Enhancement Courses | Value Added Courses(6 Credits) | | Project (Industry based Training) | Internship | Research | Credit/ Semester | Credits/ Year | | |
|-----------------|---|-----------|--|-----------------------------------|------------------|--|----------------------------|---------------------------|--------------------------------|----------------------------|-----------------------------------|------------|----------|------------------|---------------|-----------------------|-------------------------------|
| | Compulsory | Elective | | Soft Skill Development | Mentored Seminar | Academic Activity (Sports and Fitness, Yoga, NCC, NSS) | | | Other Courses | Ability Enhancement Course | | | | | | Environmental Science | Ethics Study & IPR(2 Credits) |
| | | | | | | | | | | | | | | | | | |
| I | 16 | | | 1 | 2 | 1 | | 2 | | 2 | | | | 24 | | | |
| II | 16 | | | 1 | | | | 3 | 2 | 2 | | | | 24 | 48 | | |
| III | 4 | 7 | 3 | 1 | | 1 | | 3 | 2 | 3 | | | | 24 | | | |
| IV | 4 | 7 | 3 | 1 | 2 | | | 3 | 2 | 3 | | | | 25 | 49 | | |
| V | 4 | 7 | 3 | 1 | | | | | | 3 | | 2 | | 20 | | | |
| VI | 4 | 7 | 3 | 1 | | | 2 | | | | | 3 | | 20 | 40 | | |
| VII | 4 | 10 | 4 | | | | 2 | | | | | | | 20 | | | |
| VIII (option 1) | | | | | | | | | | | | | 12 | | | | |
| (Option 2) | 8 | 12 | | | | | | | | | | | | 20 | 40 | | |
| CREDITS | 60 | 50 | 16 | 6 | 4 | 2 | 4 | 9 | 8 | 9 | 4 | 2 | 3 | 12 | 177 | | |



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| <i>Category</i> | <i>Course name</i> | <i>Credit</i> | <i>Teaching Scheme</i> | | |
|--------------------------|--|---------------|--------------------------|----------|----------|
| | | | L | T | P |
| <i>Semester I</i> | | | | | |
| MPSC_COMP_1 | Foundation of Art | 1 | 1 | 0 | 0 |
| | Foundation of Art Lab | 4 | 0 | 0 | 8 |
| MPSC_COMP_2 | Graphic Design I | 1 | 1 | 0 | 0 |
| | Graphic Design I Lab | 3 | 0 | 0 | 6 |
| MPSC_COMP_3 | Digital Videography and Photography | 1 | 1 | 0 | 0 |
| | Digital Videography and Photography Lab | 3 | 0 | 0 | 6 |
| MPSC_COMP_4 | Creative Communication | 3 | 0 | 0 | 6 |
| NMPSC_1 | Vocational- Mentored Seminar I * | 2 | 2 | | |
| NMPSC_2 | Vocational- EAA 1 (Yoga/ Sports/ NCC/NSS) | 1 | | | 2 |
| NMPSC_3 | Vocational- Soft Skill Development I | 1 | 1 | | |
| AEC 1 | Communicative English I | 2 | 2 | | |
| VAC 1 | Environmental Studies I | 2 | 2 | | |
| Total Credit= 24 | | | Teaching Hour= 29 | | |



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| Category | Course name | Credit | Teaching Scheme | | |
|-------------------------|--|--------|--------------------------|---|---|
| | | | L | T | P |
| Semester II | | | | | |
| MPSC_COMP_5 | Digital Art | 4 | | | 8 |
| MPSC_COMP_6 | Storyboarding | 1 | 1 | | |
| | Storyboarding Lab | 4 | | | 8 |
| MPSC_COMP_7 | Graphic Design II | 1 | 1 | | |
| | Graphic Design II Lab | 2 | | | 4 |
| MPSC_COMP_8 | Video Editing | 4 | | | 8 |
| NMPSC_4 | Vocational- Soft Skill Development II | 1 | 1 | | |
| MDC1 | Selected by the Candidate (Elective)* Digital Designing | 3 | 3 | | |
| AEC 2 | Communicative English II | 2 | 2 | | |
| VAC 2 | Environmental Studies II | 2 | 2 | | |
| Total Credit= 24 | | | Teaching Hour= 27 | | |



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|-------------------------|--|--------|------------------------------|---|---|
| | | | L | T | P |
| Semester III | | | | | |
| MPSC_COMP_9 | 2D Animation I | 1 | 1 | | |
| | 2D Animation I Lab | 4 | | | 8 |
| MPSC_ELEC_1 | Motion Graphic | 1 | 1 | | |
| | Motion Graphic Lab | 3 | | | 6 |
| MPSC_ELEC_2 | Project (Audio Video) | 2 | | | 4 |
| NMPSC_5 | *** | 2 | | | |
| | | 1 | | | 2 |
| NMPSC_6 | Vocational- Soft Skill Development III | 1 | 1 | | |
| NMPSC_7 | Vocational- EAA II(Yoga/Sports/NCC/NSS) | 1 | | | 1 |
| MDC2 | Selected by Candidate (Elective)* Photography and Mobile as a tool of Journalism | 3 | 2 | 1 | |
| AEC 3 | Logical Ability I/ Foreign Language I | 2 | 2 | | |
| SEC 1 | Computer Application | 3 | 3 | | |
| Total Credit= 24 | | | Teaching Hour= 27 | | |



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|-------------------------|---|--------|--------------------------|---|---|
| | | | L | T | P |
| Semester IV | | | | | |
| MPSC_COMP_10 | 2D Animation II | 4 | | | 8 |
| MPSC_ELEC_3 | Motion Graphic II | 3 | | | 6 |
| MPSC_ELEC_4 | Basic of 3D | 4 | | | 8 |
| NMPSC_8 | **** | 2 | 2 | | |
| | | 1 | | | 2 |
| NMPSC_9 | Vocational- Soft Skill Development IV | 1 | 1 | | |
| NMPSC_10 | Vocational- Mentored Seminar I * | 2 | 2 | | |
| MDC3 | Selected by Candidate (Elective)* Theatre Arts | 3 | 3 | | |
| AEC 4 | Logical Ability II/ Foreign Language II | 2 | 2 | | |
| SEC 2 | Basic Management Skill | 3 | 3 | | |
| Total Credit= 25 | | | Teaching Hour= 28 | | |



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| Category | Course name | Credit | Teaching Scheme | | |
|-------------------------|--------------------------------------|--------|--------------------------|---|---|
| | | | L | T | P |
| Semester V | | | | | |
| MPSC_COMP_11 | Advance 3D Modeling | 4 | | | 8 |
| MPSC_ELEC_5 | Basic of Compositing | 1 | 1 | | |
| | Basic of Compositing Lab | 3 | | | 6 |
| MPSC_ELEC_6 | Project II | 3 | | | 6 |
| NMPSC_11 | *** | 2 | 2 | | |
| | | 1 | | | 2 |
| NMPSC_12 | Vocational- Soft Skill Development V | 1 | 1 | | |
| SEC 3 | Data Analysis | 3 | 3 | | |
| VAC 3 | Ethics Study and IPR | 2 | 2 | | |
| Total Credit= 20 | | | Teaching Hour= 24 | | |
| | | | | | |



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| Category | Course name | Credit | Teaching Scheme | | |
|-------------------------|---------------------------------------|--------|--------------------------|---|---|
| | | | L | T | P |
| Semester VI | | | | | |
| MPSC_COMP_12 | 3D Character Modeling | 4 | | | 8 |
| MPSC_ELEC_7 | CG Texturing | 1 | 1 | | |
| | CG Texturing Lab | 3 | | | 6 |
| MPSC_ELEC_8 | Advanced Compositing | 3 | | | 6 |
| NMPSC_12 | *** | 2 | 2 | | |
| | | 1 | | | 3 |
| NMPSC_13 | Vocational- Soft Skill Development VI | 1 | | | 2 |
| NMPSC_OTHER 1 | Media Literacy 1** | 2 | 2 | | |
| INT 1 | Internship** | 3 | | | 6 |
| Total Credit= 20 | | | Teaching Hour= 25 | | |

| Category | Course name | Credit | Teaching Scheme | | |
|--|---------------------|--------|---|---|---|
| | | | L | T | P |
|    | | | | | |
| SCHOOL OF MEDIA COMMUNICATION DESIGN AND ARTS DEPARTMENT OF ANIMATION AND GRAPHIC Semester VII Bachelor of Science in Animation and Graphic | | | | | |
| MPSC_COMP_13 | CG Lighting | 1 | 1 | | |
| | CG Lighting Lab | 4 | | | 8 |
| MPSC_ELEC_9 (Any Two) | Advance Texturing | 4 | | | 8 |
| MPSC_ELEC_10 (Any Two) | 3D Rigging | 1 | 1 | | |
| | 3D Rigging Lab | 4 | | | 8 |
| MPSC_ELEC_11 (Any Two) | 3D Animation | 1 | 1 | | |
| | 3D Animation Lab | 4 | | | 8 |
| NMPSC_14 | *** | 3 | 3 | | |
| | | 1 | | | 2 |
| NMPSC_OTHER 2 | Media Literacy 2 ** | 2 | 2 | | |
|  Total Credit= 20 | | |   Teaching Hour= 24 | | |



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| Category | Course name | Credit | Teaching Scheme | | |
|--------------------------|--|-------------------|-----------------------------|---|----------|
| | | | L | T | P |
| Semester VIII | | | | | |
| MPSC_COMP_14 | 3D Animation II | 1 | 1 | | |
| | 3D Animation II Lab | 3 | | | 6 |
| MPSC_COMP_15 | Rendering and Comp. | 1 | 1 | | |
| | Rendering and Comp. Lab | 3 | | | 6 |
| (Above 75%) | Paper Presentation/ Dissertation (4)+ / Departmental Project(4) + Industry Based Training Program (4) | 12 | | | |
| | | | | | |
| MPSC_COMP_14 | 3D Animation II | 1 | 1 | | |
| | 3D Animation II Lab | 3 | | | 6 |
| MPSC_COMP_15 | Rendering and Comp. | 1 | 1 | | |
| | Rendering and Comp. Lab | 3 | | | 6 |
| MPSC_ELEC 12A/12B/12C | Web Design / Architecture Visualization / 2D Layout Design | 1 | 1 | | |
| | Web Design / Architecture Visualization / 2D Layout Design Lab | 3 | | | 6 |
| MPSC_ELEC 13A/13B/13C | Rotoscope / CG Painting / Sound Design | 1 | 1 | | |
| | Rotoscope / CG Painting and / Sound Design Lab | 3 | | | 6 |
| MPSC_ELEC 14A/14B/14C | Advertising, Marketing and Sales/ Strategic PR, ORM and CSR | 3 | 3 | | |
| | Advertising, Marketing and Sales Lab/ Strategic PR, ORM and CSR Lab | 1 | | | 2 |
| | | 12/(4+4+4) | Teaching Hour= 33/24 | | |
| Total Credit= 20 | | | | | |



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Major Program Specific Course
(MPSC)



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SEM-I

Foundation of Art

Course objective: Students will introduce you to the fundamentals of art and sketching, covering topics such as line and contour drawing, perspective drawing, light and shadow, anatomy and figure drawing, storyboarding, and character creation.

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Throughout the course, you will learn how to use basic tools and techniques of sketching, as well as the principles of perspective drawing, anatomy, and gesture. You will also gain an understanding of the importance of art and sketching in animation and film making.

In the final project, you will create an original character using the principles of anatomy, proportion, and gesture that you have learned in class. You will also storyboard a scene featuring your character, showing a clear progression of action and emotion.

By the end of the course, you will have developed a strong foundation in art and sketching, and be able to create dynamic and memorable characters for use in animation and film making.

Unit 1: Introduction to Art and Sketching

- What is art?
- The different forms of art
- The importance of art and sketching in animation and film making
- The basic tools and techniques of sketching

Unit 2: Line and Contour Drawing

- Basic line drawing techniques
- The use of contour lines to define form and shape
- The importance of gesture in drawing

Unit 3: Perspective Drawing

- The principles of perspective drawing
- Drawing from observation and imagination
- Creating depth and space in drawings



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Unit 4: Light and Shadow

- Understanding light and shadow
- The use of shading to create form and texture
- The importance of value in creating depth and contrast

Unit 5: Anatomy and Figure Drawing

- The basics of anatomy and proportions
- Drawing the human and Animal figure
- The use of gesture and expression in figure drawing

Unit 6: Storyboarding and Sketching

- The importance of storyboarding in animation and film making
- Basic storyboarding techniques
- Sketching for storyboarding

Unit 7: Final Project

- Creating memorable and Unique characters (With turn around)
- Students will create an original character using the principles of anatomy, proportion, and gesture that they've learned in class. The character should be fully designed and fleshed out, with details such as clothing, accessories, and personality traits.
- Once the character is created, students will then storyboard a scene featuring their character. The scene should be at least 10-15 panels long and should show a clear progression of action and emotion. The scene can be from an existing story or can be an original story created by the student.

Suggested Books:

1. "Drawing for the Absolute Beginner" by Mark and Mary Willenbrink
2. "The Complete Guide to Perspective" by John Raynes
3. "How to Draw What You See" by Rudy De Reyna
4. "Figure Drawing: Design and Invention" by Michael Hampton
5. "The Animator's Sketchbook: How to See, Interpret & Draw Like a Master Animator" by Tony White

Graphic Design

Course overview: - In this graphic design course, you'll learn the fundamentals of design, typography, layout, branding, digital and print design, and industry-standard software like Adobe Photoshop, Illustrator, InDesign, XD, and Sketch. You'll also explore color theory, user experience (UX) and user interface (UI) design, and creating visual identities for brands. Through hands-on projects and industry visits, you'll gain practical skills in preparing files for print and designing for packaging. By the end of this course, you'll have a strong foundation in graphic design and be able to create visually compelling designs for various mediums.

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Unit 1: Introduction to Graphic Design

- History of Graphic Design
- Elements of Graphic Design
- Principles of Graphic Design
- Color Theory
 - Adobe Photoshop

Unit 2: Typography

- Anatomy of type
- Type classification
- Type families
- Typeface pairing
 - Adobe Illustrator
 - Google Fonts

Unit 3: Layout and Composition

- Grid Systems
- Balance and Alignment
- White Space
- Hierarchy
 - Adobe InDesign

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Unit 4: Branding and Identity

- Creating a Brand
- Developing a Visual Identity
- Logo Design
- Brand Guidelines
 - Adobe Illustrator



Unit 5: Digital Design

- User Experience (UX) Design
- User Interface (UI) Design
- Web Design
- Mobile App Design
 - Adobe XD for UX and UI design OR
 - Sketch for UX and UI design
 - Figma for collaborative design

Unit 6: Print Design

- Print Design Basics
- Preparing Files for Print
- Printing Techniques (Industry visit)
- Designing for Packaging
 - Adobe Photoshop



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- Adobe Illustrator or Corel Draw

Book Reference:

1. "Graphic Design School: The Principles and Practice of Graphic Design" by David Dabner, Sandra Stewart, and Eric Zempel
2. "Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students" by Ellen Lupton
3. "Layout Essentials: 100 Design Principles for Using Grids" by Beth Tondreau
4. "Logo Design Love: A Guide to Creating Iconic Brand Identities" by David Airey
5. "Don't Make Me Think, Revisited: A Common-Sense Approach to Web Usability" by Steve Krug
6. "The Non-Designer's Design Book" by Robin Williams

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DIGITAL PHOTOGRAPHY

Course overview: - This photography and videography course covers the fundamentals of photography, including exposure, composition, and lighting. Students will learn about the principles of lighting and how to manipulate it to create different moods and atmospheres. They will also learn post-processing techniques using Adobe Lightroom and Photoshop to enhance their images and videos. The course will cover advanced techniques such as capturing motion and freezing action, working with depth of field, and understanding audio for videography. Students will also develop a storytelling approach to their photography and videography work and learn how to build a portfolio and present their work to clients. The course will also cover copyright and licensing and the business side of photography and videography.

Unit 1: Introduction to Photography

- Understanding the fundamentals of photography.
- Getting familiar with cameras and lenses.
- Understanding the basics of exposure, shutter speed, aperture, ISO, and white balance.
- Understanding the principles of composition in photography.

Unit 2: Lighting for Photography

- Understanding the principles of lighting.
- Working with natural light sources.
- Working with artificial light sources.
- Manipulating light to create mood and atmosphere.
- Understanding color temperature and its application in photography.

Unit 3: Post-Processing for Photography



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- Understanding the digital workflow
- Editing and processing images in Adobe Lightroom and Photoshop
- Using presets and filters to enhance images and videos

Unit 4: Advanced Techniques for Photography

- Understanding the different types of lenses and their applications
- Capturing motion and freezing action
- Working with depth of field
- Understanding and working with audio for videography

Unit 5: Shooting Techniques for Videography

- Understanding different shooting techniques for videography
- Getting familiar with different camera movements and their uses
- Understanding how to create different shots like close-ups, medium shots, and wide shots
- Understanding how to create movement and use it effectively

Unit 5: Storytelling in Photography and Videography

- Developing a storytelling approach in photography and videography
- Creating visual narratives through still images and video footage
- Understanding and working with pacing and sequencing in videography
- Working with music and sound to enhance storytelling

Unit 6: Post-Processing for Videography

- Understanding the digital workflow in videography
- Editing and processing video footage in Adobe Premiere Pro
- Using presets and filters to enhance videos

Unit 7: Portfolio Building and Business of Photography and Videography

- Building a portfolio and presenting your work
- Understanding copyright and licensing
- Understanding the business of photography and videography
- Understanding and working with clients.

Book Reference:

1. "The Digital Photography Book" by Scott Kelby
2. "Light Science and Magic: An Introduction to Photographic Lighting" by Fil Hunter, Steven Biver, and Paul Fuqua
3. "The Photographer's Story: The Art of Visual Narrative" by Michael Freeman
4. "Photography Business Secrets" by Lara White.



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Creative Communication

Course overview: - A comprehensive understanding of creative communication and branding in the context of animation movies. It covers key aspects such as target audience analysis, brand identity development, creative concept generation, brand management, and evaluation for continuous improvement

Unit 1: Introduction to Creative Communication

- What is branding?
- The importance of branding in animation movies
- The role of effective communication in branding
- Elements of a successful brand strategy

Unit 2: Understanding the Target Audience

- Identifying the target audience
- Analyzing consumer behavior and preferences
- Creating a brand narrative that resonates with the target audience

Unit 3: Brand Identity and Personality

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- Developing a brand identity and personality
- The use of visual and verbal elements in brand identity
- The role of branding in creating an emotional connection with the audience

Unit 4: Creative Concept Development

- Developing creative concepts that align with the brand and target audience
- The use of storytelling and emotion in branding
- Creating a unique visual and verbal identity for the brand
- Brainstorming and ideation techniques

Unit 5: Brand Management and Execution

- Managing the brand and its assets
- The use of technology and digital tools in brand management
- Turning creative concepts into a tangible animation
- Managing the animation production process and budget

Unit 6: Brand Evaluation and Optimization

- Measuring the effectiveness of branding and communication
- The use of metrics and data to optimize future campaigns
- The role of feedback and iteration in branding and communication
- Identifying areas for improvement and innovation

Suggested Books:

1. "Building a StoryBrand: Clarify Your Message So Customers Will Listen" by Donald Miller

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2. "Brand Identity Essentials: 100 Principles for Designing Logos and Building Brands" by Kevin Budelmann and Yang Kim
3. "The Brand Gap: How to Bridge the Distance Between Business Strategy and Design" by Marty Neumeier
4. "Contagious: How to Build Word of Mouth in the Digital Age" by Jonah Berger
5. "The Art of Pixar: 25th Anniversary" by Amid Amidi

SEM-II

Digital Art

Course overview: - This course is designed to provide an introduction to the art of digital painting. Participants will learn essential techniques, tools, and concepts to create digital artworks using popular software like Adobe Photoshop. The course is divided into four units, each focusing on key aspects of digital painting.

Unit 1: Introduction to Digital Painting

- Overview of digital painting tools, software, and workspace
- Introduction to digital brushes, layers, and blending modes

Unit 2: Digital Painting Techniques

- Understanding color theory and its application in digital painting
- Exploring different brush types, strokes, and textures
- Creating basic shapes, forms, and textures digitally

Unit 3: Composition, Light, and Shadow

- Principles of composition in digital painting
- Understanding light sources and their impact on objects
- Creating realistic shadows, highlights, and lighting effects

Unit 4: Character and Environment Design

- Developing character and creature concepts digitally
- Exploring different styles and approaches to character design
- Creating digital landscapes and environments
- Incorporating perspective, depth, and atmospheric effects

Suggested Books:

1. "Color and Light: A Guide for the Realist Painter" by James Gurney
2. "The Digital Matte Painting Handbook" by David B. Mattingly

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3. "Imagine FX: Digital Painting Techniques" (Series)

Storyboard

Course Overview: - This course covers the fundamentals of Storyboarding and Digital Painting in 6 units. Students will learn about the purpose and elements of Storyboarding, narrative and character development, digital painting tools and color theory, creating dynamic camera movements, effective transitions and animatics, and refining through feedback. Throughout the course, students will sketch, draw and create digital paintings using Photoshop with mixed media.

Unit 1: Introduction to Storyboarding

- Overview of Storyboarding and its purpose in visual storytelling
- Understanding the elements of a storyboard: panels, shots, angles, and camera movement
- Analyzing and dissecting existing storyboards in films and animations
- Sketching and drawing basic storyboard panels with pencil and paper

Unit 2: Visual Narrative and Shot Composition

- Understanding visual storytelling techniques and narrative structure
- Composing shots for effective storytelling
- Framing and camera angles in storyboarding
- Creating shot sequences and transitions
- Incorporating visual elements to enhance storytelling (e.g., perspective, lighting, props)

Unit 3: Developing a Storyboard

- Creating a narrative and story structure for a storyboard
- Building character and setting design for storyboards
- Developing shot lists and storyboards for a short animation
- Critiquing and refining storyboards through feedback and revision

Unit 4: Advanced Storyboarding Techniques

- Creating dynamic camera movements and angles
- Creating effective transitions between shots in a storyboard
- Storyboarding for different genres: action, comedy, horror, etc.
- Creating a storyboard animatic with sound and music

Book Reference: -

1. Introduction to Storyboarding: Principles and Techniques by Mark Simon
2. The Anatomy of Story: 22 Steps to Becoming a Master Storyteller by John Truby
3. The Writer's Journey: Mythic Structure for Writers by Christopher Vogler



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4. Character Design Quarterly: Issue 1 by 3DTotal Publishing
5. Force: Dynamic Life Drawing for Animators by Michael D. Mattesi
6. The Animator's Survival Kit: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators by Richard Williams
7. The Art of Star Wars: The Force Awakens by Phil Szostak
8. Show Your Work! 10 Ways to Share Your Creativity and Get Discovered by Austin Kleon

Graphic Design II

Course overview: - In this graphic design course, you'll learn the fundamentals of design, typography, layout, branding, digital and print design, and industry-standard software like Adobe Photoshop, Illustrator, InDesign, XD, and Sketch. You'll also explore color theory, user experience (UX) and user interface (UI) design, and creating visual identities for brands. Through hands-on projects and industry visits, you'll gain practical skills in preparing files for print and designing for packaging. By the end of this course, you'll have a strong foundation in graphic design and be able to create visually compelling designs for various mediums.

Unit 1: Introduction to Graphic Design

- History of Graphic Design
- Elements of Graphic Design
- Principles of Graphic Design
- Color Theory
- Adobe Photoshop

Unit 2: Typography and Layout Design

- Understanding Typography
- Choosing and Pairing Fonts
- Creating Visual Hierarchy
- Designing Layouts for Print
- Understanding Grid Systems
- Adobe Illustrator
- Google Fonts

Unit 3: Composition

- Grid Systems
- Balance and Alignment
- White Space



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- Hierarchy
 - Adobe InDesign

Unit 4: Print Media Design

- Understanding Print Media
- Designing for Different Print Media: Brochures, Flyers, Business Cards, Posters, etc.
- Choosing Colors for Print
- Designing for Large Format Printing
- Preparing Files for Print

Unit 5: Branding and Identity Design

- Understanding Branding and Identity Design
- Creating Logos and Brand Guidelines
- Developing Brand Voice and Personality
- Designing Collateral Materials
- Rebranding and Brand Refresh

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Book Reference:

1. "Graphic Design School: The Principles and Practice of Graphic Design" by David Dabner, Sandra Stewart, and Eric Zempel
2. "Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students" by Ellen Lupton
3. "Layout Essentials: 100 Design Principles for Using Grids" by Beth Tondreau
4. "Logo Design Love: A Guide to Creating Iconic Brand Identities" by David Airey
5. "Don't Make Me Think, Revisited: A Common-Sense Approach to Web Usability" by Steve Krug
6. "The Non-Designer's Design Book" by Robin Williams

Video Editing

Course overview: - Each unit will take approximately 2 weeks to complete, and will involve a combination of lectures, readings, assignments, and projects. Students will be expected to have access to video editing software (such as Adobe Premiere Pro or Final Cut Pro) and a computer with sufficient processing power and storage. By the end of the semester students will have gained a solid understanding of video editing principles and techniques, and will have produced a portfolio of edited video projects demonstrating their skills.

Unit 1: Introduction to Video Editing

- Overview of video editing software
- Basic concepts of video editing
- Introduction to video file formats and codecs

Unit 2: Tools and Techniques of Video Editing

- Exploring the interface of video editing software



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- Understanding video timeline and tracks
- Techniques for cutting, trimming and editing clips
- Adding and manipulating transitions, effects and filters

Unit 3: Audio Editing and Mixing

- Understanding audio levels and waveforms
- Techniques for editing and manipulating audio
- Using audio effects and filters
- Mixing audio and video tracks

Unit 4: Color Correction and Grading

- Understanding color theory
- Using color correction tools to adjust white balance, exposure, saturation, and contrast
- Using color grading techniques to create a specific mood or look

Unit 5: Advanced Editing Techniques

- Multi-camera editing
- Keyframing and animation
- Creating motion graphics and titles
- Working with green screens and chroma keying

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Unit 6: Exporting and Sharing

- Exporting video files for various formats and platforms
- Understanding compression and bitrate
- Creating and customizing presets
- Sharing and distributing videos online

Recommended book:

1. "The Technique of Film and Video Editing: History, Theory, and Practice" by Ken Dancyger
2. "Adobe Premiere Pro CC Classroom in a Book" by Maxim Jago
3. "Audio Postproduction for Film and Video" by Jay Rose
4. "Color Correction Handbook: Professional Techniques for Video and Cinema" by Alexis Van Hurkman
5. "The Cool Stuff in Premiere Pro: Learn Advanced Editing Techniques to Dramatically Speed Up Your Workflow" by Jarle Leirpoll
6. "Video Made on a Mac: Production and Postproduction Using Apple Final Cut Studio and Adobe Creative Suite" by Richard Harrington

SEM-III

2D Animation I

Course overview: – By the end of this syllabus, students will have a comprehensive understanding of the principles of 2D animation, including its history, concepts, and tools. They will also be able to create and produce a complete 2D animation project from pre-production to post-production, including character design, storyboarding, basic keyframe animation, and sound editing. With the help of the suggested books, students will gain additional knowledge and insights into the world of animation and develop their skills as 2D animators.



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Unit 1: Introduction to Digital 2D Animation

- Overview of digital 2D animation and its uses
- The history of 2D animation and how it has evolved over time
- The principles of animation and their importance in creating engaging animations
- Basic terminology used in digital 2D animation
- Understanding the difference between 2D and 3D animation
- Introduction to the animation software, such as Adobe Animate or Toon Boom Harmony
- Creating a simple animation using basic tools and techniques
- Exploring the different types of 2D animation, such as traditional, cut-out, and frame-by-frame animation

Unit 2: Background and Environment Design

- Simplify the Layout from Storyboard
- Creating appealing backgrounds and environments
- Developing a sense of space and depth in 2D animation
- Using color theory and lighting to enhance the mood and tone of the animation
- Creating parallax effects and other camera techniques

Unit 3: Timing and Pacing

- Understanding the importance of timing and pacing in 2D animation
- Using the principle of anticipation to create a build-up to a movement
- Creating animated titles and text
- Incorporating sound and music to enhance the emotional impact of the animation
- Creating vector graphics and illustrations for use in 2D animation
- Creating dynamic and engaging title sequences and captions

Unit 4: Working with Core Animation

- Understanding how to use the principle of squash and stretch to create more organic movements
- Using keyframes to create a smooth animation with proper timing
- Creating a sense of weight and gravity in animations
- Animating basic elements such as shapes and icons.

Project Unit 1 to Unit 3: - Shapes and non-organic Animation by applying all Principals of Animation

Unit 5: Character Design and Rigging

- Understanding the importance of character design in 2D animation
- Creating a character using basic shapes and forms
- Developing a character's personality and traits through design
- Rigging the character for animation, including creating a skeleton and controls to simplify the animation process
- Creating different expressions and movements for the character

Unit 6: Character Animation

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- Applying character rigs and controls to simplify the animation process
- The principles of character animation, including squash and stretch, timing, and weight
- Animating basic actions such as walks, runs, and jumps

Project Unit 4 to Unit 5: - Create and animate basic animation actions such as walks, runs, and jumps by applying all Principals of Animation

Books Reference: -

1. "The Animator's Survival Kit" by Richard Williams
2. "The Illusion of Life: Disney Animation" by Frank Thomas and Ollie Johnston
3. "Character Animation Crash Course!" by Eric Goldberg

MOTION GRAPHIC

Course overview: - Motion Graphics Fundamentals is a comprehensive course designed to introduce students to the exciting world of Motion Graphics. Through a combination of theoretical lessons, hands-on exercises, and project work, participants will gain a strong foundation in design principles, animation techniques, and the art of visual storytelling. This course is suitable for beginners with little or no prior experience in Motion Graphics but also offers valuable insights for those with some background in graphic design or animation.

Unit 1: Introduction to Motion Graphics

- What is Motion Graphics?
- History and evolution of Motion Graphics
- Principles and aesthetics of Motion Graphics
- Tools and software for Motion Graphics
- Understanding the role of Motion Graphics in various industries

Unit 2: Design Principles for Motion Graphics

- Fundamentals of graphic design for motion
- Layout and composition techniques
- Color theory and color schemes in Motion Graphics
- Typography and kinetic typography
- Creating visually appealing and engaging designs for motion

Unit 3: Animation Techniques and Timing

- Animation principles for Motion Graphics
- Keyframe animation and easing
- Timing and pacing in Motion Graphics
- Using motion to convey ideas and emotions
- Exploring different types of transitions and effects

Unit 4: Advanced Motion Graphics and Project Work

- Advanced animation techniques (e.g., character animation, 3D motion)
- Incorporating visual effects and compositing in Motion Graphics
- Sound design and synchronization with motion



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- Creating a comprehensive Motion Graphics project

Project work: Applying learned concepts and techniques to create a final Motion Graphics piece

Project I (Audio Video)

Project based on the previous Semester

SEM IV

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2D Animation II

Course overview: - The Advanced 2D Animation course is an intensive program designed to take students' animation skills to the next level. Participants will delve into the art of advanced character animation, explore special effects, and master visual storytelling techniques. Through hands-on projects and individual guidance, students will create polished animation sequences and build a professional animation portfolio that showcases their growth and expertise.

Unit 1: Fundamentals of Advanced 2D Animation

- Introduction to advanced 2D animation techniques
- Review of basic animation principles (e.g., squash and stretch, timing, easing)
- Understanding character design and development for animation
- Exploring advanced timing and spacing in animation
- Introduction to secondary motion and follow-through
- Animating complex character movements and interactions

Unit 2: Advanced Character Animation

- In-depth study of character posing and key poses
- Character acting and conveying emotions through animation
- Lip-sync animation techniques for dialogue
- Understanding and animating walk cycles, runs, and jumps
- Animating flying, swimming, and other unique character movements
- Applying advanced animation techniques to create realistic and expressive characters

Unit 3: Special Effects and Visual Storytelling

- Introduction to special effects animation (e.g., fire, water, smoke)
- Creating particle effects and dynamic simulations
- Using effects to enhance visual storytelling and narrative



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- Designing and animating dynamic backgrounds and environments
- Applying parallax and camera movements for depth in 2D animation
- Case studies of successful animated scenes and sequences

Unit 4: Advanced Project and Portfolio Development

- Planning and pre-production for an advanced animation project
- Individual project development with regular feedback and critiques
- Focus on honing individual animation styles and techniques
- Finalizing the advanced animation project
- Reviewing and refining animation sequences

MOTION GRAPHIC II

Course overview: - Participants will explore the art of dynamic animation, master visual effects, and develop an eye for advanced motion graphic design. Through a combination of theory, hands-on projects, and personalized feedback, students will create polished motion graphic sequences and build a professional portfolio that showcases their expertise and creativity.

Unit 1: Foundations of 2D Motion Graphics

- Advanced motion paths and animation curves
- Kinetic typography and text animation
- Incorporating sound and timing in motion graphics

Unit 2: Advanced Visual Effects

- Creating complex shape animations and transitions
- Mastering mask and matte techniques
- Introduction to particle systems and simulations
- Using expressions and scripting for advanced animations
- Dynamic effects with keying and chroma keying
- Advanced compositing and layer blending modes

Unit 3: Advanced Motion Graphic Design

- Advanced design principles for motion graphics
- Visual hierarchy and composition in animated scenes
- Designing for different platforms (web, social media, broadcast)
- Infographics and data visualization in motion
- Advanced color grading and color manipulation
- Integrating 2D animation with live-action footage

Unit 4: Advanced Project and Portfolio Development

- Planning and pre-production for an advanced motion graphics project
- Individual project development with regular feedback and critiques
- Fine-tuning animation and visual effects
- Finalizing the advanced motion graphics project
- Reviewing and refining animation sequences and effects
- Assembling a professional motion graphics portfolio showcasing the progress and growth

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throughout the course

BASIC OF 3D

Course overview: - The 3D Modeling Fundamentals course is a comprehensive program designed to introduce students to the exciting world of 3D modeling. Over the course of the program, participants will learn the basics of 3D modeling, various techniques used to create 3D models, and how to bring their ideas to life using 3D modeling software. The course will cover different types of 3D models and their applications, equipping students with the skills needed to create 3D models from scratch, 2D images, and photographs.

Unit 1: Introduction to 3D Modeling

- Understanding the basics of 3D modeling
- Types of 3D models and their applications
- Introduction to 3D modeling software

Unit 2: Modeling Techniques

- Polygon modeling
- NURBS modeling
- Subdivision modeling
- Sculpting techniques

Unit 3: Creating 3D Models

- Creating 3D models from scratch
- Creating 3D models from 2D images
- Creating 3D models from photographs

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SEM IV

Advance 3D Modelling

Course overview: - Participants will explore a wide range of techniques in both hard surface and organic modeling, enabling them to create detailed and realistic 3D models for various applications. Through a combination of theory, hands-on projects, and personalized feedback, students will develop expertise in complex 3D modeling workflows and build a professional portfolio that showcases their creativity and technical proficiency.

Unit 1: Foundations of Advanced 3D Modeling

- Review of basic 3D modeling concepts and terminology
- Overview of advanced 3D modeling software (Autodesk Maya)
- Understanding different modeling techniques (polygon, NURBS, subdivision, sculpting)
- Advanced polygon modeling: Edge loops, bevels, and extrusions

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- Creating intricate organic shapes with sculpting techniques

Unit 2: Advanced Hard Surface Modeling

- Mastering advanced hard surface modeling techniques
- Creating detailed mechanical and industrial objects
- Applying advanced modifiers and procedural modeling
- Model optimization and efficient topology for animation and rendering
- Working with symmetry and instancing for complex models
- Creating realistic textures and materials for hard surface models

Unit 3: Advanced Organic Modeling

- Exploring advanced organic modeling workflows
- Creating characters, creatures, and organic environments
- Using reference and anatomy studies for realistic organic modeling
- Cloth and clothing modeling techniques

Unit 4: Advanced Project and Portfolio Development

- Planning and pre-production for an advanced 3D modeling project
- Individual project development with regular feedback and critiques
- Finalizing the 3D modeling project
- Reviewing and refining models
- A professional 3D modeling portfolio showcasing the progress and growth throughout the course

BASIC OF COMPOSITING

Overview: CG compositing is a crucial part of the post-production process in the film, TV, advertising, and gaming industries. It involves the process of combining multiple images, videos, and CG elements to create a seamless final product. In this course, you will learn the fundamentals of compositing, including color theory, image acquisition and processing, keying, layering and blending, and color correction and grading. You will also learn 3D integration techniques, special effects, and industry applications. By the end of the course, you will have the knowledge and skills to create high-quality composites for various industries and purposes.

Unit 1: Introduction to CG Compositing

- Understanding what compositing is
- Types of compositing
- Overview of the compositing process
- Compositing software overview

Unit 2: Compositing Fundamentals

- Understanding color theory
- Image formats and resolutions
- Image acquisition and processing
- Digital compositing workflow

Unit 3: Keying and Rotoscoping

- Understanding keying and its applications



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- Types of keying methods
- Rotoscoping techniques
- Solving common keying issues

Project (Motion Graphic)

Project based on the previous Semester

SEM VI

3D CHARACTER MODELING

Introduction to 3D Character Modeling

- understanding the fundamentals of 3D character modeling
- Overview of character design principles and anatomy
- Introduction to 3D modeling software (e.g., Autodesk Maya,)
- Exploring the modeling workspace and basic tools
- Creating a simple 3D character model from primitives
- Understanding polygon modeling techniques
- Refining the character's basic shape and proportions
- Introduction to edge loops and topology for animation

Unit 2: Advanced Character Modeling Techniques

- Sculpting organic details and fine-tuning the character's features
- Working with reference images and concept art for character design
- Modeling character accessories and props
- Creating efficient UV layouts for texture mapping
- Understanding the use of symmetry and mirroring in character modeling
- Sculpting high-resolution details and transferring them to the low-resolution model
- Advanced retopology techniques for clean and optimized meshes
- Preparing the character model for rigging and animation

Unit 3: Texturing and Shading for Character Models

- Introduction to the principles of texturing and shading
- UV mapping the character model for texture application
- Creating realistic textures for the character's skin, clothing, and props
- Understanding materials and shaders to enhance the character's appearance
- Painting textures in 3D painting software or using image-based textures
- Adding details like scars, tattoos, and fabric patterns to the character
- Implementing texture maps for different material properties (diffuse, specular, normal maps)

Unit 4: Finalizing and Presenting the Character Model

- Fine-tuning the character model and textures based on feedback

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- Setting up basic posing and creating a character turntable animation

CG Texturing

The above syllabus is focused on providing a comprehensive understanding of 3D texturing using three popular software tools - Maya, ZBrush, and Substance Painter. The syllabus is divided into eight units that cover the fundamentals of 3D texturing, UV mapping, creating textures in each software tool, working with materials, texturing for characters, and industry applications.

Unit 1: Introduction to 3D Texturing

- Understanding the basics of 3D texturing
- Types of 3D textures and their applications
- Introduction to Maya, ZBrush, and Substance Painter

Unit 2: UV Mapping

- Understanding UV mapping
- UV mapping in Maya
- UV mapping in ZBrush
- UV mapping in Substance Painter

Unit 3: Creating Textures in Maya

- Introduction to Maya's texturing tools
- Creating and manipulating textures in Maya
- Texture painting in Maya

Unit 4: Creating Textures in ZBrush

- Introduction to ZBrush's texturing tools
- Creating and manipulating textures in ZBrush
- Texture painting in ZBrush

Unit 5: Creating Textures in Substance Painter

- Introduction to Substance Painter's texturing tools
- Creating and manipulating textures in Substance Painter
- Texture painting in Substance Painter

Unit 6: Working with Materials

- Introduction to materials in Maya, ZBrush, and Substance Painter
- Creating custom materials
- Applying and manipulating materials

Unit 7: Texturing for Characters

- Understanding the importance of character texturing
- Texturing techniques for characters
- Texturing using reference images

Unit 8: Industry Applications

- Applications of 3D texturing in various industries
- Use of 3D texturing in architecture
- Use of 3D texturing in product design
- Use of 3D texturing in animation and game development

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ADVANCED COMPOSITING

Unit 1: Layering and Blending

- Layering techniques
- Alpha channels and their applications
- Blending modes and their applications
- Layer organization and management

Unit 2: Color Correction and Grading

- Understanding color correction
- Color grading techniques
- Color matching and balancing
- Color correction workflow

Unit 3: 3D Integration

- Understanding 3D integration
- 3D tracking techniques
- 3D camera integration
- 3D object integration

Unit 4: Special Effects and Compositing Techniques

- Special effects techniques
- Particle systems and their applications
- Motion graphics techniques
- Compositing with CGI elements

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Unit 1: Introduction to 3D Lighting

- Basics of 3D lighting
- Importance of lighting in 3D animation
- Types of lighting techniques
- Principles of good lighting

Unit 2: 3D Lighting Fundamentals

- Understanding lighting concepts in 3D
- Types of lighting sources
- Shadows and shading
- Light and color theory

Unit 3: Advanced Lighting Techniques

- Global illumination
- High dynamic range (HDR) lighting
- Advanced shadow techniques



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- Light linking

Unit 6: Putting it All Together

- Combining lighting and texturing in 3D scenes
- Troubleshooting common lighting and texturing problems
- Rendering and exporting 3D scenes for animation or still images
- Showcasing 3D lighting and texturing portfolio projects

ADVANCE TEXTURING

Unit 1: Introduction to Advanced Texturing Techniques

- Overview of the latest trends and advancements in texturing technology
- Introduction to advanced texturing software and tools (e.g., Substance Painter, Mari)
- Advanced UV mapping techniques for complex 3D models
- Unwrapping and optimizing UV layouts for texture painting
- Introduction to PBR (Physically Based Rendering) materials and shaders

Unit 2: Procedural Texturing and Substance Designer

- Introduction to procedural texturing and its benefits
- Exploring Substance Designer for creating procedural textures
- Creating customizable and non-repetitive textures using nodes and graphs
- Designing advanced materials with Substance Designer
- Integrating Substance Designer materials with other 3D software
- Using procedural texturing for environmental assets and large-scale scenes

Unit 3: Texture Painting and Substance Painter

- Understanding texture painting workflows and techniques
- Utilizing Substance Painter for detailed texture painting
- Painting high-quality textures for characters and props
- Mastering texture projection and stencils for accurate painting
- Adding wear and tear, grime, and weathering to textures
- Advanced texture layering and blending in Substance Painter

Unit 4: Advanced Material Creation and Portfolio Development

- Advanced material creation with layered shaders
- Understanding the use of masks and channels for realistic textures
- Finalizing the advanced texture projects based on feedback
- Assembling a portfolio showcasing the final texture works

3D RIGGING

Rigging and Animation

Unit 1: Introduction to 3D Rigging

- Understanding the basics of 3D rigging and animation
- Types of rigs and their applications
- Overview of the animation process



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Unit 2: Joint Placement and Hierarchy

- Understanding joint placement and hierarchy
- Creating a skeleton structure
- Adjusting joint positions and orientations

Unit 3: Skinning and Weighting

- Understanding skinning and weighting
- Creating and manipulating skin weights
- Painting skin weights
- Solving common skinning issues

Unit 4: Creating Control Rigs

- Understanding control rigs
- Creating basic control rigs
- Advanced control rigging techniques

3D ANIMATION

Unit 1: Animation Techniques

- Understanding keyframe animation
- Using the animation timeline
- Creating animation curves
- Creating and manipulating poses

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Unit 2: Advanced Animation Techniques

- Understanding the importance of timing and pacing in 3D animation
- Using the principle of anticipation to create a build-up to a movement
- Creating animated titles and text
- Incorporating sound and music to enhance the emotional impact of the animation
- Creating vector graphics and illustrations for use in 2D animation
- Creating dynamic and engaging title sequences and captions

Unit 3: Working with Core Animation

- Understanding how to use the principle of squash and stretch to create more organic movements
- Using keyframes to create a smooth animation with proper timing
- Creating a sense of weight and gravity in animations
- Animating basic elements such as shapes and icons.

Unit 4: Character Animation

- Applying character rigs and controls to simplify the animation process
- The principles of character animation, including squash and stretch, timing, and weight
- Animating basic actions such as walks, runs, and jumps

Book Reference on 3D



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1. "Learning Autodesk Maya 2022: A Comprehensive Guide to 3D Modeling, Texturing, Lighting, and Animation" by Todd Palamar
2. "ZBrush Character Creation: Advanced Digital Sculpting" by Scott Spencer
3. "Substance Painter Fundamentals" by Wes McDermott
4. "Maya Character Creation: Modeling and Animation Controls" by Chris Maraffi
5. "The Art of Rigging, Second Edition" by Lee Montgomery
6. "Stop Staring: Facial Modeling and Animation Done Right" by Jason Osipa
7. "Animating with Blender: How to Create Short Animations from Start to Finish" by Roland Hess
8. "3D Game Animation For Dummies" by Kelly L. Murdock

Sem VIII

3D Animation II

The Advanced 3D Animation course is an intensive program designed to take students' animation skills to the next level. Participants will delve into the art of advanced character animation, and master visual storytelling techniques. Through hands-on projects and individual guidance, students will create polished animation sequences and build a professional animation portfolio that showcases their growth and expertise.

Unit 1: Fundamentals of Advanced 2D Animation

- Introduction to advanced 3D animation techniques
- Review of basic animation principles (e.g., squash and stretch, timing, easing)
- Understanding character design and development for animation
- Exploring advanced timing and spacing in animation
- Introduction to secondary motion and follow-through
- Animating complex character movements and interactions

Unit 2: Advanced Character Animation

- In-depth study of character posing and key poses
- Character acting and conveying emotions through animation
- Lip-sync animation techniques for dialogue
- Understanding and animating walk cycles, runs, and jumps
- Animating flying, swimming, and other unique character movements
- Applying advanced animation techniques to create realistic and expressive characters

Unit 3: Advanced Project and Portfolio Development

- Planning and pre-production for an advanced animation project
- Individual project development with regular feedback and critiques
- Focus on honing individual animation styles and techniques
- Finalizing the advanced animation project
- Reviewing and refining animation sequences.



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3D Rendering and Compositing

Unit 1: Introduction to 3D Rendering and Compositing

- Understanding the basics of 3D rendering and compositing
- Overview of the rendering process and its importance in 3D graphics
- Introduction to compositing and its role in finalizing 3D renders
- Exploring different rendering engines (e.g., Arnold, V-Ray)
- Setting up rendering parameters and quality settings
- Introduction to compositing software (e.g., Adobe After Effects, Nuke)

Unit 2: Lighting and Shading for 3D Rendering

- Principles of lighting in 3D rendering
- Types of light sources and their characteristics
- Using HDRI and IBL for realistic lighting
- Advanced shading techniques for realistic materials
- Understanding shaders and material properties
- Texture mapping for 3D models and surfaces

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Unit 3: Rendering and Finalizing 3D Scenes

- Rendering complex scenes with multiple objects and materials
- Optimizing rendering settings for efficiency
- Understanding render passes for post-processing
- Advanced rendering features (e.g., global illumination, caustics)
- Rendering animations and managing motion blur
- Troubleshooting common rendering issues



Unit 4: Compositing and Post-Processing

- Introduction to compositing nodes and workflow
- Layer-based compositing and blending modes
- Applying basic color correction and grading
- Compositing render passes for fine-tuning and control
- Adding visual effects and special elements in compositing
- Creating seamless integration between 3D renders and live-action footage

WEB DESIGN

Unit 1: Introduction to Web Design

Basics of web design
Brief history of web design



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Importance of web design in user experience
Principles of good web design

Unit 2: HTML and CSS Fundamentals

HTML basics for web design
Understanding CSS in web design
Creating basic layouts with HTML and CSS
Building responsive web designs

Unit 3: Web Design Principles and Techniques

Design principles for web pages
Creating effective layouts for web pages
Typography and web design
Color and web design
Creating graphics and images for web pages

Unit 4: Advanced Web Design Concepts

Understanding user experience (UX) in web design
Designing for mobile and other devices
Web accessibility and design
Web design trends and techniques

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Architecture Visualization

Unit 1: Introduction to Architecture Visualization

- Understanding the purpose and importance of architecture visualization
- Overview of different types of architectural visualization (interior, exterior, urban planning)
- Introduction to industry-standard software for architecture visualization (e.g., Autodesk 3ds Max, SketchUp, Blender)
- Basic modeling techniques for architectural elements (walls, floors, windows, doors)
- Applying materials and textures to architectural models
- Introduction to lighting techniques for architectural scenes

Unit 2: Interior Visualization

- Understanding interior design principles for visualization
- Modeling furniture, fixtures, and decorative elements
- Texturing and lighting interiors to create realistic environments
- Using cameras and composition for interior visualization
- Adding details and props to enhance interior scenes
- Rendering and post-processing interior visualizations

Unit 3: Exterior Visualization

- Techniques for modeling exteriors of buildings and landscapes
- Working with natural elements (trees, grass, water) in architectural scenes
- Introduction to advanced lighting and rendering settings for exteriors
- Integrating architectural models into real-world environments (photomontage)
- Adding atmospheric effects and context to exterior visualizations
- Finalizing and post-processing exterior visualizations

Unit 4: Advanced Visualization and Portfolio Development

- Advanced rendering techniques for architecture visualization
- Creating day and night scenes with different lighting conditions
- Exploring virtual reality (VR) and real-time rendering for architectural visualization

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- Planning and executing a comprehensive architectural visualization project
- Refining the project based on feedback and critiques
- Assembling a professional portfolio showcasing the final works

Rotoscoping

Unit 1: Introduction to Rotoscoping

- Understanding the basics of rotoscoping and its applications in animation and visual effects
- Overview of rotoscoping software (e.g., Adobe After Effects, Silhouette FX, Mocha Pro)
- Introduction to the principles of animation and motion for rotoscoping
- Rotoscoping tools and techniques for creating clean and accurate outlines
- Exploring different rotoscoping methods (shape-based, point-based, magnetic)
- Applying rotoscoping to static and moving objects

Unit 2: Advanced Rotoscoping Techniques

- Rotoscoping for complex objects with intricate details (e.g., hair, fur, smoke)
- Techniques for handling motion blur and fast-moving subjects
- Advanced techniques for refining and smoothing rotoscope shapes
- Incorporating rotoscoping with other visual effects and compositing techniques
- Creating seamless transitions between roto-scoped elements and live-action footage
- Understanding the use of rotoscoping in matte painting and set extensions

Unit 3: Motion Tracking and Rotoscoping Integration

- Introduction to motion tracking and its integration with rotoscoping
- Using tracking data to apply rotoscope shapes to moving objects
- Working with multi-point trackers for complex motion tracking tasks
- Combining motion tracking and rotoscoping for advanced visual effects
- Rotoscoping and tracking for 3D integration with live-action footage
- Troubleshooting common issues in motion tracking and rotoscoping

Unit 4: Final Project and Portfolio Development

- Planning and executing a comprehensive rotoscoping project
- Refining the project based on feedback and critiques
- Assembling a professional portfolio showcasing the final works
- Presenting the final rotoscoping project in a demo reel or showreel format
- Reviewing the entire rotoscoping process and final portfolio
- Wrap-up and future opportunities in the field of Rotoscoping

CG Painting

Unit 1: Introduction to CG VFX Painting



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- The role of CG VFX Painting in visual effects and post-production
- Overview of software used in CG VFX Painting (e.g., Adobe Photoshop, The Foundry Nuke, Autodesk Maya)
- Introduction to VFX pipelines and the integration of CG elements in live-action footage
- Fundamentals of digital painting for visual effects
- Working with layers and non-destructive techniques in Photoshop
- Creating texture maps and matte paintings for CG elements

Unit 2: Rotoscoping and Clean Plate Creation

- Understanding rotoscoping techniques for isolating elements in live-action footage
- Creating clean plates for removing unwanted elements or rigging from footage
- Working with tracking data to match CG elements with live-action camera movements
- Combining rotoscoping and clean plates to integrate CG elements seamlessly
- Advanced techniques for edge blending and feathering in VFX painting
- Troubleshooting common issues in rotoscoping and clean plate creation

Unit 3: Matte Painting and Set Extensions

- Introduction to matte painting techniques for creating digital environments
- Incorporating CG elements into live-action backgrounds
- Creating realistic set extensions and digital landscapes
- Using projection techniques to match CG elements with live-action environments
- Adding depth and atmosphere to matte paintings for VFX integration
- Fine-tuning matte paintings for camera movements and lighting conditions

Unit 4: Final Project and Portfolio Development

- Planning and executing a comprehensive CG VFX Painting project
- Refining the project based on feedback and critiques
- Assembling a professional portfolio showcasing the final works
- Presenting the final CG VFX Painting project in a demo reel or showreel format
- Reviewing the entire VFX painting process and final portfolio
- Wrap-up and future opportunities in the field of CG VFX Painting

SOUND DESIGN



A Satyam Roychowdhury initiative

SCHOOL OF MEDIA COMMUNICATION DESIGN AND ARTS
DEPARTMENT OF ANIMATION AND GRAPHIC
Bachelor of Science in Animation and Graphic

Unit 1: Introduction to Sound Design

- Understanding the importance and role of sound design in various media (film, animation, games, etc.)
- Overview of sound design principles and techniques
- Introduction to sound design software and tools (e.g., Pro Tools, Adobe Audition)
- Sound theory and perception: How sound affects emotions and storytelling
- Identifying and analyzing sound elements in media (dialogue, sound effects, music)
- Introduction to audio recording and editing for sound design

Unit 2: Sound Effects and Foley

- Exploring sound effects libraries and resources
- Creating and editing sound effects for various actions and objects
- Introduction to Foley artistry and its application in sound design
- Performing and recording Foley sounds for realistic and immersive soundscapes
- Syncing Foley with visual elements for seamless integration
- Advanced sound effects processing and layering techniques

Unit 3: Music and Soundscapes

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- Understanding the role of music in sound design and storytelling
- Exploring different musical styles and genres for various media
- Introduction to composing and arranging music for sound design
- Creating soundscapes and ambient sounds to enhance the atmosphere
- Incorporating music and soundscapes into sound design projects
- Utilizing music and soundscapes to evoke emotions and enhance narratives

Unit 4: Final Project and Portfolio Development

- Planning and executing a comprehensive sound design project
- Refining the project based on feedback and critiques
- Assembling a professional portfolio showcasing the final works
- Presenting the final sound design project in a demo reel or showreel format
- Reviewing the entire sound design process and final portfolio
- Wrap-up and future opportunities in the field of Sound Design

Advertising, Marketing and Sales

Course objective: - To understand how the industry operates in the marketing mix. Articulate to prepared for a 360-degree eventuality. Course Specific Program Outcome: Having learnt the basics of advertising before this unit prepares the student for the market. AD is not only meant to be created and admired, it is a part of a marketing mix and management qualities and sales promotion are inbuilt within the success mechanisms of Ads. This unit will help students with focus to pursue AD as a career get more clarity about the reality of the market and pursue their goals either as an important part of the industry or as an independent AD curator.



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UNIT-1

Objectives, Introduction, Definitions of Advertising, Features of Advertising, Objectives of Advertising, Importance of Advertising, Active Participant in advertising, Role of advertising Marketing Mix, Role of advertising in Society

UNIT-2

Meaning of IMC, Tools of IMC, Importance of IMC, Framing Integrated marketing communication, Case Studies

UNIT-3

Classification of Advertising, Types of Advertising, Difference between National Advertising and Retail Advertising, Surrogate Advertising, Online Advertising, Case Studies, AD Message decisions,

UNIT 4

Determinants of Advertising Media, Radio Advertising, Internet Advertising, Television Advertising, Press Advertising, Film Advertising, Purchase Point Advertising, Outdoor Advertising, Media planning, Media Vehicle, Significance of reach, Budget process, AD Research, Pre and Post Testing

UNIT 5

Planning of Ad Campaign, Market Segment, DAGMAR, AIDA, USP, the power of appeal, Consumer psychology, Buying Motives, Selling Points, Visualization, Concept, Purposes, Rationale and Types of Sales Promotion, Sales Promotion practices and strategies, Cross Promotion, Case Studies.

Strategic PR, ORM and CSR

Course objective: To develop skills in strategic public relations management based on an analysis of current and historical case studies and practice developing and applying strategy and tactics based on a sound understanding of public relations concepts and practices. This will help them understand the strategic use of social media and other new media channels in communicating and building relationships with publics and encourage them to view themselves as public relations strategists.

Course Specific Program Outcome:

Public Relations Strategies introduces students to the strategic planning process involved in putting together and coordinating organizational public relations efforts. In this course, students will learn what is involved in developing, implementing and evaluating public relations strategies. This focus will help them scout jobs that demand best professional practice.

UNIT 1

Various theories of PR-- Four models of PR Communication, Situational Theory, PR as a marketing concept and part of Marketing Mix, Overview of strategic PR, Various kind of strategies through case studies, Planning, Situation Analysis, Analysis of Publics, Response to strategies.



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UNIT 2

Strategy analysis, Message strategy, Strategy time frame, vision and strategy, Effective Branding through PR, Case Studies on Strategy diversification, PR campaign through corporate ad film and house journals.

UNIT 3

Crisis definition and understanding, forms of PR crisis, crisis management, pre-empting crisis, crisis precipitation, corporate social responsibility, forms and development, effectiveness of good CSR, handling social media-- YouTube, FB and Twitter, CSR in digital era

UNIT 4

Fake news, social media gutting, trolling, media trials, social media counter mandate, growth of ORM, history, need, effectiveness, various facets of ORM, future, clean data and SEO management.

Books/References:

1. How to Win Friends & Influence People: Dale Carnegie
2. A great online PR and marketing strategy book is 'Trust Me, I'm Lying: Confessions of a Media Manipulator' by Ryan Holiday.
3. The Strategic Storyteller by Alexander Jutkowitz
4. The New Rules of Marketing and PR: How to Use News Releases, Blogs, Podcasting, Viral Marketing and Online Media to Reach Buyers Directly by David Meerman Scott.
5. The Father of Spin: Edward L. Bernays and the Birth of Public Relations
6. Building a Storybrand, Donald Miller
7. "Everybody Writes" by Ann Handley
8. Spin Sucks: Communication and Reputation Management in the Digital Age" by Gini Dietrich
9. "The New Rules of Marketing and PR" by David Meerman Scott
10. "The Business of Persuasion" by Harold Burson
11. "Known" by Mark Schaefer
12. "Social Media: Marketing Strategies for Rapid Growth Using Facebook, Twitter, Instagram, LinkedIn, Pinterest and YouTube" by John Williams
13. Crisis Averted-PR Strategies to Protect Your Reputation and the Bottom Line, Evan Nierman
14. Indestructible
15. Reclaim Control and Respond with Confidence in a Media Crisis; Molly McPherson
16. Corporate Communication: A Guide to Theory and Practice, Joep P. Cornelissen
17. Internal Communications: A Manual for Practitioners (PR In Practice), Liam Fitzpatrick
18. Successful Employee Communications: A Practitioner's Guide to Tools, Models and Best Practice for Internal Communication, Sue Dewhurst
19. Simply Said: Communicating Better at Work and Beyond, Jay Sullivan
20. Business Communication; R. C. Bhatia
21. Business Communication: Principles, Methods & Techniques; Nirmal Singh
22. Professional Communication; Kavita Tyagi, Padma Mishra