Semester - I

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester - I

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	Cr	
25BMA011C01	INDIAN FILM'S SCRIPT WRITING	2	0	0	2	100
Pre-requisite	NA					
Evaluation Scheme	Theory				Hours	Marks
	External (End Semester Exam)				3	60
	Internal Midterm Examination (MTE) - 15 Marks Presentation - 5 Marks Attendance - 5 Marks Assignment / Certification - 5 Marks Quiz / Surprise Test - 5 Marks Teacher Assessment - 5 marks					40
Objective(s)						

Unit	Topic To Be Covered	Hours	Course Outcome addressed
UNIT-I	Introduction to Indian Film Scriptwriting	4	CO1
Nature and scope of scriptwriting in Indian cinema Understanding the screenwriter's role Types of scripts: feature film, short film, web series Introduction to screenplay formats Familiarization with screenplay software/tools Appreciate the basics of visual storytelling for Indian audience.			
UNIT-II	History and Evolution of Indian Screenwriting	5	CO1, CO2
Origins of storytelling in Indian performing arts (Natya Shastra, Puranas)			

Early Indian cinema and screenplay structures

Golden Era screenwriters: Salim–Javed and others

Evolution of genres and narratives in Hindi and regional films

Influence of socio-political changes on scriptwriting

UNIT-III	Structure and Elements of Screenplay	5	CO2

Three-act structure and variations

Scene construction and transitions

Exposition, conflict, climax, resolution

Dialogue writing and subtext

Understanding tone, pacing, and rhythm

UNIT-IV	Character and Setting Design in Indian Context	5	CO3

Designing compelling protagonists and antagonists

Use of archetypes and stereotypes in Indian cinema

Developing character arcs

Cultural and geographic setting as narrative tools

Language, dialects, and regional nuances.

UNIT-V	Genre and Theme in Indian Cinema	6	CO3, CO4

Popular genres: romance, drama, action, mythology, biopics

Thematic storytelling: family, love, religion, caste, politics

Writing for musicals and song integration

Social messaging vs. entertainment balance

Case studies of iconic scripts

UNIT-VI	Pitching and Future Trends in Screenwriting	5	CO4, CO5

Writing for OTT platforms and digital cinema

Pitching a script: synopsis, treatment, logline

Collaboration with directors and producers
Emerging trends: non-linear narratives, multiverse storytelling

Legal aspects: copyright, adaptation rights, WGA format

Total hours	30 Hours/ Periods

Skill Attained	Understanding of visual storytelling techniques and how to apply them in animation. Mastery of the 12 principles of animation and their application in creating realistic and engaging animated sequences. Knowledge of timing, spacing, and the role of physics in animation
Outcome(s)	At the end of the course, the students will be able to: **CO1**: Students will demonstrate a comprehensive understanding of the history and evolution of animation, including key figures, techniques, and technological advancements. **CO2:** Students will be able to identify, explain, and analyze the 12 principles of animation and their application in creating believable motion. **CO3**: Students will compare and contrast various animation techniques and styles, understanding the unique characteristics and creative potential of each method. **CO4:** Students will develop skills in storytelling, narrative structure, and character design, creating storyboards and visual narratives for animation. **CO5:** Students will explore and analyze emerging trends and technologies in animation, such as virtual reality (VR), augmented reality (AR), and advancements in animation software, and predict their potential impact on the industry.
TEXT BOOK:	
1.	Director Diaries by rakesh anand bakshi, Publisher:harpercollins, ISBN -10:9351364666
REFERENCES BOOK:	
1.	Satyajit Ray: the man who knew too much by barun chanda Publisher: om books international , ISBN-10:9392834659

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																								
25BMA011C01	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	L	M	M	S	S	M	M	M	S	M	S	S	M	S	M	M	M	L	L	S	M	M	S	S	M
CO2	M	L	L	M	S	M	S	M	L	L	M	M	M	S	L	S	M	M	M	M	L	M	L	M	L
CO3	S	M	S	L	M	M	M	L	L	S	S	S	L	S	M	S	L	S	M	L	M	M	S	S	M
CO4	S	M	M	L	S	L	M	M	L	M	L	M	M	L	L	M	L	M	L	M	L	L	S	M	S
CO5	M	M	S	M	L	M	M	S	M	S	M	L	S	M	M	L	M	M	L	L	M	M	M	L	L

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester - I

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA011C02	EXPERIMENTAL ANIMATION	0	0	4	2	100
Pre-requisite	NA					
Evaluation Scheme	Practical				Hours	Marks
	External (End Semester Exam)				4	40
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					60
Objective(s)	• Students will explore a variety of unconventional animation techniques, such as sand animation, paint-on-glass, and direct animation on film. • Students will develop creative thinking skills by experimenting with new ways to tell stories and express ideas through animation. • Students will gain a basic understanding of key animation principles, such as timing, movement, and frame-by-frame progression, applied in non-traditional contexts. • Students will learn to incorporate mixed media elements into their animations, blending traditional and digital techniques. • Students will collaborate with peers to share ideas and techniques, fostering a creative and supportive learning environment.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
UNIT-I	Flip Books	8	CO1,CO3
Capture a series of images using your camera's continuous mode.			

Design your flipbook, printing the flipbook,

lay out the flipbook pages, arrange the pictures,

holding the end of the stack.

UNIT-II	Clay Animation	8	CO1, CO2, CO3

Storyboarding: Plan the animation sequence and movements of characters.

Modelling: Create clay characters and props needed for the animation.

Animation: Capture each frame of movement by adjusting the clay models slightly and taking photographs.

Editing: Compile the frames to create a fluid sequence of movement.

Sound and Effects: Add sound effects and music to enhance the animation's narrative

UNIT-III	Stop-motion Animation	12	CO1, CO2, CO3

Using characters in stop motion animation.

Set designing: - experimental work with different mediums like sand, stones, grass, hard board, pen and ink, water colors, poster colours, dry brush etc

UNIT-IV	Introduction to cut-out animation	10	CO1, CO3

Introduction to cut-out animation techniques, history of cut out animation, traditional cut out technique

·Materials: Cutout animation uses flat materials like paper, cardboard, or fabric for characters, props, and backgrounds.

Frame-by-Frame Animation: Each frame involves slight adjustments to the position or orientation of cutout elements to create fluid movement. Layering: Techniques involve layering cutout elements to create depth and perspective within scenes.

UNIT-V	Introduction to cut-out animation -II	10	CO1, CO3, CO4

Digital cut out technique, character design for cut – out technique 5,

design character for cut out technique,

creating hand gestures,

facial expressions.

UNIT-VI	Puppet Animations	12	CO1,CO2, CO3, CO4, CO5

Designing characters with wax and clay for puppet animation.

Articulated Puppets: Puppets are designed with movable joints or mechanisms to facilitate animation.

Frame-by-Frame Animation: Each frame captures a slight adjustment in the puppet's position or pose to create fluid movement.

Character Design: Designing puppets involves considering their physical articulation and expressive capabilities.

Total hours	**60 Hour / Periods**
Skill Attained	After learning experimental animation, students will attain skills in innovative visual storytelling, unconventional animation techniques, and the ability to push creative boundaries in animation production.
Outcome(s)	At the end of the course, the students will be able to: CO1: Students will demonstrate the ability to use various unconventional animation techniques, such as stop-motion, cutout animation, and mixed media. CO2: Students will exhibit enhanced creativity by producing original animations that explore new storytelling methods and visual styles. CO3: Students will show a basic understanding of key animation principles, such as timing, movement, and frame-by-frame progression, applied in experimental contexts. CO4: Students will create animations that successfully integrate multiple media types, combining traditional and digital methods. CO5: Students will demonstrate effective collaboration and idea-sharing with peers, contributing to group animation projects and workshops.

TEXT BOOK:

1.	Complete animation course, Patmore, Barron's Educational Series

REFERENCES:

1.	The encyclopedia of Animation Techniques, Richard Taylor, Focal Press

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																									
25BMA011C02	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	M	M	S	M	S	S	S	L	M	S	S	S	L	S	M	S	L	M	M	M	L	L	S	S	M
CO2	S	L	S	M	L	M	M	M	M	S	S	S	M	S	M	M	L	S	L	M	M	L	M	S	M
CO3	M	S	L	M	M	S	M	M	M	S	S	M	S	M	M	S	M	L	M	M	S	M	S	S	S
CO4	S	M	S	L	M	M	M	L	M	S	S	S	L	S	M	S	L	M	M	L	M	M	S	S	M
CO5	M	S	S	S	L	S	M	M	S	M	S	S	S	S	L	M	M	S	S	M	S	M	L	M	M

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester - I

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA011C03	DRAWING AND SKETCHING	0	0	4	2	100
Pre-requisite	**NA**					
Evaluation Scheme	**Practical**				**Hours**	**Marks**
	External (End Semester Exam)				**4**	**40**
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					**60**
Objective(s)	• Introduce students to basic drawing techniques such as line, shape, form, and shading. • Teach students how to accurately depict proportions and perspective in their drawings. • Familiarize students with the principles of light and shadow to create depth and volume in their drawings. • Introduce students to principles of composition and design to create visually engaging artworks. • Familiarize students with various drawing materials and their unique characteristics.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
UNIT-I	**Introduction to Drawing Fundamentals**	**8**	**CO1**
Understanding the basic tools and materials for drawing. Introduction to different drawing techniques (line drawing, contour drawing, shading, etc.). Learning about composition and proportion. Sketching from observation (still life, objects, and simple shapes). Basic perspective drawing.			

UNIT-II	**Developing drawing skills**	**8**	**CO2**

Exploring various drawing mediums (pencil, charcoal, ink, etc.).

Learning about light and shadow, and how to create volume and form.

Practicing sketching with a focus on accuracy and detail.

Studying different styles of drawing (realism, impressionism, etc.).

Introduction to figure drawing and basic anatomy.

UNIT-III	**Various Mediums**	**12**	**CO2, CO3**

Pencil colors, charcoal, pen and ink, water colors, poster colors, oil pastel colors, other waste material such as and, stones, grass, hardboard, color papers & clay etc

Still life: study of different forms (basket, artificial fruits books, containers, bottles, round objects, drapery etc), still life with line as well light and shade. 6 visual elements of art form, shape, line, color, space, texture

UNIT-IV	**Anatomy study-I**	**12**	**CO3**

Simple free–hand drawing from human figure to study proportion.

Centre of gravity, inclination of main masses based on anatomical structure.

Memory drawing and outdoor sketchingadjustments to the position or orientation of cutout elements to create fluid movement.
Layering: Techniques involve layering cutout elements to create depth and perspective within scenes.

UNIT-V	**Anatomy study-II**	**10**	**CO4**

Exercises in drawing from memory to develop the sense of observation and the capacity to retain and recall images and their co–ordination introduction to various aspects and techniques of drawing and sketching both indoor and outdoor light &shade: the effects of lights on objects, the high light, middle tone and dark tone.

Shading of geometrical shapes

UNIT-VI	**Personal Style and Portfolio Development**	**10**	**CO5**

Developing personal style and artistic voice Building a portfolio of drawings

Presentation and exhibition of artwork

Develop a personal drawing style through exploration and experimentation.

Compile a portfolio showcasing skills and artistic development Prepare for presenting and exhibiting artwork

Total hours	**60 Hour / Periods**

Skill Attained	Students will attain skills in observational drawing, anatomy and proportion understanding, composition and design principles, technical proficiency with drawing materials, and creative expression through their artwork.
Outcome(s)	At the end of the course, the students will be able to: CO1: Students will demonstrate proficiency in using drawing materials and techniques to create accurate and expressive artwork. CO2: Students will understand principles of composition and design, effectively arranging elements to create visually compelling drawings. CO3: Students will have a solid understanding of human anatomy and proportions, enabling them to draw figures realistically and with artistic flair. CO4: Students will develop their own artistic style and voice, expressing ideas and emotions through their drawings. CO5: Students will compile a portfolio of artwork showcasing their skills and artistic growth, ready for further study or professional opportunities.

TEXT BOOK:	
1.	Complete animation course, Patmore, Barron's Educational Series
REFERENCES:	
1.	The encyclopedia of Animation Techniques, Richard Taylor, Focal Press

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																									
25BMA011C03	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	L	M	S	S	S	S	M	M	M	M	S	M	S	S	S	L	M	S	L	M	M	M	S	S	S
CO2	M	L	S	S	M	M	M	M	M	L	S	M	L	M	M	M	M	S	L	L	M	M	M	M	M
CO3	M	M	L	S	S	M	M	M	M	S	L	M	M	S	M	M	M	S	L	L	L	M	M	M	M
CO4	S	M	M	M	M	M	M	M	M	M	S	L	M	M	M	L	M	S	L	L	L	M	S	M	M
CO5	M	S	M	M	L	L	M	M	M	S	S	S	L	S	M	M	S	M	L	L	L	L	L	M	L

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester - I

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA011C04	INTRODUCTION TO VIDEO EDITING	0	0	2	1	100
Pre-requisite	NA					
Evaluation Scheme	Practical				Hours	Marks
	External (End Semester Exam)				2	40
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					60
Objective(s)	• Gain foundational knowledge of video editing concepts, including timelines, cutting, trimming, transitions, and sequencing. • Learn to navigate and use professional video editing tools such as Adobe Premiere Pro. • Understand how to structure a narrative visually through editing techniques that enhance the story and viewer engagement. • Learn how to incorporate music, sound effects, titles, color correction, and visual effects to elevate video quality. • Gain hands-on experience by editing a short video project, applying all learned techniques from raw footage to final export					

Practical	Topic to be Covered	Hours	Course Outcome addressed
UNIT-I	Introduction to Premiere Pro and basic tools	4	CO1
Overview of Premiere Pro interface			

- Basic navigation and workspace setup

- Importing and organizing media

- Familiarize with timeline editing tools

- Basic video and audio manipulation (cut, trim, move)

UNIT-II	Basic Video Editing Techniques	4	CO2

Understanding video editing workflow

- Basic transitions and effects

- Using basic editing tools (razor, selection, etc.)

- Basic audio mixing

UNIT-III	Advance Editing techniques and Transitions	4	CO3

Advanced video editing techniques (multicam editing, nested sequences)

- Working with advanced transitions and effects

- Speed adjustments and time remapping

- Enhance edits using keyframes and animation

UNIT-IV	Colour Correction and Grading	6	CO4

Introduction to color correction tools

- Understanding scopes and color wheels

- Adjusting exposure, contrast, and color balance

- Applying LUTs and creative grading

UNIT-V	Audio Editing and Sound Design	6	CO4

Introduction to audio editing tools in Premiere Pro

- Syncing audio with video

- Using audio effects and mixing

- Adding background music and sound effects

UNIT-VI	Final Project and Portfolio Development	6	CO5

Planning and executing a final video editing project

- Refining video edits, effects, transitions, and audio

- Compiling a portfolio of edited works

- Create a professional-grade final project with attention to detail and presentation	
Total hours	**30 Hour / Periods**
Skill Attained	Students will attain skills in observational drawing, anatomy and proportion understanding, composition and design principles, technical proficiency with drawing materials, and creative expression through their artwork.
Outcome(s)	At the end of the course, the students will be able to: CO1: Students will demonstrate proficiency in using drawing materials and techniques to create accurate and expressive artwork. CO2: Students will understand principles of composition and design, effectively arranging elements to create visually compelling drawings. CO3: Students will have a solid understanding of human anatomy and proportions, enabling them to draw figures realistically and with artistic flair. CO4: Students will develop their own artistic style and voice, expressing ideas and emotions through their drawings. CO5: Students will compile a portfolio of artwork showcasing their skills and artistic growth, ready for further study or professional opportunities.
TEXT BOOK:	
1.	Adobe Premiere Pro Classroom in a Book (Latest Edition) – By Maxim Jago (Published by Adobe Press)
REFERENCES:	
1.	The Technique of Film and Video Editing: History, Theory, and Practice – By Ken Dancyger (Focal Press)

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																									
25BMA011C04	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	L	M	S	S	S	S	M	S	M	S	S	S	L	M	S	S	M	S	L	M	M	M	S	S	S
CO2	M	L	S	S	M	M	L	S	M	L	M	M	M	M	S	M	M	S	L	L	M	M	M	M	M
CO3	M	M	L	S	S	M	S	L	M	M	S	M	M	M	S	M	M	M	L	L	L	M	M	M	M
CO4	S	M	M	M	M	M	M	S	L	M	M	M	L	M	S	M	M	S	L	L	L	M	S	M	M
CO5	M	S	M	M	L	L	S	S	S	L	S	M	M	S	M	L	L	M	L	L	L	L	L	M	L

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester – I

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA011E01	Introduction to Design Tools	0	0	6	3	100
Pre-requisite	NA					
Evaluation Scheme	Practical				Hours	Marks
	External (End Semester Exam)				2	40
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					60
Objective(s)	• Introduce students to the fundamentals of graphic design using Adobe Photoshop and Illustrator. • Provide hands-on training in raster-based image editing and vector-based illustration. • Develop understanding of design elements like layout, colour, typography, and composition. • Enable students to create posters, banners, icons, and logo designs using Photoshop and Illustrator. • Guide students to compile a beginner-level portfolio using industry-standard tools.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
UNIT-I	Introduction to Adobe Creative Suite	10	CO1
Overview of Photoshop, Illustrator interface - Basic navigation and workspace setup - Importing and organizing files - Overview of raster vs vector graphics			
UNIT-II	Basic Editing Techniques in Photoshop	12	CO2
Understanding Image editing workflow			

- Image cropping, resizing, retouching - Layers, selection tools, and adjustment layers			
UNIT-III	**Creative Compositions in Photoshop**	**12**	**CO3**
Advanced photo manipulation techniques. - Blending modes and filters - Understanding highlights and shadows - Photo manipulation and poster design			
UNIT-IV	**Vector Art and Illustration in Illustrator**	**14**	**CO4**
Basic introduction to Illustrator - Creating shapes, paths, and using the Pen Tool - Working with color, gradients, and typography			
UNIT-V	**Logo and Icon Design using Illustrator**	**20**	**CO4**
Design principles for icons and logos - Alignment, grids, and exporting assets - Mixing typography with shapes and elements			
UNIT-VI	**Final Design Project and Portfolio Presentation**	**22**	**CO5**
Planning and executing a final video editing project - Create a professional-grade final project with attention to detail and presentation - Compile and present a digital portfolio			
	Total hours	**90 Hour / Periods**	
Skill Attained	Students will gain essential skills in image editing, photo manipulation, vector illustration, and design principles. They will be able to create visually engaging digital artworks and basic branding materials using Photoshop and Illustrator.		
Outcome(s)	At the end of the course, the students will be able to: CO1: Understand the differences and applications of raster and vector tools. CO2: Perform image editing and digital artwork creation using Photoshop. CO3: Create vector-based illustrations and designs using Illustrator.		

	CO4: Design effective visual assets like logos, posters, and icons. CO5: Students will compile a portfolio of artwork showcasing their skills and artistic growth, ready for further study or professional opportunities.
TEXT BOOK:	
1.	Adobe Photoshop & Illustrator Classroom in a Book (Latest Editions) – Adobe Press
REFERENCES:	
1.	*Graphic Design School* – David Dabner, Sandra Stewart (Wiley)

Mapping of Course outcomes (COs) and Program Outcomes (POs)

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25BMA011E01	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	L	M	M	S	M	M	M	M	S	M	S	S	M	S	M	M	M	M	L	S	M	M	S	S	M
CO2	M	L	L	M	M	M	S	M	M	L	M	M	M	S	L	S	M	M	M	M	L	M	L	M	M
CO3	S	M	S	L	M	M	M	L	M	S	S	S	L	S	M	S	L	M	M	L	M	M	S	S	M
CO4	S	M	M	L	L	L	M	M	L	M	L	M	M	L	L	M	L	M	L	M	L	L	M	M	M
CO5	M	M	S	M	L	M	M	S	M	S	M	L	S	M	M	L	M	M	L	L	M	M	M	L	L

DIPLOMA IN MULTIMEDIA AND ANIMATION
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SYLLABUS

Semester - I

Course code	Course Name	Hours/week			Credit	Max. Marks
25BMA011E02	**Introduction to Artificial Tools**	**L**	**T**	**P**	**C**	**100**

		0	**0**	**6**	**3**	
Pre-requisite	**NA**					
Evaluation Scheme	**Practical**				**Hours**	**Marks**
	External (End Semester Exam)				**2**	**40**
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					**60**
Objective(s)	• Introduce the concept of Artificial Intelligence (AI) and its role in creative industries. • Familiarize students with AI-based design and content creation tools. • Provide hands-on experience with popular AI tools such as ChatGPT, DALL·E, RunwayML, and Canva AI. • Understand ethical and practical considerations of using AI in design and media. • Enable students to create AI-assisted content, from text generation to visual media.					

Practical	**Topic to be Covered**	**Hours**	**Course Outcome addressed**
UNIT-I	**Introduction to AI and Generative tools**	**12**	**CO1**
- Overview of AI in creative workflows - Exploring ChatGPT, DALL·E, and other generative tools - AI in design: Benefits and limitations			
UNIT-II	**Text Generation & Content Writing with ChatGPT**	**12**	**CO2**
- Writing blog posts, ad copy, scripts, product descriptions - Generating brainstorming ideas, creative outlines - Using ChatGPT for structured content and storytelling - Editing and refining AI-generated content			
UNIT-III	**Image Creation with DALL·E and Canva AI**	**14**	**CO3**
- Generating illustrations and conceptual art using DALL·E - Editing images using AI tools in Canva - Using magic resize, background remover, text-to-image tools			
UNIT-IV	**AI-Powered Video Editing with RunwayML or Pictory**	**16**	**CO4**

- Generating videos from text scripts using AI

- Auto-cut, remove background, and green screen effects

- Adding AI voice-overs and subtitles

- Enhancing videos with color grading and effects

UNIT-V	Design Automation with Canva AI	18	CO4

- Generating social media designs using Canva Magic Design

- Logo, business card, and brand kit creation using templates

- One-click visual theme development

- Using Brand Hub and design collaboration tools

UNIT-VI	Final Project: AI-Driven Creative Portfolio	18	CO5

- Planning a campaign, product launch, or branding package

- Combining text, images, video using AI tools

- Presenting concept with mockups and documentation

- Final submission and presentation of AI-integrated portfolio

Total hours	**90 Hour / Periods**
Skill Attained	Students will gain practical understanding of how artificial tools assist in design, text, video, and image generation. They will develop skills in prompt creation, AI-based editing, and using various platforms for content generation in creative fields.
Outcome(s)	At the end of the course, the students will be able to: CO1: Define AI and identify creative applications of AI tools. CO2: Generate and refine AI-written content and use it in design contexts. CO3: Create short videos using AI-powered tools. CO4: Use AI to automate design and branding tasks effectively. CO5: Compile and present a digital portfolio integrating multiple AI tools.

TEXT BOOK:

1.	The Age of AI – Henry A. Kissinger, Eric Schmidt, Daniel Huttenlocher (Little, Brown)

REFERENCES:	
1.	OpenAI (https://openai.com) – Guides for ChatGPT and DALL·E

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																									
25BMA011E02	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	M	M	S	M	S	S	S	L	M	S	S	S	L	S	S	S	L	S	M	L	M	M	S	S	M
CO2	L	S	M	S	L	M	M	L	M	S	S	S	M	S	M	S	M	S	L	M	L	S	M	S	M
CO3	S	S	L	M	M	S	S	M	M	S	S	M	S	S	M	S	M	M	S	S	S	S	S	S	S
CO4	S	M	S	L	M	M	M	L	M	S	S	S	L	S	M	S	L	M	M	L	M	M	S	S	M
CO5	M	S	S	S	L	S	M	M	S	M	S	S	S	S	L	M	M	S	S	M	S	M	L	M	M

Semester - II

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester - II

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA012C01	Introduction to 3D software	0	0	4	2	100
Pre-requisite	NA					
Evaluation Scheme	Practical				Hours	Marks
	External (End Semester Exam)				2	40
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					60
Objective(s)	• Familiarize students with the basic tools and interface of Autodesk Maya. • Provide hands-on practice in modeling, texturing, and basic rendering. • Build foundational understanding of 3D pipelines used in animation and game design.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
UNIT-I	Interface and Navigation in Maya	10	CO1
- Introduction to 3D space and Maya UI - Viewports, panels, and hotkeys - Transform tools: Move, Rotate, Scale - Working with Outliner and Channel Box			
UNIT-II	Object Creation and Transformation	10	CO2
- Primitive shapes: cube, sphere, cylinder - Object snapping and alignment			

- Grouping and parenting

- Pivot manipulation

UNIT-III	Basic Polygon Modeling	12	CO3

- Introduction to Edit Mesh tools
- Extrude, Insert Edge Loop, Merge, Bevel
- Object duplication and modifiers
- Modeling a simple prop (e.g., table, chair)

UNIT-IV	Materials and Hypershade	8	CO4

- Applying Lambert, Blinn, and Arnold Standard Surface shaders

- Adding colors, transparency, and textures

- Intro to UVs and checker patterns

UNIT-V	Lighting and Rendering	10	CO5

-3-point lighting setup
- Adding and adjusting cameras
- Arnold settings, basic test renders, and batch render

UNIT-VI	Scene Cleanup and Export	10	CO4, CO5

- Freezing transforms, deleting history
- Scene organization and naming
- Export options, turntable render, Playblast

Total hours	60 Hour / Periods

Skill Attained	By completing this course, students will be able to design, model, texture, light, and render a simple 3D scene using Autodesk Maya. They will develop core skills such as navigating the Maya workspace, using modeling tools, applying shaders, setting up lighting, and rendering with Arnold. The course builds a strong technical and creative foundation for future studies in 3D animation, game design, or VFX.
Outcome(s)	At the end of the course, the students will be able to: **CO1:** Navigate and operate Maya's interface and tools. **CO2:** Apply object transformation and management techniques. **CO3:** Model basic 3D assets using polygonal tools. **CO4:** Assign materials and basic textures using Hypershade. **CO5:** Use lighting, cameras, and render settings effectively.

TEXT BOOK:

1.	**Introducing Autodesk Maya 2024** by Dariush Derakhshani – A hands-on beginner's guide to mastering Maya's essential tools.

REFERENCES:

1.	Autodesk Maya Documentation: https://help.autodesk.com

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																									
25BMA012C02	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	M	M	S	M	S	S	S	M	S	S	S	S	M	M	M	M	S	M	S	S	M	M	S	S	M
CO2	L	S	M	S	L	M	M	L	S	S	M	M	M	M	M	L	S	M	L	M	L	S	M	S	M
CO3	S	S	L	M	M	S	S	M	L	S	S	M	M	M	M	S	L	M	M	S	S	S	S	M	L
CO4	S	S	S	S	M	S	M	M	M	M	M	M	M	M	M	M	S	L	M	M	M	M	S	S	M
CO5	M	S	S	S	L	S	M	S	M	M	L	L	M	M	M	S	S	S	L	S	S	M	L	M	M

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester - II

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA012C02	DIGITAL ART ILLUSTRATION	0	0	4	2	100
Pre-requisite	NA					
Evaluation Scheme	Practical				Hours	Marks
	External (End Semester Exam)				2	40
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					60
Objective(s)	• Students will learn the basics of Adobe Illustrator, including understanding the interface, navigating the workspace, and utilizing essential tools and functions to create and edit vector graphics effectively. • Students will apply advanced Illustrator techniques, such as creating complex illustrations, using advanced path and shape tools, and incorporating typography and color theory, to complete real-world design projects that demonstrate their proficiency and creativity. • Students will learn to create professional-quality layouts for both print and digital media, mastering the use of Adobe InDesign tools and techniques to design visually appealing and well-structured documents.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
UNIT-I	Introduction to Illustrator	12	CO1

Illustrator 's Environment, Raster and Vector Graphics, Illustrator Environment Elements, Navigating in Photoshop, Sizing Images Image Size and Resolution , Cropping, Selecting Image Areas, The Rectangular and Elliptical Marquee Tools , The Lasso Tools, Saving Selections, Layers, Floating Versus Fixed Selections, Undoing Previous 7 Steps, Copying Selections, Creating Layers, Transforming Layers, Copying Layers between Images , Arranging Layers, Saving Images in Photoshop Format, The Magic Wand Tool

UNIT-II	Tools	12	CO2

The Magnetic Lasso Tool, Modifying Selections, Blending and Compositing, Defringing, Opacity and Blending Modes , Feathering Edges, Image Modes, Mode Characteristics, Grayscale and Bitmap Modes , Color Modes, Color and Painting, Selecting Colors , Painting Tools , The Clone Stamp Tool, Text, Layer Effects, and Filters, Type Layers , Layer Effects , Filters , Merging and Flattening Layers, Adjusting Images, Brightness/Contrast , Levels Adjustment Layers, Toning Tools.

UNIT-III	Design and Illustration Projects	10	CO2, CO3

Adding and formatting text, Working with Type on a Path
Creating and editing text outlines, Combining text with graphic elements
Designing seamless patterns, Using the Pattern Options panel
Creating custom brushes, Applying brushes to paths and shapes
Principles of logo design, Creating scalable vector logos
Designing simple icons, Exporting designs for web and print

UNIT-IV	Introduction to Indesign	10	CO3

Introduction to InDesign: Overview of the software, interface, and workspace.
Basic Tools and Panels: Understanding and navigating the toolbar, panels, and menus.
Creating a New Document: Setting up document dimensions, margins, and bleeds.
Text Frames and Type Tools: Creating and editing text frames, using type tools.
Formatting Text: Applying character and paragraph styles, leading, kerning, and tracking.
Flowing Text: Importing and flowing text from external sources, linking text frames.
Importing and Managing Images: Placing images, managing links, and fitting images to frames.
Basic Graphic Editing: Cropping, resizing, and applying basic effects to images.
Working with Shapes: Creating and editing basic shapes, using the Pathfinder tool.

UNIT-V	Advanced Layout and Design Techniques	10	CO4

Master Pages: Creating and applying master pages, understanding hierarchical design.

· Using Styles: Advanced use of paragraph, character, object, and table styles.

Working with Colors and Swatches

Color Theory Basics: Understanding color models, using RGB and CMYK.

Creating and Managing Swatches: Creating color swatches, gradients, and tints.

Applying Colors: Applying colors to text, objects, and backgrounds.

Layers and Effects

Using Layers: Organizing content with layers, locking, hiding, and reordering layers.

Effects and Transparency: Applying effects like drop shadows, glows, and transparencies.
Working with Blending Modes: Understanding and using blending modes for creative effects.

UNIT-VI	Preparing for Print and Digital Publishing	6	CO5

Finalizing Documents for Print
Preflight and Packaging: Checking documents for errors, packaging files for print.
Exporting for Print: Exporting to PDF, understanding print settings and options.
Working with Printers: Understanding printing terms and working with commercial printers.
Digital Publishing
Interactive Documents: Adding interactive elements like buttons, hyperlinks, and multimedia.
Exporting for Web and Devices: Exporting to ePub, interactive PDF, and other digital formats.
Using Publish Online: Publishing documents online and sharing with a wider audience.
Capstone Project
Project Planning and Design: Planning a final project incorporating learned skills.
Execution and Feedback: Creating and refining the project with instructor and peer feedback.
Presentation and Critique: Presenting the final project, discussing design choices, and receiving constructive critiques.

Total hours	**60 Hour / Periods**
Skill Attained	Students will gain practical skills in creating digital illustrations using Adobe Photoshop, Illustrator and InDesign. They will learn the fundamentals of sketching, inking, coloring, and layout design for both standalone artworks and publication-ready visuals. Emphasis will be placed on composition, lighting, and stylization, enabling students to create professional digital illustrations suitable for editorial, branding, and print media.
Outcome(s)	At the end of the course, the students will be able to: CO1: Students will demonstrate proficiency in using drawing materials and techniques to create accurate and expressive artwork. CO2: Students will understand principles of composition and design, effectively arranging elements to create visually compelling drawings. CO3: Students will have a solid understanding of human anatomy and proportions, enabling them to draw figures realistically and with artistic flair. CO4: Students will develop their own artistic style and voice, expressing ideas and emotions through their drawings. CO5: Students will compile a portfolio of artwork showcasing their skills and artistic growth, ready for further study or professional opportunities.

TEXT BOOK:

1.	"The Animator's Survival Kit" "The Animator's Survival Kit" Faber & Faber

REFERENCES:

1.	"The Animator's Workbook: Step-By-Step Techniques of Drawn Animation" Tony White Watson-Guptil

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																								
25BMA012C03	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	M	M	S	M	S	S	S	M	S	M	S	S	M	M	M	M	S	M	S	S	M	M	S	S	M
CO2	L	S	M	S	L	M	M	L	S	L	M	M	M	M	M	L	S	M	L	M	L	S	M	S	M
CO3	S	S	L	M	M	S	S	M	L	S	S	M	M	M	M	S	M	M	S	M	S	S	S	M	L
CO4	S	S	S	S	M	S	M	M	M	M	M	M	M	M	M	M	L	S	M	S	L	M	S	S	M
CO5	M	S	S	S	L	S	M	S	M	S	L	L	M	M	M	S	S	S	L	S	S	M	L	M	M

DIPLOMA IN MULTIMEDIA AND ANIMATION
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SYLLABUS

Semester - II

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA012C03	BASICS OF MOTION GRAPHICS	0	0	4	2	100
Pre-requisite	NA					
Evaluation Scheme	Practical				Hours	Marks
	External (End Semester Exam)				2	40
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					60
Objective(s)	• Students will demonstrate proficiency in using industry-standard software tools and techniques to create high-quality motion graphics, including animation, visual effects, and compositing. • Students will apply design principles, animation techniques, and storytelling concepts to effectively communicate messages and narratives through motion graphics, showcasing innovative and visually compelling work. • Students will develop the skills necessary to collaborate effectively with clients, directors, and production teams, understanding project requirements, meeting deadlines, and presenting their motion graphics work professionally and persuasively.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
UNIT-I	Introduction to Motion Graphics	10	CO1
History and Evolution of Motion Graphics Key milestones and influential artists Understanding Motion Graphics			

Differences between motion graphics, animation, and video

Basic Terminology

Key terms like keyframes, timeline, layers, and composition

UNIT-II	Software and Tools	10	CO2

Introduction to Adobe After Effects

Overview of the interface and basic tools

Other Motion Graphics Tools

Brief overview of other software like Cinema 4D, Blender, and Motion

Essential Plugins and Scripts

Useful plugins and scripts to enhance workflow

UNIT-III	Fundamentals of Animation	10	CO3

The 12 Principles of Animation

Applying these principles to motion graphics

Keyframing and Tweening

Creating smooth transitions and animation

Timing and Spacing

Understanding the importance of timing and spacing in animation

UNIT-IV	Design and Composition	10	CO4

Basic Design Principles

Elements of design, color theory, and typography

Storyboarding Planning motion graphic projects through

Visual Hierarchy and Composition

Creating visually balanced and engaging compositions

UNIT-V	Audio and Effects	8	CO4

Working with Audio

Syncing audio with visuals, adding sound effects

Applying Effects

Using built-in effects in After Effects Advanced Effects and Techniques Introduction to particle systems, 3D layers, and other advanced effects			
UNIT-VI	**Final Project and Portfolio Development**	**12**	**CO5**
Planning and Executing a Final Project From concept to completion of a motion graphics piece Developing a Professional Portfolio Organizing and presenting work effectively Presenting and Critiquing Work Sharing work with peers and receiving feedback			
	Total hours	**60 Hour / Periods**	

Skill Attained	Students will attain skills in technical proficiency with motion graphics software, understanding and applying animation principles, effective design and composition, incorporating audio and effects, and developing professional motion graphics projects and portfolios.
Outcome(s)	At the end of the course, the students will be able to: Animate words and logo **CO1**: Demonstrate comprehension of motion graphics principles, including animation techniques, design theories, and software functionalities used in the industry. **CO2:** Apply motion graphics skills to create visually compelling animations, integrating typography, imagery, and effects to effectively communicate ideas or messages. **CO3**: Critically analyze motion graphics projects to assess their effectiveness in achieving communication goals, evaluating the use of animation techniques, visual elements, and narrative coherence. **CO4:** Evaluate the impact and quality of motion graphics projects based on industry standards and client requirements, reflecting on the strengths and areas for improvement in both technical execution and creative expression. **CO5:** Generate original motion graphics content that demonstrates creativity, technical proficiency, and innovative use of design and animation principles, showcasing mastery in digital storytelling and visual communication.

TEXT BOOK:

1.	"The After Effects Illusionist: All the Effects in One Complete Guide" Chad Perkins Focal Press

REFERENCES:

1.	"Motion Graphics: Principles and Practices from the Ground Up" Ian Crook, Peter Beare, and Professor Ian Crook Bloomsbury Academic

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																								
25BMA012C04	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	M	M	S	M	S	S	S	M	S	M	S	S	M	M	M	S	M	L	S	S	M	S	S	S	M
CO2	L	L	S	L	M	M	M	L	S	L	M	M	L	S	M	M	M	M	M	M	S	L	M	S	M
CO3	S	M	L	S	S	M	S	M	L	S	S	M	S	S	M	S	M	M	S	M	S	S	S	M	L
CO4	S	M	M	M	M	M	M	M	M	M	M	S	L	M	M	M	L	S	M	S	L	M	S	S	M
CO5	M	S	M	S	L	L	M	S	M	S	L	L	M	M	M	S	S	S	L	S	S	M	L	M	M

DIPLOMA IN MULTIMEDIA AND ANIMATION
Program Code- 50SDIDD02

SYLLABUS

Semester - II

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
24BMA011C04	Photography	0	0	2	1	100

Pre-requisite	**NA**		
Evaluation Scheme	**Practical**	**Hours**	**Marks**
	External (End Semester Exam)	**2**	**40**
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks		**60**
Objective(s)	● Introduce students to the basic functions and settings of a camera, including aperture, shutter speed, ISO, and white balance. ● Teach students fundamental principles of composition, such as the rule of thirds, leading lines, and framing, to create visually appealing photographs. ● Help students grasp the importance of light in photography and how to utilize natural light effectively for various subjects. ● Introduce students to different genres of photography, such as landscape, portrait, macro, and still life, allowing them to explore their interests and preferences. ● Familiarize students with essential photo editing techniques to enhance their images, including adjustments to exposure, color balance, and cropping.		

Practical	Topic to be Covered	Hours	Course Outcome addressed
Practical-I	**Introduction to camera**	**6**	**CO1**
History of Photography Evolution of photography Key milestones and inventors Understanding the Camera			

Types of cameras (DSLR, mirrorless, point-and-shoot, smartphone)
Camera parts and functions
Basic Photography Terms
Exposure, aperture, shutter speed, ISO
Composition, framing, focus

Practical-II	**Camera Settings and Controls**	**4**	**CO2**

Aperture and Depth of Field
Understanding f-stops
Controlling depth of field for creative effects
Shutter Speed and Motion
Capturing motion: freeze vs. blur
Using shutter speed creatively
ISO and Noise
What is ISO and how it affects exposure
Managing noise in photos

Practical-III	**Composition Techniques**	**4**	**CO3**

Rule of Thirds
Understanding and applying the rule of thirds
Composing shots using grid lines
Leading Lines and Symmetry
Using lines to guide the viewer's eye
Finding and using symmetry in photography
Framing and Perspective
Framing subjects within a scene
Experimenting with different perspectives and angles

Practical-IV	**Lighting in Photography**	**6**	**CO3, CO4**

Natural Light
Golden hour vs. blue hour
Using natural light effectively
Artificial Light
Types of artificial light sources
Using flash and studio lights
Light and Shadows
Understanding hard and soft light
Creating and using shadows for effect

Practical-V	**Post-Processing and Editing**	**6**	**CO4**

Introduction to Photo Editing Software
Overview of popular editing tools (Adobe Lightroom, Photoshop, free alternatives)
Basic Editing Techniques
Cropping, adjusting exposure, contrast, and color
Advanced Editing Techniques

Retouching, filters, and special effects			
Practical-VI	**Developing a Photography Portfolio**	**4**	**CO5**
Selecting Photos for a Portfolio Criteria for choosing portfolio-worthy images Organizing photos by theme or project Creating an Online Portfolio Platforms for showcasing work (Instagram, personal website, online galleries) Presenting and Critiquing Work Sharing work with peers and receiving feedback Constructive critique and self-assessment			
Total hours	**30 Hour / Periods**		
Skill Attained	After completing this photography course, students will attain a solid foundation in camera operations, composition, lighting, and editing, enabling them to create visually compelling photographs and present a portfolio.		
Outcome(s)	At the end of the course, the students will be able to: [Text Wrapping Break]**CO1:** Students will demonstrate proficiency in using various camera settings and controls to achieve desired photographic effects. **CO2:** Students will apply fundamental and advanced composition techniques to create visually engaging and balanced photographs. **CO3:** Students will utilize both natural and artificial lighting to enhance the mood and quality of their photographs. **CO4:** Students will develop basic and advanced post-processing skills using photo editing software to enhance and refine their images. **CO5:** Students will compile and present a professional photography portfolio that showcases their technical skills, creative vision, and artistic growth.		
TEXT BOOK:			
1.	"Understanding Exposure" by Bryan Peterson, published by Amphoto Books		
REFERENCES:			
1.	"The Photographer's Eye" by Michael Freeman, published by Focal Press.		

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping (S/M/W indicates strength of correlation) S-Strong, M-Medium, L-Low																									
24BMA011C06	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PO13**	**PO14**	**PO15**	**PO16**	**PO18**	**PO19**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	L	M	S	S	S	S	M	M	M	M	S	M	S	S	S	L	M	S	L	M	M	M	S	S	S
CO2	M	L	S	S	M	M	M	M	M	L	S	M	L	M	M	M	M	S	L	L	M	M	M	M	M
CO3	M	M	L	S	S	M	M	M	M	S	L	M	M	S	M	M	M	S	L	L	L	M	M	M	M
CO4	S	M	M	M	M	M	M	M	M	M	S	L	M	M	M	L	M	S	L	L	L	M	S	M	M
CO5	M	S	M	M	L	L	M	M	M	S	S	S	L	S	M	M	S	M	L	L	L	L	L	M	L

DIPLOMA IN MULTIMEDIA AND ANIMATION
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SYLLABUS

Semester – II

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA012E01	3D Assets Modeling	0	0	6	3	100
Pre-requisite	**NA**					
Evaluation Scheme	**Practical**				**Hours**	**Marks**
	External (End Semester Exam)				**2**	**40**
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					**60**
Objective(s)	• Introduce students to the principles of 3D modeling and animation. • Familiarize students with the Autodesk 3Ds Max interface and tools. • Teach techniques for creating and editing 3D models. • Apply textures and materials to enhance model realism. • Set up lighting and render scenes effectively. • Animate objects and characters using keyframes and controllers. • Develop a portfolio showcasing 3D modeling projects.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
Practical-I	**Introduction to 3D Modeling & Software Tools**	**16**	**CO1**
Navigating the Maya Interface Understanding Viewports and Panels Creating and Manipulating Primitive Objects Basic Transformations: Move, Rotate, Scale Introduction to Polygon Components: Vertices, Edges, Faces			

Practical-II	**Polygonal Modeling Techniques**	**14**	**CO2**
Extrude, Bevel, and Bridge Tools Insert Edge Loop and Multi-Cut Tools Merging and Splitting Polygons Understanding Topology and Edge Flow Working with the Modeling Toolkit			
Practical-III	**NURBS and Curve-Based Modeling**	**16**	**CO3**
Creating and Editing Curves Lofting, Revolving, and Birail Techniques Converting NURBS to Polygons Trimming and Attaching Surfaces Applications in Industrial and Automotive Modeling			
Practical-IV	**Subdivision and Organic Modelingin Photography**	**14**	**CO3, CO4**
Working with Subdivision Surfaces Sculpting Tools for Organic Forms Retopology Techniques Modeling Characters and Creatures Understanding Edge Loops for Deformation			
Practical-V	**Hard Surface Modeling**	**14**	**CO5**
Modeling Mechanical Objects and Props Using Booleans for Complex Shapes Applying Deformers for Precision Techniques for Clean Hard Edges Creating Game Assets and Environments			
Practical-VI	**Asset Optimization and Portfolio Development**	**16**	**CO6**
Optimizing Models for Performance UV Mapping and Unwrapping Basics Preparing Assets for Export Creating Turntables and Renders Compiling a Professional Portfolio			
	Total hours	**90 Hour / Periods**	
Skill Attained	After completing this photography course, students will attain a solid foundation in Modelling, Maya interface, Basic modeifiers, and hard surface modelling.		
Outcome(s)	At the end of the course, the students will be able to: • **CO1**: Demonstrate proficiency in using various camera settings and controls to achieve desired photographic effects.		

	• **CO2**: Apply fundamental and advanced composition techniques to create visually engaging and balanced photographs. • **CO3**: Utilize both natural and artificial lighting to enhance the mood and quality of photographs. • **CO4**: Develop basic and advanced post-processing skills using photo editing software to enhance and refine images. • **CO5**: Compile and present a professional photography portfolio that showcases technical skills, creative vision, and artistic growth.
TEXT BOOK:	
1.	"Understanding Exposure" by Bryan Peterson
REFERENCES:	
1.	"The Photographer's Eye" by Michael Freeman

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping
(S/M/W indicates strength of correlation)
S-Strong, M-Medium, L-Low

25BMA012E01	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15	PO16	PO18	PO19	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	S	M	S	S	S	S	M	M	M	M	S	M	S	S	S	L	M	S	L	M	M	M	S	S	S
CO2	M	L	S	S	M	M	M	M	M	L	S	M	L	M	M	M	M	S	L	L	M	M	M	M	M
CO3	M	M	L	S	S	M	M	M	M	S	L	M	M	S	M	M	M	S	S	S	M		M	M	M
CO4	M	M	M	M	M	M	M	M	M	M	S	L	M	M	M	L	M	S	L	L	L	M	S	M	M
CO5	M	S	M	M	L	L	M	M	M	S	S	S	L	S	M	M	S	M	L	L	L	L	L	M	L

DIPLOMA IN MULTIMEDIA AND ANIMATION
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SYLLABUS

Semester – II

Course code	Course Name	Hours/week			Credit	Max. Marks
		L	T	P	C	
25BMA012E02	3D Environment Modeling	0	0	6	3	100
Pre-requisite	NA					
Evaluation Scheme	Practical				Hours	Marks
	External (End Semester Exam)				2	40
	Internal Internal Practical - 40 Marks Continuous Assessment - 20 Marks					60
Objective(s)	• Understand and navigate the Autodesk Maya interface for efficient 3D environment modeling. • Apply fundamental and advanced modeling techniques to create detailed 3D environments. • Design and construct various environmental elements, including terrains, architectural structures, and natural features. • Integrate props and assets seamlessly into 3D scenes to enhance realism. • Assemble complete 3D environments and present them effectively using appropriate rendering techniques.					

Practical	Topic to be Covered	Hours	Course Outcome addressed
Practical-I	Introduction to Maya & Environment Modeling Basics	16	CO1
Navigating the Maya Interface Understanding Viewports and Panels Creating and Manipulating Primitive Objects Basic Transformations: Move, Rotate, Scale Setting Up Project and Scene Organization			

Practical-II	**Terrain and Landscape Modeling**	**14**	**CO2**
Creating Terrain Using Sculpting Tools Utilizing Height Maps for Landscape Generation Applying Deformers for Natural Formations Integrating Rocks, Cliffs, and Ground Details Optimizing Terrain for Performance			
Practical-III	**Architectural Structure Modeling**	**16**	**CO3**
Modeling Buildings and Structures Using Modular Techniques Implementing Grid and Snap Tools for Precision Creating Doors, Windows, and Architectural Details Understanding Structural Topology Preparing Structures for Texturing			
Practical-IV	**Prop and Asset Integration**	**14**	**CO3, CO4**
Designing Environmental Props (e.g., Furniture, Streetlights) Utilizing Reference Images for Accurate Modeling Applying Boolean Operations for Complex Shapes Grouping and Organizing Assets within the Scene Ensuring Consistency in Scale and Style			
Practical-V	**Vegetation and Natural Elements Modeling**	**14**	**CO5**
Modeling Trees, Bushes, and Grass Using Maya Tools Implementing Paint Effects for Foliage Creation Applying Deformers to Create Natural Variations Integrating Water Bodies and Natural Features Optimizing Natural Elements for Real-Time Applications			
Practical-VI	**Scene Assembly and Final Presentation**	**16**	**CO5**
ssembling Modeled Elements into a Cohesive Scene Setting Up Cameras and Lighting for Presentation Applying Basic Materials for Visual Enhancement Rendering the Final Scene Using			
Total hours	**90 Hour / Periods**		
Skill Attained	Proficiency in Autodesk Maya for 3D environment modeling. Ability to create detailed terrains, architectural elements, and natural features. Expertise in integrating various assets and props into cohesive 3D scenes.		
Outcome(s)	At the end of the course, the students will be able to: • **CO1: Demonstrate proficiency in using Maya's tools to model complex 3D environments.** • **CO2: Create and manipulate various environmental components, such as terrains and structures,**		

	with attention to detail and realism. • **CO3: Employ advanced modeling techniques to develop intricate environmental features and props.** • **CO4: Optimize 3D scenes for performance without compromising visual quality.** • **CO5: Compile and present a professional portfolio showcasing a comprehensive 3D environment project.**
TEXT BOOK:	
1.	Autodesk Maya 2025: A Comprehensive Guide (16th Edition)
REFERENCES:	
	• Autodesk Maya 2024 Basics Guide • Maya Studio Projects: Game Environments and Props • *Parametric Building Design Using Autodesk Maya*

Mapping of Course outcomes (COs) and Program Outcomes (POs)

CO/PO Mapping
(S/M/W indicates strength of correlation)
S-Strong, M-Medium, L-Low

25BMA012E02	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15	PO16	PO18	PO19	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	L	M	S	S	S	S	M	M	M	M	S	M	S	S	S	L	M	L	L	M	M	M	S	S	S
CO2	M	L	S	S	M	M	M	M	M	L	S	M	L	M	M	M	M	L	L	L	M	M	M	M	M
CO3	M	M	M	M	S	M	M	M	M	S	L	M	M	S	M	M	M	L	L	L	L	M	M	M	M
CO4	S	S	M	M	M	M	M	M	M	M	S	L	M	M	M	L	M	S	L	L	L	M	S	M	M
CO5	M	S	M	S	M	M	M	M	M	S	S	S	L	S	M	M	S	M	L	L	L	L	L	M	L