DEPARTMENT OF MASS COMMUNICATION

Sharda School of Media, Film & Entertainment

Bachelor of Science (Hon. /Hon. with Research)

(Animation, VFX & Gaming Design)

Academic Year 2024-28

Programme Code: SMF0119

Program Structure Template
Name of School: Sharda School of Media, Film & Entertainment
Bachelor of Science (Hon. /Hon. with Research)
(Animation, VFX & Gaming Design)
TERM: I
Batch-2024-28

S. No.	Subject Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
THEORY SUBJECTS							
1	AVG121	Digital Art Techniques*	2	2	0	4	CC
2	VAC103	Environmental Management	0	2	2	3	AECC
3	AVG122	2D Game Design Development*	1	2	0	3	DSE
	AVG123	2D Animation Techniques*					
JURY SUBJECTS							
4	OPE	Audio & Visual Production Process	0	2	2	3	AECC
5	AVG 124	UI & UX Design Tools	0	0	2	1	CC
6	AVG 125	Foundation Art Techniques	0	0	2	1	DSE
	AVG 126	Game Programming Fundamentals					
7	ARP101	Communicative English-I	1	0	2	2	AECC
8	VOF105	Script writing, Storyboard & Animatic	0	2	2	3	SEC
TOTAL CREDITS						**20**	

* Evaluation is to be done as Jury Subject.

Program Structure Template
Name of School: Sharda School of Media, Film & Entertainment
Bachelor of Science (Hon. /Hon. with Research)
(Animation, VFX & Gaming Design)
TERM: II
Batch-2024-28

S.No.	Subject Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
THEORY SUBJECTS							
1	AVG129	Hard Surface Modeling & Texturing*	2	2	0	4	CC
2	AVG130	3D Animation Fundamentals*	1	2	0	3	CC
JURY SUBJECTS							
3	OPE	Material Animation Techniques	0	2	2	3	AECC
4	AVG131	Drawing & Painting	0	0	2	1	SEC
5	AVG132	Basics of Editing & Compositing	0	0	2	1	SEC
6	VOF106	3D Lighting & Rendering	0	2	2	3	SEC
7	ARP102	Communicative English-II	1	0	2	2	AECC
8	BCJ111	Indian Culture and Art Forms	0	2	2	3	AECC
9	VAF006	Stress and Time Management	-	-	-	-	AECC
TOTAL CREDITS						**20**	

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Program Structure Template
Name of School: Sharda School of Media, Film & Entertainment
Bachelor of Science (Hon. /Hon. with Research)
(Animation, VFX & Gaming Design)
TERM: III
Batch-2024-28

S.No.	Subject Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
THEORY SUBJECTS							
1	AVG221	Character Modeling & Sculpting Techniques*	2	2	0	4	CC
2	AVG222	VFX Compositing-I*	1	2	0	3	CC
3	AVG223	3D Game Design & Development*	1	2	0	3	DSE
	AVG224	Character Animation*					
JURY SUBJECTS							
4	OPE	Radio Jockeying & Program Production*	0	2	2	3	AECC
5	AVG225	Texture Painting Tools	0	0	2	1	CC
6	AVG226	Anatomy Drawing	0	0	2	1	AECC
7	ARP207	Communicative English-III Logical Skill Building and Soft Skills	1	0	2	2	AECC
8	AVG227	Gaming Devices	0	0	2	1	DSE
	AVG228	Photography and VFX					
9	RBL001	Research Based Learning – I	0	0	4	0	AECC
10	VOF206	Motion Graphics & TVC	0	2	2	3	SEC
TOTAL CREDITS						**21**	

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Name of School: Sharda School of Media, Film & Entertainment
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TERM: IV
Batch-2024-28

S.No.	Subject Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
THEORY SUBJECTS							
1	AVG230	VFX Compositing-II*	2	2	0	4	CC
2	**AVG239**	**AR VR ***	**1**	**2**	**0**	**3**	**CC**
3	AVG232	Game Testing*	1	2	0	3	DSE
	AVG233	Particles & FX *					
JURY SUBJECTS							
4	OPE	Basic Still Photography*	0	2	2	3	AECC
5	AVG234	VFX & Gaming Animation	0	0	2	1	CC
6	AVG235	Visual Scripting for Game Development	0	0	2	1	AECC
7	ARP306	Communicative English-IV- Campus To Corporate	1	0	2	2	AECC
8	AVG236	Game Architecture Development	0	1	2	2	DSE
	AVG237	3D Walk-Through					
9	RBL002	Research Based Learning – II	0	0	4	0	AECC
10	**VAF008**	**Innovation & Entrepreneurship**	**-**	**-**	**-**	**-**	**AECC**
TOTAL CREDITS						**19**	

*** Evaluation is to be done as Jury Subject.**

Program Structure Template
Name of School: Sharda School of Media, Film & Entertainment
Bachelor of Science (Hon. /Hon. with Research)
(Animation, VFX & Gaming Design)
TERM: V
Batch-2024-28

S.No.	Subject Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
THEORY SUBJECTS							
1	AVG321	Introduction to Game Engine*	1	2	0	3	CC
2	**AVG340**	**AI for Gaming ***	**1**	**2**	**0**	**3**	**CC**
3	AVG323	Camera Tracking & Match-moving*	1	2	0	3	CC
4	AVG324	Web & E-Business and Game Development*	1	2	0	3	DSE
	AVG325	Rotoscopy, Paint & Comping *					
JURY SUBJECTS							
5	AVG326	Lighting & Rendering and Photorealism	0	1	2	2	Core
6	AVG327	Sound Design Techniques	0	1	2	2	Core
7	AVG328	**Multimedia Design**	0	0	2	1	DSE
	AVG329	Fluid Dynamics & Plugins					
8	RBL003	Research Based Learning – III	0	0	2	1	AECC
9	INC001	Industry Connect	0	2	0	2	AECC
TOTAL CREDITS						**20**	

*** Evaluation is to be done as Jury Subject.**

Program Structure Template
Name of School: Sharda School of Media, Film & Entertainment
Bachelor of Science (Hon. /Hon. with Research)
(Animation, VFX & Gaming Design)
TERM: VI
Batch-2024-28

S.No.	Subject Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
JURY SUBJECTS							
1	**AVG341**	**Studio Training**	0	0	28	14	CC
2	**AVG342**	**Portfolio 3D Animation**					CC
3	**AVG343**	**Portfolio VFX**					CC
4	**AVG344**	**Portfolio Gaming**					AECC
5	OPE	Smartphone Mobile Film Making	0	2	2	3	AECC
6	RBL004	Research Based Learning-4	0	0	2	1	CC
7	CCU108	Community Connect	0	2	0	2	CC
TOTAL CREDITS						**20**	

*** Evaluation is to be done as Jury Subject.**

Program Structure Template
Name of School: Sharda School of Media, Film & Entertainment
Bachelor of Science (Hon. /Hon. with Research)
(Animation, VFX & Gaming Design)
TERM: VII
Batch-2024-28

S.No.	Course Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
THEORY SUBJECTS							
1	BCJ 412	Qualitative Research Methods	3	0	0	3	CC
2	BCJ 413	Quantitative Research Methods	3	0	0	3	CC
3	BCJ 414	Communication Research Methods & Tools	3	0	0	3	CC
4	BCJ 415	Statistics for Research	2	1	0	3	CC
JURY SUBJECTS							
5	BCJ 416	Qualitative Research Lab	0	1	2	2	CC
6	BCJ 417	Quantitative Research Lab	0	1	2	2	CC
7	BCJ 418	Project on constructing tools for Media & Communication Research	0	2	2	3	CC
8	OPE	Anchoring for Different Media – OPE	0	3	2	4	AECC
Total						**23**	

*** Evaluation is to be done as Jury Subject.**

Program Structure Template
Name of School: Sharda School of Media, Film & Entertainment
Bachelor of Science (Hon. /Hon. with Research)
(Animation, VFX & Gaming Design)

TERM: VIII
Batch-2024-28

S.No.	Course Code	Subjects	Teaching Load			Credits	Type of Course: CC AECC SEC DSE
			L	T	P		
THEORY SUBJECTS							
1	BCJ 419	Ethical Perspective of Media & Communication Research	3	0	0	3	CC
JURY SUBJECTS							
2	BCJ 420	Research Writing Techniques	0	0	2	1	CC
3	OPE	Digital Media Marketing – OPE	0	3	2	4	AECC
4	BCJ 421	Media & Communication Dissertation - Project	0	3	12	9	CC
Total						**17**	

* Evaluation is to be done as Jury Subject.

Semester I

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 1**	
1	**Course Code**	**AVG121**	
2	**Course Title**	**Digital Art Techniques***	
3	**Credits**	**4**	
4	**Contact Hours (L-T-P)**	**2-2-0**	
5	**Course Type**	**Core Compulsory**	
6	**Course Objective**	The purpose of this subject is to provide the students with training methodologiesand specific industry skills that will assist them in developing creative ideas into digital art with emphasis on image manipulation, matte painting and image creation and editing. The students will receive information that will enable them to: • Understand the design principles used in the creation of digital art. • Familiarize with the terminologies and concepts for creating and manipulatingdigital images.	
		CO1	Explain Digital Art & Industry Application
		CO2	Understand Digital Color Theory & Design Fundamentals
		CO3	Use raster graphics and vector graphics tools
		CO4	Illustrate the Typography
		CO5	Develop background composition
		CO6	Design Photo bashing Techniques
8	**Course Description**	Students will learn the core basic of digital image editing & manipulation, creating digital art work & textures for future use in 3d look development. They will also learn design principles and how to create info-graphics.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Digital Color, Ink and Painting**	
1		Digital Color mixing, Custom Brushes, Custom Palette for painting	CO1,CO2
2		Digital Concept Art, Environment & Character Painting	CO1,CO2
3		Colorizing & Artistic Filters	CO1,CO2
Unit 2		**Typography Fundamentals**	
1		Fonts & Designing Type	CO4
2		Typography Design and Art	CO4
3		Special Effects for Typography.	CO4
Unit 3		**Introduction to Raster Graphics Tools**	
1		Introduction of Unit	CO3
2		Layers	CO3
3		Adjustment Tools	CO3
4		Painting	CO3
5		Creating raster artworks.	CO3
6		Image Manipulation.	CO3
7		Color Manipulation.	CO3
8		Layer Blending, Masking, Export Parameters.	CO3
Unit 4		**Introduction to Vector Graphics Tools**	
1		Introduction of Unit	CO3
2		Creating Vector Arts	CO3
3		Paths and Shapes	CO3
4		Vector brushes and colors	CO3
5		Layers, Transparency, Grouping, Blending Modes, Managing Artwork, Single and Multipage Illustrations.	CO3

Unit 5	**Background**			
1	Digital Ink and Paint			CO5,CO6
2	Background Composition			CO5,CO6
3	Art of Collages, Creating Digital Collages			CO5,CO6
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%	
Text Book/s	Blum, M. Rosen. How to Build Better Vocabulary. London:Bloomsbury Publication			
Other References	• Adobe Photo shop Cs6 Bible: The Comprehensive, Tutorial Resource, Lisa Danae Dayley, Brad Dayley • Adobe Photoshop CC Classroom in a Book with Access Code, ADOBE CREATIVE TEAM Principles of Form and Design by Wucius Wong			

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 1**	
1	**Course Code**	**AVG122**	
2	**Course Title**	**2D Game Design Development***	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To explore 2D platform requirements. To identify the resources for game development. To learn techniques for setting up a game. To understand the game mechanism. To understand game optimization techniques.	
		CO1	Explain the overview of unity Game engine for 2D game organization
		CO2	Classify the required assets for the game development.
		CO3	Relate the game engine and their project set up techniques for game development.
		CO4	Contrast the optimization techniques using the game engine
		CO5	Design the required game visuals for the 2D Game
		CO6	Develop the prototype for the 2D Game
8	**Course Description**	The course is about the understanding the principle of 2D Game Development and Plan the resources for a 2D game development	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Overview of 2D Platform**	
1		Introduction to unity2d, Downloading and installing, Project Wizard - Component, Game object, creating a scene, setting up a new project, Project Structure.	CO1
2		Asset Workflow – Folder Organization – File Naming Conventions, Unity Interface.	CO1
3		Creating Gameplay, Editor features, Asset bundles.	CO1
4		Android SDK, player setting, Import, File formats, Sounds, performance, Stats panel, Mesh and Geometry, MonoDevelop, the profiler.	CO1
Unit 2		**Game Resources Overview**	
1		Creating Raster & Vector design, Vector Illustration, Modular Design, File formats.	CO2
2		Importing – Assets – Packages - Game Objects -Components, working in 2D – behaviors – Workspace.	CO2
3		Building Sprites – Sprite Packaging - Main Character – Sprites, Environment –Design, Sprites, Enemy –Design, Sprites.	CO2
4		Props –Design- Sprites, Sprite editor, Using External Files, sprite render, Props Design - Sprites, Conclusion.	CO2
Unit 3		**Game World**	
1		Level design 101, Level editor, Scene, Manipulating Objects, Layered sorting, Tilemap.	CO3
2		First Level prefabs, Coding, Player – controller, camera, physics, colliders.	CO3
3		Animation Timeline, Animation – rules, creating animation – States, State machine.	CO3
4		Camera Setup, Game hierarchy, Asset Management.	CO3

Unit 4	**Visualization for 2D games**		
1	Physics - 2D vs. 3D - 2D Settings, Rigid Bodies, Colliders, Joints 2D, Effectors 2D.		CO4
2	Gameplay, Trigger, Checkpoints, Collectibles, Player Stats, Raycast, Scoring Setup.		CO4
3	Challenging Gameplay, Enemy, Controller, Game object, Collision, Animation, and Damage.		CO4
4	Expanding on plat forming, scrolling Backgrounds, Prototyping, Path finding.		CO4
Unit 5	**Game Finalizing Techniques**		
1	UI Design, GUI, HUD.		CO5,CO6
2	Touch controls.		CO5, CO6
3	Particle System, Audio System.		CO5, CO6
4	Organization and Optimization, Building and deploying, UGUI.		CO5, CO6
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	Learning 2D Game Development with Unity: A Hands-On Guide to Game Creation – by Matthew Johnson (Author), James A. Henley (Author) - Addison-Wesley Professional; 1 edition (December 24, 2014) - ISBN-10: 0321957725, ISBN-13: 978-0321957726. Learning Unity 2D Game Development by Example - by Venita Pereira (Author) - Packt Publishing (August 25, 2014) - ASIN: B00N1X68Z4. Unity Game Development Blueprints Kindle Edition - by John P. Doran (Author) - Packt Publishing (November 11, 2014) - ASIN: B00PITJRQ6		
Other References	Learn Unity for Android Game Development: A Guide to Game Design, Development, and Marketing - by Adam Sinicki (Author), Apress; 1st ed. edition (July 22, 2017) - ISBN-10: 9781484227039, ISBN-13: 978-1484227039. Mastering Unity 2D Game Development -: Using Unity 5 to develop a retro RPG - by Ashley Godbold (Author), Simon Jackson (Author), Packt Publishing Limited; 2nd edition (14 October 2016) - ISBN-10: 1786463458,ISBN-13: 978-1786463456. Unity 2d game development: Beginner's Guide to 2D game development with Unity, - by MemLnc (Editor), Moaml Mohmmed (Translator), John Bach (Author); Independently Published (27 June 2020) - ISBN-13: 979-8657626209.		

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**		
Branch: Mass Communication		**Semester: 1**		
1	**Course Code**	**AVG123**		
2	**Course Title**	**2D Animation Techniques***		
3	**Credits**	**3**		
4	**Contact Hours (L-T-P)**	**1-2-0**		
5	**Course Type**	**Core Elective**		
6	**Course Objective**	Understand the basics of creating 2D digital animation. Creating Key frame and Twining animation. Understand the workflow to create layered 2D digital animation Creating Background design and animation.		
8	**Course Description**	Students will learn the different techniques and rules of 2D Digital Animation. Students will learn key frame full and limited animation. This course enables a student to create his or her Animated Movies, Web Graphics etc.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Tools and Interface**		
1		Workflow Introduction and Settings		CO1
2		Drawing and Shape Manipulation Animation		CO1
3		Drawing and Shape Manipulation Animation		CO1
Unit 2		**Tween Animation**		
1		Motion and Shape Tween		CO2
2		Path animation using Guide Layer		CO2
3		Masking and Effects using Gradients		CO2
Unit 3		**Staging and Timing**		
1		Static Background Scenes		CO3
2		Animated Background Scenes		CO3
3		Animated Background Scenes		CO4
Unit 4		**Exporting Movie**		
1		Rendering		CO5
2		Compressions Settings		CO5
Unit 5		**Applications**		
1		Key Frame Animation - Principles of Animation		CO6
2		Key frame Animation – Simple Character Animation		CO6
3		Creating Scenes for Animation		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		Adobe Flash Professional CS6 Classroom in a Book 1st Edition from Adobe Creative Team		
Other References		How to Cheat in Adobe Flash CS5: The Art of Design and Animation Publications from Chris Georgenes		

School: SSMFE		**Batch 2024-28**
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**
Branch: Mass Communication		**Semester: 1**
1	**Course Code**	**OPE**
2	**Course Title**	**Audio and Visual Production Process**
3	**Credits**	**3**
4	**Contact Hours (L-T-P)**	**0-2-2**
5	**Course Type**	**Elective**

6	**Course Objective**	The objective of this course is to: To explore basic principles relations to the (re) production of sound and image To understand the basic methods of audio recording and (re)generation To understand basic methods of image (re)generation and photographic capture To understand interactivity between sound, image and context		
7	**Course Outcomes**	**After completing the course, the student will be able to:**		
		CO1	Define the basic principles related to production and editing of different kinds of Sounds	
		CO2	Summarize microphones and different audio accessories	
		CO3	Explain the fundamentals of digital image production using different equipment	
		CO4	Apply the knowledge of sound and image to create basic audio-visuals	
		CO5	Examine basic methods of audio recording and re-generation	
		CO6	Demonstrate projects using sound-recording technology	
8	**Course Description**	This course is designed to offer the students, a primary level understanding of sound and image production and how both can be juxtaposed for the purpose of story-telling using audio visuals.		
9	**Outline Syllabus**			**CO Mapping**
	Unit 1	**Principles of Sound**		
	1	What is photography? The role & importance of photography.		CO1
	2	Brief History of photography		CO1, CO2
	3	Working principle of a still Camera, Principles of Camera Obscura Types of Cameras		CO1, CO2
	Unit 2	**Principles of Photographic composition**		
	1	Concepts of composition		CO1, CO2
	2	Digital Capture, Types of Graphics (Vector and Raster), Various types of Digital Capture and Image, Basic Software for Production of Vector & Raster Graphics		CO1, CO3,CO4
	3	Practical Applications of Image Editing, Mobile Applications for image editing, Online Tools for Image Processing and Editing		CO3, CO4
	Unit 3	**Basic Lighting Concept**		
	1	Sources of light : Natural & Artificial Correct exposure		CO3
	2	Nature and physical properties of light Direction & angle of light : Front, side, top & back		CO3
	3	Lighting contrast and its control by fill in lights One, two & three point lighting : Key, fill and back light		CO3
	Unit 4	**Sound Recording and Mixing**		
	1	Sound Recording & Mixing, Nature of Sound, its Properties and Dimensions, Microphones, Audio Accessories for Sound Production		CO3, CO4
	2	Digital Audio Formats		CO3, CO4
	3	Sound Recording & Reproduction		CO3
	Unit 5	**Audio Visual Production**		
	1	Basics of Audio-Visual Mixing		CO5
	2	AV Creation using different Software		CO5, CO6
	3	Final AV production		CO6
	Mode of examination	Jury Examination		
	Evaluations	CA 25%	CE(Viva) 25% ETE 50%	
	Text Book/s	Mastering Audio: The Art and the Science by Bob Katz		
	Other References	Master Handbook of Acoustics by F. Alton Everest & Ken Pohlmann The Sound Book: The Science of the Sonic Wonders of the World by Trevor Cox		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 1**	
1	**Course Code**	**AVG124**	
2	**Course Title**	**UI & UX Design Tools**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**AVG124**	
6	**Course Objective**	To understand principles behind Human Computer interaction (HCI) To understand User Interface requirements To recognize the importance of User Experience Design (UXD or UED) To understand various methods of User Centered Design To demonstrate effective UI / UX designs with case studies.	
8	**Course Description**	The course is about the understanding the principle of HCI, usability standards, UX design and UCD	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Introduction to HCI**	
	1	Introduction of Unit.	CO1
	2	Human-Computer Interaction Foundations.	CO1
	3	Roots of HCI.	CO1
	4	Meteoric rise of HCI.	CO1
	5	The multidisciplinary field of HCI.	CO1
	6	Models & Theories.	CO2
	7	Usability Evaluation.	CO2
	8	Programming interactive systems.	CO2
	9	Conclusion of the Unit.	CO2
	Unit 2	**User Experience Design (UXD or UED)**	
	1	Overview of UX.	CO3
	2	Elements of UX.	CO3
	3	UX Design Process – Research – Design – Prototyping –Testing – Measurements.	CO3
	4	UX Analysis, Design Thinking – Thinking out of box – Empathy – Design Thinking Process.	CO3
	5	Importance of Information Architecture.	CO3
	6	Wireframing.	CO3
	7	User research.	CO3
	8	Planning.	CO3
	Unit 3	**User Centered Design**	
	2	Introduction.	CO4
	3	Principles.	CO4
	4	Research.	CO4
	5	Elements of UCD.	CO4
	6	Usability and Accessibility.	CO4

7	User Centered Design Process – Analysis – Design – Implementation – Deployment.		CO4
8	Benefits of user centered process.		CO4
Unit 4	**User Interface Design (UI)**		
1	Overview of UI – Importance of UI – Characteristics.		CO5
2	Design Process.		CO5
3	Three cognitive levels of emotional design.		CO5
4	Attractiveness Vs Usability.		CO5
5	Visual design Concepts.		CO5
6	Graphical User interface.		CO5
7	Design Tools.		CO5
8	Navigation and structure.		CO5
9	Composition and Layout Design.		CO5
10	Design Icons.		CO5
11	Iconography.		CO5
12	Graphic symbols – typography – color theory.		CO5
13	Design Patterns and Style guides, Interaction Styles, Naming & Abbreviations.		CO5
Unit 5	**Case Studies**		
1	Introduction of Unit.		CO6
2	Effective UI Design examples.		CO6
3	UX Design examples.		CO6
4	Common Errors.		CO6
5	Complete case study of any existing application development.		CO6
6	Conclusion.		CO6
Mode of examination	Jury		
Weightage Distribution	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s*	Human-computer Interaction- by Alan Dix and Janet Finlay (Author) – Pearson Education (2004) - ISBN-10: 9788131717035. The Elements of User Experience: User-Centered Design for the Web and Beyond - Voices That Matter Paperback – by Jesse James Garrett (Author) - New Riders; 2 edition (16 December 2010) - ISBN-10: 0321683684,ISBN-13: 978-0321683687. UX Design for Mobile - Pablo Perea (Author), Pau Giner (Author)- Packt Publishing - ebooks Account (July 28, 2017)- ISBN- 10: 1787283429, ISBN-13: 978-1787283428.User-Centered Design: A Developer's Guide to Building User- Friendly Applications - by Travis Lowdermilk (Author) - O'Reilly Media; 1 edition (29 March 2013) - ASIN: B00C3NX1BW UI/UX Design Basic and Fundamentals - by Nathan Clark		
Other References	Lean UX: Designing Great Products with Agile Teams - by Jeff Gothelf (Author), Josh Seiden (Author); Shroff/O'Reilly; Second edition (1 November 2016)- ISBN-10: 9352134567,ISBN-13: 978-9352134564. Fundamentals of User-Centered Design: A Practical Approach Paperback – 20 Dec 2016 - by Brian Still (Author), CRC Press; 1 edition (20 December 2016) - ISBN-10: 1498764363,ISBN-13: 978-1498764360. The Essential Guide to user Interface Design: An Introduction to GUI Design Principles and Techniques, - by Wilbert O.Galitz (Author) - Wiley; Second edition (2002) - ISBN-10: 8126502800,ISBN-13: 978-8126502806.		
School: SSMFE	**Batch 2024-28**		
Program: B.Sc. (Animation	**Current Academic Year: 2024-25**		

,VFX and Gaming Design)			
Branch: Mass Communication		**Semester: 1**	
1	**Course Code**	**AVG125**	
2	**Course Title**	**Foundation Art Techniques**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	It enables the students to learn the medium of Drawing and its importance in visualization. Allows students to learn, observe, analyze and visualize. Guides the student to strengthen the drawing skills to support later part of Animation design.	
8	**Course Description**	Students will learn basic fundamentals of drawing & materials to be used and visualization. They will understand the significance of Perspective Drawing and Sketching for Animation, VFX & Gaming Pre-Production.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to Drawing Materials**	
1		Introduction Materials	CO1
2		Papers-Different pencils	CO1
3		Color pencils-Crayons and poster colors	CO1
4		Introduction to drawing the objects, figures from the surroundings	CO2
5		To learn, observe, analyzing, and drawing the mechanical objects, utensils, and objects from everyday life.	CO2
Unit 2		**Environment Drawing**	
1		Introduction Perspective Drawing	CO3
2		To learn the importance of Perspective	CO3
3		Rules of perspectives – To learn one point – two-point perspectives-Learn to draw from different eye levels and different angles	CO3
Unit 3		**Sketching**	
1		Introduction Sketching	CO4
2		Sketching from Reference/Live with Shape, Line of Action & Balance	CO4
3		Sketch a Sequential Poses	CO4
Unit 4		**Lighting and Shading**	
1		Introduction of Unit	CO5
2		To introduce to the concept of light in visualization	CO5
3		To study objects in Lighting and learn to draw them with proper shading	CO5
Unit 5		**Gesture Drawing**	
1		Introduction to Gesture Drawing	CO6
2		Capturing Gesture Poses of Group Poses	CO6
3		Sequential Gesture poses of any action with memory/Observation	CO6
Mode of Examination		Jury	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Perspective Drawing Handbook, JosephD'Amelio • Fun with the Pencil,Loomis	
Other References		• Dynamic Figure Drawing, BurneHogarth • Complete Book of Drawing Technique, Peter Stanyer	

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 1**	
1	**Course Code**	**AVG126**	
2	**Course Title**	**Game Programming Fundamentals**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To understand the basics of C#. To describe methods of decision making in C#. To explain importance of arrays & classes. To understand development of windows & graphics. To understand implementation C# for game compiling.	
7	**Course Outcomes**	**After completing the course, the student will be able to:**	
		CO1	Describe the basics of C# programming
		CO2	Compare various methods of decision making in C#
		CO3	Use the fundamental concepts of programming in gaming
		CO4	Illustrate the concepts of arrays & classes
		CO5	Correlate the concept of windows & graphics development in C#.
		CO6	Write the game controls scripting implementation in C#.
8	**Course Description**	The course is designed to equip students, who are at a very basic level of programming, to design and develop programs with ease in varied workplace environment. The course begins with basic programming structure with OOPs concepts and ends with developing gaming applications.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction C#**	
1		Introductions, Features, OOPs concept.	CO1
2		Program structure, comments, data types, Variables and constants, operators.	CO1
3		Exception Handling, Try-Catch block, Try-catch-finally block.	CO1
4		Errors and Debugging, Unit Testing.	CO1
Unit 2		**Decision Making**	
1		Control statements, if, if-else, switch-case.	CO2, CO3
2		Looping statements, while, do-while, for, nested loops, Break, Continue.	CO2,CO3
3		Encapsulation and Functions.	CO2,CO3
Unit 3		**Arrays & Classes**	
1		Introduction, Array definition, Array declaration.	CO4
2		For each loop, multi-dimensional arrays, Classes and objects.	CO3,CO4
3		Class declaration, Object creation, Namespaces, this Operator, Properties, Constructors and Destructors.	CO4,CO5
4		Structure, Enumerators.	CO4
Unit 4		**Inheritance, polymorphism & File I/O**	
1		Inheritance, Types of inheritance.	CO5
2		Polymorphism, Strings.	CO5
3		Exception Handling, File I/O, File Reading and Writing.	CO5
Unit 5		**Delegates & Interfaces**	
1		Delegates, Multicasting Delegates, Events, Using events in Delegates.	CO6

2	Dictionary, Interfaces.		CO6
3	List, Threads, Object Pooling, Singleton Class.		CO6
Mode of Examination	**Jury**		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Andy Harris, 'Microsoft C# Programming for the Absolute Beginner', PRENTICE-HALL OF INDIA PVT LTD, 2002 • Programming in C# by E Balagurusamy (Author) - McGraw Hill Education; 4th edition (1 July 2017) - ISBN-10: 9351343189, ISBN-13: 978-9351343189. • Beginning C# Game Programming (Game Development) - by Ron Penton (Author) - Premier Press; Pap/Cdr edition (22 October 2004) - ISBN-10: 1592005179, ISBN-13: 978- 1592005178. • C# Programming in easy steps - by Mike McGrath (Author) - In Easy Steps Limited (11 December 2016) - ASIN: B01MXXGZAJ.		
Other References	• Learning 2D Game Development with Unity®: A Hands-On Guide to Game Creation by James A. Henley, Matthew Johnson Publisher: Addison- Wesley Professional Release Date: December2014 • Beginning Visual C# 2015 Programming (WROX) - by Benjamin Perkins (Author), Jacob Vibe Hammer (Author), Jon D. Reid (Author) - Wiley (2016) - ISBN-10: 8126559691, ISBN- 13: 978-8126559695. • C#: 2 BOOKS IN 1 - The Ultimate Beginner's & Intermediate Guide to Learn C# Programming Step By Step - by Ryan Turner (Author), N.B.L Publishing (7 December 2019) -ISBN-10: 1647710200,ISBN-13: 978-1647710200.		

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**		
Branch: Mass Communication		**Semester: 1**		
1	**Course Code**	**ARP101**		
2	**Course Title**	**Communicative English-I**		
3	**Credits**	**2**		
4	**Contact Hours (L-T-P)**	**1-0-2**		
5	**Course Type**	**Co-Requisite**		
6	**Course Objective**	To minimize the linguistic barriers that emerge in varied sociolect-linguistic environments through the use of English. Help students to understand different accents and standardize their existing English. Guide the students to hone the basic communication skills - listening, speaking, reading and writing while also uplifting their perception of themselves, giving them self-confidence and building positive attitude		
8	**Course Description**	The course is designed to equip students, who are at a very basic level of language comprehension, to communicate and work with ease in varied workplace environment. The course begins with basic grammar structure and pronunciation patterns, leading up to apprehension of oneself through written and verbal expression as a first step towards greater memorability.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Sentence Structure**		
1		Subject Verb Agreement		CO1
2		Parts of speech		CO1
3		Writing well-formed sentences		CO1
Unit 2		**Vocabulary Building & Punctuation**		
1		Homonyms/ homophones, Synonyms/Antonyms		CO1
2		Punctuation/ Spellings (Prefixes-suffixes/Unjumbled Words)		CO1
3		Conjunctions/Compound Sentences		CO1, CO2
Unit 3		**Writing Skills**		
1		Picture Description – Student Group Activity		CO3
2		Positive Thinking - Dead Poets Society-Full-length feature film - Paragraph Writing inculcating the positive attitude of a learner through the movie | SWOT Analysis – Know yourself		CO3, CO2, CO3
3		Story Completion Exercise –Building positive attitude - The Man from Earth (Watching a Full length Feature Film)		CO2, CO3, CO4
4		Digital Literacy | Effective Use of Social Media		CO3
Unit 4		**Speaking Skill**		
1		Self-introduction/Greeting/Meeting people – Self branding		CO2, CO3
2		Describing people and situations - To Sir With Love (Watching a Full length Feature Film)		CO3, CO4
3		Dialogues/conversations (Situation based Role Plays)		CO2, CO4
Unit 5		**Professional Skills | Career Skills**		
1		Exploring Career Opportunities		CO5
2		Brainstorming Techniques & Models		CO5
3		Social and Cultural Etiquettes		CO6
4		Internal Communication		CO6
Unit 6		**Leadership and Management Skills**		
1		Managerial Skills		CO6
2		Entrepreneurial Skills		CO6
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%

Text Book/s	Blum, M. Rosen. How to Build Better Vocabulary. London: Bloomsbury Publication
Other References	Comfort, Jeremy (et.al). Speaking Effectively. Cambridge University Press

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**		
Branch: Mass Communication		**Semester: 1**		
1	**Course Code**	**VOF105**		
2	**Course Title**	**Script writing, Storyboard & Animatic**		
3	**Credits**	**3**		
4	**Contact Hours (L-T-P)**	**0-2-2**		
5	**Course Type**	**Co-Requisite**		
6	**Course Objective**	To Describe the dramatic structure of a story, explain formats in script, the act structure, characterization and the scene creation.		
8	**Course Description**			
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**The Principles of Dramatic Wring**		CO1
1		Introduction to Screenwriting		CO1
2		The Basics: Character, Story, Structure		CO1
3		The Premise: Story Spine		CO1
Unit 2		**Finding the Story**		CO2
1		How to Format a Script		CO2
2		How to Write a Short Outline		CO2
Unit 3		**Three Act Structure: Putting It All Together**		CO3
1		"The Godfather": Beginnings, Middles, and Ends		CO3
2		Treatment: 5 Key Moments		CO3
Unit 4		**Exploring Character**		CO4
1		Dramatizing Character		CO4
2		Proper Script Formatting		CO4
Unit 5		**Scene**		
1		Scene defined.		CO5
2		Length of scene. Tenets of a good scenes—importance, desire/conflict, structure, compression		CO5
3		Sequences, Making a step outline		CO5
4		Visual Storytelling		CO6
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		The Art and Science of Digital Compositing, SecondEdition		
Other References		Techniques for Visual Effects, Animation and MotionGraphics (The Morgan Kaufmann Series in Computer Graphics) - Ron Brinkmann (Author)		

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**		
Branch: Mass Communication		**Semester: 1**		
1	**Course Code**	**VAC103**		
2	**Course Title**	**Environmental Management**		
3	**Credits**	**03**		
4	**Contact Hours (L-T-P)**	**3-0-0**		
5	**Course Type**	**Compulsory**		
6	**Course Objective**	Enable students to learn the concepts, principles and importance of environmental science. Provide students an insight of various causes of natural resource depletion and its conservation. Provide detailed knowledge of causes, effects and control of different types of environmental pollution and its effect on climate change, global warming and ozone layer depletion. Provide knowledge of different methods of water conservation. Provide and enrich the students about sustainable practices and environmental management		
8	**Course Description**	Environmental Science emphasises on various factors as Importance and scope of environmental science, Natural resource conservation, Pollution causes, effects and control methods , Sustainable and Environmental environment		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Natural resource management**		CO1
1		Air pollution Control and Water Pollution treatment Methods		CO2
2		Soil and Noise Pollution Management		CO2
3		Solid waste management		CO2
Unit 2		**Environmental Pollution Management**		
1		Air pollution Control and Water Pollution treatment Methods		CO2
2		Soil and Noise Pollution Management		CO2
3		Solid waste management		CO2
Unit 3		**Climate Change Mitigation**		
1		Concept of Global Warming and greenhouse effect		CO3/CO6
2		Ozone layer Depletion and its consequences		CO3/CO6
3		Climate change, its effect on ecosystem and its mitigation. Kyoto protocol and IPCC concerns on changing climate.		CO3/CO6
Unit 4		**Biodiversity Management**		
1		Hot spots, Endangered and endemic species of India		CO4/CO6
2		Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions		CO4/CO6
3		Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.		CO4/CO6
Unit 5		**Sustainable practices and environmental management**		
1		Sustainable development and sustainable consumption		CO5/CO6
2		Environmental Issues and Management in India		CO5/CO6
3		Environmental Management System (EMS)		CO5/CO6
Evaluations		CA 15%	CE(Viva) 10%	ETE 75%
Text Book/s		Textbook of Environmental Studies for Undergraduate Courses by Erach Bharucha, Pub: Orient Blackswan Pvt Ltd		
Other References		Environmental Science by G. Tyler Miller, JR. and Scott E. Spoolman; Broks/Cole.		

Semester II

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 2**	
1	**Course Code**	**AVG129**	
2	**Course Title**	**Hard Surface Modeling & Texturing***	
3	**Credits**	**4**	
4	**Contact Hours (L-T-P)**	**2-2-0**	
5	**Course Type**	**Core**	
6	**Course Objective**	To understand Assets development requirements. To develop a design brief for a 3d model To understand the tools and techniques to UV wrapping To identify texturing techniques To explain the creation and integration of rigging To understand animation requirements.	
8	**Course Description**	This course offers introductory knowledge of 3D Asset creation process to make students familiar with designing computer graphics	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Overview of 3D Assets**	
	1	Topology & Mesh flow	CO1
	2	Edge Flow & Bevel	CO1
	3	Deformers	CO1
	Unit 2	**Modelling**	
	1	Interface and Concept of 3D Modeling	CO2
	2	Understanding 3D space, Difference between 2D and 3D	CO2
	3	Discover the user interface of Maya software and various elements	CO2
	4	Game modeling & Optimization	CO2
	Unit 3	**UV Unwrapping Tools & Techniques**	
	1	Concepts of UV un-wrapping	CO3
	2	Creation of UV and texture for different objects	CO3
	3	Understanding of UV Editor and techniques in it, including the optimization and clean up	CO3
	Unit 4	**Digital Sculpting for Hard Surface**	
	1	Principles of Sculpting	CO4
	2	Interface & Navigation	CO4
	3	Subdivision	CO4
	Unit 5	**Rendering**	
	1	Preparation	CO6
	2	Render Setup	CO6
	3	Material Setup	CO6
Mode of Examination		**Jury**	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Unity 4 Fundamentals: Get Started at Making Games with Unity by Alan Thorn • Understanding 3D Animation Using Maya -John Edgar Park Basics	

	Animation: Digital Animation - Andrew Chong • The Animator's Survival Kit--Revised Edition: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Interne - Richard Williams
Other References	• Hybrid Animation Integrating 2D and 3D Assets, 2nd Edition By Tina O'Hailey • Getting Started with Unity By Patrick Felicia Unity 5.x Cookbook by Matt Smith, Chico Queiroz

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 2**	
1	**Course Code**	**AVG130**	
2	**Course Title**	**3D Animation Fundamentals***	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core**	
6	**Course Objective**	To provide a detailed introduction to Autodesk Maya Software and helps the student understand the concepts of object in 3D space, Object creation (modelling and texturing), its observation, timing, and motion in the real art of animation and helps in creating strong and believable animation. The students will also understand the importance and application of Basic Rigging and Skinning. This course also emphasizes artistic and aesthetic creativity, intending to push the boundaries of the imagination and to familiarize students with acting, developing different kind of personality of characters and to explore character rigging for animation. The Course ensures that the students will be familiarized with the Maya interface and tools.	
8	**Course Description**	This subject will provide a detailed introduction to Autodesk Maya Software, Different techniques to create 3D model, about UV process and how does it help in texturing, the importance and application of Basic Rigging and helps the student understand the concepts of observation, timing, and motion in the real art of animation and helps in creating strong and believable animation pieces. This subject will provide the basic understanding of 3D dynamics and particle effects.	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Interface and Concept of 3D Modelling**	
	1	Difference between 2D and 3D	CO1
	2	Understanding 3D space	CO1
	3	Discover the user interface of Maya software and variouselements	CO1
	Unit 2	**Introduction to Modelling Tools**	
	1	Tools and technique in modelling	CO1
	2	Different types of geometry	CO1
	3	Nature of different meshes, advantage and disadvantage of different geometry.	CO1
	Unit 3	**Concepts of UV UN-wrapping**	
	1	Concepts of UV	
	2	Creation of UV	CO2
	3	Texture for different objects	CO2
	Unit 4	**Working with UV tools and Techniques**	
	1	Understanding of UV Editor and techniques in it	CO2
	2	UV unwrapping techniques for Objects	CO2
	3	Creation of textures for Objects	CO3
	Unit 5	**Animation**	
	1	Applying principles of animation in 3D	CO6
	2	Using of Graph Editor and Dope sheet and techniques in it	CO6
	3	Expressions, Constraints and parenting in animation, object character interactions.	CO5
	4	Character Interaction and story telling	CO6
	5	Walk cycles, Personality and Appeal, Acting and staging	CO6

Unit 6	**Rigging**		
1	Introduction to Deformers, Nonlinear Deformers		CO5
2	Types of deformers, Editing, Painting, membership and its significance		CO5
3	Rigging Basics- Joints, Skin, IK and FK, Model and UV requirement		CO5
Unit 7	**Skinning**		
1	Introduction to Smooth Binding and its concepts		CO5
2	Introduction to Rigid Binding and its concepts		CO5
3	Editing skin weights, pruning, normalizing		CO5
4	Creation and editing of joints for props and simple character		CO5
Mode of Examination	**Jury/Practical/Viva**		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	Story: Substance, Structure, Style and the Principlesof Screenwriting RobertMcKee		
Other References	The Way of theStorytellerby RuthSawyer Facial Expressions: A Visual Reference for Artists Mark Simon The Animation Book: A Complete Guide toAnimated Filmmaking--From Flip-Books to Sound Cartoons to 3-D		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 2**	
1	**Course Code**	**OPE**	
2	**Course Title**	**Material Animation Techniques**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**0-2-2**	
5	**Course Type**	**Elective**	
6	**Course Objective**	To introduce various techniques and styles of Animation. To provide the students hands on experience of simple ideas for Animation using the materials available in the immediate surroundings.	
8	**Course Description**	Students Will Learn The workflow for Story Development, Elements of script writing, and 3Acts Structure & Development of the Characters.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to Material Animation**	
1		Introduction to Material Animation	CO1
2		Different Styles in material animation	CO2
3		Popular material animation and other techniques	CO2
Unit 2		**Different Techniques**	
1		Different Techniques	CO2
2		Exploring Different Material	CO2
3		Rig & Installation.	CO2
Unit 3		**Process and methods of Material Animation**	
1		Visualization of Material Animation.	CO3
2		Production process for Method.	CO3
3		Rough Test	CO3
Unit 4		**Material Animation in Action**	
1		Story and Preproduction for Material Animation Film	CO4, CO5
2		Identification and Execution of Material	CO4, CO5
3		Animation Film-Post Production of Material Animation Film	CO4, CO5
Unit 5		**Material Animation in Action**	
1		Story and Preproduction for Material Animation Film	CO6
2		Identification and Execution of Material	CO6
3		Animation Film-Post Production of Material Animation Film	CO6
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• The Animator's Survival Kit: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators (FARRAR, STRAUS) by Richard Williams	
Other References		• The Advanced Art of Stop-Motion Animation by Ken A. Priebe • Stop Motion: Craft Skills for Model Animation, Second Edition (Focal Press Visual Effects and Animation) by Susannah Shaw	

School: SSMFE		**Batch 2024-28**
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**
Branch: Mass Communication		**Semester: 2**
1	**Course Code**	**AVG131**
2	**Course Title**	**Drawing & Painting**
3	**Credits**	**1**

4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Co-requisite**	
6	**Course Objective**	Understand the basics of Drawing and Painting. Familiarize with the tools and techniques of Drawing and Painting. To introduce the creative skill through Drawing and Painting. To improve the ability of visualization. To Explore and create creative visual through Drawing and Painting.	
8	**Course Description**	The goal of this course is to explore fundamental techniques of Drawing and Painting, design, and illustration. Ideal for students eager to explore Paintings, Web Comics, Storybooks. Students will learn to create environment from real life references and gain an understanding of how to design landscape, illustrations with colors. Students will learn how to compose painting through photographs.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction of Drawing and Painting**	
1		History of visual art and design	CO1
2		Indian Art (Ajanta Caves to Contemporary art)	CO1
3		Introduction of Indian Painting Masters	CO1
4		Introduction of art Materials	CO1
Unit 2		**Understanding of pencils and charcoal**	
1		Introduction of different types of pencils	CO2
2		Basic Charcoal drawings	CO2
3		Basic Shapes and forms through pencil	CO2
4		Introduction to drawing the objects, figures from the surroundings	CO2
Unit 3		**Art of Water-coloring**	
1		Introduction of water color and Paper	CO3
2		Nature Drawing through water color	CO3
3		Landscape design using water color medium.	CO3
4		Landscape design using real life references	CO3
Unit 4		**Introduction of different dry color mediums**	
1		Introduction of different dry color mediums	CO4
2		Drawing and sketching using dry color medium	CO4
3		Still Life painting using soft pastels	CO4
4		Landscape through dry medium	CO4
Unit 5		**Final Projects**	
1		Introduction of using perspective drawing technique	CO5
2		Different types of perspectives	CO5
3		Poster Design using traditional method	CO6
4		Book Cover Designing in traditional style	CO6
Mode of Examination		**Jury**	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		Charcoal by Richard Rochester, Publisher: Guild of Master Craftsman Publications Ltd (28 February 2020), ISBN-10: 1784945528 ISBN-13: 978-1784945527 The Perspective Drawing Guide by Spencer Nugent, Publisher: Rocky Nook; Reprint edition (6 January 2023), ISBN-10: 1681989034 ISBN-13: 978-1681989037 Watercolour Landscapes Step by Step by Milind Mulick, Publisher: Jyotsna Prakashan; Second edition (1 December 2008); Jyotsna Prakashan Girgaon Mumbai 400004, ISBN-10: 8179252175 ISBN-13: 978-8179252178	
Other References		20th Century Indian Art: Modern, Post-Independence, Contemporary by Rakhee Balaran and Partha Mitter, Publisher: Thames and Hudson (24 May 2022); Thames and Hudson Ltd, ISBN-10: 0500023328	

	ISBN-13: 978-0500023327

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 2**	
1	**Course Code**	**AVG132**	
2	**Course Title**	**Basics of Editing & Compositing**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Co-requisite**	
6	**Course Objective**	Familiarize the tools and techniques to create standard VFX shots. Learn Problem solving techniques to rectify the errors during compositing. Create content for broadcast, feature film and web animation.	
8	**Course Description**	Students will learn core concepts of 2D & 3D Digital Compositing, Historical development, Creating Virtual Realm & Video Art	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**History of Compositing**	
1		Terminologies	CO1
2		Physical Compositing, Multiple exposure,	CO2
3		Background Projection, Matting,	CO1&CO2
4		Digital Compositing,	CO1&
5		Node based and Layer Based Compositing.	CO2
6		Visual information and the camera,	CO1&CO2
Unit 2		**Digital Image**	
1		Digital Image Generation, Pixels, Components and Channels,	CO3
2		Bit Depth, Floating point and High Dynamic Range Imagery,	CO3
3		HSV Color, YUV color, Digital Image file formats, Channels, Compression.	CO3
4		Color Manipulation, Levels, Variations, Multiply, Add,	CO3
5		Gamma Correction, Exposure Correction, Invert, Contrast, HSV manipulations	CO3
Unit 3		**Layers**	
1		Layer and Node based compositing.	CO3&CO4
2		Blending layers, Matte Image, Masking, Morphing - Chroma Keying, Garbage Mattes, Edge Mattes, Luminance Keying, Chrominance Keying, Difference Matting, Plug-ins and tools for keying.	CO3&CO4
3		Tracking and Stabilization, tracking an element, 2D tracking, Perspective tracking, Stabilizing footage.	CO4
4		Limitations of tracking and stabilizing tools.	CO3
5		Tools for advanced tracking and match moving.	CO3&CO4
6		Digital Imagery, Color Correction	CO3
Unit 4		**Lighting and Composition**	
1		Creating elements, Lighting in compositing tool, Matching live and virtual cameras.	CO5
2		3D Compositing, vanishing point conversion, creating 3D compositing using 2D images,	CO5
3		Working with camera and lighting, effects, Working with Multi pass Rendering, Alpha and Luma mattes, Z depth maps, Blending passes and effects.	CO5
4		Animation, 2D and 3D transformation, Temporal and spatial interpolation, speed graph, optimizing key frames, expressions for animation, Time Remapping	CO6

Unit 5	Theory and Practice of Video Art			
1	History of Video Art, Contemporary video style, culture and emotion reference -			CO6
2	Video synthesizer, real-time video art, tools and techniques, applications -			CO6
3	Music visualization and media art, automation to music, applications and tools			CO6
4	Video art as art form, Interactive film, display and projection, case studies.			CO6
5	Learning Lab: Create 2.5D Animation of an exterior and interior scene. Animate a slideshow using images imported into compositing Track and composite chroma footage to a background, color correct the scene for film. Animate and composite 3D rendered passes with 2D footages.			CO6
Mode of Examination	**Jury**			
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%	
Text Book/s	Compositing Digital Images - T. Porter and T. Duff I Proceedings of SIGGRAPH '84, 18 (1984) The Art and Science of Digital Compositing - Ron Brinkman			
Other References	Wright's Compositing Visual Effects: Essentials for the Aspiring Artist [Paperback]2007) - Paperback (2007) - Wright Compositing Visual Effects – Essentials for aspiring artists - Steve Wright			

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 2**	
1	**Course Code**	**VOF106**	
2	**Course Title**	**3D Lighting & Rendering**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**0-2-2**	
5	**Course Type**	**Co-requisite**	
6	**Course Objective**	It enables the students to learn the 3d Tool to Create a Virtual Environment with 3d Lighting. Allows students to learn, observe, analyze, and visualize the virtual world Guides the student to strengthen the Three Point Lighting & Cinematic	
8	**Course Description**	Students will learn the use of different types of 3D Lighting, How to create Real Lighting Effects in Virtual World and create final rendered output.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to Lighting and Shading**	
1		The theory of light & Various Concepts of light	CO1, CO2
2		Intro of Standard Lights & Exploring Standard Lights	CO1, CO2
3		Shadow types & Studying shadow controls	CO1, CO2
4		Studying light effects with various shading techniques	CO1, CO2
Unit 2		**Types of camera & Lights**	
1		Concept of 3-Point lighting & Fundamentals of Product Lighting	CO3, CO4
2		Seen setup using standard lights & Uses of Photo metric lights	CO3, CO4
3		Sunlight and Daylight System, Fundamental of environmental	CO3, CO4
4		Illumination & Lighting setup of an environment	CO3, CO4
5		Basics of camera & Types of cameras	CO3, CO4
6		Camera Setup for a seen & Camera correction techniques	CO3, CO4
Unit 3		**Rendering Basics & Types of Renderers**	
1		Introduction of Rendering	CO5, CO6
2		Explaining Various rendering techniques	CO5, CO6
3		Rendering a Scene	CO5, CO6
4		Render Effect	CO5, CO6
5		Exposure Control	CO5, CO6
6		Studying ART	CO5, CO6
7		Renderer	CO5, CO6
8		Intro of Arnold	CO5, CO6
9		Exploring Arnold Lights and Camera	CO5, CO6
10		Basic scene set up with Arnold	CO5, CO6
11		Exploring Rendering with Arnold	CO5, CO6
Unit 4		**Materials, Texturing**	
1		Standard Maps and material browser	CO5, CO6
2		Arnold Materials	CO5, CO6
3		Projection-Mapping	CO5, CO6
4		UV Editor Interface	CO5, CO6
Unit 5		**Lighting and rendering in Maya**	
1		Types of Standard Lights, Sunlight system & HDRI Lighting	CO5, CO6
2		Rendering Interface, Saving render files and their type	CO5, CO6
3		Rendering an Interior Scene	CO5, CO6
4		Rendering an Exterior Scene (Day Light/ Night/Evening view	CO5, CO6
5		Post Production in Adobe Photoshop	CO5, CO6
Mode of		**Jury**	

examination			
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• The Art and Technique of Matchmoving Solutions for the VFX Artist By Erica Hornung, 1st Edition (First Published 2010)		
Other References	• Compositing Visual Effects: Essentials for the Aspiring Artist Paperback– 11 August 2011by Steve Wright (Author)		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 2**	
1	**Course Code**	**ARP102**	
2	**Course Title**	**Communicative English-II**	
3	**Credits**	**2**	
4	**Contact Hours (L-T-P)**	**1-0-2**	
5	**Course Type**	**Co-requisite**	
6	**Course Objective**	To Develop LSRW skills through audio-visual language acquirement, creative writing, advanced speech et al and MTI Reduction with the aid of certain tools like texts, movies, long and short essays.	
8	**Course Description**	The course takes the learnings from the previous semester to an advanced level of language learning and self-comprehension through the introduction of audio-visual aids as language enablers. It also leads learners to an advanced level of writing, reading, listening and speaking abilities, while also reducing the usage of L1 to minimal in order to increase the employability chances.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Acquiring Vision, Goals and Strategies through Audio-visual Language Texts**	
1		Pursuit of Happiness / Goal Setting & Value Proposition in life	CO1
2		12 Angry Men / Ethics & Principles	CO1
3		The King's Speech / Mission statement in life | strategies & Action Plans in Life	CO1
Unit 2		**Creative Writing**	
1		Story Reconstruction - Positive Thinking	CO2
2		Theme based Story Writing - Positive attitude	CO2
3		Learning Diary Learning Log – Self-introspection	CO2
Unit 3		**Writing Skills 1**	
1		Precis	CO3
2		Paraphrasing	CO3
3		Essays (Simple essays)	CO3
Unit 4		**MTI Reduction/Neutral Accent through Classroom Sessions & Practice**	
1		Vowel, Consonant, sound correction, speech sounds, Monothongs, Dipthongs and Tripthongs	CO4
2		Vowel Sound drills, Consonant Sound drills, Affricates and Fricative Sounds	CO4
3		Speech Sounds | Speech Music| Tone | Volume| Diction |Syntax |Intonation | Syllable Stress |	CO4
Unit 5		**Gauging MTI Reduction Effectiveness through Free Speech**	CO5
1		Jam sessions	
2		Extempore	
3		Situation-based Role Play	
Unit 6		**Leadership and Management Skills**	
1		Innovative Leadership and Design Thinking	CO5
2		Ethics and Integrity	CO5
Unit 7		**Universal Human Values**	
1		Love & Compassion, Non-Violence & Truth	CO6
2		Righteousness, Peace	CO6
3		Service, Renunciation (Sacrifice)	CO6

Unit 8	**Introduction to Quantitative aptitude & Logical Reasoning**			
1	Analytical Reasoning & Puzzle Solving			CO6
2	Number Systems and its Application in Solving Problems			CO6
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%	
Text Book/s	Wren, P.C.&Martin H. High English Grammar and Composition, S.Chand& Company Ltd, New Delhi. Blum, M. Rosen. How to Build Better Vocabulary. London: Bloomsbury Publication Comfort, Jeremy(et.al). Speaking Effectively. Cambridge University Press The Luncheon by W.Somerset Maugham - http://mistera.co.nf/files/sm_luncheon.pdf			

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**		
Branch: Mass Communication		**Semester: 2**		
1	**Course Code**	**BCJ111**		
2	**Course Title**	**Indian Culture and Art Forms**		
3	**Credits**	**3**		
4	**Contact Hours (L-T-P)**	**0-2-2**		
5	**Course Type**	**Compulsory**		
6	**Course Objective**	**The objective of pursuing this course is:** **To debate on various aspects of Indian history, art and culture** **To critically engage on various socio-economic and political issues in India** **To utilize knowledge gained to influence the social fabric of the country**		
8	**Course Description**	The course is aimed to impart knowledge of Indian history, art, and culture among students. The course will also help the student to critically examine the socio-economic and political aspects and issues of the country		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Indian History: An Introduction**		
1		Society in India through Ages- Ancient period- Varna and Jati, Family and Marriage in India,		CO1
2		Religion and Philosophy in India: Ancient Period, Pre- Vedic and Vedic Religion, Buddhism and Jainism, Indian Philosophy – Vedanta and Mimansa School of Philosophy		CO1
3		Indian Freedom Movement (1857-1947) Landmarks		CO1
Unit 2		**Indian Culture: An Introduction**		
1		Socio-cultural Configuration of Contemporary India: Unity, Diversity, Multi-Culturalism		CO2
2		Art and Culture: Contemporary Issues and Debates		CO2
3		Scientific Temper: Concept, Relevance and Practice		CO2
Unit 3		**Indian Polity**		
1		Indian Constitution: Preamble; Fundamental Rights and Duties; Directive Principles		CO3
2		Presidential System and Parliamentary Democracy		CO3
3		General Elections and Electoral Reforms		CO3
Unit 4		**Indian Art & Architecture:**		
1		Gandharva School and Mathura School of Art; Hindu Temple Architecture, Buddhist Architecture, Medieval Architecture and Colonial Architecture		CO4
2		Indian Painting Tradition: Ancient, Medieval, Modern Indian Painting and Regional Painting Tradition		CO4
3		Performing Arts: Divisions of Indian Classical Music: Hindustani and Carnatic, Dances of India: Various Dance forms: Classical and Regional, Rise of Modern Theatre and Indian Cinema. Contemporary Indian Art and Artists		CO4
Unit 5		**Social Movements & Activism**		
1		Marginalization, Socio-Economic Equality and Reservation		CO5
2		Judicial Activism & Women Safety, Gender Equality and Activism		CO5
3		Public Health, Hygiene & Sanitation: Swachh Bharathidasan		CO6
Mode of examination		**Theory**		
Evaluations		**CA 25%**	**CE(Viva) 25%**	**ETE 50%**
Text Book/s		Basham, A. L. (2007). The Illustrated Cultural history of India. New Delhi: Oxford		

	University Press. Ed. 1
Reference	Nehru, J. (1946). The Discovery of India. New York: The John Day Company. Thapar, R. (2003). The History of Early India: From the Origins to AD 1300. London: Penguin. Dhingra, I. C. (1986). Indian Economics and Development. New Delhi: Sultan Chand & Sons. Verma, N., & Bhalla, A. (200 0). India and Europe: Selected Essays. Shimla: Centre for the Study of Indian Civilization and Indian Institute of Advanced Study.

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2024-25**	
Branch: Mass Communication		**Semester: 2**	
1	**Course Code**	**VAF006**	
2	**Course Title**	**Stress and Time Management**	
3	**Credits**	**Audit**	
4	**Contact Hours (L-T-P)**	**30 Hrs**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To understand the nature of stress Comprehend the psychological and physiological effects of stress To access the risk factors related to stress. To understand intricacies of time management	
8	**Course Description**	The course is designed to inculcate the basic understanding of the relationship between the stress management and time management skills with the academic achievement of the students.	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Understanding the Nature of Stress**	
	1	Meaning of Stress	CO1
	2	Reactions to Stress, Sources of Stress	CO1
	3	Individual and Cultural Differences	CO1
	Unit 2	**Strategies of Stress Management**	
	1	Stressful thinking	CO2
	2	Psychological and Spiritual Relaxation Methods	CO2
	3	Physical Methods of Stress Reduction	CO2
	Unit 3	**Strategies of Stress Management Prevention**	
	1	Self Care: Nutrition and Lifestyle	CO3
	2	Stress & Conflict in relationships, Resilience and Stress	CO3
	3	Apply stress management prevention technique	CO6
	Unit 4	**Fundamental Aspects of Time Management**	
	1	Planning & Goal Setting	CO4
	2	Focus on time and resources	CO4
	3	Pre-Analysis of performance	CO6
	Unit 5	**Productive Time Management System**	
	1	Busy vs Productive	CO5
	2	Indecision and Delay, Urgency vs Importance	CO5
	3	Apply time management technique	CO6
Text Book/s		Stress and Time Management by Brian Lomas	
Reference		Time and Stress Management for Rookies by Kay Frances	

Semester III

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 3**	
1	**Course Code**	**AVG221**	
2	**Course Title**	**Character Modeling & Sculpting Techniques***	
3	**Credits**	**4**	
4	**Contact Hours (L-T-P)**	**2-2-0**	
5	**Course Type**	**Core**	
6	**Course Objective**	This Course is extension of 3D Modelling and allows to create like clay handling in traditional sculpting in digital format. This advanceapplication allows a student to create hyper realistic character, textures with minor details, how to develop basic mesh within or outside of application and develop that into highly creative, expressive and realistic character.	
8	**Course Description**	This subject will provide a detailed introduction to Digital Sculpting Tools Different techniques to create 3D model, about UV process and how does it help in texturing photo realistic	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction**	
1		Setting a project	CO1
2		Interface & Navigation.	CO1
3		Tools & Techniques	CO1
Unit 2		**Digital Sculpting Basic**	
1		Gizmo	CO2
2		Move, Scale & Rotation	CO2
3		Symmetry	CO2
Unit 3		**Tools & Sub Tools**	
1		Importing	CO3
2		Spitting & Merging	CO3
3		Multimesh	CO3
Unit 4		**Sculpting Brushes**	
1		Settings & Size	CO4
2		Combining Meshes	CO4
3		Alpha	CO4
Unit 5		**DynaMesh**	
1		Starting the Sculpting	CO5
2		Symmetry & Smoothness	CO5
3		Sculptris	CO6
Mode of examination		**Jury**	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• ZBrush Character Creation: Advanced Digital SculptingBook by Scott Spencer	
Other References		• 3D Sculpting for Beginners: Amazing Guide To Sculpting Book by Scott Redhed	

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 3**	
1	**Course Code**	**AVG222**	
2	**Course Title**	**VFX Compositing I***	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core**	
6	**Course Objective**	Familiarize the tools and techniques to create standard VFX shots. Learn Problem solving techniques to rectify the errors during compositing. Create content for broadcast, feature film and web animation.	
8	**Course Description**	Students will learn core concepts of 2D & 3D Digital Compositing, Historical Development, Creating Virtual Realm & Video Art.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**History of Compositing**	
1		Terminologies	CO1
2		Physical Compositing, Multiple exposure,	CO2
3		Background Projection, Matting,	CO1&CO2
4		Digital Compositing,	CO1&
5		Node based and Layer Based Compositing.	CO2
6		Visual information and the camera,	CO1&CO2
Unit 2		**Digital Image**	
1		Digital Image Generation, Pixels, Components and Channels,	CO3
2		Bit Depth, Floating point and High Dynamic Range Imagery,	CO3
3		HSV Color, YUV color, Digital Image file formats, Channels, Compression.	CO3
4		Color Manipulation, Levels, Variations, Multiply, Add,	CO3
5		Gamma Correction, Exposure Correction, Invert, Contrast, HSV manipulations	CO3
Unit 3		**Layers**	
1		Layer and Node based compositing. Blending layers, Matte Image, Masking, Morphing - Chroma	CO3&CO4
2		Keying, Garbage Mattes, Edge Mattes, Luminance Keying, Chrominance Keying, Difference Matting, Plug-ins and tools for keying.	CO3&CO4
3		Tracking and Stabilization, Tracking an element, 2D tracking, Perspective tracking, Stabilizing footage.	CO4
4		Limitations of tracking and stabilizing tools. Tools for advanced tracking and match moving. Digital Imagery, Color Correction	CO3
5		Lighting and Composition	CO3&CO4
6		Creating elements, lighting in compositing tool, Matching live and virtual cameras.	CO3
Unit 4		**Compositing using 2D images,**	
1		Working with camera and lighting, effects, Working with Multipass Rendering, Alpha and Luma mattes, Z depth maps, Blending passes and effects .	CO5
2		Animation, 2D and 3D transformation, Temporal and spatial interpolation, speed graph, optimizing key frames, expressions for	CO5

	animation, Time Remapping	
3	Theory and Practice of Video Art History of Video Art, Contemporary video style, culture and emotion reference	CO5
4	Video synthesizer, real-time video art, tools and techniques, applications	CO5
Unit 5	**Music visualization and media art, automation to music, applications and tools**	
1	Video art as art form, Interactive film, display and projection, case studies.	CO6
2	Learning Lab	CO6
3	Create 2.5D Animation of an exterior and interior scene. Animate a slideshow using images imported into compositing.	CO6
4	Track and composite croma footage to a background, color correct the scene for film.	CO6
5	Animate and composite 3D rendered passes with 2D footages.	CO6
Method of examination	**Jury**	
Evaluations	CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s	• Compositing Digital Images - T. Porter and T. Duff I Proceedings of SIGGRAPH '84, 18 (1984) I • The Art and Science of Digital Compositing - Ron Brinkman • Wright's Compositing Visual Effects: Essentials for the Aspiring Artist [Paperback]2007) - Paperback (2007) - Wright	
Other References	• Compositing Visual Effects – Essentials for aspiring artists - Steve Wright	

School: SSMFE		**Batch 2024-28**
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**
Branch: Mass Communication		**Semester: 3**
1	**Course Code**	**AVG223**
2	**Course Title**	**3D Game Design & Development**
3	**Credits**	**3**
4	**Contact Hours (L-T-P)**	**1-2-0**
5	**Course Type**	**Core Elective**
6	**Course Objective**	To understand the overview of 3D game platform

		To identify the resources for a 3D game development To learn techniques essential for setting up a 3D game To understand the game mechanism and its interface To explain 3D game workflow and optimization techniques	
8	**Course Description**	The course is about the understanding the principle of 3D Game Development and Plan the resources for a 3D game development	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Overview of 3D Platform**	
1		Introduction to unity 3D, Loading or creating a New project or scene	CO1,CO2
2		Layout, Toolbar, Menu, Simple Objects, selecting and focus, Transforming, Snaps	CO1,CO2
3		Scene, Lights, Particle, 3D Objects, Materials, Environment, Player Character, Interactions	CO1,CO2
		Concepts of unity 3d, Interface, Terrain Editor, Camera, GUI and HUD	CO1,CO2
Unit 2		**Game Assets Overview**	
1		Pro builder - Game 3d models – Environment - Terrain - Character – Vehicles- Props- particles and other assets,	CO3
2		Importing – model packages, Costumes, Fog, Setting up materials, Architecture, Skybox, shaders, Lighting and shadows	CO3
3		Assets Management, Package Manager, Timeline Editor	CO3
Unit 3		**3D Game World**	
1		Navigation and functionality- Characters - Inspector setup - Prefabs –controller – Graphics - Camera Setup,	CO4
2		Culling Mask, Occultation Culling	CO4
3		Cursor control – GUI cursor , Action Objects -Interaction – Collision – collision detection – Trigger –Raycasting – camera follow	CO4
4		Rigid Bodies, Instantiation, physics, Input controllers.	CO4
Unit 4		**Visualization for 3D game**	
1		Cinemachine, Post Processing,	CO5
2		Managing State – State Machine – Object lookup,	CO5
3		Exploring Transition – object visibility – player focus,	CO5
4		Unity Animation view, Animator, Mecanim and characters,	CO5
5		Setting up.	CO5
Unit 5		**Game Testing & Finalizing**	
1		Menu and Levels, UGUI, Message text- GUI skin- text,	CO6
2		Inventory Logic – Layers – screen – icons –cursor, Managing the Inventory – object- layout-overflow – limits, Dialogue tree,	CO6
3		Special effects, Particle System, Audio System, Device simulators, 3D Sounds	CO6
4		Debugging and Optimization, Building – Settings – Game (Web / PC & Android) – Quality Settings, Testing.	CO6
Mode of examination		**Jury**	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Beginning 3D Game Development with Unity 4: All-in-One, Multi- Platform Game Development, Second Edition by- sue-Blackman Publisher: A press • Learn Unity3D Programming with Unity Script: Unity's JavaScript for Beginners by Janine Suvak • Unity Game Development Essentials by Will Goldstone Game Development with Unity by Michelle Menard	

	• 3D Game Textures: Create Professional Game Art Using Photoshop / 3D Game Environments: Create Professional 3D Game Worlds by Luke Ahearn
Other References	• Unity Game Development in 24 Hours, Sams Teach Yourself by Ben Tristem, Mike Geig • Getting Started with Unity By Patrick Felicia 3- Unity 3D UI Essentials by Simon Jackson

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 3**	
1	**Course Code**	**AVG224**	
2	**Course Title**	**Character Animation***	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	The purpose of this subject is to provide simulated hands-on experience of Character Animation and Rigging pipeline. It will help in: Understanding the workflows involved in actual productions. Knowledge of planning and organizing projects. Learning artistic techniques to create high quality Rigs and Animations.	
8	**Course Description**	Students will learn the core concepts of creating High Functioning Character Rigsand using them for creating appealing Animations	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Project Preparation**	
1		Introduction of Unit	CO1
2		Choosing Character Topic (Stylized / Realistic)	CO1
3		Collecting References	CO1
4		Planning	CO1
5		Preparing Scenes and Resources	CO1
Unit 2		**Body Rigging**	
1		Introduction of Unit	CO2
2		Creating Joints	CO2
3		Attaching Controls	CO2
4		Adding Constraints	CO2
5		Painting Weights	CO2
6		Adding Deformers	CO2
Unit 3		**Facial Rigging**	
1		Introduction of Unit	CO3
2		Sculpting Poses	CO3
3		Generating Blend Shapes	CO3
4		Attaching Controls	CO3
5		Organizing Heirarchy	CO3
Unit 4		**Body Animation**	
1		Introduction of Unit	CO4
2		Blocking Out Animation	CO4
3		Creating Key Poses from Reference	CO4
4		Adding in-betweens	CO4
5		Cleaning up Graph Editor	CO4
6		Refining Animation	CO4
Unit 5		**Facial Animation**	
1		Introduction of Unit	CO5
2		Blocking Out Animation	CO5
3		Creating Key Poses from Reference	CO5
4		Adding in-betweens	CO5
5		Cleaning up Graph Editor	CO6
6		Refining Animation	CO6
Mode of examination		**Jury**	

Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Learning Maya 5: Character Rigging and Animation by Alias Wave front		
Other References	• The Advanced Art of Stop-Motion Animation by Ken A. Priebe • Understanding 3-D animation using Maya by John Edgar Park		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 3**	
1	**Course Code**	**OPE**	
2	**Course Title**	**Radio Jockeying, Podcast and Programme Production (OPE)**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**0-2-2**	
5	**Course Type**	**Minor Elective**	
6	**Course Objective**	The objective of this course is to: Familiarize the students with different aspects of Radio Programming & Radio Production Understand how to conceptualize and deliver radio programs. To understand the importance of Voice, punctuation & vocabulary in Radio Programming Understand the difference between outdoor and studio-based Radio production	
8	**Course Description**	This course is specially designed to deal with various elements of radio production process. Beginning with conceptualization of the radio programs, various stages of the production process keeping in view the nature of audience and the zone of broadcast will also be dealt with.	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Radio: An Introduction**	
	1	Introduction to radio, its development as a medium of mass communication.	CO1
	2	Functions, Characteristics & limitations of Radio. Different types of Radio: Commercial Radio, Community Radio, Satellite Radio & Internet Radio	CO1
	3	Introduction to Sound, Importance of Sound in Producing Radio Programs, Doppler Effect	CO1, CO2, CO3
	Unit 2	**Radio Format & different stages**	
	1	Stages of Radio Production • Pre-Production – (Idea, research, script) • Production–Creative use of Sound; Listening, Recording, using archived sounds, (execution, requisite, challenges), Podcast • Post Production	CO2, CO3
	2	Different formats of radio programs	CO 2,CO3
	3	Program format V/s Station format: Music and Non music formats, different formats- talk, discussion, interviews, magazine show, fillers documentary, features etc.	CO1, CO2, CO3
	Unit 3	**Radio Jockeying**	
	1	Voice Modulation Pitch, Tempo, Phonetics, the art of proper articulation and pronunciation, voice projecting.	CO4, CO3
	2	Use of microphones & Console handling	CO1, CO3, CO4, CO6
	3	OB recordings & Live shows.	CO1, CO3, CO4, CO6
	Unit 4	**Radio: Writing & Editing**	
	1	Writing for Radio- Styles & Structure	CO3, CO4
	2	Art of taking Interview for Radio	CO3, CO4
	3	Radio Editing: Tools & Techniques	CO3, CO4,

				CO5, CO6
Unit 5	**Radio Programmes Production**			
1	Producing Radio Interviews, Talks, Magazine Show, Phonos			CO3, CO4, CO5, CO6
2	Producing Public Service Announcement, Promo and Jingles			CO3, CO4, CO5, CO6
3	Final Project Submission and Presentation			CO3, CO4, CO5, CO6
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%	
Text Book/s	Keith, Michael C & Krause, Joseph M. (1989) — "The Radio Station".			
Other References	• Aspinall, R. (1971) Radio Production, Paris: UNESCO. • Flemming, C. (2002) The Radio Handbook, London: Routledge. Keith, M. (1990) • Radio Production, Art & Science, London: Focal Press McLeish, R. (1988) • Techniques of Radio Production, London: Focal Press • Chatterji, P.C. (1993) — "Indian Broadcasting".			

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 3**	
1	**Course Code**	**AVG225**	
2	**Course Title**	**Texture Painting Tools**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Core**	
6	**Course Objective**	The purpose of this subject is to provide simulated hands-on experience of being able to create complete high quality 3D Assets for Films and Game Productions. This subject will help in: Understanding the workflows involved in actual productions. Knowledge of planning and organizing projects. Learning artistic techniques to create high quality assets.	
8	**Course Description**	Students will learn the core concepts of creating High Quality 3D Assets for Film and Game Productions. They will gain the knowledge of planning and organizing projects in a Simulated production environment.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Project Preparation**	CO1
1		Introduction of Unit	CO1
2		Choosing Topic (Environment / High Quality Asset)	CO1
3		Collecting References	CO1
4		Planning	CO1
Unit 2		**Modeling and Sculpting**	
1		Introduction of Unit	CO2, CO3
2		Creating Base Model	CO2, CO3
3		Modeling Hard Surfaces	CO2, CO3
4		Optimizing Topology	CO2, CO3
5		Organic Sculpting	CO4
6		Preparing LODs	CO3, CO4
Unit 3		**Creating UV's and Base Materials**	
1		Assigning Materials	CO4, CO5
2		UV Projection and Cutting	CO4, CO5
3		Unwrapping	CO4, CO5
4		UV Layouts	CO4, CO5
5		Utilizing UDIM Workflow	CO4, CO5
6		Optimizing UV Spaces	CO4, CO5
7		Creating UV's and Base Materials	CO4, CO5
8		Assigning Materials	CO4, CO5
Unit 4		**Texturing and Shading**	
1		Introduction of Unit	CO5
2		Baking LOD Details to Material	CO5
3		Matching Material Properties	CO5
4		Painting organic details	CO5
5		Generating PBR Textures	CO5
6		Plugging-in Textures to Materials	CO5
7		Texturing and Shading	CO5
Unit 5		**Rendering and Presentation**	
1		Introduction of Unit	CO6
2		Setting up Camera	CO6
3		Lighting Scene	CO6

4	Rendering		CO6
5	Post-Processing and Touch up		CO6
6	Rendering and Presentation		CO6
Mode of examination	**Jury**		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Beginning PBR Texturing: Learn Physically Based Rendering with Allegorithmic's Substance Painter Perfect Paperback – 1 January 2022 by Kumar (Author)		
Other References	• Creating Games with Unity, Substance Painter, & Maya (English, Paperback, Li Jingtian)		

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 3**	
1	**Course Code**	**AVG226**	
2	**Course Title**	**Anatomy Drawing**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Core Compulsory**	
6	**Course Objective**	Impart knowledge on Human body and its structural function. Apply the knowledge in creating characters in 3D and2D Understanding Rigging in Anatomy Study.	
8	**Course Description**	This subject will provide an overview of Artistic Human Anatomy, Deformation of human form during various activity. It helps in 3D modeling in more realistic way and rigging as well.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Anatomy Study**	
1		Size and proportion of human body	CO1
2		Bone structure	CO1
3		Stick poses	CO1
4		Action poses in stick drawing	CO1
Unit 2		**Understanding of Human Muscles**	
1		Types of muscles	CO2
2		Muscles in human torso	CO2
3		Muscles in hand and leg	CO2
4		Basic sketches of human muscles	CO2
Unit 3		**Hand and Leg study**	
1		Proportion of Hand and Leg	CO3
2		Hand movement study	CO3
3		Leg Movement study	CO3
4		Full moving pose study	CO3
Unit 4		**Study of Human poses**	
1		Basic human pose study	CO4
2		Action pose study	CO4
3		Group Pose study	CO4
4		Foreshortening poses	CO4
Unit 5		**Study of Human Head**	
1		Basic proportion of human head	CO5
2		Different angles of human head	CO5
3		Separate study of human facial parts	CO6
4		Study of human expression	CO6
Mode of examination		Jury	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Human anatomy for artist by Gyorgy Feher, Publisher: Ullmann Publishing (3 May 2012) ISBN-10: 3833162562, ISBN-13: 978-3833162565 • Drawing the head, hands & figure drawing by- Andrew Loomis, Publisher: TITAN; Reprint edition (10 November 2020), ISBN-10: 1789095344 ISBN-13: 978-1789095340	
Other References		• Constructive Anatomy by George B Bridgman, Publisher: Martino Fine Books; Illustrated edition (2 October 2018) ISBN-10: 1684222648 ISBN-13: 978-1684222643	

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Branch: Mass Communication		**Semester: 3**		
1	**Course Code**	**ARP207**		
2	**Course Title**	**Communicative English-III- Logical Skill Building and Soft Skills**		
3	**Credits**	**2**		
4	**Contact Hours (L-T-P)**	**1-0-2**		
5	**Course Type**	**Co-Requisite**		
6	**Course Objective**	To enhance holistic development of students and improve their employability skills. To provide a 360 degree exposure to learning elements of Business English readiness program, behavioral traits, achieve softer communication levels and a positive self-branding along with augmenting numerical and altitudinal abilities. To step up skill and upgrade students' across varied industry needs to enhance employability skills. By the end of this semester, a student will have entered the threshold of his/her 1st phase of employability enhancement and skill building activity exercise.		
7	**Course Outcomes**	**After completing the course, the student will be able to:**		
		CO1	Ascertain a competency level through Building Essential Language and Life Skills	
		CO2	Build positive emotional competence in self and learn GOAL Setting and SMART Goals techniques	
		CO3	Apply positive thinking, goal setting and success-focused attitudes, time Management, which would help them in their academic as well as professional career	
		CO4	Acquire satisfactory competency in use of aptitude, logical and analytical reasoning	
		CO5	Develop strategic thinking and diverse mathematical concepts through building number puzzles	
		CO6	Demonstrate an ability to apply various quantitative aptitude tools for making business decisions	
8	**Course Description**	This Level 1 blended training approach equips the students for Industry employment readiness and combines elements of soft skills and numerical abilities to achieve this purpose		
9	**Outline Syllabus**			**CO Mapping**
	Unit 1	**BELLS (Building Essential Language and Life Skills)**		
	1	Know Yourself: Core Competence. A very unique and interactive approach through an engaging questionnaire to ascertain a student's current skill level to design, architect and expose a student to the right syllabus as also to identify the correct TNI/TNA levels of the student		CO1
	2	Techniques of Self Awareness | Self Esteem & Effectiveness| Building Positive Attitude | Building Emotional Competence		CO1, CO2
	3	Positive Thinking & Attitude Building | Goal Setting and SMART Goals – Milestone Mapping | Enhancing L S R W G and P (Listening Speaking Reading Writing Grammar and Pronunciation) |		CO1, CO2,CO3
	Unit 2	**Introduction to APTITUDE TRAINING- Reasoning- Logical/Analytical**		

1	Syllogism |Letter Series | Coding, Decoding , Ranking & Their Comparison Level-1	CO4
2	Number Puzzles	CO5
3	Selection Based On Given Conditions	CO5
Unit 3	**Quantitative Aptitude**	
1	Number Systems Level 1 | Vedic Maths Level-1	CO6
2	Percentage ,Ratio & Proportion | Mensuration - Area & Volume |Algebra	CO6
Unit 4	**Verbal Abilities – 1**	
1	Reading Comprehension	CO1
2	Spotting the Errors	CO2
Unit 5	**Time & Priority Management**	
1	Steven Covey Time Management Matrix	CO3
2	Creating Self Time Management Tracker	CO3
Weightage Distribution	Class Assignment/Free Speech Exercises / JAM – 60% | Group Presentations/Mock Interviews/GD/ Reasoning, Quant & Aptitude – 40%	
Text Book/s	Wiley's Quantitative Aptitude-P Anand | Quantum CAT – Arihant Publications | Quicker Maths- M. Tyra | Power of Positive Action (English, Paperback, Napoleon Hill) | Streets of Attitude (English, Paperback, Cary Fagan, Elizabeth Wilson) The 6 Pillars of self-esteem and awareness – Nathaniel Brandon | Goal Setting (English, Paperback, Wilson Dobson	

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Branch: Mass Communication		**Semester: 3**		
1	**Course Code**	**BSA228**		
2	**Course Title**	**Photography & VFX**		
3	**Credits**	**1**		
4	**Contact Hours (L-T-P)**	**0-0-2**		
5	**Course Type**	**Core Elective**		
6	**Course Objective**	Impart knowledge in Photography as an artistic medium. Understand the tools and techniques of Photography Create effective storytelling through photography		
8	**Course Description**	Students Will Learn The Core Basic of Digital Photography, effects of lights and its artistic arrangement. It will helpful for them in creating VFX environment, Matte painting, etc.,		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**History of Photography**		
1		Principle of Camera Obscura		CO1
2		Photography artist study		CO1
3		Aesthetics study of photography in documentary and creative photography		CO1
Unit 2		**Characteristics of Light**		
1		Light Spectrum and color Temperature		CO2
2		Camera structure and their functions		CO2
3		Camera Lenses and their types		CO2
Unit 3		**Lighting Techniques**		
1		Indoor and Outdoor light study		CO3
2		Light Kits and Reflectors		CO3
3		Light study through Black and White Photography		CO3
Unit 4		**Accessories used in Photography**		
1		Exposure and Controls		CO3
2		Flash and Lighting		CO3
3		Reflectors		CO3
Unit 5		**Creative Photography**		
1		Macro Photography		CO4, CO6
2		Light Painting and Freeze Frame Photography		CO6
3		DRI and Panoramas		CO5, CO6
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		Digital Photography Step by Step - Tom, Ang		
Other References		The Complete Digital SLR Handbook: Master Your Camera to Take Pictures Like a Pro		

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Branch: Mass Communication		**Semester: 3**
1	**Course Code**	**AVG227**
2	**Course Title**	**Gaming Devices**
3	**Credits**	**1**
4	**Contact Hours (L-T-P)**	**0-0-2**

5	**Course Type**	**Core Elective**	
6	**Course Objective**	To understand Hand held device eco systems To understand the basics of android gaming To explore game development requirement in android To identify troubleshooting techniques and best practices To explore various build / publishing platforms	
7	**Course Outcomes**	**After completing the course, the student will be able to:**	
		CO1	Describe more about the hand held devices / consoles and android versions including the publishing platforms
		CO2	Summarize the specialties and functionality required for the mobile devices
		CO3	Compare the process of game development techniques for the android
		CO4	Use game development technique for the android
		CO5	Relate the android troubleshooting methods and best practices
		CO6	Collaborate various optimization techniques and develop games in various platforms
8	**Course Description**	The course is designed to equip students with the fundamentals of handheld devices and its concepts. The course begins with basic concepts and ends with optimization techniques used in game development.	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Overview of Handled Device**	
	1	Introduction,	CO1
	2	Types of handled devices & OS,	CO1
	3	Types of API and SDK	CO1
	4	Android Versions, Google play Services,	CO1
	5	Unity build Platform & Settings	CO1
	Unit 2	**Android Game**	
	1	Understanding,	CO2
	2	Setting up the development environment – connecting to a device	CO2
	3	Specialties of the mobile device	CO2
	4	Android Components – Unity Remote-	CO2
	5	API Level Settings- Functionality – High-end-graphics	CO2
	6	Android profiler – debugging, Android SDK	CO2
	Unit 3	**Android setup**	
	1	Multiplayer and Networking	CO3,CO4
	2	Running the app on the device / emulator/ simulator,	CO3,CO4
	3	Android developer console,	CO3,CO4
	4	Adding achievements in the game ,	CO3,CO4
	5	Saving game stats	CO3,CO4
	6	Unity Services, Google API	CO3,CO4
	7	Adding social media integration, User Touch Input – Single & Multi, summary	CO3,CO4
	Unit 4	**Troubleshooting and Best Practices**	
	1	Measuring performance Android profiler – GPU activity –	CO5
	2	Unity Player Statistics – Script Statistics – Memory allocated by scripts ,	CO5
	3	Debugging android devices – Profiler timeline – CPU area –	CO5
	4	Rendering area – memory area – audio area – physics area – GPU area,	CO5
	5	Real practice techniques – high speed – off-screen particle technique in unity – pool technique,	CO5
	6	Scriptable profile tool.	CO5

7	Occlusion culling, Light mapping		CO5
Unit 5	**Building & Publishing**		
1	Optimizing the APK,		CO6
2	Unity build Settings window , Add scene , Switching platforms, PC or Mac Standalone build ,		CO6
3	Standalone –Rendering and optimization – Quality		CO6
Mode of examination	**Jury**		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Mastering Android Game Development with Unity –Siddharth Shekar, Wajahat Karim – Packt Publishing Limited (25 May 2017) - ISBN-10: 9781783550777,ISBN-13: 978-1783550777,ASIN: 1783550775 • Unity 5 for Android Essentials - Valera Cogut – Packt Publishing; 1 edition (5 August 2015) - ASIN: B00YSILC66		
Other References	• Mobile Game Development with Unity: Build Once, Deploy Anywhere - Jonathon Manning (Author), Paris Buttfield-Addison (Author) - O'Reilly Media; 1 edition (September 4, 2017) - ISBN-10: 1491944749,ISBN-13: 978-1491944745		

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**			
Branch: Mass Communication		**Semester: 3**			
1	**Course Code**	**RBL001**			
2	**Course Title**	**Research Based Learning – I**			
3	**Credits**	**-**			
4	**Contact Hours (L-T-P)**	**0-0-4**			
5	**Course Type**	**-**			
6	**Course Objective**	The objective of this course is to: Strengthen the academic research ability of the students. Evolve the inquisitiveness of the students towards society and various factors affecting media and society at a large. Enhance the problem solving skills of the students			
8	**Course Description**	The course is designed to inculcate the research value and skills among the students.			
9	**Outline Syllabus**				**CO Mapping**
	Unit 1	Start of Project/ Dissertation			CO1
	Unit 2	List of Project/ Dissertation proposal area shall be floated to the students			CO1
	Unit 3	Mutual Agreement signed between Supervisor & Student			CO1
	Unit 4	Submission of proposal form by student to the Dissertation/ Project coordinator of the Department after approval from the Supervisor			CO2, CO3
	Unit 5	First Review of Topic Second Review of Topic Approval of Topic Mapping of Dissertation/ Projects to PO-PSO			CO4, CO5,C06
	Mode of examination	Only An Audit course			
	Evaluations	CA 100%	MTE 0%	ETE 0%	

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Branch: Mass Communication		**Semester: 3**	
1	**Course Code**	**VOF206**	
2	**Course Title**	**Motion Graphics & TVC**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**0-2-2**	
5	**Course Type**	**Co-Requisite**	
6	**Course Objective**	Familiarize the tools and techniques to create standard VFX shots Learn Problem solving techniques to rectify the errors during compositing. Create content for broadcast, feature film and web animation	
8	**Course Description**	Students will learn core concepts of 2D & 3D Digital Compositing, Historical Development, Creating Virtual Realm & Video Art.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**History of Compositing**	
1		Terminologies	CO1
2		Physical Compositing, Multiple exposure,	CO2
3		Background Projection, Matting,	CO1&CO2
4		Digital Compositing,	CO1&
5		Node based and Layer Based Compositing.	CO2
6		Visual information and the camera,	CO1&CO2
Unit 2		**Digital Image**	
1		Digital Image Generation, Pixels, Components and Channels,	CO3
2		Bit Depth, Floating point and High Dynamic Range Imagery,	CO3
3		HSV Color, YUV color, Digital Image file formats, Channels, Compression.	CO3
4		Color Manipulation, Levels, Variations, Multiply, Add,	CO3
5		Gamma Correction, Exposure Correction, Invert, Contrast, HSV manipulations	CO3
Unit 3		**Layers**	
1		Layer and Node based compositing.	CO3&CO4
2		Blending layers, Matte Image, Masking, and Morphing - Chroma Keying, Garbage Mattes, Edge Mattes, Luminance Keying, Chrominance Keying, Difference Matting, Plug-ins and tools for keying.	CO3&CO4
3		Tracking and Stabilization, Tracking an element, 2D tracking, Perspective tracking, Stabilizing footage.	CO4
4		Limitations of tracking and stabilizing tools.	CO3
5		Tools for advanced tracking and match moving.	CO3&CO4
6		Digital Imagery, Color Correction	CO3
Unit 4		**Lighting and Composition**	
1		Creating elements, Lighting in compositing tool, Matching live and virtual cameras.	CO5
2		3D Compositing, Vanishing point conversion, creating 3D compositing using 2D images,	CO5
3		Working with camera and lighting, effects, Working with Multipass Rendering, Alpha and Luma mattes, Z depth maps, Blending passes and effects.	CO5
4		Animation, 2D and 3D transformation, Temporal and spatial interpolation, speed graph, optimizing key frames, expressions for animation, Time Remapping	CO6

Unit 5	**Theory and Practice of Video Art**		
1	History of Video Art, Contemporary video style, culture and emotion reference -		CO6
2	Video synthesizer, real-time video art, tools and techniques, applications -		CO6
3	Music visualization and media art, automation to music, applications and tools		CO6
4	Video art as art form, Interactive film, display and projection, case studies.		CO6
5	Learning Lab: Create 2.5D Animation of an exterior and interior scene. Animate a slideshow using images imported into compositing. Track and composite chroma footage to a background, color correct the scene for film. Animate and composite 3D rendered passes with 2D footages.		CO6
Mode of examination	**Jury**		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Compositing Digital Images - T. Porter and T. Duff I Proceedings of SIGGRAPH '84, 18 (1984) I • The Art and Science of Digital Compositing - Ron Brinkman • Wright's Compositing Visual Effects: Essentials for the Aspiring Artist [Paperback]2007) - Paperback (2007) - Wright		
Reference Book	• Compositing Visual Effects – Essentials for aspiring artists - Steve Wright		

Semester IV

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**		
Branch: Mass Communication		**Semester: IV**		
1	**Course Code**	**AVG230**		
2	**Course Title**	**VFX Compositing -II**		
3	**Credits**	**4**		
4	**Contact Hours (L-T-P)**	**2-2-0**		
5	**Course Type**	**Core Compulsory**		
6	**Course Objective**	Familiarize the Concepts and techniques used in compositing To familiarize in Advanced In-Depth Compositing		
8	**Course Description**	Students will learn core concepts of 2D & 3D Digital Compositing, Historical Development, Creating Virtual Realm & Video Art.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Channels**		
1		Pass Management,		CO1
2		Bit Depth Allocation		CO1
3		Finding The Best Depth Channels		CO1
4		Color Channels for the Project		CO1
Unit 2		**Color Correction**		
1		The LUT use and Specifications		CO2
2		Finding the Black's and White's Node reusing to Maintain Color Correction		CO2
3		Use of Plugin's in 3D Channels		CO2
Unit 3		**Advanced In-Depth Compositing,**		
1		Concepts and Techniques to Compositing Foliage		CO3
2		Learn to Composite Hair and Fur		CO3
4		Creating and Merging Horizon Lines		CO3
5		Using Vector Blur For Quicker Results		CO3
Unit 4		**Layer, Node & Projection**		
1		Creating Macro's and Dummies,		CO4
2		3D Layers / Nodes in Brief,		CO4
3		3D Camera Projection and Tracking,		CO5
4		3D Channels and Depth Creation,		CO5
5		RGB Mattes and Rotoscopy Solutions.		
Unit 5		**Compositing Lab**		CO5
1		Compositing a Cityscape with Live Footage.		CO5
2		Compositing an Explosion Accident.		CO6
3		Compositing a Live scene with Multiple CG Characters.		CO6
4		Compositing a natural Disaster scene.		CO6
Mode of examination		**Jury**		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		• Compositing Digital Images - T. Porter and T. Duff I Proceedings of SIGGRAPH '84, 18 (1984) • The Art and Science of Digital Compositing - Ron Brinkmann • Wright's Compositing Visual Effects: Essentials for the Aspiring Artist [Paperback]2007) - Paperback (2007) - S.Wright • Compositing Visual Effects – Essentials for aspiring artists -Steve Wright		
Reference Book		• Compositing Visual Effects – Essentials for aspiring artists - Steve Wright		

School: SSMFE			**Batch 2024-28**
Programme: B.Sc. Animation, VFX & Gaming Design			**Current Academic Year: 2025-26**
Branch: Mass Communication			**Semester: 4**
1	**Course Code**		**AVG239**
2	**Course Title**		**AR VR**
3	**Credits**		**3**
4	**Contact Hours (L-T-P)**		**1-2-0**
5	**Course Type**		**Core**
6	**Course Objective**	• Understand key Augmented Reality (AR) concepts and develop and create a functional prototype • Identify VR hardware components, Implement VR interaction in Unity and develop a basic VR environment. • Utilize AR Foundation and VR SDKs in Unity. Implement advanced scripting for interactivity and optimize AR and VR applications for performance.	
7	**Course Outcomes**	**After completing the course, the student will be able to:**	
		CO1	Understand the fundamental concepts and distinctions between Augmented Reality (AR) and Virtual Reality (VR) technologies in the context of gaming.
		CO2	Develop practical skills in utilizing Unity, covering scene setup, asset management, scripting in C#, and implementing both AR and VR components.
		CO3	Apply AR development principles, including marker-based tracking, integration in Unity, and creation of a simple AR application.
		CO4	Apply VR development techniques, encompassing hardware and device familiarity, interaction implementation, and the creation of a basic VR environment in Unity.
		CO5	Explore Unity's AR Foundation, various VR SDKs, advanced scripting, user interface implementation, and performance optimization for AR and VR experiences.
		CO6	Design and develop a capstone AR or VR game project, integrating all learned concepts, and showcase their projects to peers, gaining valuable experience in project presentation and refinement based on feedback.
8	**Course Description**	This course introduces students to the exciting world of Augmented Reality (AR) and Virtual Reality (VR) with a focus on creating immersive gaming experiences using the Unity Game Engine. Students will gain hands-on experience in developing AR and VR projects, understanding the fundamentals of these technologies, and applying them to game development.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to AR and VR**	
1		Overview of AR and VR	CO1
2		Unity Basics	CO1
3		Fundamentals of AR Development	CO1
Unit 2		**Basic VR Development in Unity**	
1		VR Hardware and Devices	CO2
2		VR Interaction Techniques	CO2
3		Building a Basic VR Environment	CO2

Unit 3	**Advanced AR and VR Development**		
1	Unity's AR Foundation and VR SDKs		CO3
2	Advanced Scripting for AR and VR		CO3
3	User Interfaces in AR and VR		CO4
Unit 4	**Optimization and Performance**		
1	Capstone Project Overview		CO4
2	Testing and Profiling AR and VR Applications		CO5
3	Strategies for Improving Frame Rates		CO5
Unit 5	**Final Project and Showcase**		
1	Project Presentation and showcase		CO6
2	Project Development		CO6
3	Final Project Showcase		CO6
Mode of examination	**Jury**		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Augmented Reality with Unity AR Foundation: A Practical Guide to cross-platform AR development with Unity 2020 and later versions, Author: Jonathan Linowes, Publisher: Packt Publishing Ltd, 2021, ISBN- 1838982965, 9781838982966 • Unity 2020 Virtual Reality Projects - Third Edition, Author: Jonathan Linowes, Released July 2020, Publisher(s): Packt Publishing, ISBN: 978183921733		
Other References	• Unity 2018 Augmented Reality Projects: Build four immersive and fun AR applications using ARkit, ARCore, and Vuforia - Jesse Glover (Author) - Packt Publishing - ebooks Account (July 30, 2018) - ISBN-10: 9781788838764,ISBN-13: 978-1788838764. • Learning Virtual Reality: Developing Immersive Experiences and Applications for Desktop, Web, and Mobile - by Tony Parisi (Author) - O'Reilly Media; 1 edition (November 20, 2015) - ISBN-10:9781491922835, ISBN-13: 978-1491922835, ASIN: 1491922834.		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**AVG232**	
2	**Course Title**	**Game Testing***	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To explain game testing methodologies. To discuss test phases, process and plan. To assess various like ADHOC, combinatorial and other testing techniques. To summarize game testing procedures for handled devices. To explore game publishing platforms and their process.	
8	**Course Description**	The course is designed to equip students with Game Publishing and Testing concepts and to apply these concepts and techniques in game development.	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Overview of testing**	
	1	Introduction	CO1
	2	Two rules of game testing.	CO1
	3	Being a game tester.	CO1
	4	Types of game testing.	CO1
	5	Why testing is important.	CO1
	6	Testing strategy.	CO1
	7	Testing vs. debugging, and Testing coverage.	CO1
	Unit 2	**Testing Fundamentals**	
	1	Software quality.	CO2
	2	Test phases.	CO2
	3	Test process.	CO2
	4	Testing by numbers.	CO2
	5	Test plan.	CO2
	Unit 3	**Testing Techniques**	
	1	Combinatorial testing.	CO3
	2	Test Flow Diagrams.	CO3
	3	Clean room testing.	CO3
	4	Test trees.	CO3
	5	Play testing and ADHOC Testing.	CO3
	6	Defect Triggers.	CO3
	7	Game test Automation.	CO3
	8	Capture / playback testing.	CO3
	9	Software testing processes.	CO3
	Unit 4	**Game Testing Procedures**	
	1	Game Components and breakdown structure.	CO4,CO5
	2	Game Testing Techniques.	CO4,CO5
	3	Special considerations for game testing.	CO4,CO5
	4	Android Game testing, Bug spotting.	CO4,CO5
	Unit 5	**Unity Game Publishing**	
	1	Introduction	CO6
	2	Type of game publishing platforms. Fundamentals.	CO6
	3	How to build for various platforms like pc, mobile, web	CO6

	platforms using the variety of tools.		
4	Build features.		CO6
5	Packing up assets.		CO6
6	Game Aspects.		CO6
Mode of examination	Jury		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	Cengage Learning; New edition edition (22 June 2009) - ISBN-10: 1435439473 , ISBN-13: 978- 1435439474 Unity 2018 By Example: Learn about game and virtual reality development by creating five engaging projects - by Alan Thorn (Author) - Packt Publishing; 2 edition (July 31, 2018) - ASIN: B0789J4DVP. Mastering Unity 2017 Game Development with C# - by Alan Thorn (Author) – Packt Publishing Limited; 2nd Revised edition edition (30 October 2017) - ISBN-10: 1788479831, ISBN-13: 978- Game Testing: All in One - by Charles P. Schultz (Author), Robert Bryant (Author) - Mercury Learning & Information; 3rd edition edition (20 October 2016) - ISBN-10: 1942270763, ISBN-13: 978-1942270768. Game Development Essentials: Game QA & Testing - by Levy (Author), Jeannie Novak (Author) - Delmar 1788479837.		
Other References	Getting Started with Unity 2018: A Beginner's Guide to 2D and 3D game development with Unity - by Dr. Edward Lavieri (Author) - Packt Publishing; 3 edition (March 22, 2018) - ASIN: B07BP9Y7RB. Mobile Game Design Essentials - Dr. Claudio Scolastici (Author), David Nolte (Author) - Packt Publishing (November 21, 2013) - ISBN-10: 184969298X, ISBN-13: 978-1849692984.		

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**
Branch: Mass Communication		**Semester: 4**
1	**Course Code**	**AVG233**
2	**Course Title**	**Particles & FX ***
3	**Credits**	**3**
4	**Contact Hours (L-T-P)**	**1-2-0**
5	**Course Type**	**Core Compulsory**

6	**Course Objective**	Understand and formulate the dynamic simulations to be created. To create simple dynamic simulations of object collisions and destructions. To create particle simulations for simulating liquids and gas. To understand and implement scripting for creating dynamic simulations.	
8	**Course Description**	Students Will Learn the Core Basic of 3D effects creation in Autodesk Maya. They will explore the Physics behind effects creation, attributes & various tools.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1	**Introduction to Maya Dynamics**		
1	Introduction to Applied Physics and Quantum mechanics		CO1
2	Kinetic Motion		CO1
3	Energy Conversion		CO1
Unit 2	**Rigid Bodies**		
1	Introduction to special effects		CO2
2	Rigid bodies – Active and passive rigid bodies		CO2
3	Physics based procedural animation using rigid bodies		CO2
4	Collisions		CO4
Unit 3	**Emitters**		
2	Particles		CO6
3	Emitter types and Attributes		CO6
4	Deflectors and its attributes		CO3
5	Simulating particle effects		CO3
Unit 4	**Fields**		
1	Goals		CO5
2	Soft Bodies		CO4
3	Animating soft bodies		CO4
4	Fields and its attributes		CO5
5	Simulation of fields		CO5
Unit 5	**Constraints**		
1	Introduction		CO6
2	Types & Attributes		CO6
3	Nail & Pin		CO6
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	Beginning VFX with Autodesk Maya: Create Industry-Standard Visual Effects from Scratch by Abhishek Kumar		
Other References	Maya Visual Effects The Innovator's Guide: Autodesk Official Press, 2nd Edition Eric Keller		

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**OPE**	
2	**Course Title**	**Basic Still Photography**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**0-2-2**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	Describe photography, types of photography, and their purpose Different composition technique Elaborate on basics of visual literacy and composition Lens and its functions	
8	**Course Description**	This course provides an introduction to basic visual composition and Photography techniques	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to Photography**	
1		What is photography? The role & importance of photography.	CO1
2		Brief History of photography and how Camera works?	CO1
3		Principles of Camera Obscura and types of Cameras	CO1
Unit 2		**Principles of Photographic composition**	
1		Concepts of composition	CO2,CO5
2		Digital Capture	CO2,CO6
3		Various types of Digital Capture and Image	CO2,CO6
Unit 3		**Lighting**	
1		Sources of light: Natural & Artificial Correct exposure.	CO3
2		Nature and physical properties of light Direction & angle of light: Front, side, top & back	CO3
3		Lighting contrast and its control by fill in lights, one-, two- & three-point lighting: Key, fill and back light	CO2,CO3
Unit 4		**Photography Composition**	
1		Rule of 3rd, How to shoot buildings, monuments and portrait	CO3,CO5
2		Importance of lens in photography	CO6,CO5
3		Different types of camera lenses	CO3,CO5
Unit 5		**Introduction to image editing software Photoshop**	CO6
1		Basic image editing technique	CO3,CO2,CO6
2		Understanding common terms like Resolution, Depth, Cropping, Scaling, Hue, Saturation, vibrance, Sharpness, etc.	CO3,CO2,CO6
3		Final Project	CO3,CO5,CO2
Mode of examination		Jury	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Michael Langford Basic Photography, Focal Press • James A. Folts Ronald P. Lovell Handbook of Photography, Fred C. Zwahlen, Jr. Delmal Thomsan learning	
Other References		• Lee Frost Photography, Hodder Headline • Audio – Vision – Sound on Screen by Michael Chion	

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**AVG234**	
2	**Course Title**	**VFX & Gaming Animation**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Core Compulsory**	
6	**Course Objective**	It enables the students to learn the basis of photogrammetry explaining what this form of scanning consists of. Allows students to learn technique relates to photography and what you should do to capture a real 3D object. Guides the student to create 3D by using techniques behind 3D scanning to create models based on real objects.	
8	**Course Description**	Students will learn the use of 2D & 3D Application to create Various kinds of Animation for VFX & Games.	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Animation for VFX**	
	1	Understanding the VFX Animation & Simulation	CO1
	2	Rotomation & Mo-Cap	CO1
	3	Body Mechanics	CO1
	Unit 2	**Creature Animation**	
	1	Reference Study	CO2
	2	Rig Testing & Blocking	CO2
	3	Graph Editing.	CO2
	Unit 3	**Animation for Games**	
	1	Understand Idle, Walk, Run & Jump Animation Loop	CO3
	2	Sprite in Games.	CO3
	3	Game Animation Fundamentals.	CO3
	Unit 4	**Game Animation**	
	1	Blocking the Animation Cycle.	CO4
	2	Breakdown & Polishing.	CO4
	3	Transition/Blending the All Animation Cycle	CO4
	Unit 5	**Game Engine Animation**	
	1	Bake Simulation	CO5 & CO6
	2	Time Editor & Clip Layers	CO5 & CO6
	3	Application to Game Engine	CO5 & CO6
	Evaluations	CA 25% / CE(Viva) 25% / ETE 50%	
	Text Book/s	• Game Anim (Paperback) | Released: 27 Jan 2019 By: Jonathan Cooper • (Author) , Publisher Imprint: A K Peters	
	Other References	• 3D Game Development with Unity 1st Edition 2022 Softbound by LANZINGER, CRC Press	
School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**AVG235**	
2	**Course Title**	**Visual Scripting for Game Development**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	

5	**Course Type**	**Core Elective**	
6	**Course Objective**	VS Introduction Features and Limitations Purpose of VS Introduction to Gaming VS tools Unity VS system (BOLT)	
8	**Course Description**	The course is designed to equip students with the basics of visual scripting and the ease in varied workplace environment. The course begins with visual scripting, VS Tools and ends with the use of Unity Bolt in game development.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Visual Scripting Introduction**	
1		Introduction to visual scripting.	CO1
2		Feature and Limitations.	CO1
3		Purpose of visual scripting.	CO1
4		Introduction to Gaming Visual Scripting Tools.	CO1
Unit 2		**Basic Concepts**	
1		Variables.	CO2
2		Graphs.	CO2
3		Machine and Macros.	CO2
4		Groups.	CO2
Unit 2		**Flow Graphs and State Graphs**	
1		Flow Graphs.	CO3, CO4
2		Unit and Ports.	CO3, CO4
3		Connection and Relations.	CO3
4		Predictive and Live Debugging.	CO3
5		Super unit.	CO3
6		State Graphs – Flow state and super state.	CO3, CO4
7		Transitions and State unit.	CO3, CO4
Unit 3		**Unit Reference**	
1		Self, Control.	CO4, CO5
2		Time, Events, Variable.	CO5
3		Nulls, Formula.	CO5
Unit 4		**Scripting and Advance Topic**	
1		Custom Types.	CO6
2		Variables API.	CO6
3		Event API, Refactoring.	CO6
4		Live Editing, Prefabs.	CO6
5		Version control.	CO6
6		Build mobile and pc games.	CO6
Mode of examination		**Jury**	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• The Game Production Handbook, 3rd Edition by Heather Maxwell Chandler Published by Jones & Bartlett Learning, 2013 • Game Development Essentials: Game Project Management 1st Edition by John Hight (Author), Jeannie Novak (Author) • Game Development Essentials: An Introduction 2nd Edition by Jeannie Novak (Author)	
Other References		• The Visual Effects Producer: Understanding the Art and Business of VFX - Charles Finance, Susan Zwerman, Publisher: Focal Press; 1 edition (August 28, 2009) • The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures - Jeffrey A. Okun, Publisher: Focal Press; 1 edition (July 8, 2010)	

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**ARP 306**	
2	**Course Title**	**Communicative English IV – Campus to Corporate**	
3	**Credits**	**2**	
4	**Contact Hours (L-T-P)**	**1-0-2**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To enhance holistic development of students and improve their employability skills. Provide a 360 degree exposure to learning elements of Business English readiness program, behavioral traits, achieve softer communication levels and a positive self-branding along with augmenting numerical and altitudinal abilities. To up skill and upgrade students' across varied industry needs to enhance employability skills. By the end of this semester, a will have entered the threshold of his/her 3rd phase of employability enhancement and skill building activity exercise.	
8	**Course Description**	This penultimate stage introduces the student to the basics of Human Resources. Allows the student to understand and interpret KRA | KPI and understand Job descriptions. A student also understands how to manage conflicts, brand himself/herself, understand relations and empathize others with level-4 of quant, aptitude and logical reasoning	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Ace the Interview**	
1		HR Sensitization (Role Clarity | KRA | KPI | Understanding JD) | Conflict Management	CO1
2		Negotiation Skills | Personal Branding	CO3, CO4
3		Uploading & Curating Resumes in Job Portals, getting Your Resumes Noticed | Writing Cover Letters | Relationship Management	CO1, CO3
Unit 2		**Introduction to APTITUDE TRAINING- Reasoning- Logical/ Analytical**	
1		Sitting Arrangement & Venn Diagrams | Puzzles | Distribution | Selection	CO4
2		Direction Sense | Statement & Conclusion | Strong & Weak Arguments	CO4
3		Analogies, Odd One out | Cause & Effect	CO5
Unit 3		**Quantitative Aptitude**	
1		Average , Ratio & Proportions, Mixtures & Allegation	CO6
2		Geometry-Lines, Angles & Triangles	CO6
3		Problem of Ages | Data Sufficiency - L2	CO6
Unit 4		**Verbal Abilities-4**	
1		Antonyms and Synonyms	CO1
2		Idioms and Phrases	CO2
Unit 5		**Problem Solving and Case Studies**	
1		Real time Case Study Solving Exercises	CO4
2		Intra student Mock Situation Handling Exercises	CO4
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• (CA)Class Assignment/Free Speech Exercises / JAM – 60% | (ETE) Group Presentations/Mock Interviews/GD/ Reasoning, Quant & Aptitude – 40%	
Other References		• Wiley's Quantitative Aptitude-P Anand | Quantum CAT – Arihant	

	Publications | Quicker Maths- M. Tyra | Power of Positive Action (English, Paperback, Napoleon Hill) | Streets of Attitude (English, Paperback, Cary Fagan, Elizabeth Wilson) The 6 Pillars of self-esteem and awareness – Nathaniel Brandon | Goal Setting (English, Paperback, Wilson Dobson

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**AVG236**	
2	**Course Title**	**Game Architecture Development ***	
3	**Credits**	**2**	
4	**Contact Hours (L-T-P)**	**0-1-2**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To explain layer of game architecture. To assess role of game engine framework To explain the importance of game software architecture To discuss components involved in game logic, devices, lifetimeTo recognize the flow in runtime game engine architecture.	
8	**Course Description**	The course is designed to equip students with detailed knowledge of game architecture and its components. Course starts with game architecture and ends with game logic and game engine concepts	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Overview of Game Architecture**	
	1	Introduction.	CO1
	2	Layers of Game Architecture.	CO1
	3	Game software architecture.	CO1
	Unit 2	**Game development comparisons.**	CO1
	1	Game architecture.	CO1
	2	Runtime engine architecture.	CO1
	3	Layer of Game Architecture	
	4	Game engine framework – a. Graphics, Rendering & physics.	CO2
	5	Game stats, Data & Memory & processing.	CO2
	6	Screen Monitor Display.	CO2
	7	operating System.	CO2
	8	openGL&Directx Computer Hardware & Graphic Chipset.	CO2
	Unit 3	**Game software Architecture**	
	1	Game Application,	CO3
	2	Game Engine Framework.	CO3, CO5
	3	OpenGL &Directx frame work.	CO3, CO5
	Unit 4	**Game Application Layer**	
	5	Game logic.	CO4
	2	Game view.	CO4
	3	Devices – Input – files – Ram – Time.	CO4
	4	Operating System – Language – DLL – Threads – network,Game Lifetime – core Libs – Main Loop – Int& shutdown.	CO4, CO5
	5	Runtime Engine Architecture	
	Unit 5	**Gameplay (Input) programming.**	CO6
		AI programming.	CO6
		Shader Graphic & visuals programming.	CO6
		Animation & tools programming	CO6
		Game UI Programming	CO6
		third party Node Based programming.	CO6
		Programming patterns.	CO6
		Game stats & Events Programming.	CO6
	Mode of examination	Jury	

Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	*Game Architecture and Design: A New Edition - by Andrew Rollings (Author), David Morris (Author) - New Riders; Subsequent edition (24October 2003) - ISBN-10: 0735713634, ISBN-13: 978-0735713635* *Mastering Android Game Development - by Raul Portales (Author) - Packt Publishing Limited (30 June 2015) - ISBN-10: 1783551771, ISBN-13: 978-1783551774.*		
Other References	*Game Engine Architecture, Third Edition - by Jason Gregory (Author) -A K Peters/CRC Press; 3 edition (16 August 2018) - ISBN-10: 1138035459, ISBN-13: 978-1138035454* *Game Architecture and Programming (WIND) - by GaurangSinha (Author), Saurabh Jain (Author), RadhaShankarmani (Author) - WileyIndia Pvt Ltd (2011) - ISBN-10: 9788126528875, ISBN-13: 978-8126528875, ASIN: 8126528877.*		

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**AVG237**	
2	**Course Title**	**3d Walk-through**	
3	**Credits**	**2**	
4	**Contact Hours (L-T-P)**	**0-1-2**	
5	**Course Type**	**Core Compulsory**	
6	**Course Objective**	It enables the students to learn the 3d Tool to Create a Virtual Environment. Allows students to learn, observe, analyze, and visualize the virtual world Guides the student to strengthen the Perspective Analysis and Virtual background.	
8	**Course Description**	Students will learn the use of various CGI tools to create a complete or partial set 3d model and compose with Live Action. They will understand the significance of Linear & Aerial Perspective, different eye levels & Camera Shots, and environmental Lights. At the end of the module, they will acquire the skill of creating a Virtual Set for Motion Pictures	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction**	
1		Brainstorming session about 3D	CO1, CO2
2		Importance of Architectural Visualization	CO1, CO2
3		Role of a Designer and Visualizer	CO1, CO2
4		Digesting 3D training & Practicing	CO1, CO2
Unit 2		**3ds Max interface**	
1		User Interface	CO5, CO6
2		The Viewports and Navigation	CO5, CO6
3		Command Panel	CO5, CO6
4		Scene Management Tools	CO5, CO6
Unit 3		**Getting Started with Modeling**	
1		Modeling a Product	CO3, CO4
2		Furniture Modeling	CO3, CO4
3		Importing CAD drawing and Modeling	CO3, CO4
4		Importing Sketch up Model, Cleaning up and remodeling	CO3, CO4
Unit 4		**Materials, Texturing, and Basics of Unwrapping**	
1		Standard Maps and material browser	CO5, CO6
2		Arnold Materials	CO5, CO6
3		Projection-Mapping	CO5, CO6
4		UV Editor Interface	CO5, CO6
Unit 5		**Lighting and Rendering**	
1		Lighting and Rendering	CO5, CO6
2		HDRI Lighting	CO5, CO6
3		Environment and Effects	CO5, CO6
4		Rendering an Interior Scene	CO5, CO6
Mode of Examination		Jury	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Autodesk 3ds Max 2024 Basics Guide, Kelly Murdock	
Other References		• Autodesk 3ds Max 2020: A Detailed Guide to Modeling, Texturing, Lighting, and Rendering, Pradeep Mamgain	

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**			
Branch: Mass Communication		**Semester: 4**			
1	**Course Code**	**RBL002**			
2	**Course Title**	**Research Based Learning – II**			
3	**Credits**	**-**			
4	**Contact Hours (L-T-P)**	**0-0-4**			
5	**Course Type**	**Pre-Requisite/AECC**			
6	**Course Objective**	The objective of this course is to: Strengthen the academic research ability of the students. Evolve the inquisitiveness of the students towards society and various factors affectingmedia and society at a large. Enhance the problem solving skills of the students.			
8	**Course Description**	The course is designed to inculcate the research value and skills among the students			
9	**Outline Syllabus**				**CO Mapping**
	Unit 1	Dissertation/ Project Monitoring Stage			CO1, CO2
	Unit 2	Progress of Project/ Dissertation after topic approval			CO3, CO4
	Unit 3	Evaluation of progress of Project/ Dissertation after topic approval			CO4, CO5, CO6
	Unit 4	First Review of the project by internal committee (R1)			CO4, CO5, CO6
	Unit 5	Second Review of the project by internal committee (R2)			CO4, CO5, CO6
	Mode of examination	Only an Audit course			
	Evaluations	CA 100%	CE(Viva) 0%	ETE 0%	

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Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2025-26**	
Branch: Mass Communication		**Semester: 4**	
1	**Course Code**	**VAF008**	
2	**Course Title**	**Innovation & Entrepreneurship**	
3	**Credits**	Audit	
4	**Contact Hours (L-T-P)**	30 Hrs	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	• To understand the concepts of Innovation and Entrepreneurship • To explore opportunities to interpret organizational output and efficiency. • To work effectively and professionally in teams.	
8	**Course Description**	The course is designed to provide the tools necessary for starting independent businesses. This course will facilitate the students with competencies and knowledge in key business functional areas, understand the changing business environment and apply the new business management solutions in terms of start-up ideas.	
9	**Outline Syllabus**		**CO Mapping**
	Unit 1	**Understanding Innovation**	
	1	Introduction to innovation	CO1
	2	Fundamentals of Innovation	CO1
	3	Theories of Innovation	CO1
	Unit 2	**Innovation Foundation**	
	1	Business in Society, Diffusion of Innovation	CO2
	2	Creative thinking	CO2
	3	Innovation Management	CO2
	Unit 3	**Understanding Entrepreneurship**	
	1	Introduction to Entrepreneurship	CO3
	2	Design thinking for Entrepreneurship	CO3
	3	Startup Methods	CO6
	Unit 4	**Entrepreneurship Foundation**	
	1	Opportunity Analysis	CO4
	2	Assembling and motivating a team	CO4
	3	Pitching and presenting	CO6
	Unit 5	**Advance Innovation & Entrepreneurship**	
	1	Advance Strategy for Innovators and Entrepreneurs	CO5
	2	Finance for Innovators and Entrepreneurs	CO5
	3	Marketing for Innovators and Entrepreneurs	CO6
Text book/s*		• Technology Ventures: From Idea to Enterprise. Byers, Dorf, and Nelson. 4th Edition. McGraw Hill Education. Copyright 2015. ISBN 978-1259252754 (International Student Edition).	
Other References		• Poornima Charantimath, (2007)"Entrepreneurship Development-Small Business Enterprise", Pearson Education.	

Semester 5

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 5**	
1	**Course Code**	**AVG321**	
2	**Course Title**	**Introduction to Game Engine***	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core Compulsory**	
6	**Course Objective**	To explain importance of game engine To elucidate scripting techniques using C++ To assess physics parameters required for game development To construct particle systems and camera techniques To identify about the build process and platforms	
8	**Course Description**	The course is designed to equip students, who are at a very basic level of gaming, to design and develop programs with ease in varied workplace environment. The course begins with game engine and ends with optimizing and testing the build	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction**	
1		Unreal Engine Setup, Installing Unreal Engine, Installing \ Visual Studio	CO1
2		Creating First Project, Understanding Project Structure, Understanding The Game Window Hierarchy, Understanding Unread Editor.	CO1
3		Working With Unreal Class System ,Create Scenes,	CO1
4		Working With Multiple Scenes, Using 2D Objects.	CO1
5		Working With SFX	CO1
Unit 2		**Working with C++**	
1		Understanding C++ Function Syntax.	CO3
2		Working With #Include, Namespaces.	CO3
3		Working With Enumerations, Creating Header Files, Using Type Alias	CO3
4		Understanding TMap And Map	CO3
Unit 3		**Game Scene**	
1		Physics And Collider 2D	CO4
2		Working With Line Tracing	CO2, CO4
3		Work With Different UI Components, Handling Different Events, Understanding Physics 2D, Using Landscape Layers.	CO2, CO4
4		Working With Colliders, Using Physics Material, Material, Meshes, Animations And Animator Controller 2D & 3D.	CO2, CO4
5		Creating Animations, Handling Multiple 2D Character Animation, Creating Text Animation.	CO2, CO4
Unit 4		**Visualization**	
1		Camera And Particles.	CO5
2		Working With Camera Controls.	CO5
3		Understanding 3rd Person Camera Control.	CO5
4		Working With AI Controls.	CO5
5		Working With Particle System.	CO5
6		Using Particle System In Game	CO5
7		Working With Particle Bounding Boxes.	CO5

Unit 5	Game Finalizing			
1	User Interface			CO6
2	Package project– Android / PC/MAC Standalone			CO6
3	Texture compression and debug stripping			CO6
4	Quality Settings			CO6
Mode of examination	Jury			
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%	
Text Book/s	• Unreal Development Kit Beginner's Guide - by Richard Moore (Author) - Packt Publishing (September 11, 2011) - ISBN-10: 1849690529, ISBN-13: 978-1849690522. • Unreal Development Kit Game Design Cookbook - by Thomas Mooney (Author) - Packt Publishing (February 22, 2012) - ASIN: B007CXZ9D6. • Blueprints Visual Scripting for Unreal Engine: Build professional 3D games with Unreal Engine 4's Visual Scripting system - by Brenden Sewell (Author) - Packt Publishing (28 July 2015) - ASIN: B00YSILVNA.			
Other References	• Unreal Engine 4 Game Development in 24 Hours, Sams Teach Yourself - by Aram Cookson (Author), Ryan DowlingSoka (Author), Clinton Crumpler (Author) - Sams Publishing; 1 edition (June 18, 2016) - ISBN-10: 0672337622, ISBN-13: 978-0672337628. • Unreal Engine 4 Game Development Quick Start Guide: Programming professional 3D games with Unreal Engine 4 - by Rachel Cordone (Author) - Packt Publishing (May 31, 2019) - ISBN-10: 1789950686, ISBN-13: 978-1789950687.			

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 6**	
1	**Course Code**	**AVG340**	
2	**Course Title**	**AI for Gaming ***	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To describe role of AI in games. To define fundamental AI techniques in Game Development. To identify the path finding setup for games. To discuss the decision-making techniques in AI. To understand neural networks in AI.	
8	**Course Description**	The course is designed to equip students with AI concepts and to apply these concepts and AI techniques in game development	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to AI**	
1		Understanding Generative AI	CO1
2		Types of Generative Models	CO1
3		Ethical Considerations and Challenges	CO1
Unit 2		**Generative Models in Game Design**	
1		Procedural Content Generation (PCG)	CO2
2		Dynamic Difficulty Adjustment	CO2
3		Procedural Narrative Generation	CO2
Unit 3		**Generative Models in Animation**	CO2
1		Character Animation and Movement	CO2
2		Motion Generation Algorithms	
3		Advanced Animation Techniques	CO3, CO4
Unit 4		**Enhancing Game Dynamics with Generative AI**	CO3, CO4
1		Reinforcement Learning in Games	CO3, CO4
2		Procedural Art Generation	CO3, CO4
3		AI-driven Game Design	CO3, CO4
Unit 5		**Real-time Applications and Optimization**	
1		Real-time Performance Optimization	CO5
2		Integration with Game Engines and Animation Software	CO5
3		merging Trends and Future Directions	CO5
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Artificial Intelligence for Games - Ian Millington (Author), John Funge (Author) - CRC Press; 2 edition (August 6, 2009) - ISBN-10: 0123747317, ISBN-13: 978-0123747310.Auth, Kyaw (Author), ThetNaingSwe(Author)	
Other References		• AI and Artificial Life in Video Games - Guy W. Lecky-Thompson (Author) - Charles River Media; 1 edition (15 May 2008) - ISBN-10: 1584505583,ISBN-13: 978-1584505587	

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**		
Branch: Mass Communication		**Semester: 5**		
1	**Course Code**	**AVG323**		
2	**Course Title**	**Camera Tracking & Match Moving***		
3	**Credits**	**3**		
4	**Contact Hours (L-T-P)**	**1-2-0**		
5	**Course Type**	**Core Elective**		
6	**Course Objective**	Familiarize the tools and techniques to create Match moving and effects Learn Problem solving techniques to rectify the errors during the process Create content for broadcast, feature film and animation.		
8	**Course Description**	Students will learn the core knowledge & techniques of Camera Tracking & match moving so that they can be able to add or merge 3d Elements into Live Action Footage		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Introduction to Match Moving**		
1		Need for Match Moving in a scene		CO1
2		Science & Art of Matchmoving		CO1
3		Understanding Camera and its types		CO1
Unit 2		**Tracking 1**		
1		Understanding Tracking		CO2
2		Tracking Fundamentals for Match moving		CO2
3		Tools and Techniques in Tracking		CO2
Unit 3		**Match Moving Process**		
1		Tools in Match Moving		CO2
2		Techniques in Match Moving		CO2
3		Do's & Don'ts Match Moving		CO2
Unit 4		**Tracking 2**		
1		Different types of Tracking		CO3
2		Calibrating Camera		CO3
3		Tracking and noise reduction		CO3
Unit 5		**3D Integration**		
1		Set and Coordinate system		CO4
2		Advanced tools and Techniques		CO5
3		Final Compilation		CO6
Mode of examination		Jury		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		• The Art and Technique of Match moving: Solutions for the VFX Artist - Erica Hornung		
Other References		• Compositing Visual Effects–Essentials for the Aspiring Artist - Steve Wright • The VES Handbook of Visual Effects - Okun J, Zwerman S		

School: SSMFE		**Batch 2024-28**
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**
Branch: Mass Communication		**Semester: 5**
1	**Course Code**	**AVG325**
2	**Course Title**	**Rotoscopy, Paint & Comping ***
3	**Credits**	**3**

4	**Contact Hours (L-T-P)**	**1-2-0**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To impart technical skills in Rotoscopy and painting and application knowledge for different requirement	
8	**Course Description**	Students will Learn& understand about Roto & paint, the one of the important part of visual effects, Keying, Matting & removing of unwanted elements from live plates.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Rotoscopy**	CO1
1		History of Rotoscopy & Terminologies	CO1
2		Latest tools for Roto & Shortcuts to work faster	CO1
3		Understanding the frame, shot length	CO1
4		planning the matte usage, Multiple shapes & Repeating shapes,	CO1
5		Keying animation & Motion paths	
Unit 2		**Creating Shapes**	
1		Creating splines	CO 1& CO5
2		Transitioning between shapes	CO 1& CO5
3		Working with pivot points	CO 1& CO5
4		Key frame placement and types	CO 1& CO5
5		Working with Blur & Motion blur	CO 1& CO5
6		Checking the mattes and jitter	CO 1& CO5
Unit 3		**Tracking**	
1		Tracking and scale and rotation	CO 2
2		Multiple transforms	CO 2
3		Averaging tracks	CO 2
4		Corner pinning	CO 2
5		Stabilizing footage	CO 2
Unit 4		**Rotoscopy**	
1		Rotoscopy Object I	CO 3
2		Rotoscopy Human, Isolating extremities, Joints, Hands, Overlap,	CO 3
3		Rotoscopy Human fixed shapes, faces and heads, hair	CO 3
4		Rotoscopy movement, fast and slow movement	CO 3
5		Tracking to optimize roto	CO 3
Unit 5		**Painting**	
1		Concepts and tools for painting	CO6
2		Cleaning plates	CO6
3		Wire and Rig Removal	CO6
4		Pixel restoration.	CO6
Mode of examination		Jury	
Evaluations		CA 25% / CE(Viva) 25% / ETE 50%	
Text Book/s		• Rotoscopy a footage containing minimum character movements and no camera movement. • Track and Rotoscopy footage with camera movement and fast movement of the characters. • Remove wire, foliage's and destructions from the footage using Rotoscopy.	

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**		
Branch: Mass Communication		**Semester: 5**		
1	**Course Code**	**AVG324**		
2	**Course Title**	**Web & E-Business and Game Development***		
3	**Credits**	**3**		
4	**Contact Hours (L-T-P)**	**1-2-0**		
5	**Course Type**	**Core Elective**		
6	**Course Objective**	To understand conceptual framework for WordPress To understand building blocks for WordPress site To explore plugins / themes available in WordPress		
8	**Course Description**	This course is all about learning the techniques of wordpress to create pages and posts		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**WordPress**		
1		Introduction to WordPress		CO1
2		Introduction to Blogging		CO1
3		Intro to WordPress and content management		CO1
4		Wordpress.org and Wordpress.com		CO1
Unit 2		**Setting Up WordPress**		
1		Designing a logo		CO2
2		Banner		CO2
3		Local Environment Setup.		CO2
4		Installing WordPress		CO2
5		Admin tour		CO2
Unit 3		**Pages and Posts**		
1		Creating Pages		CO3
2		Creating Posts		CO3
3		Forms in Wordpress		CO3
4		SEO and Metatags		CO4
Unit 4		**Plugins in WordPress**		
1		Portfolio Gallery		CO4
2		Video gallery		CO4
3		Other Plugins Downloads.		CO4,CO5
Unit 5		**WordPress Themes**		
1		Downloading and installing Themes		CO5
2		Themes Programming Standards		CO5
3		Building a Theme- Part1		CO6
4		Building a Theme- Part2		CO6
5		Conclusion		CO6
Mode of examination		Jury		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		• Wordpress: Wordpress Beginner's Step-by-step Guide on How to Build Your Wordpress Website Fast (Without Coding) Paperback – 29 Jul 2015 by Adam Price (Author) • Beginner's Guide to Wordpress: Create an Amazing Website in Under 24		

	Hours! Paperback – Import, 19 May 2013 by Katrina Abiasi (Author) • Build Your Own Wordpress Website: An Ultimate Guide for Small Business Owners Paperback – 28 Jun 2016 by Wordpress Genie (Author)
Other References	• WordPress for Beginners 2020: A Visual Step-by-Step Guide to Mastering WordPress (Webmaster Series) -by Dr. Andy Williams (Author) Format: Kindle Edition, ASIN : B082SYXLDF. • WordPress All–in–One For Dummies - by Lisa Sabin–Wilson (Author)– John Wiley & Sons; 2nd edition (31 May 2013) - ISBN- 10: 1118383346, ISBN- 13 : 978-1118383346. • Professional WordPress: Design and Development - by Brad Williams (Author), David Damstra (Author), Hal Stern (Author)- • John Wiley & Sons; 2nd edition (18 January 2013)- ISBN-10: 111844227X, ISBN-13: 978-1118442272.

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 5**	
1	**Course Code**	**AVG326**	
2	**Course Title**	**3d Lighting & Rendering and Photorealism**	
3	**Credits**	**2**	
4	**Contact Hours (L-T-P)**	**0-1-2**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	To introduce creative Concepts and technical application of Animation and Compositing and scripting	
8	**Course Description**	Students will learn the fundamentals of Maya embedded language, customizing the tools as per need and easing the workflow	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**HDRI**	
1		Image Based Lighting	CO1
2		Creating HDRI Maps, and Digitizing HDRI Maps for Virtual Sets	CO2
3		Lighting with HDRI Maps	CO2
4		Volumetric nodes, Lenses, Shadow, XPasses.	CO1
Unit 2		**Lighting**	
1		Artificial Lighting,	CO3
2		Natural Lighting,	CO3
3		Using IES light Modules.	CO4
Unit 3		**Workflow**	
1		Production Workflow.	CO5
2		Sequence Light Rig.	CO3
3		Lighting Types.	CO3
Unit 4		**Rendering Types**	
1		Maya software render	CO6
2		setting and features	CO6
3		Scene Management & optimization	CO4
Unit 5		**Rendering Settings**	
4		Preparing for rendering	CO5
5		Render settings window	CO4
6		Vector rendering, Toon shading & Multi-pass Rendering.	CO4
Evaluations		CA 25%	CE(Viva) 25% ETE 50%
Text Book/s		• Advanced Maya® Texturing and Lighting Paperback – Import, 19September 2006 by Lee Lanier (Author)	
Other References		• Lighting for Cinematography: A Practical Guide to the Art andCraft of Lighting for the Moving Image Book by David Landau	

School: SSMFE		**Batch 2024-28**
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**
Branch: Mass Communication		**Semester: 5**
1	**Course Code**	**AVG327**
2	**Course Title**	**Sound Design Techniques**
3	**Credits**	**2**
4	**Contact Hours (L-T-P)**	**0-1-2**

5	**Course Type**	**Compulsory**	
6	**Course Objective**	Understand the technical aspects of producing and recording sounds. Create Foleys and effects sounds using analog and digital techniques. Understand the workflow used to producing and mastering sounds. Export sound output to various Medias. Establishing an environment Helping to tell a story, Defining mood, Rhythm and style Aiding flow of action	
8	**Course Description**	Students will learn about "Sound" the one of the important elements of animation film making. They will Understand the technical aspects of producing and recording sounds, Create Foleys and effects sounds using analog and digital techniques	
9	**Outline Syllabus**		**CO Mapping**
Unit 1	**History**		
1	Fundamental of sound and sound Design		CO1
2	Art and Techniques of sound editing		CO1
3	Sound equipment and their significance		CO1
Unit 2	**Recording Techniques**		
1	Recording and Music		CO2
2	Fundamentals of Digital Audio		CO2
3	Production Techniques		CO2
Unit 3	**Sound Editing Application**		
1	Customizing workspace		CO3
2	Extracting audio clips		CO3
3	Foley sound recording		CO3
Unit 4	**Sound Editing Techniques**		
1	Editing properties of sound		CO5
2	Mixing and Effects for sound		CO5
3	Managing of sound files		CO5
Unit 5	**Designing of Sound**		
1	The psychology of sound		CO6
2	Creating Memorable Sounds		CO6
3	Region specific sounds		CO6
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	Sound Design: The Expressive Power of Music, Voice and Sound Effectsin Cinema by David Sonnenschein - 2002 The Sound Effects Bible: How to Create and Record Hollywood StyleSound Effects by RicViers(Oct 1, 2008)		
Other References	The Animator's Eye: Adding Life to Animation with Timing, Layout,Design, Color and Sound by Francis Glebas(Sep 24, 2012) Designing Sound by Andy Farnell(Aug 20, 2010)		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 5**	
1	**Course Code**	**AVG328**	
2	**Course Title**	**Multimedia Design**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To understand functioning of multimedia eco system To discuss role of AV and tools importance. To understand the keying techniques and format requirement.	
8	**Course Description**	This course is all about learning multimedia including AVinterpretation, video editing, sound editing, VFX and exporting techniques	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Multimedia**	
1		Introduction to multimedia.	CO1
2		Fundamentals of multimedia.	CO1
3		Types of Games.	CO1
4		PC games.	CO1
5		Mobile games.	CO1
6		Wordpress.com	CO1
Unit 2		**Audio Video Interpretation**	
1		Introduction to computer graphics.	CO2
2		Image processing;	CO2
3		Importance of audio,	CO2
4		Shooting videos,	CO3
5		Adding sound to videos,	CO3
6		Diegetic and non-diegetic sound,	CO3
7		Live and non-live sound.	CO3
Unit 3		**Software**	
1		Working with tools	CO4
2		Audacity or Pro tools	CO4
3		Adobe Premiere Pro,	CO4
4		After Effects.	CO4
5		Editing	CO4
6		Transitions and effects	CO4
Unit 4		**Chroma Key technique**	
1		Green mat.	CO5
2		Blue mat.	CO5
3		Chroma key setup: keying.	CO5
4		Changing backgrounds.	CO5
5		Adding special effects.	CO5
6		Incorporation of audio video with special effects	CO5
Unit 5		**Exporting Video**	
1		Exporting techniques.	CO6
2		Formats and various formats in exporting.	CO6
3		Exporting for high resolution and low resolution.	CO6
4		Exporting for animation, exporting for various social media.	CO6
Mode of examination		Jury	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Introduction to Multimedia and Its Applications Paperback – 1 Dec 2012 by	

	V. K. Jain (Author) • The Ultimate Introduction to DSLR Film Making: Book 1 Kindle Editio by Danny Yann (Author) • Make Your Movie, Real Cinema You Can Afford, EVEN 4K and RAW Video! Kindle Edition by Simon Levi (Author) Video Editor Basic Guide Adobe CS5 and superior: Premiere, Media Encoder, Encore, After Effects Kindle Edition by Betina Goetjen (Author)
Other References	• The Green Screen Handbook: Real-World Production Techniques 1st Edition by Jeff Foster (Author) • Green screen Made Easy: Keying and Compositing Techniques for Indie Filmmakers 2nd ed. Edition by Jeremy Hanke (Author), Michele Yamazaki (Author) • The Technique of Film and Video Editing: History, Theory,and Practice 4th edition by Dancyger, Ken (2006) Paperback Paperback – 1707

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 5**	
1	**Course Code**	**AVG329**	
2	**Course Title**	**Fluid Dynamics & Plugins**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To impart knowledge and technical skills to understand the science of Fluid Dynamics and application at various stages	
8	**Course Description**	Students will Learn The core physic concept of simulation, advanced Fluidssystem & enable to create 3d effects in Maya	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Science of Fluid Dynamics**	
1		Characteristics of fluids & Dimensions	CO1
2		Analysis of Fluid behavior	CO1
3		Measure of Fluid mass and weight, ideal gas law, viscosity	CO1
Unit 2		**Fluid Pressure**	
1		Compressibility of fluids	CO2
2		Vapor pressure & surface tension.	CO2
3		Pressure at point, standard atmosphere.	CO2
4		Measurement of pressure.	CO2
Unit 3		**Fluid Principles**	
1		Buoyancy	CO2
2		Flotation and stability	CO2
3		Archimedes principle	CO2
4		Stability, Bernoulli equation & fluid kinematics	CO3
Unit 4		**Tools**	
1		Differential analysis of fluid flow	CO4
2		Tools and software to create fluid simulation	CO4
3		Attributes	CO3
Unit 5		**Fluid Simulation**	
1		Introduction to Fluid simulation software,	CO4
2		Emitters, Grid based particles, Splash particles, Mist and form particles	CO5
3		Generation displacement maps & exporting simulation	CO5
4		Forms of liquids & Morphing fluids	CO5
Unit 6		**Scripting for Simulation**	
1		Initial project setup.	CO6
2		Particle morphing, Small scale fluid simulation, Large scale fluid simulation Using the fluid simulation scripting.	CO6
3		Batch script, Scripting reference, Working with variables, custom emitter scripting.	CO6
Evaluations		CA 25%	CE(Viva) 25% ETE 50%
Text Book/s		• Introduction to Maya Fluid Effects DVD-ROM – Import, 9 September 2010 by W. Hollingsworth (Author)	
Other References		• Maya Visual Effects The Innovator's Guide by Eric Keller	

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**		
Branch: Mass Communication		**Semester: 5**		
1	**Course Code**	**RBL003**		
2	**Course Title**	**Research Based Learning-3**		
3	**Credits**	**1**		
4	**Contact Hours (L-T-P)**	**0-0-2**		
5	**Course Type**	**Co-Requisite/AECC**		
6	**Course Objective**	The objective of this course is to Strengthen the academic research ability of the students. Evolve the inquisitiveness of the students towards society and various factors affecting media and society at a large. Enhance the problem solving skills of the students.		
8	**Course Description**	The course is designed to inculcate the research value and skills among thestudents.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		Dissertation/ Project Implementation Stage		CO1, CO2
Unit 2		First Review (R1)		CO3, CO4, CO5, CO6
Unit 3		Second Review (R2)		CO3, CO4, CO5, CO6
Unit 4		Review (R3) by internal committee		CO3, CO4, CO5, CO6
Mode of examination		Jury/Viva/Practical		
Evaluations		CA 70%	CA (RBL1+RBL 2) 30%	ETE 00

School: SSMFE		**Batch 2024-28**			
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**			
Branch: Mass Communication		**Semester: 5**			
1	**Course Code**	**INC001**			
2	**Course Title**	**Industry Connect**			
3	**Credits**	**2**			
4	**Contact Hours (L-T-P)**	**0-2-0**			
5	**Course Type**	**Co-Requisite/AECC**			
6	**Course Objective**	The objective of this course is: To give real-time exposure of the industry environment to students To familiarize the faculty and students with the media and communication industry To acquaint Student and Faculties with the latest demands of Industry To create a platform to enhance the industry-academia interaction To give industry exposure to our faculty and students			
8	**Course Description**	The course is aimed to provide the students and faculty a platform to get connected with the industry and get real-time exposure on the daily working environment of the media and communication industry			
9	**Outline Syllabus**				**CO Mapping**
Unit 1		**Understanding Target Industry**			
1		Print Media, Evolution, Organizational Structure, Basic/Advance level Technology used for Production			CO1
2		Electronic Media, Origin, Organizational Structure, Basic/Advance level Technology used for Broadcast			CO1
3		Digital Media, Evolution, Organizational Structure, Basic/Advance level Technology used for Publish content online			CO2
Unit 2		**Recent Trends in Industry**			
1		Invited lecture from domain experts			CO4
2		Group / Panel discussion			CO4
3		Collaborative learning			CO4
Unit 3		**Hands on Training for Skill Development**			
1		Print Media: Quark Express, InDesign			CO5
2		Video Production any one software i.e. Premier			CO5
3		Digital Media, PR tools training			CO5
Unit 4		**Industry Connect**			
1		Identify the input and output for different processes of target Industry			CO3
2		Understanding background of field visit industry			CO3
3		Industry etiquettes skills			CO3
Unit 5		**Industry Visit Reports**			
1		Pre Field Visit and Post Field Visit preparation			CO6
2		Field Visit Report preparation process			CO6
3		Field visit report presentation			CO6
Mode of examination		Practical			
Evaluations		CA 85%	Industrial Visit Report 10%	ETE 10%	

Note: This is a qualifying Program

Semester 6

School: SSMFE		**Batch 2024-28**		
Programme: B.Sc. Animation, VFX & Gaming Design		**Current Academic Year: 2026-27**		
Branch: Mass Communication		**Semester: 4**		
1	**Course Code**	**AVG341**		
2	**Course Title**	**Studio Training**		
3	**Credits**	**14**		
4	**Contact Hours (L-T-P)**	**0-0-28**		
5	**Course Type**	**Core Compulsory**		
6	**Course Objective**	• The purpose of this subject is to provide practical industry based hands-on experience of being able to create high quality 3D Modelling & 3D Animation projects. • Understanding the workflows involved in actual productions pipeline in industry. • Knowledge of planning and organizing projects by observation and practical. • Learning artistic techniques to create high quality Industry ready product/films.		
8	**Course Description**	Students will undergo On Job Training (OJT) in lieu of in-house Production. The students will submit a detailed report on their OJT and final report for a period 90 hrs in Animation/VFX/Gaming/Motion Graphics/Graphics along with the Power point Presentation containing the actual learning experience		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Bi-Weekly Report**		
		Work in progress report		CO1
Unit 2		**Bi-Weekly Report**		
		Work in progress report		CO2
Unit 3		**Bi-Weekly Report**		
		Work in progress report		CO3
Unit 4		**Bi-Weekly Report**		
		Work in progress report		CO4
Unit 5		**Bi-Weekly Report**		
		Work in progress report		CO5,CO6
Mode of examination		**Jury**		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		NA		
Other References		NA		

School: SSMFE		**Batch 2024-28**
Programme: B.Sc. Animation, VFX & Gaming Design		**Current Academic Year: 2026-27**
Branch: Mass Communication		**Semester: 6**
1	**Course Code**	**AVG342**
2	**Course Title**	**Portfolio – Animation**
3	**Credits**	**14**
4	**Contact Hours (L-T-P)**	**0-0-28**
5	**Course Type**	**Core Compulsory**
6	**Course Objective**	• The purpose of this subject is to provide practical industry based hands-on

		experience of creating high quality 3D modelling and animation projects. • Understanding the workflows involved in actual productions pipeline in industry. • Knowledge of planning and organizing projects by observation and practical. • Learning artistic techniques to create high quality industry ready product/films.		
8	**Course Description**	Students will learn the core concepts of creating High Quality 3D Projects They will gain the knowledge of planning and organizing projects in a Simulated production environment.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Bi-Weekly Report**		
		Work in progress report		CO1
Unit 2		**Bi-Weekly Report**		
		Work in progress report		CO2
Unit 3		**Bi-Weekly Report**		
		Work in progress report		CO3
Unit 4		**Bi-Weekly Report**		
		Work in progress report		CO4
Unit 5		**Bi-Weekly Report**		
		Work in progress report		CO5,CO6
Mode of examination		**Jury**		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		The Way of the Storyteller by Ruth Sawyer The Advanced Art of Stop-Motion Animation by Ken A. Priebe Understanding 3-D animation using Maya by John Edgar Park		
Other References		The Animation Book: A Complete Guide to Animated Filmmaking- -From Flip-Books to Sound Cartoons to 3-D Animation, Three Rivers Press		

School: SSMFE		**Batch 2024-28**		
Programme: B.Sc. Animation, VFX & Gaming Design		**Current Academic Year: 2026-27**		
Branch: Mass Communication		**Semester: 6**		
1	**Course Code**	**AVG343**		
2	**Course Title**	**Portfolio – VFX**		
3	**Credits**	**14**		
4	**Contact Hours (L-T-P)**	**0-0-28**		
5	**Course Type**	**Core Compulsory**		
6	**Course Objective**	• The purpose of this subject is to provide practical Industry based hands-on experience of being able to create complete high quality VFX shots. • Understanding the workflows involved in actual productions pipeline in Industry. • Knowledge of planning and organizing projects by observation and practice. • Learning artistic techniques to create high quality Industry ready product/films.		
8	**Course Description**	Students will learn the core concepts of creating High Quality VFX shots. They will gain the knowledge of planning and organizing projects in a Simulated VFX production environment.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1		**Bi-Weekly Report**		
		Work in progress report		CO1
Unit 2		**Bi-Weekly Report**		
		Work in progress report		CO2
Unit 3		**Bi-Weekly Report**		
		Work in progress report		CO3
Unit 4		**Bi-Weekly Report**		
		Work in progress report		CO4
Unit 5		**Bi-Weekly Report**		
		Work in progress report		CO5,CO6
Mode of examination		**Jury**		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		Filming the Fantastic, Second Edition: A Guide to Visual Effects Cinematography by Mark Sawicki		
Other References		Industrial Light & Magic: The Art of Innovation by Pamela Glintenkamp		

School: SSMFE		**Batch 2024-28**	
Programme: B.Sc. Animation, VFX & Gaming Design		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 6**	
1	**Course Code**	**AVG344**	
2	**Course Title**	**Portfolio – Gaming**	
3	**Credits**	**14**	
4	**Contact Hours (L-T-P)**	**0-0-28**	
5	**Course Type**	**Core Compulsory**	
6	**Course**	• Design and develop an original gaming project, demonstrating mastery of game development	

	Objective	principles and applying creativity at the synthesis level. • Manage all project phases, showcasing their ability to plan, organize, and execute a complex gaming project at the application level. • Innovate in game design by creating unique gameplay mechanics, narratives, and user experiences, showcasing creativity at the synthesis level.
8	**Course Description**	Through the Gaming Project course, students will demonstrate a comprehensive understanding of game design and development principles, including mechanics, dynamics, and aesthetics, by conceptualizing and implementing innovative and engaging gameplay features in their capstone project.

9	**Outline Syllabus**	**CO Mapping**
Unit 1	**Bi-Weekly Report**	
	Work in progress report	CO1
Unit 2	**Bi-Weekly Report**	
	Work in progress report	CO2
Unit 3	**Bi-Weekly Report**	
	Work in progress report	CO3
Unit 4	**Bi-Weekly Report**	
	Work in progress report	CO4
Unit 5	**Bi-Weekly Report**	
	Work in progress report	CO5,CO6
Mode of examination	**Jury**	

Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Augmented Reality with Unity AR Foundation: A Practical Guide to cross-platform AR development with Unity 2020 and later versions, Author: Jonathan Linowes, Publisher: Packt Publishing Ltd, 2021, ISBN- 1838982965, 9781838982966 • Unity 2020 Virtual Reality Projects - Third Edition, Author: Jonathan Linowes, Released July 2020, Publisher(s): Packt Publishing, ISBN: 978183921733		
Other References	Mobile Game Development with Unity: Build Once, Deploy Anywhere -Jonathon Manning (Author), Paris Buttfield-Addison (Author) - O'Reilly Media; 1 edition (September 4, 2017) - ISBN-10: 1491944749,ISBN-13: 978-1491944745		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 6**	
1	**Course Code**	**OPE**	
2	**Course Title**	**Smartphone Mobile Film Making**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**0-2-2**	
5	**Course Type**	**Core Elective**	
6	**Course Objective**	This course aims at enriching the minds of those students who have an interest in learning the techniques of filmmaking using a smartphone for a various platform (Cinema, Television, Advertisement, Film Festivals, etc.) in the broader context of the Media and Entertainment industry	
8	**Course Description**	This course provides an introduction to smartphone filmmaking and the use of audio integrated with visuals	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Smartphone Film Making**	
1		Introduction to the basic concepts of smartphone filmmaking	CO1
2		Why smartphone filmmaking is an important and versatile option	CO1
3		Film analysis and appreciation	CO1
Unit 2		**Introduction to Smartphone as a tool for Film Making**	
1		The Equipment	CO2
2		Important Apps and Platform	CO2
3		The Audio: Sound Perception and its use for different situation, Importance of sound in films and introduction to sound recording Microphones and their pickup patterns, Microphone placement and usage, sound perspective and practical application, Recording of sound in noisy locations	CO3, CO4
Unit 3		**Basic Smartphone Film Techniques**	
1		Photos: Composition, leading lines and the rule of thirds, Depth of field and selective focus	CO3, CO4
2		Video: Significance of different camera angles , Selection of viewpoint to heighten the drama, Characteristics and impact of various dimensions of Shots, White balance color wheel and color temperatures, Gimbals and aesthetics of camera operation Time-lapse cinematography	CO3, CO4
3		Audio: audio editing using apps	CO3, CO4, CO5
Unit 4		**Idea to Screen**	
1		Story Idea and basics of screenwriting	CO2, CO6
2		Characterization and shooting on location	CO2
3		Lighting: Shooting indoor/outdoor (understanding the importance of light), Continuity of lighting, How to use ambient light?, Supplementary lighting for a lit location with ambient light , Mixing a different kind of lights and color temperatures	CO3, CO4
Unit 5		**Editing Essentials**	
1		Imaginary line: 30 & 180-degree rule and placement of the camera	CO4
2		Visualization: Capture a scene in 5 shot	CO4, CO6
3		Introduction to Video Editing using mobile apps like Kine Master	CO5, CO6
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• The Digital Filmmaking Handbook. Mark Brindle	

Other References	• Smartphone Movie Maker by Stoller Bryan The Smartphone Filmmaking Handbook by Neil Philip Sheppard

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**		
Branch: Mass Communication		**Semester: 6**		
1	**Course Code**	**RBL004**		
2	**Course Title**	**Research Based Learning – IV**		
3	**Credits**	**1**		
4	**Contact Hours (L-T-P)**	**0-0-2**		
5	**Course Type**	**Co-Requisite/AECC**		
6	**Course Objective**	The objective of this course is to: Strengthen the academic research ability of the students. Evolve the inquisitiveness of the students towards society and various factors affecting media and society at a large. Enhance the problem solving skills of the students.		
8	**Course Description**	The course is designed to inculcate the research value and skills among the students		
9	**Outline Syllabus**			**CO Mapping**
	Unit 1	Project/ Dissertation Verification and Validation Stage First Review (R1)		CO1, CO2, CO3,CO4, CO5
	Unit 2	Second Review (R1)		CO2, CO3, CO4,CO5,
	Unit 3	Third Review (R3)		CO2, CO3, CO4,CO5,
	Unit 4	Review (R4) by External expert		CO2, CO3, CO4,CO5,CO6
	Unit 5	Submission		CO6
	Mode of examination	Jury/Viva/Practical		
	Evaluations	CA 25%	CE(Viva) 25%	ETE 50%

School: SSMFE		**Batch 2024-28**
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**
Branch: Mass Communication		**Semester: 6**
1	**Course Code**	**CCU**
2	**Course Title**	**Community Connect**
3	**Credits**	**2**
4	**Contact Hours (L-T-P)**	**0-2-0**
5	**Course Type**	**Co-Requisite**
6	**Course Objective**	To let the student engage and connect directly with the community/society. In this survey-based course students will get hand-on experience of the real- world situation by directly accessing and analyzing the information collected from the people in the community under study. The course aims to sensitize the student towards society and social issues. This course will also give a proper field exposure to the student, where student will not only interact with the community but will analyze the data and try to find solutions to the larger issues affecting the community and the country at large.
8	**Course Description**	This course is design especially for the students to connect with the community and understand the problems of the people in the community and get a sense of belonging to the community.
9	**Theme**	Major Sub-themes for research: Major developmental issue (Socio-Economic, gender, environmental etc.) Media habits/ Media usage/Audience profiling Media perceptions
10	**Guidelines for Faculty Members**	It will be a group assignment (4 to 5 students), the student will work together as a team, they have to survey at least 250 respondent (per team), and the faculty guide will guide the students and approve the project title and help the student in preparing the questionnaire and final report (the faculty member will collect all the questionnaires of survey and final report and submit to CCC coordinator within stipulated time). The questionnaire should be well design and it should carry at least 20 questions (Including demographic questions). The topic of the research should be related to social, economic or environmental issues concerning the common man. The report should contain 2,500 to 3,000 words and relevant charts, tables and photographs. The student should submit the report to CCC-Coordinator signed by the faculty guide in the assigned time frame. The students have to send the hard copy of the Report and PPT to CCC coordinator and then only they will be allowed for External Exam.
11	**Role of CCC-Coordinator**	The CCC Coordinator will supervise the whole process and assign students to faculty members.
12	**Layout of the Report**	Abstract(250 words) Front Page (sample design will be provided by Community Connect Coordinator/Mentor) Certificate of originality duly signed by the faculty supervisor Acknowledgement Content Page Abstract Introduction Objective of the report Methodology Results, finding, conclusion Recommendation/plan of action References Appendices Note: Research report should base on primary data.
13	**Guideline for Report Writing**	Title Page: The following elements must be included: Title of the article;

		Name(s) and initial(s) of author(s), preferably with first names spelled out; Affiliation(s) of author(s); Name of the faculty guide and Co-guide Abstract: Each article is to be preceded by a succinct abstract, of up to 250 words, that highlights the objectives, methods, results, and conclusions of the paper. Text: Manuscripts should be submitted in Word. Use a normal, plain font (e.g., 12-point Times Roman) for text. Use italics for emphasis. Use the automatic page numbering function to number the pages. Save your file in docx format (Word 2007 or higher) or doc format (older Word versions) Reference list: The list of references should only include works that are cited in the text and that have been published or accepted for publication. The entries in the list should be in alphabetical order. Journal article Hamburger, C.: Quasimonotonicity, regularity and duality for nonlinear systems of partial differential equations. Ann. Mat. Pura Appl. 169, 321–354 (1995) Article by DOI Sajti, C.L., Georgio, S., Khodorkovsky, V., Marine, W.: New nanohybrid materials for biophotonics. Appl. Phys. A (2007). doi:10.1007/s00339-007-4137-z Book Geddes, K.O., Czapor, S.R., Labahn, G.: Algorithms for Computer Algebra. Kluwer, Boston (1992) Book chapter Broy, M.: Software engineering — from auxiliary to key technologies. In: Broy, M., Denert, E. (eds.) Software Pioneers, pp. 10–13. Springer, Heidelberg (2002) Online document Cartwright, J.: Big stars have weather too. IOP Publishing PhysicsWeb. http://physicsweb.org/articles/news/11/6/16/1 (2007). Accessed 26 June 2007 Always use the standard abbreviation of a journal's name according to the ISSN List of Title Word Abbreviations, see
14		www.issn.org/2-22661-LTWA-online.php For authors using End Note, Springer provides an output style that supports the formatting of in-text citations and reference list. End Note style (zip, 2 kB)
15	**Format:**	The report should be Spiral/ hardbound The Design of the Cover page to report will be given by the Coordinator- CCC Cover page Acknowledgement Content Project report Appendices Font Times New Roman, Headings 16, subhead 14, body text 12. Justified text. Line spacing 1.5. Margins should be 3 cm at binding side, 2 cm top, bottom and Remaining side.
16	**Important Dates:**	Students needs to submit the hard copy of the report, duly signed and approved by the faculty supervisor by 20th April, 2020. A trip to village will be organized by the University for the students in the 1st week of May. It will be mandatory for all the students. The final jury examinations will be held as per the date sheet, announced by the Dy. COE of the school.
17	**ETE**	The students will be evaluated by panel of faculty members on the basis of their presentation on date announced by the Dy. COE of the School.
18	**Method of Evaluation**	Interpretative evaluation by Internal / external expert(s) AUDIT COURSE

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 7**	
1	**Course Code**	**BCJ412**	
2	**Course Title**	**Qualitative Research Methods**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**3-0-0**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To impart in-depth knowledge of qualitative research. To provide good understanding of methods for qualitative research. To develop critical and analytical thinking on ethical issues in qualitative research.	
8	**Course Description**	This course is an introduction to qualitative research methods. The course will give an understanding of various methods of qualitative research	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to Qualitative Research Methods**	
1		Understanding qualitative research	CO1
2		Historical development of qualitative research	CO1
3		Issues in Qualitative Research—Subjectivity, Reflexivity, Power, Validity and Triangulation	CO1
Unit 2		**Applications of Qualitative Methods to Social Research**	
1		Theoretical and applied research	CO2
2		Ethnographic and Phenomenological Approaches	CO2
3		Combining qualitative and quantitative methods	CO2
Unit 3		**Qualitative Research Methods - I**	
1		Introduction, Techniques and Applications of Focus Group Discussions	CO3
2		Report writing on Conduction, Execution and Conclusions obtained by Focus Group Discussions	CO3
3		Implementation and Evaluation Challenges of Focus Group Discussions	CO3
Unit 4		**Qualitative Research Methods - II**	
1		Introduction, Techniques and Applications of Interview method	CO4
2		Report writing on Conduction, Execution and Conclusions obtained by interview	CO4
3		Implementation and Evaluation Challenges of interview	CO4
Unit 5		**Qualitative Research Methods - III**	
1		Introduction, Techniques and Applications of observation	CO5
2		Report writing on Conduction, Execution and Conclusions obtained by observation	CO5
3		Implementation and Evaluation Challenges of observation	CO6
Evaluations		MTE 15% | CA10% | ETE 75%	
Text Book/s		• Mass Media Research: An Introduction by Roger D. Wimmer Creswell, J. W., Qualitative inquiry and research design, 2rd edition. Sage Publications. 2013.	

Other References	• Media and communication research methods by Arthur Berger • Mass Communication Research Methods by Anders Hansen • Berg, B. L. & Lune, H. Qualitative Research Methods for the Social Sciences, 8th edition, Boston: Pearson, Allyn & Bacon. 2012 • Seidman, I. E. Interviewing as Qualitative Research, Teachers College Press, 4rd edition. • Miles, M.B., Huberman, A.M. & Saldana, J. 2014. Qualitative data analysis: A methods sourcebook – Third edition. Thousand Oaks, CA: Sage.

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 7**	
1	**Course Code**	**BCJ413**	
2	**Course Title**	**Quantitative Research Methods**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**3-0-0**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To impart in-depth knowledge of quantitative research. To provide good understanding of methods for quantitative research. To develop critical and analytical thinking on ethical issues in quantitative research.	
8	**Course Description**	The course is designed primarily for the students to anticipate future applications of quantitative methods in media and communication research.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to Quantitative Research Methods - I**	
1		Understanding nature of quantitative research	CO1
2		Historical development of quantitative research	CO1
3		Quantitative research in Media & Communication	CO1
Unit 2		**Introduction to Qualitative Research Methods - II**	
1		Research Question and Scientific Approach to Social Science	CO2
2		Research Design; Causality vs. Correlation	CO2
3		Reliability and Validity.	CO2
Unit 3		**Quantitative Research Methods**	
1		Introduction to various quantitative research methods	CO3
2		Survey method	CO3
3		Developing questionnaire and schedule for survey	CO3
Unit 4		**Basic data analysis - I**	
1		Statistical significance	CO4
2		Measurement, validity, reliability	CO4
3		Cross-tabulation and Correlation.	CO4
Unit 5		**Basic data analysis - I**	
1		Simple regression, Multiple regression.	CO5
2		Hypothesis testing, ANOVA, The One-Way ANOVA's Null and Alternative Hypotheses	CO6
3		Factor Analysis	CO5
Evaluations		CA 15% | MTE 10% | ETE 75%	
Text Book/s		• Mass Media Research: An Introduction by Roger D. Wimmer	
Other References		• Media and communication research methods by Arthur Berger • Mass Communication Research Methods by Anders Hansen	

School: SSMFE		**Batch 2024-28**
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**
Branch: Mass Communication		**Semester: 7**
1	**Course Code**	**BCJ414**
2	**Course Title**	**Communication Research Methods & Tools**
3	**Credits**	**3**

4	**Contact Hours (L-T-P)**	**3-0-0**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To impart in-depth knowledge of nature of research methods used in communication research. To provide theoretical knowledge of Communication Research Methods and Tools. To develop critical and analytical thinking on of Communication Research Methods and Tools.	
8	**Course Description**	The course is designed primarily for the students to get an in-depth knowledge of communication research methods and tools	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction to Research Methods**	
1		Research Method: Nature and Concept	CO1
2		Communication Research Approaches	CO1
3		Research Tools: Nature and Concept	CO1
Unit 2		**Descriptive Research Methods**	
1		Longitudinal, Cross Sectional	CO2
2		Census and Survey	CO2
3		Panel Studies, Trend Studies, Time series Studies	CO2
Unit 3		**Descriptive Research Tools**	
1		Schedule, Questionnaire	CO3
2		Interview and Observation	CO3
3		Pre-testing of Questionnaire, Pilot Study	CO3
Unit 4		**Measurement Scales and Distributions**	
1		Levels of Measurement NOIR	CO4
2		Likert Scale: Nature and Background	CO4
3		Attitude Scales, Thurston Scales, Guttmann Scale, Ranking Scales	CO4
Unit 5		**Sampling Techniques**	
1		Population, Sample, Sampling Frame	CO5
2		Types of Sampling, Sampling Matrix	CO5
3		Sampling Problems, Bias and Errors	CO6
Evaluations		CA 15% | MTE 10% | ETE 75%	
Text Book/s		• Mass Media Research: An Introduction by Roger D. Wimmer	
Other References		• Media and communication research methods by Arthur Berger • Mass Communication Research Methods by Anders Hansen	

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2026-27**	
Branch: Mass Communication		**Semester: 7**	
1	**Course Code**	**BCJ415**	
2	**Course Title**	**Statistics for Research**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**2-1-0**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To impart basic knowledge of statistics for social science research. To develop critical and analytical thinking on statistics required for social sciences research.	
7	**Course Outcomes**	**After completing the course, the student will be able to:**	
		CO1	Develop an understanding of the concept of Statistics
		CO2	Define descriptive statistics

		CO3	Acquaint with SPSS
		CO4	Apply the basic data analysis through SPSS
		CO5	Analyze various descriptive stats through SPSS
		CO6	Explain the ethical consideration in using statistics in media & communication research
8	**Course Description**	The course is designed primarily for the students to develop an understanding of the concept of statistics in media and communication research	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Introduction**	
1		An Overview of Statistics: Meaning, Definition and Characteristics	CO1
2		Types of Variables (Continuous and Discrete) and Levels of Measurement (NOIR)	CO1
3		Importance of Statistics in Media Research (With reference to Content analysis, Code Book Preparation and Coding)	CO1
Unit 2		**Descriptive Statistics**	
1		Statistical Series: Importance and Limitations	CO2
2		Measures of Central Tendency: Arithmetic Mean, Median, Mode	CO2
3		Measures of Variability	CO2
Unit 3		**Introduction to SPSS**	
1		An Overview and Major features of SPSS	CO3
2		Basic Features of SPSS: Menu and Options	CO3
3		Data Entry, Data Editing and Data Deletion in SPSS	CO3
Unit 4		**Descriptive Statistics through SPSS**	
1		Calculation of Frequency analysis	CO4
2		Graphical Representation of Data	CO4
3		Calculation of Mean, Median and Mode	CO4
Unit 5		**Quantitative Analysis**	
1		Reliability and Consistency Analysis: Uses and Interpretation	CO5
2		Normality Analysis: Uses and Interpretation, T-Test: Uses and Interpretation	CO5
3		Ethical consideration for using statistics in media and communication research	CO6
Mode of Examination		Theory	
Evaluations		CA 15% | MTE 10% | ETE 75%	
Text Book/s		• Mass Media Research: An Introduction by Roger D. Wimmer	
Other References		• Media and communication research methods by Arthur Berger • Mass Communication Research Methods by Anders Hansen	

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**	
Branch: Mass Communication		**Semester: 7**	
1	**Course Code**	**BCJ416**	
2	**Course Title**	**Qualitative Research Lab**	
3	**Credits**	**2**	
4	**Contact Hours (L-T-P)**	**0-1-2**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	To impart in-depth knowledge of qualitative research. To provide good understanding of methods for qualitative research. To develop critical and analytical thinking on ethical issues in qualitative research.	
8	**Course Description**	This course is an introduction to qualitative research methods. The course will give an understanding of analysis of various methods of qualitative research	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Understanding Qualitative Research Methods**	
1		Understanding qualitative research	CO1
2		Identifying Subjectivity, Reflexivity and Power	CO1
3		Understanding Validity and Triangulation	CO1
Unit 2		**Identifying Qualitative Methods**	
1		Understanding theoretical and applied research	CO2
2		Identifying Ethnographic and Phenomenological Approaches	CO2
3		Exercise on Combining qualitative and quantitative methods	CO2
Unit 3		**Application on Qualitative Research Methods**	
1		Exercise on Focus Group Discussions	CO3
2		Exercise on Interview method	CO3
3		Exercise on observation	CO3
Unit 4		**Data Analysis and Software's for Qualitative Research Methods**	
1		Different techniques of qualitative data analysis	CO4
2		Software's used for content analysis, transcription, discourse analysis, coding etc.	CO4
3		Software's used for qualitative analysis – Nvivo, ATLAS etc.	CO4
Unit 5		**Reporting and Writing Qualitative Research Methods**	
1		Reporting and compiling data in qualitative research	CO5
2		Writing qualitative research report	CO5
3		Ethical consideration in qualitative research	CO6
Evaluations		IA 25% | CE (Viva) 25% | ETE 50%	
Text Book/s		• Mass Media Research: An Introduction by Roger D. Wimmer	
Other References		• Media and communication research methods by Arthur Berger • Mass Communication Research Methods by Anders Hansen	
School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**	
Branch: Mass Communication		**Semester: 7**	
1	**Course Code**	**BCJ417**	
2	**Course Title**	Quantitative Research Lab	
3	**Credits**	2	
4	**Contact Hours (L-T-P)**	0-1-2	

5	**Course Type**	**Compulsory**	
6	**Course Objective**	• To understand the process of content analysis method. • To understand tools and techniques of content analysis method. • To learn the essence of analyzing textual, audio and video contents. • To provide theoretical knowledge and applied know how of Content Analysis method. • To orient students in depth towards the concepts Content Analysis method.	
8	**Course Description**	The course is designed primarily for the students to anticipate future applications of content analysis in media and communication research	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Quantitative Research Methods**	
1		Longitudinal, Cross-Sectional & trend studies	CO1
2		Experimental and Quasi-experimental studies	CO1
3		Constructing tools for quantitative studies	CO1
Unit 2		**Sampling in Quantitative Studies**	
1		Types of sampling	CO2
2		Techniques of sampling for quantitative studies	CO2
3		Exercise on sampling	CO2
Unit 3		**Content Analysis**	
1		Qualitative and Quantitative Content Analysis	CO3
2		Coding, Data Sheet Tabulation, Graphical presentation of data	CO3
3		Interpretation and Report Writing	CO3
Unit 4		**Survey**	
1		Understanding survey methods	CO4
2		Conducting survey	CO4
3		Interpretation and Report Writing	CO4
Unit 5		**Case Study and Ethical consideration in Quantitative studies**	
1		Understanding case study	CO5
2		Conducting case study, data analysis and writing	CO5
3		Ethical consideration of Qualitative studies	CO6
Mode of Examination		Theory	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• Mass Media Research: An Introduction by Roger D. Wimmer	
Other References		• Media and communication research methods by Arthur Berger • Mass Communication Research Methods by Anders Hansen	

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**		
Branch: Mass Communication		**Semester: 7**		
1	**Course Code**	**BCJ418**		
2	**Course Title**	**Project on constructing tools for Media & Communication Research**		
3	**Credits**	**3**		
4	**Contact Hours (L-T-P)**	**0-2-2**		
5	**Course Type**	**Compulsory**		
6	**Course Objective**	To develop research skills To develop various tools for different research methods.		
8	**Course Description**	The course is aimed to enhance the practical skills of the students and will help the students to understand how to construct tools for various types of research.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1-5		**Portfolio on different research tools**		CO1, CO2, CO3, CO4, CO5, CO6
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s		• Mass Media Research: An Introduction by Roger D. Wimmer		
Other References		• Media and communication research methods by Arthur Berger • Mass Communication Research Methods by Anders Hansen		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**	
Branch: Mass Communication		**Semester: 7**	
1	**Course Code**	**OPE**	
2	**Course Title**	**Anchoring for Different Media**	
3	**Credits**	**4**	
4	**Contact Hours (L-T-P)**	**0-3-2**	
5	**Course Type**	**Co-Requisite**	
6	**Course Objective**	The objective of this course is to: Familiarize the students with different aspects of anchoring & news presentation To develop an understanding how to handle different situation during Live News Presentation To make the students understand the roles and responsibility and do's and don'ts of news reader/presenter	
7	**Course Outcomes**	**After completing the course, the student will be able to:**	
8	**Course Description**	This course is designed to produce professional newsreaders and presenters. This course will help the student to face the camera and understand the responsibility, dos and don'ts for the newsreader/presenter.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		Introduction to Anchoring & News Presentation	
		Practical Anchoring and writing techniques for electronic media and events.	CO1
Unit 2		Technical and Practical techniques for News presentation- Script Writing- Researching- writing content	
		Performance: Different aspects of understanding how to handle different situation during Live News Bulletin.	CO2
Unit 3		Voice Analysis and Improvement	
		Importance of voice improvement	CO3
Unit 4		Clarity in Hindi pronunciation, grammar and how to get rid of regional touch in language along with practice sessions	CO4
		Clarity in English pronunciation, English grammar and how to get rid of regional touch in language along with practice sessions.	CO4
Unit 5		Facing Camera and Writing Anchor Links	
		Understanding of camera etiquettes, camera microphone, peace to camera, Anchoring and writing skills required for digital media-	CO5
		Writing for Anchor Links & Headlines	CO6
Evaluations		CA 25%	CE(Viva) 25% ETE 50%
Text Book/s		• Radio Jockeying And News Anchoring Hardcover – 2009 by Aruna Zachariah • The ABC of News Anchoring: A Guide for Aspiring Anchors Kindle Edition by Richa Jain Kalra	

Semester 8

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**	
Branch: Mass Communication		**Semester: 8**	
1	**Course Code**	**BCJ419**	
2	**Course Title**	**Ethical Perspective of Media & Communication Research**	
3	**Credits**	**3**	
4	**Contact Hours (L-T-P)**	**3-0-0**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	Guide and mentor students in developing, completing, writing, and presenting a valid and ethical research report. Provide students with the fundamental knowledge of basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on sessions are designed to identify research misconduct and predatory publications.	
8	**Course Description**	The course is designed to inculcate the ethical perspective of media and communication research among students	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Philosophy and Research**	
1		Introduction to philosophy	CO1
2		Ethics: definition, moral philosophy	CO1
3		Nature of moral judgement and reaction	CO1
Unit 2		**Scientific Conduct**	
1		Ethics with respect to science and research	CO2
2		Misconduct: Falsification, Fabrication & Plagiarism (FFP)	CO2
3		Selective reporting and misrepresentation of data	CO2
Unit 3		**Publication Ethics**	
1		Introduction, definition and importance of publication ethics	CO3
2		Conflicts of interest	CO3
3		Predatory Journals	CO3
Unit 4		**Open Access Publication**	
1		Open access publication & initiatives	CO4
2		Software tools to identify predatory journals	CO4
3		Online resources to check publisher copyright & Self-archiving policies	CO4
Unit 5		**Publication Misconducts**	
1		Subject specific ethical issues	CO6
2		Case studies	CO5
3		Complaints and appeals	CO5
Mode of Examination		Theory	
Evaluations		CA 15% MTE 10% ETE 75%	
Text Book/s		• Bird, A. (2006). Philosophy of Science. Routledge	
Other References		• Indian National Science Academy (INSA), Ethics in Science Education, Research & Governance (2019)	

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**	
Branch: Mass Communication		**Semester: 8**	
1	**Course Code**	**BCJ420**	
2	**Course Title**	**Research Writing Techniques**	
3	**Credits**	**1**	
4	**Contact Hours (L-T-P)**	**0-0-2**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	Students to Become familiar with the process of organizing and drafting a report that poses a significant problem and offers a convincing solution; learn how to identify, track down, and use a wide variety of sources in the service of responsible research and scholarship; produce a paper using APA documentation and manuscript form polished enough to be publishable and to become familiar with other formal (APA, Chicago style) documentation and manuscript styles; examine some of the best past and current writing by scholars; review the mechanics of writing and hone editorial and proof-reading skills; develop evaluative strategies and vocabulary to best serve other writers in a workshop setting	
8	**Course Description**	This course is designed to familiarize students with the basic methods and techniques of research writing. The course will focus on such issues as developing a thesis statement, writing a prospectus, finding source material (books, articles, internet resources, etc.), generating an argument, writing and revising a rough draft, and APA documentation of sources	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Research Writing Skills - I**	
1		Planning and Preparation	CO1
2		Language of Research	CO1
3		Drafting, Proof-reading, Editing and Evaluation of Research papers	CO1
Unit 2		**Analyzing Research Papers**	
1		The rhetorical patterning of a passage;	CO2
2		The introductory and closing paragraphs of samples of research papers	CO2
3		Linguistic aspects of sample research papers	CO2
Unit 3		**Report Writing - I**	
1		Meaning and Objective of Research Report, Report the findings, Chapterisation,	CO3
2		Types of Research Report,	CO3
3		Quotation, Footnotes, Endnotes, Referencing Style: APA, MLA Chicago, Harvard	CO3
Unit 4		**Report Writing - II**	
1		Research Database	CO4
2		Writing abstract, Introduction, literature review	CO4
3		Writing conclusion & Results	CO4
Unit 5		**Report Writing - III**	
1		Skills of writing the Results	CO5
2		Discussion and skills are needed when writing the Conclusions	CO6
3		Plagiarism, similarity checker, Turnitin	CO5

Mode of examination	Jury		
Evaluations	CA 25%	CE(Viva) 25%	ETE 50%
Text Book/s	• Abdul Rahim, F. Thesis Writing: A Manual for Researchers. New Delhi: New Age International, 2005		
Other References	• Adam Sirjohn. Research Methodology: Methods & Techniques. Delhi: New Age International Ltd, 2004. • Barker, Nancy and Nancy Hulig. A Research Guide for Under Graduate Students: English and American Literature. New York : MLA of America, 2000		

School: SSMFE		**Batch 2024-28**	
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**	
Branch: Mass Communication		**Semester: 8**	
1	**Course Code**	**OPE**	
2	**Course Title**	**Digital Media Marketing**	
3	**Credits**	**4**	
4	**Contact Hours (L-T-P)**	**0-3-2**	
5	**Course Type**	**Compulsory**	
6	**Course Objective**	The main objective of the course is to impart skills of creating digital marketing content. This course will help the students to use digital media to amplify messages. The students will be able to make content discoverable in search, run ad campaigns and advertise it on various social media handles.	
8	**Course Description**	The course is designed with the aim to impart the knowledge, skill and competency of digital media marketing among the students. The course will help the students to understand and apply the concepts, tools of digital media marketing.	
9	**Outline Syllabus**		**CO Mapping**
Unit 1		**Marketing Fundamentals**	
1		Introduction to Digital Marketing and Digital Marketing Framework	CO1
2		Identifying Customers (Who & where)	CO1
3		Marketing Channels and Marketing Objectives	CO1
Unit 2		**Content Strategy**	
1		Plan and create marketing content	CO2
2		Distribute and Promote content	CO2
3		Optimize websites & Landing Pages	CO2
Unit 3		**Social Media Presence**	
1		Social Media Landscape	CO3
2		Social Media Channels& content	CO3
3		Implement and monitoring campaigns	CO3
Unit 4		**Social Media Advertising**	
1		Introduction to social media advertising	CO4
2		Platforms for Social Ads	CO4
3		Hand-on exercise	CO6
Unit 5		**SEO & SEM**	
1		Search Engine Optimization (SEO)	CO5
2		Search Engine Marketing with AdWords (SEM)	CO5
3		Hand-on Exercise	CO6
Mode of examination		Jury/Practical	
Evaluations		CA 25% | CE(Viva) 25% | ETE 50%	
Text Book/s		• B2B Digital Marketing Strategy: How to Use New Frameworks and Models to Achieve Growth by Simon Hall	
Other References		• Digital + Marketing & Vice Versa: Featuring Digital Strategies like the I-Journey, the I-Relevant content, the Spiral Strategy and much more by Juan A. Flores Sanchez	

School: SSMFE		**Batch 2024-28**		
Program: B.Sc. (Animation ,VFX and Gaming Design)		**Current Academic Year: 2027-28**		
Branch: Mass Communication		**Semester: 8**		
1	**Course Code**	**BCJ421**		
2	**Course Title**	**Media & Communication Dissertation - Project**		
3	**Credits**	**9**		
4	**Contact Hours (L-T-P)**	**0-3-12**		
5	**Course Type**	**Compulsory**		
6	**Course Objective**	The objective of this course is to: Strengthen the academic research ability of the students. Evolve the inquisitiveness of the students towards society and various factors affecting media and society at a large. Enhance the problem solving skills of the students.		
8	**Course Description**	The course is designed to inculcate the research value and skills among the students.		
9	**Outline Syllabus**			**CO Mapping**
Unit 1-5		Complete the master's thesis/dissertation under the supervision of the assigned faculty in given time		**CO1, CO2, CO3, CO4, CO5, CO6**
Guidelines for the students		• Each student is required to write a dissertation on any topic related to communication and will have to seek approval of the faculty supervisor for her/his dissertation. • The final dissertation report duly signed by the supervisor and head of the center has to be submitted to the center before the summative examination of the last semester. • Students will apply similarity checker before submitting final copy of dissertation and submit self-declaration that similarity in dissertation content, excluding review of literature, is not more than 15 percent.		
Mode of examination		Jury		
Evaluations		CA 25%	CE(Viva) 25%	ETE 50%