Koneru Lakshmaiah Education Foundation
(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)
❖Approved by AICTE ❖ ISO 9001-2015 Certified
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DEPARTMENT OF FINE ARTS

Board of Studies Virtual Meeting

Date: 14-07-2026

Circular

The Board of Studies meeting is proposed to be conducted online on 21-07-2026 at 2.00 PM. All members are requested to attend the meeting online.

Thank you

Head of the Department

Department of Fine Arts.

Head of the Department
Department of Fine Arts
Koneru Lakshmaiah Education Foundation
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Green Fields, Vaddeswaram-... 12
Guntur Dist., Andhra Prades...

To

The Dean -Academics

K L Deemed University

Vaddeswaram.

Dear Sir,

Sub: Minutes of the 17th BOS meeting- Fine Arts Department held on 21st July 2026 (Online) from 2.00 pm Reg.,

Greetings to you,

On behalf of the Department of Fine Arts, K.L.E.F. conducted the 17th BOS meeting on 21-07-2026 from 2:00 pm.

I am herewith submitting the minutes of the meeting for your kind Perusal.

Thanking You,

Yours sincerely

Dr. Hari Krishna S
Co-Chairman - BoS

Dr. Subhash Yalavarthy
Chairman – BoS

Head of the Department
Departrment of Fine Arts
Koneru Lakshmaiah Education Foundation
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Guntur Dist., Andhra Pradesh

DEPARTMENT OF DEPARTMENT OF FINE ARTS

MINUTES OF 17th BOARD OF STUDIES MEETING

The Department Board of Studies meeting was conducted on 21-07-2026 in online mode from 2.00 pm, Dr. Y Subhash, HOD-Fine Arts, as a chair.

The following members were present for the 16th BoS meeting

1. Dr. Subhash Yalavarthy
2. Dr. Mr. S. Hari Krishna
3. Mr. Chandra Shekar
4. Mr. G K Sumanth
5. Mr. J Rajendra Kumar
6. Dr. P. John Adinarayana
7. Mr Ramesh Babu
8. Mr S Guru Prasad
9. Mrs. Anna Ashirvadham
10. Mrs. K. Sarala Rao
11. Mr Dilip Kumar Kocharla

Dr. Y Subhash, Chairman of BoS, started the meetingg by welcoming and introducing the external members to the internal and special invite members and thanking them for accepting to become members of the Board of Studies. The chairman put forward the agenda items before the Board of Studies meeting.

The following items of the agenda were placed for consideration before the Board of Studies in Fine Arts at its present meeting.

Agenda:

Agenda I: To discuss the feedback received from stakeholders on the curriculum aspects **Annexure - I**

Agenda II: To discuss the revision of B.Sc. Animation and Gaming course curriculum and Structure for the Academic year 2026-2027 **Annexure – II**

Agenda III: Proposed to introduce new courses from the academic year 2026-27, **Annexure - III**

Agenda IV: Proposed to revise and change the nomenclature for a few courses, **Annexure - IV**

Agenda V: Proposed to discuss CO-PO Attainment and Gap Analysis. **Annexure - V**

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AGENDA & RESOLUTIONS

AGENDA ITEM-1

AGENDA ITEM DESCRIPTION	RESOLUTION PASSED
To discuss the feedback received from stakeholders on the curriculum aspects	Approved and recommended

Resolutions: Upon discussing the feedback from stakeholders, the committee recommended changes to the course structure for the academic year 2026-27.

Discussion: The committee thoroughly reviewed and approved of the recommendations during the 16th Departmental Academic Committee (DAC) meeting held on 04-07-2026. Feedback was gathered from various stakeholders, including academic peers, industry experts, alumni, students, and faculty members. Each suggestion was analysed for relevance and alignment with academic and industry standards. Based on this analysis, the committee recommended comprehensive revisions to the course structure to enhance academic quality, industry readiness, and student learning outcomes for the upcoming academic session.

AGENDA ITEM-2

AGENDA ITEM DESCRIPTION	RESOLUTION PASSED
To discuss the revision of B.Sc. Animation and Gaming course curriculum and Structure for the Academic year 2026-2027	Approved and recommended

Resolutions: On the recommendations of the academic peers' feedback, the committee has decided to revision of B.Sc. Animation and Gaming course curriculum and Structure for the Academic year 2026-2027.

Discussion: Academic peers provided feedback on the current structure of the B.Sc. Animation and Gaming program. The committee decided to revise and improve the course curriculum and structure. The updated structure will be applicable from the Academic Year 2026–27.Details are listed in **Annexure – II**

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AGENDA ITEM-3

AGENDA ITEM DESCRIPTION	Resolution Passed
Proposed to introduce new courses from the academic year 2026-27	Approved and recommended

Resolutions: On the recommendations of industry experts, the committee has decided to introduce new courses from the academic year 2026-27.

Discussion: Industry professionals gave valuable input to enhance academic offerings. The committee approved the introduction of new courses aligned with industry needs. These new courses will begin from the 2026-27 Academic Year. Full list and details are available in **Annexure – III**.

AGENDA ITEM-4

AGENDA ITEM DESCRIPTION	Resolution Passed
Proposed to revise and change the nomenclature for a few courses.	Approved and recommended

Resolutions: On the recommendations of students, the committee has decided to revise and change nomenclature for a few courses.

Discussion: Students gave feedback about confusion and clarity in course names. The committee reviewed the input and decided to revise and rename some courses for better clarity. These updates are noted in **Annexure – IV**.

AGENDA ITEM-5

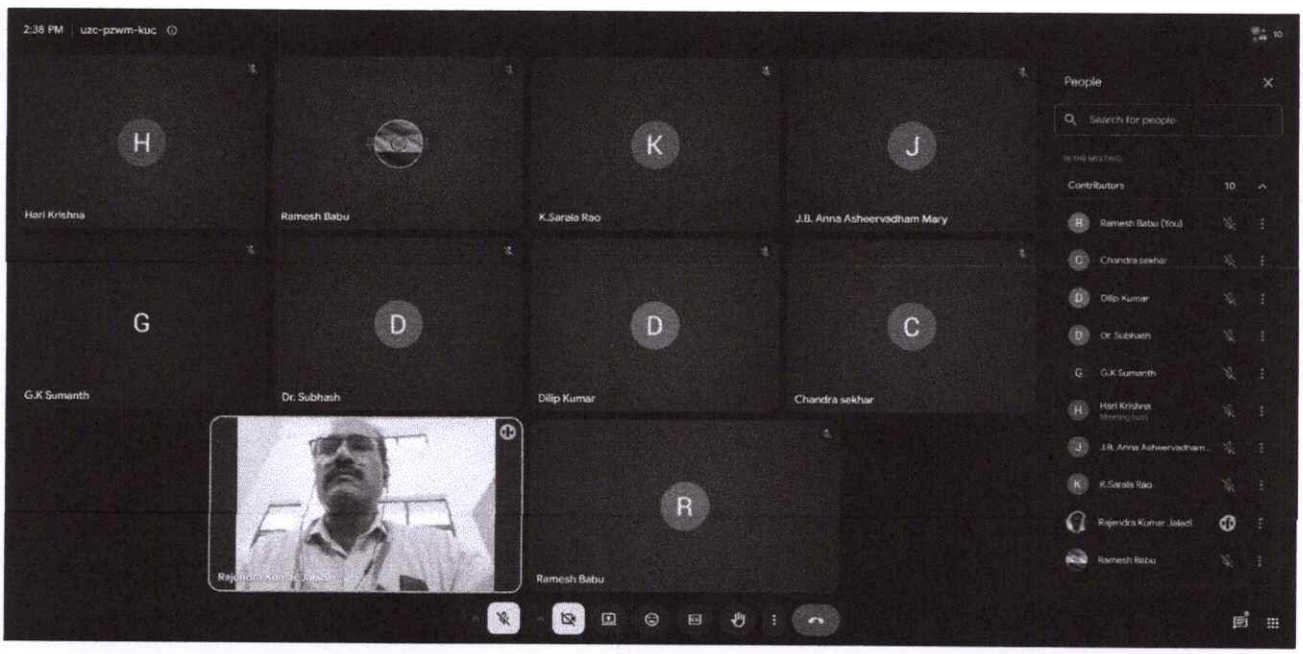
AGENDA ITEM DESCRIPTION	Resolution Passed
Proposed to discuss CO-PO Attainment and Gap Analysis.	Approved and recommended

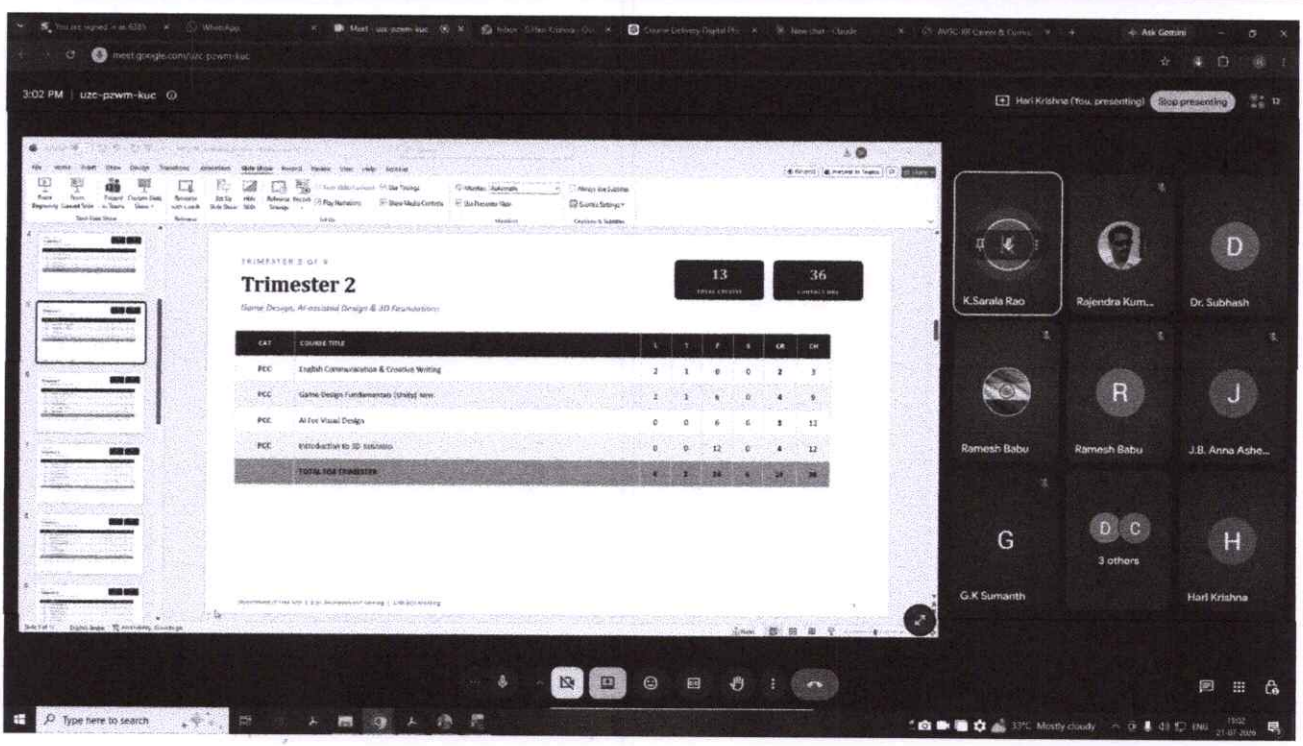
Resolution: On the recommendations of ODA, the committee has decided to review the Outcome Attainment and Gap Analysis, Annexure - V

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Discussion: Alumni and faculty suggested improvements to LTPS (Lecture-Tutorial-Practical-Self Study) distribution.The committee agreed and decided to propose necessary revisions for certain courses.These suggested changes are outlined in **Annexure – V**.

Few pics/Screenshots of BOS meeting





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BOS Members List

Sl.no	Full name	Designation	Organization	Position in the meeting
1	Dr. Subhash Yalavarthy	Head of the Department	KLEF	Chairman
2	Dr. S. Hari Krishna	Assistant Professor	KLEF	Member & Co-Chairman
3	Mr. Chandra Shekar	Assistant Professor	Aditya University	External Expert – Academics
4	Mr G Sumanth	Team Leader	Yacht Club Games	External Expert – Industry
5	Mr. J Rajendra Kumar	Deputy HoD	KLEF	Member
6	Dr. P. John Adinarayana	Assistant Professor	KLEF	Member
7	Mr Ramesh Babu	Assistant Professor	KLEF	Member
8	Mr.Guru Prasad	Assistant Professor	KLEF	Member
9	Mr Dilip Kumar Kocharla	Assistant Professor	KLH	Member
10	Mrs.Anna Asheervadham	Assistant Professor	KLH	Member
11	Mrs. Sarala Rao.	Assistant Professor	KLH	Member
12	2100540004-SHOYEB SHAIK	Alumni	KLEF	Member
13	2100540009-GOLAKOTI GUNA SEKHAR	Alumni	KLEF	Member
14	Rubeena Shaik	Student	KLEF	Member
15	Alekya	Student	KLEF	Member

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Annexure I

To discuss the recommendations of the 16th DAC Summary of Stakeholders Feedback to revise the Program structure of the department

S.NO	Stake Holders	Count
1	Academic Peers	3
2	Industry Personnel	4
3	Alumni	3
4	Faculty	2
5	Parents	2
6	Students	2

Stake Holder Feedback Analysis and Action Taken Report					
Department of Fine Arts					
S.No	**Department -Program Name**	**Recommendation/Suggestion received**	**Analysis (Justification on what basis this feedback was taken for discussion)**	**Action Taken**	**Date of DAC meeting Minutes where it has been discussed along with agenda point number**
Academic Peers					
1	Fine Arts	Recommended introducing a dedicated Digital 2D Animation course in the foundation year.	Academic peers emphasized the need to strengthen students' understanding	Introduced Digital 2D Animation as a new foundation course in the revised	4-07-2026, Agenda I

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			of animation principles before progressing to advanced production courses. Benchmarking with leading universities also supported this recommendation.	curriculum.	
2	Fine Arts	Suggested incorporating Game Design Fundamentals (Unity) at the introductory level.	The recommendation aligns with current game industry practices and provides students with early exposure to interactive design and game engines.	Introduced Game Design Fundamentals (Unity) into the curriculum.	4-07-2026, Agenda I
3	Fine Arts	Recommended including Camera Projections.	Academic peers recommended advanced VFX techniques aligned with virtual production and digital environment creation.	Introduced Camera Projections as an advanced production course.	4-07-2026, Agenda I
4	Fine Arts	Recommended updating the nomenclature of foundational animation courses.	The course title needed better alignment with animation-specific learning.	Drawing for Animation was revised to Drawing & Visual Anatomy.	4-07-2026, Agenda IV
5	Fine Arts	Recommended updating visual design terminology.	The nomenclature was reviewed for broader design relevance.	Graphic Design was revised to Principles of Visual Design.	4-07-2026, Agenda IV
6	Fine Arts	Recommended updating the 3D course nomenclature.	The course title was reviewed	Concepts of 3D was revised to	4-07-2026, Agenda IV

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			for better conceptual clarity.	Introduction to 3D.	
Industry Personnel					
S.No	**Department -Program Name**	**Recommendation/Suggestion received**	**Analysis (Justification on what basis this feedback was taken for discussion)**	**Action Taken**	**Date of DAC meeting Minutes where it has been discussed along with agenda point number**
1	Fine Arts	Recommended integrating Programming Foundations for Creative Arts.	Industry experts highlighted the growing demand for creative professionals with basic programming knowledge for animation, VFX, and game development.	Introduced Programming Foundations for Creative Arts as a core course.	4-07-2026, Agenda I
2	Fine Arts	Suggested introducing Previsualization as a dedicated course.	The recommendation reflects the increasing adoption of virtual production and visualization workflows across film and gaming industries.	Added Previsualization to the curriculum.	4-07-2026, Agenda II
3	Fine Arts	Recommended including Audio & Video Editing as a core course.	Industry stakeholders emphasized integrated post-production skills required for multimedia content creation.	Introduced Audio & Video Editing in the revised curriculum.	4-07-2026, Agenda III

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4	Fine Arts	Suggested strengthening rendering pipelines and AI-assisted motion graphics.	Industry experts recommended updating the curriculum to include modern rendering workflows and AI-supported motion graphics.	Revised existing rendering and motion graphics courses by incorporating AI-assisted workflows.	4-07-2026, Agenda II
5	Fine Arts	Recommended strengthening the nomenclature related to 3D production skills.	The course structure was reviewed to represent the required 3D production competencies.	Modelling & Texturing was revised to 3D Modeling & Sculpting.	4-07-2026, Agenda IV
6	Fine Arts	Recommended refining the screenwriting course nomenclature.	The title was reviewed to align with the broader storytelling component.	Screen Writing was revised to Screen Writing & Visual Storytelling.	4-07-2026, Agenda IV
7	Fine Arts	Recommended strengthening UI/UX education for interactive media.	The course was reviewed for alignment with interactive-media requirements	UI & UX Design was revised to UI & UX Design for Interactive Media.	4-07-2026, Agenda IV
8	Fine Arts	Recommended strengthening film editing terminology.	The nomenclature was reviewed for clearer alignment with film production.	Editing for Films was revised to Film Editing.	4-07-2026, Agenda IV
9	Fine Arts	Recommended updating motion graphics terminology.	The course was reviewed to reflect its core motion graphics focus.	Motion Graphics was revised to Motion Graphics & Generative AI.	4-07-2026, Agenda IV

Alumni

S.No	Department -Program Name	Recommendation/Suggestion received	Analysis (Justification on what basis this feedback was taken for	Action Taken	Date of DAC meeting Minutes where it

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			discussion)		**has been discussed along with agenda point number**
1	Fine Arts	Recommended introducing Advanced Game Programming.	Alumni highlighted the importance of advanced programming competencies for improving employability in the gaming sector.	Introduced Advanced Game Programming as an advanced specialization course.	1-07-2025, Agenda III
2	Fine Arts	Suggested incorporating Commercial Video Production.	Alumni feedback indicated increasing employment opportunities in advertising, branded content, and corporate media production.	Added Commercial Video Production as a specialization course.	1-07-2025, Agenda III
3	Fine Arts	Recommended improving professional communication and collaborative skills.	Alumni emphasized that communication and teamwork are essential employability skills for creative industries.	Introduced Professional Communication/Corporate Communications course in the revised curriculum.	1-07-2025, Agenda III
Faculty					
S.No	**Department -Program Name**	**Recommendation/Suggestion received**	**Analysis (Justification on what basis this feedback was taken for discussion)**	**Action Taken**	**Date of DAC meeting Minutes where it has been discussed along with agenda point**

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					number
1	Fine Arts	Recommended incorporating AI-driven creative tools and real-time production technologies.	The feedback aligns with emerging industry practices emphasizing AI-assisted production and real-time workflows.	Revised curriculum to include AI-enabled creative production concepts and related courses.	4-07-2026, Agenda II
2	Fine Arts	Suggested specialized training in Texturing & Shading.	Academic benchmarking identified the need for physically based rendering (PBR) workflows in modern 3D production.	Introduced Texturing & Shading course with industry-standard workflows.	4-07-2026, Agenda III
Parents					
S.No	**Department -Program Name**	**Recommendation/Suggestion received**	**Analysis (Justification on what basis this feedback was taken for discussion)**	**Action Taken**	**Date of DAC meeting Minutes where it has been discussed along with agenda point number**
1	Fine Arts	Recommended integrating advanced AI applications and intelligent creative workflows.	Parents stressed the importance of AI-assisted production tools to meet evolving digital media requirements.	Introduced AI-focused courses and integrated AI tools across relevant practical courses.	4-07-2026, Agenda II
2	Fine Arts	Suggested introducing Previsualization as a dedicated course.	The recommendation reflects the increasing adoption of virtual	Added Previsualization to the curriculum.	4-07-2026, Agenda II

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			production and visualization workflows across film and gaming industries.		
Students					
S.No	**Department -Program Name**	**Recommendation/Suggestion received**	**Analysis (Justification on what basis this feedback was taken for discussion)**	**Action Taken**	**Date of DAC meeting Minutes where it has been discussed along with agenda point number**
1	Fine Arts	Suggested introducing Mobile Game Development.	Student feedback reflected the rapid growth of mobile gaming and the demand for cross-platform development skills.	Added Mobile Game Development to the curriculum.	4-07-2026, Agenda II
2	Fine Arts	Recommended including Audio & Video Editing as a core course.	Students emphasized integrated post-production skills required for multimedia content creation.	Introduced Audio & Video Editing in the revised curriculum.	4-07-2026, Agenda II

Annexure II

17th meeting of Department Academic Committee held on 21-07-2026

The following Points are recommended to the BOS.

Agenda II: To discuss the revision of B.Sc. Animation and Gaming course curriculum and Structure for the Academic year 2025-2026

Resolutions:

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On the recommendations of the academic peers' feedback, the committee has decided to revision of B.Sc. Animation and Gaming course curriculum and Structure for the Academic year 2026-2027

Annexure – II

Y25-26 Course Structure

Y25 Course Structure

Sl No	Type	Course Title	Mode	L	T	P	S	Cr	CH	New/Retain	E/E/S
1.	PCC	Drawing for Animation	R	2	0	4	0	4	6	Revised	Employability
2.	PCC	Digital Photography	R	2	0	4	0	4	6	Revised	Skill Development
3.	PCC	Visual Thinking and Problem Solving	R	0	0	4	0	2	4	New	Employability
4.	PCC	Story Telling	R	2	2	0	0	4	4	New	Employability
5.	PCC	Language Skills	R	0	0	4	0	2	4	Retain	Employability
6.	SDC	Graphic Design	R	0	0	6	4	4	10	Revised	Skill Development
7.	AUC	Ecology & Environment	R	2	0	0	0	0	2	Retain	Employability
8.	PCC	AI for Visual Design	R	0	0	4	0	2	4	New	Employability
9.	PCC	Concept Art	R	0	0	6	0	3	6	New	Employability
10.	PCC	Media Laws	R	3	1	0	0	4	4	New	Employability
11.	HAS	Design Thinking and Innovation	R	0	0	4	0	2	4	Revised	Entrepreneurship
12.	HAS	Human Values, Gender Equality & Professional Ethics	R	2	0	0	0	2	2	Revised	Skill Development
13.	HAS	Foreign Language (Korean)	R	3	0	0	0	3	3	Revised	Employability

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14.	PE 1	Screen Writing	R	0	2	4	0	4	6	Retain	Employability
15.	PE 2	Television Production	R	0	0	6	0	3	6	Revised	Employability
16.	PE 1	Game Art	R	0	2	4	0	4	6	New	Employability
17.	PE 2	Concepts of 3D	R	0	0	6	0	3	6	Revised	Employability
18.	PCC	Media Research Methods	R	2	0	4	0	4	6	Revised	Employability
19	PCC	Advertising and Semiotics	R	3	0	2	0	4	5	Revised	Employability
20	SDC	Game Programming	R	0	0	4	4	3	8	Revised	Skill Development
21	SIL	Social Immersive Learning	R	0	0	2	0	1	2	Retain	Skill Development
22	PE 3	Editing for Films	R	0	0	8	0	4	8	Revised	Employability
23	PE 4	Matte Painting	R	0	0	8	0	4	8	Revised	Employability
24	PE 3	Modeling & Texturing	R	0	0	8	0	4	8	Revised	Employability
25	PE 4	Environment Design for Games	R	0	0	8	0	4	8	Revised	Employability
26	HAS	Communication Skills	R	0	0	4	0	2	4	Retain	Employability
27	PCC	Digital Media Design	R	0	0	6	0	3	6	New	Employability
28	PCC	Motion Graphics	R	0	0	4	0	2	4	Revised	Skill Development
29	OEC	Photography Techniques (Open Elective I)	M	0	0	8	0	4	0	New	Skill Development
30	PE 5	Cinematography	R	0	0	8	0	4	8	Revised	Employability
31	PE 6	Tracking and Matchmoving	R	0	0	8	0	4	8	Revised	Employability
32	PE 5	Shading, Lighting and Rendering	R	0	0	8	0	4	8	Revised	Employability
33	PE 6	Game Development Using Unreal	R	0	0	8	0	4	8	Revised	Employability
34	PE 7	Documentary Film Making	R	0	0	6	0	3	6	Revised	Employability

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35	PCC	UI & UX Design	R	0	3	4	0	5	7	Revised	Employability
36	SDC	Virtual Production	R	0	0	6	4	4	10	New	Skill Development
37	PEC	Film Production	R	0	0	6	0	3	6	Revised	Employability
38	PEC	Composting Techniques	R	0	0	6	0	3	6	Revised	Skill Development
39	PE 7	3D Dynamics	R	0	0	6	0	3	6	Retain	Employability
40	PEC	Character Animation	R	0	0	6	0	3	6	Revised	Employability
41	PEC	Advertisement Film Making	R	0	0	4	0	2	4	Revised	Employability
42	PRI	Portfolio	R	0	0	20	0	10	20	New	Employability

New Course Structure (125 CR)

ANIMATION AND GAMING COURSE STRUCTURE FOR Y26 REGULATION

Sl No	Type	Course Title	Mode	L	T	P	S	Cr	CH	New/Retain	E/E/S
1	PCC	Drawing and Visual Anatomy	R	2	1	3	0	3	6	Revised	Employability
2	PCC	Principles of Visual Design	R	3	0	6	0	4	9	Revised	Employability
3	PCC	Digital Photography	R	0	0	9	6	4	15	Revised	Skill Development
4	PCC	Digital 2D Animation	R	2	1	3	0	3	6	New	Employability
5	PCC	English Communication & Creative Writing	R	2	1	0	0	2	3	New	Employability
6	PCC	Game Design Fundamentals (Unity)	R	2	1	6	0	4	9	New	Employability
7	PCC	AI for Visual Design	R	0	0	6	6	3	12	Revised	Employability
8	PCC	Introduction to 3D	R	0	0	12	0	4	12	Revised	Employability

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9	PCC	Programming Foundation for Creative Arts	R	2	1	3	0	3	6	New	Employability
10	PCC	Previsualization	R	0	0	9	0	3	9	New	Skill Development
11	PCC	Audio & Video Editing	R	2	1	3	0	3	6	New	Employability
12	PE 1	3D Modeling & Sculpting	R	0	0	9	6	4	15	Revised	Employability
13	PE 1	Screen Writing & Visual Storytelling	R	0	0	9	6	4	15	Revised	Employability
14	PRI	Annual Studio Production I	R	0	0	4	0	0	4	New	Employability
15	PCC	Compositing Techniques (Nuke)	R	0	0	9	0	3	9	Revised	Employability
16	PE 2	Texturing & Shading (Substance)	R	0	0	9	0	3	9	New	Employability
17	PE 3	Unreal Engine 5 Fundamentals	R	0	0	12	0	4	12	New	Employability
18	PE 4	AI / Gen AI for Production	R	2	1	3	0	3	6	New	Employability
19	PE 2	AI for Film Making & Content Creation	R	0	0	9	0	3	9	New	Employability
20	PE 3	Media Laws	R	2	1	3	0	3	6	Revised	Employability
21	PE 4	Lighting for Film & Digital Media	R	0	0	12	0	4	12	New	Employability
22	PCC	UI & UX Design for Interactive Media	R	2	1	6	0	4	9	Revised	Employability
23	PE 5	Environment Design for Games	R	0	0	6	6	3	12	Revised	Employability
24	PE 6	3D Character Animation & Rigging	R	2	1	3	0	3	6	Revised	Employability
25	PE 7	Advanced Game Programming	R	0	0	9	0	3	9	New	Employability
26	PE 5	Film Editing	R	2	1	3	0	3	6	Revised	Employability
27	PE 6	Tracking & Match Moving	R	0	0	9	0	3	9	Revised	Employability

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28	PE 7	Commercial Video Production	R	0	0	12	0	4	12	New	Employability
29	PCC	Corporate Communications	R	2	1	3	0	3	6	New	Employability
30	PE 8	Lighting Look Dev & Rendering	R	0	0	9	0	3	9	New	Employability
31	PE 9	Generative AI & ML Agents	R	2	1	3	0	3	6	New	Employability
32	PE 10	Mobile Game Development	R	0	0	6	6	3	12	New	Employability
33	PE 8	Camera Projections	R	0	0	9	0	3	9	New	Employability
34	PE 9	Documentary Film Making	R	0	0	15	0	5	15	Revised	Employability
35	PE 10	Motion Graphics & Generative AI	R	0	0	6	0	2	6	Revised	Skill Development
36	PRI	Annual Studio Production II	R	0	0	0	0	0	0	New	Employability
37	PCC	Virtual Production & Real-time Cinematics	R	0	0	9	0	3	9	Revised	Skill Development
38	PE 11	3D Live Integration	R	0	0	9	0	3	9	New	Employability
39	PE 12	Multiplayer Games & Networking	R	0	0	9	0	3	9	New	Employability
40	PE 13	Simulations & Procedural Workflow	R	0	0	9	0	3	9	New	Employability
41	PE 11	Digital Media Strategy and Marketing	R	2	1	3	0	3	6	New	Entrepreneurship
42	PE 12	Digital Film Making	R	0	0	15	0	5	15	Revised	Employability
43	PE 13	Television Production	R	2	1	6	0	4	9	Revised	Employability
44	AUC	Portfolio and Showreel Development	R	0	0	4	0	0	4	Revised	Employability
45	PRI	Industry Internship 1	R	0	0	24	12	10	36	Retained	Employability
46	OE 1	Open Elective I	M	3	0	0	0	3	3	Retained	Skill Development

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47	AUC	Environmental Studies	R	3	0	0	0	2	3	Revised	Skill Development
48	PRI	Industry Internship 2	R	0	0	24	12	10	36	New	Employability
49	OE 2	Open Elective II	M	3	0	0	0	3	3	Retained	Skill Development
50	AUC	Human Values, Gender Equality and Professional Ethics	R	3	0	0	0	2	3	Revised	Skill Development

Percentage of Syllabus Revision = 17/50 × 100=34 %

Percentage of Courses focusing on Employability= 41/50 × 100= 82 %

Percentage of Courses focusing on Entrepreneurship= 1/50 × 100=2 %

Percentage of Courses focusing on Skill Development = 8/50 × 100= 16 %

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47	AUC	Environmental Studies	R	3	0	0	0	2	3	Revised	Skill Development
48	PRI	Industry Internship 2	R	0	0	24	12	10	36	New	Employability
49	OE 2	Open Elective II	M	3	0	0	0	3	3	Retained	Skill Development
50	AUC	Human Values, Gender Equality and Professional Ethics	R	3	0	0	0	2	3	Revised	Skill Development

Percentage of Syllabus Revision = 17/50 × 100=34 %

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3.Proposed to introduce new courses from the academic year 2026-27, Annexure - III

LIST OF NEW COURSES

SL NO	COURSE TITLE	TYPE	L	T	P	S	CR	CH	PRE-REQUISITVE
1	Digital 2D Animation	PCC	2	1	3	0	3	6	NIL
2	Game Design Fundamentals (Unity)	PCC	2	1	6	0	4	9	NIL
3	Programming Foundation for Creative Arts	PCC	2	1	3	0	3	6	NIL
4	Previsualization	PCC	0	0	9	0	3	9	NIL
5	Audio & Video Editing	PCC	2	1	3	0	3	6	NIL
6	Texturing & Shading (Substance)	PE 2	0	0	9	0	3	9	NIL
7	Unreal Engine 5 Fundamentals	PE 3	0	0	12	0	4	12	NIL
8	AI / Gen AI for Production	PE 4	2	1	3	0	3	6	NIL
9	AI for Film Making & Content Creation	PE 2	0	0	9	0	3	9	NIL
10	Lighting for Film & Digital Media	PE 4	0	0	12	0	4	12	NIL
11	Advanced Game Programming	PE 7	0	0	9	0	3	9	NIL
12	Commercial Video Production	PE 7	0	0	12	0	4	12	NIL
13	Corporate Communications	PCC	2	1	3	0	3	6	NIL
14	Lighting Look Dev & Rendering	PE 8	0	0	9	0	3	9	NIL
15	Generative AI & ML Agents	PE 9	2	1	3	0	3	6	NIL
16	Mobile Game Development	PE 10	0	0	6	6	3	12	NIL
17	Camera Projections	PE 8	0	0	9	0	3	9	NIL
18	Annual Studio Production I	AUC	0	0	4	0	0	4	NIL
19	Annual Studio Production II	AUC	0	0	4	0	0	4	NIL
20	3D Live Integration	PE11	0	0	9	0	3	9	NIL
21	Multiplayer Games & Networking	PE 12	0	0	9	0	3	9	NIL
22	Simulations & Procedural	PE 13	0	0	9	0	3	9	NIL

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	Workflow								
23	Digital Media Strategy and Marketing	PE 11	2	1	3	0	3	6	NIL

4. Proposed to revise and change the nomenclature for a few courses, Annexure IV

Nomenclature Change

NEW COURSE

SL NO	COURSE TITLE	TYPE	L	T	P	S	CR	CH	PRE-REQUISITVE
1	Drawing & Visual Anatomy	PCC	2	1	3	0	3	6	NIL
2	Principles of Visual Design	PCC	3	0	6	0	4	9	NIL
3	Introduction to 3D	PCC	0	0	12	0	4	12	NIL
4	3D Modeling & Sculpting	PEC	0	0	9	6	4	15	NIL
5	Screen Writing & Visual Storytelling	PEC	0	0	9	6	4	15	NIL
6	UI & UX Design for Interactive Media	PCC	2	1	6	0	4	9	NIL
7	Film Editing	PEC	2	1	3	0	3	6	NIL
8	Motion Graphics & Generative AI	PEC	0	0	6	0	2	6	NIL

OLD COURSE

SL NO	COURSE TITLE	TYPE	L	T	P	S	CR	CH	PRE-REQUISITVE
1	Drawing for Animation	PCC	2	0	4	0	4	6	NIL
2	Graphic Design	SDC	0	0	6	4	4	10	NIL
3	Concepts of 3D	PEC	0	0	6	0	3	6	NIL
4	Modelling &Texturing	PEC	0	0	8	0	4	8	NIL
5	Screen Writing	PEC	0	2	4	0	4	6	NIL
6	UI & UX Design	PCC	2	0	6	0	5	8	NIL
7	Editing For Films	PEC	0	0	8	0	4	8	NIL
8	Motion Graphics	PCC	0	0	4	0	2	4	NIL

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Course wise syllabus revision

Course code	Course name	Category	Existing Syllabus	New Syllabus	Topics added/ removed/ replaced	Change in outcome	Justification for modification	Overall revision percentage
26AG1103E	**Digital Photography**	**PCC**	**Module I - Introduction to Photography:** History and evolution of photography, Types of cameras (DSLR, Mirrorless, Mobile), Understanding the Exposure Triangle (ISO, Aperture, Shutter Speed), Camera handling and controls, Shooting in Auto vs Manual modes, Exercises using different exposure settings. **Practicals:** Camera handling and controls, Shooting in Auto vs Manual modes, Exercises using different exposure settings. **Module II - Composition and Aesthetics:** Rules of	Module I: Camera anatomy, digital sensor, exposure triangle, metering, histogram, dynamic range and RAW capture. Module II: Optics, focal length, field of view, prime/zoom, depth of field, bokeh, perspective and lens selection. Module III: Advanced lighting, three-point/studio lighting, modifiers, white balance, colour temperature and composition. Module IV: RAW processing, non-destructive	Added: Digital sensors, metering, histogram, dynamic range, optics, focal length, depth of field, bokeh, perspective compression, studio lighting, white balance, non-destructive workflow, colour grading, metadata, colour spaces, advanced Photoshop, compositing, matte painting, AI-assisted editing and ACP preparation. Expanded: Exposure, lighting, composition, RAW processing and portfolio development. Replaced/Upgraded: Basic editing → advanced RAW and	**70%**	Change has done as per the contemporary requirements	**70%**

			composition (Rule of thirds, Leading lines, Framing), Visual balance and depth, understanding color and contrast, Framing and composing different subjects, Shooting tasks based on composition rules, Color, and black & white shooting. **Practicals:** Framing and composing different subjects, shooting tasks based on composition rules, Color and black & white shooting. **Module III - Lighting and Techniques:** Natural vs Artificial lighting, - Light direction, quality, and modifiers, Use of reflectors, diffusers, and flash. **Practicals:** Portrait lighting setups, Using reflectors and softboxes, Indoor/outdoor lighting practice. **Module IV - Digital**	workflow, colour grading, HSL, metadata, colour spaces and export pipelines. Module V: Advanced Photoshop, layers, masks, blending, channels, retouching, compositing, matte painting and AI-assisted tools. Module VI: Portfolio curation, professional presentation and Adobe Certified Professional (ACP) exam readiness.	Photoshop workflow; basic portfolio → professional portfolio and certification readiness. Removed: No major core topic removed; existing fundamentals are retained and upgraded.			

			Workflow & Editing: Image formats (RAW vs JPEG), Introduction to photo editing software (Lightroom, Photoshop), Basics of color correction and retouching. **Practicals:** Importing, organizing, and editing RAW files, Retouching portraits, Creative effects and filters. **Module V - Portfolio Development & Evaluation:** Genres of photography (Portrait, Landscape, Product, Street, etc.), Visual storytelling, Building a photography portfolio. **Practicals:** Final portfolio project (minimum 10 curated images), Peer and instructor critique, Preparing work for print/digital showcase					
26AG1102E	**Principles of Visual**	**PCC**	**Module-1** Introduction to Graphic Design: History and	**Module I:** Elements of Design – line, shape, form,	**Added:** Elements of design, advanced principles, Gestalt	65%	Change has done as per the	65%

			Evolution Key Design Principles: Balance, Contrast, Alignment, Repetition, Proximity Visual Hierarchy and Composition Techniques ,Introduction to Design Software (e.g., Adobe Illustrator, Photoshop). Color Theory: Color Wheel, Harmony, and Psychology Creating and Applying Color Palettes Typography: Anatomy of Type, Font Selection, and Pairing Typography in Practice: Hierarchy, Readability, and Legibility. **Logo Design Project:** Create a unique logo for a fictional or real brand, focusing on scalability, color psychology, and brand identity. **Module-2** Print Design: Brochures, Posters, Business Cards	space, texture, value and colour. **Module II:** Principles of Design – balance, contrast, emphasis, movement, rhythm, repetition, proportion, scale, unity and variety. **Module III:** Colour Theory & Application – colour properties, harmonies, temperature, psychology, cultural meaning and RGB/CMYK/HSB. **Module IV:** Composition & Gestalt – compositional systems, Gestalt principles, visual grouping and directing the eye. **Module V:** Typography & Layout – type anatomy,	theory, golden ratio/spiral, dynamic symmetry, figure-ground, colour models, grid systems, type anatomy, kerning, tracking and professional design critique. **Expanded:** Colour theory, composition, typography and visual hierarchy. **Replaced/Reduced:** Application-specific projects such as logo, brochure, magazine and social media campaigns are replaced by broader design-principle exercises and portfolio-based compositions. **Removed:** Detailed platform-specific design specifications and individual commercial design projects.		contemporary requirements	

			Digital Design: Web Graphics, Social Media, Mobile Interfaces Understanding Media Specifications and Constraints Adapting Designs for Different Platforms. **Poster Design:** Design a poster for a movie, concert, or social issue using strong visual hierarchy, typography, and layout skills. **Brochure Design Project:** Design a **tri-fold or bi-fold brochure** for a business, product, or travel destination. Include a clear layout, branding elements, imagery, and well-structured content sections like About Us, Services, Contact Info, etc. **Module-3** Methods for Analyzing Design Print Effectiveness Identifying Strengths and	classification, pairing, hierarchy, spacing, grids and print/screen layouts. **Module VI:** Design Portfolio & Critique – design rationale, peer critique, iterative refinement, portfolio development and self-evaluation.				

			Weaknesses Constructive Critique Techniques and Theme based Design Revision Strategies Based on Feedback. **Magazine Cover & Spread Project:** Create a magazine front cover and an inside editorial spread, applying grid systems, typography styling, and composition techniques. **Social Media Campaign Project:** Design a cohesive series of 4–6 Instagram or Facebook posts for a product launch, ensuring consistency in colors, fonts, and branding					
26AG1101E	Drawing and Visual Anatomy	PCC	**Unit 1: Foundations of Observational Drawing:** Introduction to drawing tools and materials (pencils, charcoal, ink, paper types). Basic linework techniques: contour, gesture, and blind contour drawing. Understanding basic	**Module I:** Observational drawing, mark-making, line quality, sighting, comparative proportion, contour, cross-contour, negative space and gesture. **Module II:**	**Added:** Sighting and measurement, negative space, Loomis/Reilly construction, figure construction, anatomical landmarks, muscle groups, head planes, hands and feet, advanced gesture, foreshortening, animal anatomy, light physics, chiaroscuro,	25%	Change has done as per the contemporary requirements	25%

			shapes and forms (cubes, spheres, cylinders, cones).Introduction to value and shading techniques (hatching, cross-hatching, blending).Basic principles of composition: rule of thirds, leading lines, and focal points. **Unit 2: Form, Space, and Perspective for Animation:** Understanding three-dimensional form in two-dimensional space. Advanced perspective: two-point and three-point perspective. Drawing complex objects and environments in perspective. Understanding spatial relationships and depth. Thumbnails and rough layouts for animation scenes. **Unit 3: Anatomy and Character Design Fundamentals:** Basic human and animal anatomy	Structural figure construction using Loomis, Reilly and mannequin methods; proportion canons, ribcage, pelvis and limb construction. **Module III:** Surface anatomy, skeletal landmarks, major muscle groups, head construction, facial planes, hands and feet. **Module IV:** Gesture, motion, weight, balance, momentum, foreshortening and comparative animal anatomy. **Module V:** Light, shadow, value, form rendering, chiaroscuro and material representation. **Module VI:** Portfolio development, critique,	material rendering and professional portfolio presentation. **Expanded:** Anatomy, gesture, figure construction and rendering. **Replaced/Reduced:** Storyboarding, animatics, sequential poses and character design are removed as major components. Environment perspective is reduced in favour of figure construction and anatomy. **Retained:** Basic drawing, forms, gesture, anatomy, shading and observational skills.			

			(skeletal and muscular structure). Proportion, balance, and gesture in figure drawing.Drawing dynamic poses and movement. Character design principles: silhouette, shape language, and expression. Developing basic character design turnarounds and expressions. **Unit 4: Drawing for Movement and Storytelling:** Drawing sequential poses for animation (keyframes and breakdowns). Introduction to storyboarding techniques and visual storytelling. Creating simple animatics based on storyboards. Developing visual development sketches for animation projects (environments, props, character variations).	sketchbook practice and professional presentation.				

26AG1206E	PCC	AI for Visual Design	**Module-I** Introduction to AI in Visual Design- Overview of AI and its impact on animation and gaming - Hands-on - How AI is used in animation and gaming - Creating simple characters and backgrounds with AI tools. - ow AI helps in planning visual stories. - Discussion on new trends and tools. **Module-II** Generative AI Techniques for Designing - Generating concepts using AI tools - AI for Storyboarding and	**Module I:** Foundations of Generative AI, diffusion, GANs, transformers and LLMs, AI tool ecosystem, capabilities, limitations and failure modes. **Module II:** Prompt Engineering for Visuals including prompt structure, style, composition, lighting, negative prompts, parameters, iteration and reproducibility. **Module III:** Controllable AI Workflows using img2img, inpainting, outpainting, ControlNet and node-based	**Added:** Generative AI fundamentals, diffusion/GANs/transformers/LLMs, prompt engineering, negative prompts, parameters, seeds, reproducibility, img2img, inpainting, outpainting, ControlNet, ComfyUI, AI-to-Photoshop workflows, art direction, provenance and C2PA. **Expanded:** AI-assisted design, ethics and responsible AI. **Replaced:** Basic AI tool introduction and simple character/background generation → structured professional AI design workflows. **Expanded project:** Basic visual concept/storyboard → complete AI-augmented design project with workflow and authorship documentation.	75	Change has done as per the contemporary requirements	75%

			Pre-visualization - Creating pre-visualizations using AI-generated assets - Ethical Considerations in AI Design - Copyright and ownership of AI-generated content - Discussion on ethical use in animation and gaming - Generate visual concepts using AI tools based on a given theme - Develop a storyboard combining AI-generated visuals and manual sketches.	workflows. **Module IV:** AI in Human Design Workflow including Photoshop integration, mood boards, concept exploration, asset variation, art direction and human refinement. **Module V:** Ethics, IP and Responsible AI covering copyright, training data, authorship, bias, deepfakes, provenance, consent and disclosure. **Module VI:** AI-Augmented Design Project, workflow documentation, authorship decisions, presentation, critique and reflection.			
					Module V: Business Model Development for	15%	Change has done as per the	15%

					Media Startups, Funding and Financial Planning for Media Entrepreneurs, Legal and Regulatory Framework Affecting Media Ventures, Intellectual Property Rights in Media Entrepreneurship, Marketing Strategies for New Media Ventures, Digital Transformation and Innovation in Media Entrepreneurship		contemporary requirements	
26AG1207E	**Introduction to 3D**	PCC	Module 1 3D Interface of Application: Introduction about the 3D environment, Installing 3D software, Introduction about the Maya user interface, Creating, manipulating and viewing objects, Understanding the 3D scene, Components and attributes. Introduction to Modelling: Using 2D reference images, creating	**Module 1- The 3D Workflow & Viewport**: 3D coordinate space and transforms; navigating the viewport; the 3D production pipeline (model → UV → texture → rig → animate → light → render); interface of Maya and Blender;	**Added:** Generative AI fundamentals, diffusion/GANs/transformers/LLMs, prompt engineering, negative prompts, parameters, seeds, reproducibility, img2img, inpainting, outpainting, ControlNet, ComfyUI, AI-to-Photoshop workflows, art direction, provenance and C2PA. **Expanded:** AI-assisted design, ethics	**75%**	Change has done as per the contemporary requirements	**75%**

			a polygon Primitive, creating basic polygon Models and Editing Models. Module 2 Environment effects. Simulating the particle systems, Environmental effects, dynamics of active, passive, rigid & soft bodies. Paint effects.Apply the basics of joints and types of IK Handles, skinning & types of fitting skeletons to a mesh. Generating Basic character Animation as referred to in 3D Application and making a basic demo video.	core terminology. • XYZ space, transforms and pivots • Viewport navigation and the interface • The end-to-end 3D pipeline • Maya vs. Blender orientation **Module 2- Polygon Modelling:** Primitives and components (vertex/edge/face); core tools (extrude, bevel, bridge, loop cut); topology and edge flow; modelling props and simple hard-surface objects with clean geometry. • Primitives and component editing	and responsible AI. **Replaced:** Basic AI tool introduction and simple character/background generation → structured professional AI design workflows. **Expanded project:** Basic visual concept/storyboard → complete AI-augmented design project with workflow and authorship documentation.			

				• Core modelling operations • Clean topology and edge flow • Modelling a hard-surface prop **Module 3: UV Mapping & Materials:** Why UVs matter; unwrapping, seams and layout; UDIM basics; assigning materials and shaders; intro to PBR; applying textures to a model. • UV unwrapping and seam placement • UV layout and texel density • Material/shad				

				er assignment • Intro to PBR texturing **Module 4: Lighting & Cameras:** Light types (directional, point, area, HDRI); three-point lighting in 3D; shadows and exposure; camera setup, focal length and composition; building mood through light. • 3D light types and properties • Three-point and HDRI lighting • Camera, focal length and framing • Lighting for mood and readability				

				Module 5: Rendering & Real-Time / VP Basics: Render engines (Arnold / Cycles / EEVEE); render settings, samples and output; offline vs real-time rendering; a first, basic look at real-time engines and virtual-production concepts (why real-time matters for film and games). • Render engines and settings • Samples, denoising and output formats • Offline vs real-time rendering • Virtual production — basic				

				introduction **Module 6: The 3D Scene Project & Critique**: Bringing it together: a complete modelled, UV'd, textured, lit and rendered scene; composition and presentation; turntables; critique and iteration; portfolio export. • End-to-end scene assembly • Composition, turntables and beauty render • Presentation and portfolio export • Critique and iteration				

26AG13A1E	**3D Modeling & Sculpting**	**PE 1**	Module 1-The flow of geometry for hard surface modelling. Importing image planes in viewports, making a basic shape of the sets & props with a given reference for the Gaming environment. Making hard surface objects and props like guitars, speakers, pen, watches and various household industrial machine objects, procedural modeling concepts in the 3d Sets & Props, and different types interior/ Exterior 3DEnvironmental structures. Understanding shader attributes, assigning shading networks, connecting nodes. Low Poly Character Modelling. Applying shading networks, connecting nodes in work area, using 2D and 3D textures, transparency maps, bump maps, UV Projection-	**Module 1- Modelling Pipeline & Topology**: The asset pipeline; hard-surface vs organic; topology principles — quads, edge flow, poles, deformation; reference gathering and blockout; scale and units. • Asset-creation pipeline overview • Topology, edge flow and poles • Reference, blackout and scale • Hard-surface vs organic strategy **Module 2- Hard-Surface Modelling in Maya:** Maya modelling toolkit;	**Added:** asset production pipeline, topology principles, ZBrush sculpting, DynaMesh, ZSpheres, retopology, game/animation-ready low-poly construction, texel density, UDIMs, high-to-low baking, AO/curvature/ID maps, bake troubleshooting and certification readiness. **Retained & expanded:** hard-surface modelling, reference-based modelling, UV mapping and normal/displacement workflows. **Reduced/Replaced:** extensive shader networks, texture painting, SSS, layered shaders, detailed lighting and final rendered-video workflow.	**70%**	Change has done as per the contemporary requirements	**70%**

			Mapping coordinates & UVs Unwrapping Techniques. Module 2-	extrude, bevel, bridge, Boolean, multi-cut; supporting edges and hard-surface detailing; modelling a props/vehicle/weapon with clean topology. • Maya modelling toolset mastery • Supporting edges and bevels • Booleans and clean-up • Modelling a hero hard-surface asset **Module 3-Digital Sculpting in ZBrush:** ZBrush interface; DynaMesh and ZSpheres; primary/secondary/tertiary forms; sculpting brushes; anatomy and detail; sculpting an organic				

				creature or character bust. • ZBrush navigation and DynaMesh • Form blocking and refinement • Detail brushes and surface noise • Sculpting a creature/character bust **Module 4- Retopology & UV Mapping:** Why retopology; manual and auto retopo; building animation/game-ready low-poly meshes; UV unwrapping, seams, packing and texel density; UDIMs. • Retopology for deformation/g				

				ames • Low-poly mesh construction • UV unwrapping and packing • Texel density and UDIMs **Module 5- High-to-Low Baking:** Baking high-detail onto low-poly; normal, displacement, AO and curvature maps; cage setup; troubleshooting bake errors; preparing assets for texturing. • Normal and displacement baking • AO, curvature and ID maps • Cage setup and bake troubleshooting • Handoff to texturing				

				Module 6-Portfolio Asset & Certification Readiness: Presenting an asset — turntables, wireframes, breakdowns; portfolio standards; full review of Autodesk Maya certification objectives; timed practice and mock testing. • Turntables, wireframes and breakdowns • Art Station-ready presentation • Mapping skills to Autodesk cert domains • Timed mock exams and remediation				

26AG13F1E	Screen Writing & Visual Storytelling	PE 1	Module 1- Role of the screenwriter in filmmaking and media production, Basics of storytelling: concept, premise, inciting incidents, Stages of scripting: idea generation, outlining, writing drafts, Storytelling forms: linear vs. nonlinear narratives, Elements of a screenplay: plot, characters, dialogue, and setting, Logline and synopsis writing, Adaptation techniques (e.g., novel to screenplay),Writing for different formats: film, TV, and web series, Introduction to screenplay formats and industry standards, Narrative structure: three-act structure, story beats, and treatments, Techniques for time jumps, flashbacks, and parallel stories, Principles of suspense and surprise, Genre writing:	**Module I: Story & the Screenplay Form** What story is; the screenplay as blueprint; format conventions (scene heading, action, dialogue, parentheticals); the difference between prose and screen; reading screenplays. • Story fundamentals and the dramatic question • Screenplay format and conventions • Prose vs. screen writing • Reading and analysing scripts **Module-II: Premise, Theme & Structure**	**Added/Expanded:** dramatic question, screenplay conventions, script reading and analysis, theme and controlling idea, sequence structure, beat sheets, step outlines, character wants/needs, subtext, visual storytelling, image systems, visual motifs, screenwriting software, treatments, one-pagers, short-form writing, table reads and structured rewriting. **Retained:** premise, logline, three-act structure, character arcs, dialogue, adaptation and screenplay formatting. **Removed/Reduced:** extensive AI-assisted screenwriting, genre-specific writing, Indian OTT/TV/regional cinema case studies, interactive/branching storytelling, transmedia world-building, industry	65%	Change has done as per the contemporary requirements	65%

			sci-fi, comedy, horror, action, romance, fantasy, Dialogue writing and building strong character arcs Module 2- Use of AI tools in screenwriting (e.g., ChatGPT, Indic AI tools),AI for ideation, formatting, and proofreading in Indian languages, Cultural context and ethical concerns in using AI for storytelling, Case studies: AI-assisted Indian short films or ads, Writing for Indian OTT platforms, TV soaps, regional cinema, and web series Cultural and linguistic diversity in storytelling: localizing narratives for regional audiences, Interactive and branching storytelling in Indian apps, games, and edutainment platforms, World-building for Indian transmedia franchises (e.g.,	Loglines and premise; theme and the controlling idea; three-act structure, sequences and the beat sheet; the hero's journey and alternatives; outlining and the step outline. • Logline, premise and theme • Three-act and sequence structure • Beat sheets and turning points • Outlining and the step outline **Module-III: Character & Dialogue** Character wants vs need; arc; the antagonist; voice and distinct dialogue; subtext and	pitching, CBFC/IP/SWA legal aspects.			

			mythological universes, cinematic universes),Pitching to Indian production houses, OTT platforms (e.g., Netflix India, Hotstar, Zee5),Peer review, script coverage for Indian stories, Professional portfolio building: writing spec scripts for Indian markets, Copyright, censorship, and legal aspects of screenwriting in India (e.g., CBFC, IP rights, SWA registration).	economy; exposition without telling; writing a scene that turns. • Character motivation and arc • Distinct voice and dialogue • Subtext and economy • The scene that turns **Module-IV: Visual Storytelling** Show, don't tell; writing the image; visual motifs and image systems; using space, objects and action to carry meaning; writing for the camera without directing on the page. • Writing visually and economically • Image systems and				

				motifs • Action and objects as meaning • Implying the visual without over-directing **Module-V: Formatting, Treatments & Tools** Industry screenwriting software (Final Draft / open tools); correct formatting; the treatment, synopsis and one-pager; adaptation basics; writing for short form and digital platforms. • Screenwriting software workflow • Treatments, synopses and one-pagers • Short-form and digital				

				writing • Formatting discipline **Module-VI: The Short Screenplay & Table Read** Completing an original short screenplay; the table read; receiving and applying notes; the rewrite; the workshop critique method and reflective revision. • Completing the first draft • The table read and notes • The rewrite and revision Critique and finalisation				
26AG2111E	Compositing Techniques	PCC	Module-1 **Fundamentals of Compositing** Introduction to digital compositing and its role in VFX, Understanding image	**Module-1 Compositing Theory & the Node Graph**	**Added/Expanded:** Nuke DAG and workflow, premultiplication, core Nuke nodes, Grade/ColorCorrect,	60%	Change has done as per the contemporary	60%

	(Nuke)		formats: EXR, TIFF, PNG, etc.,colour channels ,alpha channels, and bit depth, Linear workflow and colour management, Software overview: Nuke, After Effects, Fusion, etc. Green/blue screen keying: tools and techniques, Rotoscoping and matte painting integration, Tracking and match-moving for compositing Module-2 **Layer-Based and Node-Based Compositing** Differences between layer-based and node-based systems, Working with node graphs: organization and efficiency, Compositing operations: Merge, Add, Multiply, Screen, Over, etc.Using masks and mattes effectively, Pre-compositing and hierarchy in complex scenes, Light wrap, edge blending, and motion blur, Grain matching and noise	What compositing is; node vs layer compositing; the Nuke interface and DAG; channels and the alpha; premultiplication; linear colour and the comp pipeline. • Node-based vs layer compositing • Nuke interface, DAG and viewer • Channels, alpha and premult • Linear workflow and colour spaces **Module-2 Core Nodes & Transformations** Read/Write; Merge operations; Grade, ColorCorrect;	RotoPaint, 2D tracking, AOVs and render passes, beauty reconstruction, Cryptomatte, comp-side relighting, advanced keying/despill, AI-assisted roto/cleanup, shot QC and professional breakdown presentation. **Retained:** node-based compositing, channels/alpha, linear workflow, keying, roto, tracking, mattes, light wrap, grain and integration. **Reduced/Removed:** broad software overview of After Effects/Fusion, explicit matte-painting integration, and some general-purpose pass treatment.		requirements	

			removal, Using Z-depth, normal, and ambient occlusion passes.	Transform, Reformat; Roto and RotoPaint; the Dope sheet and keyframing; basic 2D tracking. • Merge operations and over • Grade and colour nodes • Transform and reformat • Roto, paint and 2D track **Module-3 Multi-Pass CG Compositing** Render layers and AOVs; rebuilding a beauty from passes; relighting in comp; using IDs/cryptomatte; art-directing the render without re-rendering. • AOVs and				

				render passes • Beauty rebuild from passes • Cryptomatte and ID mattes • Comp-side relight and adjustment **Module-4 Keying, Roto & Mattes** Green-screen keying (Keyer, Primatte, IBK); despill; edge treatment; rotoscoping animation; combining keys and roto; clean mattes for integration. • Keying workflows and despill • Edge extension and matte				

				refinement • Rotoscoping moving elements • Combining keys and roto **Module-5 Integration, Grading & 2D FX** Colour-matching elements to a plate/scene; light wrap, grain, lens effects, glows and bloom; 2D effects and atmospherics; selling the integration; AI-assisted matte/clean-up. • Colour matching and integration • Light wrap, grain and lens effects • Atmospherics			

				and 2D FX • AI roto/clean-up assist **Module-6 Finished Shot & Breakdown** Building a clean, labelled, efficient script; finishing a shot; the comp breakdown reel; render and delivery; critique and iteration. • Clean, readable node graphs • Shot finishing and QC • Comp breakdown presentation • Render, delivery and critique				
26AG21	Media	PE 3	**Module I - Introduction**	**Module - I: Media Law Foundations &**	**Added/Expanded:** IP categories, copyright	70%	Change has done as per	70%

F3E	Laws		**to Media Laws and Constitution:** Origin and history of media law in India, Indian Constitution and media freedom, Article 19(1)(a) and reasonable restrictions, Role of judiciary in protecting press freedom. **Module II - Key Legislations for Media:** Press and Registration of Books Act, Working Journalists Act, Cable Television Networks (Regulation) Act, IT Act (relevant sections), Cinematograph Act. **Module III - Legal and Ethical Issues in Media:** Defamation: Civil and Criminal, Contempt of court, Copyright and Intellectual Property Rights, Right to Privacy vs Public Interest, Case law discussions. **Module IV -**	**IP** The media legal landscape; types of IP (copyright, trademark, design, patent); the Copyright Act framework; what is protectable; ownership, moral rights and the public domain. • Sources and structure of media law • Categories of intellectual property • Copyright subsistence and ownership • Moral rights and public domain **Module-II: Copyright, Licensing & Contracts** Licensing models	ownership and moral rights, licensing and Creative Commons, fair dealing, music/footage licensing, release forms, creative-industry contracts, AI-generated authorship, training-data copyright, deepfakes, likeness and consent, synthetic performers, AI regulation, data protection, intermediary liability, content takedown, RMG/skill-gaming regulation, age-gating, responsible gaming and project compliance review. **Retained:** copyright, defamation, privacy, film certification and OTT/digital content regulation. **Reduced/Removed:** detailed constitutional history and Article 19 focus, specific regulatory bodies, global perspectives, and explicit hate-speech/fake-news		the contemporary requirements	

			Contemporary Media Laws and Regulatory Frameworks: Role of Press Council of India, BCCC, TRAI, and MIB, Laws related to digital and OTT platforms, Hate speech, fake news regulation, Global perspectives on media law.	and Creative Commons; assignment vs licence; fair use/fair dealing; music and stock licensing; release forms; key creative-industry contract clauses. • Licensing, assignment and CC • Fair use / fair dealing limits • Music, footage and asset licensing • Release forms and contract basics **Module-III: Defamation, Privacy, Censorship & Certification** Defamation and content liability; privacy and personality/publicity rights; film	regulation.			

				certification and content regulation; OTT/digital content rules; obscenity and community standards. • Defamation and content liability • Privacy and publicity rights • Certification and content regulation • OTT/digital content guidelines **Module-IV: AI, Deepfakes & Synthetic-Media IP** Authorship and ownership of AI-generated work; training-data and copyright disputes; deepfakes, likeness and consent; synthetic performers and voice; emerging				

				AI regulation and disclosure/provenance norms. • Authorship/ownership of AI output • Training data and copyright • Deepfakes, likeness and consent • AI regulation, disclosure, provenance **Module-V: Data Protection & Online / RMG Compliance** Data-protection principles and user data; intermediary liability and content takedown; online safety; real-money and skill-gaming (RMG) regulation, age-gating, responsible-gaming and advertising compliance.			

				• Data protection and user data • Intermediary liability and takedown • RMG / skill-gaming regulation • Age-gating and responsible gaming **Module-VI: Compliance Review & Ethics in Practice** Conducting a legal/ethical compliance review of a project; clearances and the rights checklist; ethical decision frameworks; documenting safeguards; presenting a compliance opinion. • Project clearance and				

				rights checklist • Ethical decision frameworks • Documenting safeguards • Presenting a compliance review				
26AG2212E	**UI & UX Design**	PCC	**Module-1** Defining UI (User Interface) and UX (User Experience), History and evolution of User-Centered Design UX Laws & Gestalt Principles Understanding cognitive biases in user behaviour B2B, B2C, and B2B2C applications Design Thinking Process: Ideation, prototyping, and testing AI in Design Thinking: How generative AI supports ideation and creative exploration (e.g., using ChatGPT or Midjourney in	**Module - I: UX/UI Foundations & Process** UX vs UI; the design-thinking and double-diamond process; human-centred design; usability heuristics; accessibility basics; UI in games vs apps. • UX vs UI and where they meet • Design-thinking process • Usability heuristics	**Added:** Double Diamond, problem framing, HMW questions, card sorting, task flows, design tokens, component states, game HUD/menu design, moderated usability testing, synthesis, developer handoff and structured portfolio case study. **Revised:** UX research, information architecture, wireframing, visual UI design, prototyping and usability testing have been reorganised into a systematic industry workflow.	55%	Change has done as per the contemporary requirements	55%

			brainstorming) **Module-2** User Research techniques: interviews, surveys, contextual inquiry, etc. Understanding user needs, behaviours, and preferences, Competitive analysis and benchmarking, Developing personas, Creating User Journey Maps, Empathy Maps, Storyboards, Mood boards, and Concept Boards, AI for User Research. Understanding Accessibility Guidelines (WCAG) and inclusive design principles. AI for Accessibility: Tools for auto-generating alt text, voice interfaces, contrast checking **Module-3** Colour theory, typography, layout, and visual	• Accessibility fundamentals **Module – II: UX Research & Problem Framing** User interviews and surveys; personas; empathy maps; user journeys; problem statements and how-might-we; competitive analysis; defining a brief. • Research methods • Personas and empathy maps • User journeys and pain points • Problem framing and the brief **Module - III: Information Architecture & Wireframing**	**Reduced/Replaced:** Extensive standalone coverage of AI tools, AI-based research/testing and B2B/B2C classification has been reduced to keep the focus on core UX/UI competencies.			

			hierarchy**,** Interface elements: buttons, forms, navigation bars, interactive components**,** Design systems and component libraries**,** Design consistency and branding**,** UX writing Content Strategy : Microcopy, tone, CTAs, error messages, onboarding text**, AI in Visual Design**: Adobe Firefly, Canva AI, or Figma's AI plugins for assets/layouts and colour palettes**, Ethics in AI and Design**: Recognizing limitations and bias in generative tools. **Module-4** Information Architecture: Structuring content for usability, Interaction Design: Creating intuitive and meaningful interactions, User flows and wireframing: low- and high-fidelity prototypes	Information architecture and card sorting; user flows; low-fidelity wireframes; layout and grids; navigation patterns; wireframing in Figma. • Information architecture • User flows and task flows • Low-fi wireframes • Navigation and layout patterns **Module- IV: Visual UI Design & Design Systems** Visual hierarchy; typography and colour for UI; components and states; design systems and tokens; iconography; HUD/menu design for games; high-			

			,Visual prototyping using Figma, Micro interactions (e.g., hover effects, swipe gestures, animations) and motion design, Responsive Design: Designing for various devices and screen sizes . AI in Prototyping, Usability Testing: Heuristics evaluation, A/B testing, iterative design cycles, AI-based Usability Testing: Tools like Uizard, Maze, PlaybookUX for automated feedback, Testing AI-generated interfaces and responsiveness. **Module-5** Conduct a user research study and develop personas using AI insights, Design low-fidelity and high-fidelity wireframes using Figma and test responsiveness, Create mood boards and visual design systems with AI	fidelity mockups. • Visual hierarchy and Gestalt • Type, colour and components • Design systems and tokens • Game HUD/menu UI **Module - V: Prototyping & Usability Testing** Interactive prototyping in Figma; micro-interactions and transitions; usability test planning; moderated testing; synthesising findings; iterating the design. • Interactive prototyping • Micro-				

			design assistance, Perform accessibility evaluations using AI-based tools, Conduct usability testing with platforms like Maze or Uizard Develop a portfolio-ready UX case study.	interactions • Usability test planning & running • Synthesis and iteration **Module-VI: The Case Study & Critique** Assembling a portfolio case study problem, process, design, test, outcome; presenting design rationale; handoff specs for developers; critique. • Portfolio case-study structure • Presenting design rationale • Developer handoff • Critique and iteration				

26AG22A5E	**Environment Design for Games**	PE 5	**Module 1:** Mood boards and references, map design and planning, concept art, Unreal Engine basics, level blockout, basic 3D modelling and asset import, Blueprints for interactivity, procedural environment generation, water bodies, buildings/interiors and ambience sounds. **Module 2:** Texturing, PBR materials, lighting, atmospheric effects, terrain and foliage, landscape sculpting/materials, dynamic weather, post-processing, interactive objects, skyboxes, particles, recreation of a famous game level and VR integration.	**Module 1:** Environment Design Principles – composition, visual flow, scale, proportion, environmental storytelling, landmarks, player guidance, modularity, references and mood boards. **Module 2:** Concept, Reference & Greybox – reference gathering, concept/layout sketches, floorplans, in-engine greyboxing, scale, sightlines, gameplay flow and blockout iteration. **Module 3:** Modular Kits & Trim Sheets – modular design, grid snapping, trim sheets, tiling textures, kit-bashing, reusable	**Added:** Environmental storytelling, player guidance, scale/human reference, modular design, greyboxing to scale, sightlines and gameplay flow, modular kits, trim sheets, grid/snapping, set dressing, vertex painting, decals, visual density, LODs, profiling and performance optimization, professional breakdown presentation. **Revised:** Reference gathering, concept art, blockout, materials, foliage, lighting and atmosphere are reorganized into a complete game-environment production workflow. **Reduced/Replaced:** Standalone procedural environment generation, water-body effects, dynamic weather systems, ambience sound creation, VR integration and recreation of a	60%	Change has done as per the contemporary requirements	60%

				modular pieces and level-kit construction. **Module 4:** Set Dressing, Materials & Foliage – prop placement, material instances, vertex painting, decals, foliage, vegetation, visual density and detail passes. **Module 5:** Lighting, Atmosphere & Optimization – lighting for mood/gameplay, Lumen/baked lighting, fog, atmosphere, post-processing, LODs, draw calls, profiling and optimization. **Module 6:** Playable Environment & Critique – environment finishing, beauty shots, fly-through, blockout-to-final breakdown,	famous game level are reduced/removed as core syllabus components.			

				presentation, critique and iteration.				
26AG22A6E	3D Character Animation & Rigging	PE 6	**Module 1:** 12 principles of animation applied to rigged characters through assignments such as bouncing ball, cliff-to-cliff jump, mannerism walk, running, sneak walk, double-bounce walk, ball throw and weightlifting. Physical action, character poses, blocking, pose-to-pose animation, in-betweens, line of action, extremes and breakdowns. **Module 2:** Character interaction with props, human body animation, acting and observation, biped biomechanics, secondary action, overlap, follow-through, squash and stretch, exaggeration, playblast evaluation and demo-reel output.	**Module 1:** Rigging & Animation Fundamentals – rig and animation pipeline, skeletons, deformation, 12 principles in 3D, Graph Editor, animation planning and reference. **Module 2:** Joints, Skinning & Weights – joint placement/orientation, hierarchy, binding, skinning, weight painting, corrective fixes and deformation testing. **Module 3:** Control Rigs – IK/FK, switching, constraints, control curves, rig UI, foot roll, biped rig, basic facial rig and rig testing. **Module 4:** Body Mechanics –	**Added:** Complete rigging workflow, joint placement and orientation, skinning/weight painting, corrective deformation, IK/FK systems, constraints, animator-friendly controllers, foot-roll systems, facial rig basics, Graph Editor workflow, lip-sync and performance animation, certification readiness. **Revised:** Existing animation principles and body mechanics are retained but reorganized into a structured progression from rigging → controls → mechanics → acting → final production. **Reduced/Replaced:** Individual isolated animation exercises such as ball bouncing, cliff jumping, weightlifting and prop exercises are no	65%	Change has done as per the contemporary requirements	65%

				weight, balance, force, walk/run cycles, jumps, physical actions, timing, spacing, arcs, blocking, spline and polish. **Module 5:** Acting & Performance – acting poses, facial animation, expressions, lip-sync, dialogue, subtext, beats, performance and appeal. **Module 6:** Polished Shot & Certification Readiness – reel-standard shot, playblast, presentation, breakdown, Autodesk Maya certification preparation and mock testing.	longer the primary structure; they are incorporated as applications of body mechanics and performance.			
26AG2 2F5E	Film Editing	PE 5	**Module 1:** Foundations of post-production, history of editing, Kuleshov effect, Soviet Montage, post-production roles,	**Module 1:** Narrative Editing & Premiere Workflow – editor as	**Added:** Narrative editing as final rewrite, professional media management, proxies, logging/selects, assembly	60%	Change has done as per the contemporar y	60%

			linear/non-linear and online/offline editing, editing principles, cuts, L/J cuts, transitions, parallel editing, continuity editing, match-on-action, eyeline match, 180-degree rule, pacing and rhythm. **Module 2:** VFX and graphics including keying, masking, tracking, rotoscoping, motion graphics, After Effects/Nuke, visual effects, colour correction/grading, Premiere Pro workflow, media import and organization, trimming, transitions, audio editing, dialogue, Foley and introduction to AI in post-production.	storyteller, Premiere project setup, media management, proxies, timeline, bins and sequence settings. **Module 2:** Assembly & Scene Construction – logging, selects, assembly, rough cut, coverage, cutting patterns, scene construction and dialogue/radio edit. **Module 3:** Editing Craft & Fine Cut – performance selection, pacing, rhythm, continuity, matching action, transitions, tension, emotional editing and fine-cut trimming. **Module 4:** Multi-Cam, Sound & Titling – multi-camera editing, sound editing/mixing, music, SFX, titles,	and rough-cut workflow, scene construction, performance selection, emotional editing, multi-camera editing, Essential Sound workflow, professional titling, platform-specific delivery, reframing, QC, archive and Adobe certification readiness. **Revised:** Existing continuity, pacing, transitions, audio, colour and Premiere workflow are reorganized into a structured professional post-production pipeline. **Reduced/Replaced:** Detailed VFX/keying, rotoscoping, tracking, Nuke/After Effects-based effects and Foley-specific work are reduced as core Film Editing components; colour, sound and graphics are retained at an editing/finishing level.		requirements	

				lower-thirds, motion and keyframing. **Module 5:** Colour, Finishing & Delivery – Lumetri correction/grading, finishing, QC, platform-specific exports, Media Encoder, aspect ratios and reframing. **Module 6:** Finished Edit & Certification Readiness – final narrative piece, review/polish, Premiere certification objectives, mock testing, professional delivery and archive.				
26AG22F6E	Tracking & Match Moving	PE 6	Module 1: Introduction to rotoscoping and keying; history and evolution of rotoscoping; chroma, luma and difference keying; After Effects, Nuke and Silhouette; alpha channels	**Module 1:** Matchmove Concepts & Pipeline – matchmove principles, parallax, depth cues, camera	**Added:** Matchmove fundamentals, parallax and camera geometry, 2D point/planar tracking, 3D camera solving, object/rigid tracking, body tracking, set reconstruction, point	70%	Change has done as per the contemporary requirements	70%

			and mattes; manual roto, Bézier curves, splines, feathering, frame-by-frame animation, motion tracking, roto shapes, layering and edge quality. Module 2: Green/blue-screen setup and lighting; Keylight, Primatte and Ultimatte; matte refinement, edge treatment, despill, choking, transparency, hair/smoke, garbage/core mattes; integration of roto and keyed footage, colour/grain matching, motion blur, edge blending, VFX paint-outs/replacements, output formats and render passes.	intrinsics/extrinsics, lens distortion, tracking pipeline, 3DEqualizer/PFTrack/SynthEyes and on-set data. **Module 2:** 2D Tracking – point and planar tracking, stabilization, 2D matchmove, corner-pin, screen replacement, tracking for roto and troubleshooting. **Module 3:** 3D Camera Tracking & Solving – auto/manual tracking, feature selection, camera solving, solve error reduction, scene scale, ground plane and orientation. **Module 4:** Object & Body Tracking, Set Reconstruction – rigid/object tracking, basic body tracking, set	clouds, survey/LiDAR integration, lens calibration, reprojection error, solve validation, Maya/Nuke integration and professional matchmove delivery. **Revised:** Tracking is expanded from a supporting technique within roto/keying to the **central discipline of camera and object matchmoving**. **Removed/Reduced:** Detailed chroma-keying, luma-keying, Primatte/Ultimatte/Keylight workflows, manual rotoscoping, despill, matte refinement and compositing integration are substantially reduced/removed as core topics.			

				reconstruction, point clouds, geometry generation, survey/LiDAR data and multiple solves. **Module 5:** Lens, Survey & Solve Validation – lens calibration, undistortion/redistortion, survey measurements, solve validation, reprojection error, QC and troubleshooting. **Module 6:** Export, Integration Test & Critique – exporting cameras/geometry/points to Maya/Nuke, CG integration tests, clean solve delivery, breakdown and critique.				
26AG23F9E	Documentary Film Makin	PE 9	**Module I:** History and evolution of documentary cinema; types and modes; documentary storytelling	**Module I – Documentary Modes, History &**	**Added:** Fact-checking, access and subject relationships, risk assessment and	65%	Change has done as per the contemporar	65%

	g		and realism; ethics; topic selection; research; proposal/treatment; script/storyboarding; interview planning. **Module II:** Camera fundamentals; framing and composition; lighting; sound recording; interview shooting; observational/handheld shooting; B-roll; sync sound; editing workflow; media management; narrative construction; sound design and music.	**Ethics:** Documentary modes, history and landmark films, ethics and truth, consent and representation. **Module II – Research, Development & Access:** Story-finding, research and fact-checking, proposal/treatment, access and subject relationships, risk, logistics and shooting plan. **Module III – Verité & Observational Shooting:** Run-and-gun/verité techniques, documentary camera and sound, shooting for the edit, available light, location sound, B-roll and coverage. **Module IV – Directing & The**	production logistics, verité/run-and-gun methodology, shooting for the edit, documentary directing, vulnerable subjects, paper edit, archival material, ethics of editing, festival/portfolio delivery and structured critique. **Expanded:** Documentary modes, ethics, research, interviews, field production, editing and sound. **Replaced/Restructured:** Generic camera and editing fundamentals are reorganized into a professional documentary production workflow. Script/storyboarding is replaced by more documentary-specific development tools such as proposal, treatment, access planning and paper edit.		y requirements	

				Interview: Interview craft, questioning and listening, building trust, ethical representation, directing real subjects and vulnerable participants. **Module V – Documentary Editing & Structure:** Paper edit, finding structure, narrative and voice, archive, music and sound, ethics in editing and pacing. **Module VI – The Short Documentary & Critique:** Completing a short documentary, finishing and delivery, festival/portfolio cut, presentation, critique and ethical reflection.				

26AG23F10E	**Motion Graphics & Generative AI**	PE 10	Fundamentals of motion design, design principles, colour theory, typography, layout and visual storytelling; Adobe After Effects interface and workflow; compositions, timelines, layers and keyframing; easing, motion paths, kinetic typography, shape animation and transitions; logo animation; basic 2D character rigging; motion tracking; green-screen integration; blending modes and compositing; audio synchronization; output for different platforms; final motion graphics project and showreel development.	Module I – Motion Design & After Effects Foundations: Motion-design principles, After Effects interface, compositions, layers, timeline, rendering and output. Module II – Animation Principles & Keyframing: Keyframes, graph editor, easing, timing, 12 principles of animation, shape and logo animation. Module III – Kinetic Typography & Design-in-Motion: Type animation, kinetic typography, title sequences, lower-thirds, layout, rhythm, brand consistency and animated explainers. Module IV – Compositing, Effects &	**Added:** Graph editor, advanced animation principles, kinetic typography, title/lower-third design, expressions and automation, 3D layers/camera, generative-AI elements, AI-assisted roto/matte, generative video/transitions, AI upscaling, AI workflow integration, provenance and ethics, and certification readiness. **Expanded:** Animation principles, compositing, effects, professional delivery and motion-design workflow. **Replaced/Restructured:** General coverage of motion tracking, green-screen and basic character rigging has been reorganized into a broader compositing/effects workflow. The course now explicitly integrates **Generative AI into motion-design**	65%	Change has done as per the contemporary requirements	65%

				Expressions: Masks, mattes, blending, effects, motion VFX, 3D layers and cameras, expressions and basic tracking. Module V – Generative-AI Motion Workflows: AI-generated elements and textures, AI-assisted rotoscoping/matting, generative video and transitions, AI upscaling, AI integration, ethics and provenance. Module VI – Finished Piece & Certification Readiness: Finished motion-graphics project, render and delivery, Adobe After Effects certification objectives, timed practice, presentation and reel.	**production** rather than treating AI as a separate or incidental tool.			

26AG3114E -	**Virtual Production & Real-time Cinematics**	PCC	**Module I:** Introduction to green-matte virtual production; real-time rendering with Unreal Engine; camera tracking and synchronization using Mo-Sys, Ncam and Vive trackers; physical/digital lighting integration; Previs and Techvis; In-Camera VFX. **Module II:** VFX integration in VP; green-matte compositing; set extensions and digital doubles; motion/performance capture; virtual cameras; hybrid rendering pipelines; post-production VFX. **Module III:** Recording VP in Unreal Engine; Live Link, Take Recorder, Virtual Camera and WMF Media Player; tracking data and timecode; Stype Keyer; composite recording; Movie Render Queue additional passes; AOVs, layers, object IDs; ST maps; FBX export; virtual camera recording	**Module I – Virtual Production Foundations:** VP spectrum and history; previs, simulcam, LED volume and ICVFX; real-time pipeline; hardware and volume; convergence of film and games. **Module II – Real-Time Environments in Unreal:** Real-time environment setup; VP lighting; optimisation; world-building for LED volumes; environments designed for LED-wall readability. **Module III – Virtual Cameras & Real-Time Cinematics:** VCam; real-time cinematography; Sequencer; camera movement and	**Added:** VP spectrum and history, LED-volume workflow, real-time environment optimisation, LED-wall-specific environment design, Sequencer cinematics, real-time cinematography, nDisplay, camera-frustum concepts, brain-bar workflow and roles, on-set communication, VP data/asset management, professional presentation and certification readiness. **Expanded:** Virtual cameras, real-time rendering, ICVFX, camera tracking and Unreal-based cinematic production. **Replaced/Restructured:** The previous emphasis on specific recording tools, render passes, ST maps, FBX export and green-matte compositing has been reorganized into a broader **end-to-end virtual-production and**	65%	Change has done as per the contemporary requirements	65%

			and takes.	lensing; creation of real-time cinematic sequences. **Module IV – In-Camera VFX & LED Volume:** ICVFX; camera frustum; camera tracking; nDisplay; colour management and LED-wall integration; common VP problems. **Module V – On-Set Workflow & Brain Bar:** On-set VP workflow; brain-bar roles; live compositing and simulcam; film crew–Unreal operator communication; data and asset management. **Module VI – VP Shot/Cinematic & Certification Readiness:** Completion of VP shot/cinematic;	**real-time cinematics workflow**.			

				capture and rendering; Epic Unreal credential objectives; mock testing; presentation and reel.				
26AG31F12E	Digital Film Making	PE 12	**Module I – Pre-Production & Production Practices:** Basics of digital filmmaking and visual storytelling; idea development and script writing; storyboarding and shot division; DSLR/Mirrorless camera fundamentals; exposure control through ISO, aperture and shutter speed. **Module II – Post-Production & Final Film Project:** Introduction to Premiere Pro/DaVinci Resolve; importing and organizing footage; basic editing, cutting, trimming and transitions; sound editing and synchronization; colour correction and grading.	**Module I – The Film Pipeline & Authorship:** End-to-end film production; director's and producer's roles; authorship and vision; integration of different filmmaking crafts; short-film form; case studies. **Module II – Development & Pre-Production:** Script finalisation and breakdown; shot lists and storyboards; scheduling and budgeting; casting and location planning; pre-production package;	Replaced Added: End-to-end film-production pipeline, authorship and directorial vision, director/producer responsibilities, short-film form, production case studies, detailed script breakdown, shot-list development, production scheduling and budgeting, casting and location planning, risk and logistics management, directing actors, blocking and coverage, DP collaboration, on-set/AD workflow, continuity and data management, production safety, sound design and mixing, VFX/compositing integration, professional finishing and delivery	75%	Change has done as per the contemporary requirements	75%

				risk and logistics. **Module III – Directing & Cinematography:** Directing for the camera; blocking and coverage; collaboration with the cinematographer/DP; lensing and lighting choices; visual storytelling; directing actors and performance. **Module IV – Production & On-Set:** Running the set; shoot-day workflow; Assistant Director workflow; cast and crew direction; on-set problem-solving; continuity and data management; production safety. **Module V – Post: Edit, Sound, VFX & Grade:** Film editing; sound design and mixing;	specifications, festival strategy, screening/presentation, structured critique and reflective practice. Expanded: Visual storytelling, cinematography, directing, production management, editing, sound, colour grading and final-film development. Replaced/Restructured: The previous syllabus primarily focused on basic filmmaking concepts, camera fundamentals and introductory post-production software. These tool- and technique-oriented components have been reorganized into a complete end-to-end filmmaking workflow, progressing from authorship and development through pre-production, directing, production, post-			

				VFX and compositing integration; colour grading; complete finishing pipeline; delivery specifications. **Module VI – Delivery, Festival & Critique:** Final film delivery; festival cut and strategy; screening and presentation; critique and reflection on authorship and craft; development of the film as a reel/portfolio centrepiece.	production and professional delivery.			
26AG31F13E	Television Production	PE 13	Module I – Introduction to Television Production: History and evolution of television; overview of the TV production process; types of TV programmes including news, talk shows, fiction and documentaries; studio vs. field production; production team roles. Practicals include TV	Module I – TV Pipeline, Formats & Roles: Television production pipeline; genres and formats including news, talk shows, magazine programmes, episodic content and live events;	**Added:** Complete TV production pipeline, contemporary television formats, control-room workflow, broadcast framing and headroom, multi-camera coverage, camera blocking, continuity management, ENG workflows, studio lighting grids, multi-	80%	Change has done as per the contemporary requirements	80%

			studio visits, identifying roles in a mock studio setup, and analysing different TV programme formats. Module II – Scripting and Pre-Production: TV scriptwriting basics, format and structure; writing for visuals; concept development; storyboarding; budgeting and scheduling; producer and director roles in pre-production. Practicals include developing a TV concept, writing a short TV script, creating a storyboard and preparing a basic production schedule.	crew roles and responsibilities; studio and control-room layout; pre-production for television. Module II – Single- & Multi-Camera Production: Camera operation for television; broadcast framing and headroom; multi-camera coverage; crossing the line; camera blocking and continuity; ENG/field versus studio production. Module III – Studio Lighting & Audio: Studio lighting grids; three-point lighting for television; lighting for multi-camera production; broadcast audio; microphone selection and placement; audio	camera lighting, broadcast audio mixing, talkback and communication systems, vision mixing, live switching, lower-thirds and CG insertion, programme calling, rundown/run-of-show, call sheets, floor management, live-to-air workflows and broadcast standards. **Expanded:** Camera operation, studio production, lighting, audio, scripting, production management and crew responsibilities have been expanded from introductory concepts to practical broadcast workflows. **Replaced/Restructured:** The earlier syllabus concentrated on the history of television, basic programme formats, introductory scripting and pre-production. These elements have been reorganized into a			

				mixing and levels; talkback and communication systems; technical broadcast standards. Module IV – Live Switching & the Control Room: Vision mixer/switcher operation; live cutting and transitions; graphics, lower-thirds and CG insertion; director's role and calling a programme; recording versus live-to-air workflows. Module V – Production Management & the Rundown: Television scripting and rundown/run-of-show; scheduling and call sheets; crew coordination and communication; budgeting	**complete single-camera, multi-camera and live television production workflow**, with greater emphasis on studio operations, technical coordination, control-room practice and complete programme-segment production.			

				fundamentals; working to deadlines; floor manager responsibilities. Module VI – The Programme Segment & Critique: Production of a complete broadcast-style segment using defined crew roles; live or as-live recording; evaluation against broadcast standards; critique, reflection and role rotation.				

Koneru Lakshmaiah Education Foundation
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New Courses Syllabus

Tri Semester I

ACADEMIC YEAR 2026-2027
TRIMESTER-WISE SYLLABUS
DEPARTMENT OF FINE ARTS

26AG1101E- Drawing & Visual Anatomy

L-T-P-S : 2-1-3-0 **Credits : 3** **Contact Hours : 6** **Pre-requisite : NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the principles of line, gesture, proportion and the elements of observational drawing.	1,2,3,9,10	2
CO2	Apply structural construction methods (boxes, cylinders, the Reilly/Loomis approach) to build the human figure from a mannequin base.	1,2,3,9,10	3
CO3	Apply skeletal and muscular surface anatomy to render believable figures in varied poses.	1,2,3,9,10	3
CO4	Analyze gesture, weight, line-of-action and foreshortening in dynamic and animal/creature forms.	1,2,3,9,10	4
CO5	Analyze light, shadow and form rendering to convey three-dimensional volume on a 2D surface.	1,2,3,9,10	4
CO6	Evaluate and curate a coherent figure-drawing portfolio, critiquing one's own and peers' work against industry standards.	1,2,3,7,8,9,10	5

Syllabus:

Module-1

Foundations of Observational Drawing: The drawing toolkit and mindset; mark-making, line quality and control. Sighting and measuring; comparative proportion. Contour, blind-contour and cross-contour drawing. Negative space. Introduction to gesture as the first mark.

- Materials: graphite, charcoal, conté, newsprint vs. cartridge paper
- Line confidence drills; ghosting and the drawing-from-the-shoulder technique
- Sight-size measurement and angle-checking
- Seeing shape before symbol — defeating the "known" object

Module-2

Structural Construction of the Figure

Building the figure from simple solids. The Loomis and Reilly construction methods; the mannequin/wireframe approach. Proportion canons (7.5–8 head heads). The bean/ribcage-pelvis relationship.

- Block-in of head, ribcage, pelvis as 3D volumes
- The line of action and the gesture-to-structure transition
- Proportional landmarks and the standing/seated canon
- Constructing limbs as tapering cylinders with joints

Module-3

Surface Anatomy — Skeleton & Muscle

Bony landmarks that read on the surface; the major muscle groups of the torso, arms, legs and their action. The head, skull and facial planes; basic portraiture proportion.

- Skeleton as the armature; key landmarks (clavicle, scapula, iliac crest)
- Antagonistic muscle pairs and how they deform the silhouette
- Planes of the head; the Asaro/Loomis head
- Hands and feet as constructed forms

Module-4

Gesture, Motion & the Animal Form

Dynamic gesture and the analysis of weight, balance and momentum. Foreshortening and dramatic perspective on the figure. Comparative anatomy — quadrupeds, birds and creature design fundamentals.

- 30-second to 5-minute timed gesture cycles
- Line of action, C and S curves, exaggeration for clarity
- Foreshortening using overlapping forms
- Animal skeleton/muscle comparison; inventing believable creatures

Module-5

Light, Shadow & Form Rendering

The physics of light on form; the value scale. Core shadow, cast shadow, reflected light, occlusion and highlight. Rendering volume through hatching, blending and value massing.

- 5–9 step value scales and squinting to read value
- The terminator and form turning; sphere/cylinder/box studies
- Single-source lighting on the figure; chiaroscuro
- Material reading — skin, cloth, metal at a basic level

Module-6

Portfolio, Critique & Industry Standards

Curating a figure-drawing portfolio; sketchbook discipline. The professional critique vocabulary; self- and peer-evaluation against studio expectations. Digital capture and presentation of traditional work.

- Selecting, sequencing and presenting a portfolio set
- Giving and receiving structured critique (what works / what to push)
- Photographing/scanning traditional art for ArtStation
- Sketchbook habit and the daily-drawing discipline

Text Books:

1. Bridgman, G. B. (1973). *Constructive anatomy*. Dover Publications. (Original work published 1920)
2. Edwards, B. (2012). *Drawing on the right side of the brain* (4th ed.). TarcherPerigee.
3. Loomis, A. (2011). *Figure drawing for all it's worth*. Titan Books. (Original work published 1943)
4. Mattesi, M. D. (2017). *Force: Dynamic life drawing* (3rd ed.). CRC Press.
5. Yot, R. (2019). *Light for visual artists: Understanding and using light in art & design* (2nd ed.). Laurence King Publishing.
6. Zarins, U., & Kondrats, S. (2014). *Anatomy for sculptors: Understanding the human figure*. Anatomy Next.

26AG1102E -Principles of Visual Design

L-T-P-S: 3-0-6-0 Credits : 4 Contact Hours : 9 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the elements of design (line, shape, form, space, texture, value, colour) and their visual roles.	1,2,3,9,10	2
CO2	Apply the principles of design (balance, contrast, emphasis, rhythm, unity, proportion) to organise visual fields.	1,2,3,9,10	3
CO3	Apply colour theory harmony, temperature, value and psychological effect to a design problem.	1,2,3,9,10	3
CO4	Analyze compositional and gestalt systems (rule of thirds, golden ratio, leading lines, figure-ground) in existing media.	1,2,3,9,10	4
CO5	Analyze typography and layout for hierarchy, legibility and visual flow across formats.	1,2,3,9,10	4
CO6	Evaluate and justify design decisions in a portfolio of original compositions through structured critique.	1,2,3,6,7,8,9,10	5

Syllabus:

Module 1- Elements of Design
The visual building blocks: line, shape, form, space (positive/negative), texture, value and colour as an element. How each element carries meaning and directs the eye.

- Line as direction, emotion and contour
- Shape vs. form; geometric vs. organic
- Positive and negative space; the picture plane
- Texture and value as visual weight

Module 2 -Principles of Design
How elements are organised: balance (symmetrical, asymmetrical, radial), contrast, emphasis/focal point, movement, rhythm, repetition, pattern, proportion, scale and unity/variety.

- Creating and resolving visual tension
- Establishing a focal point and visual hierarchy

- Rhythm and repetition for cohesion
- Unity vs. variety — the balancing act

Module 3 -Colour Theory & Application

The colour wheel, hue/value/saturation; colour harmonies (complementary, analogous, triadic, split); temperature; colour psychology and cultural meaning; digital colour models (RGB/CMYK/HSB).

- Building and applying colour schemes
- Value structure underneath colour
- Colour for mood, brand and storytelling
- Digital colour pickers, swatches and palettes

Module 4- Composition & Gestalt

Compositional systems: rule of thirds, golden ratio/spiral, dynamic symmetry, leading lines, framing. Gestalt principles — proximity, similarity, continuity, closure, figure-ground.

- Analysing master paintings, film frames and game art
- Directing the eye through the frame
- Cropping and the decisive frame
- Figure-ground and visual grouping

Module 5 -Typography & Layout

Type anatomy, classification and pairing; hierarchy, leading, kerning, tracking. Grid systems and layout for print and screen; the relationship of type to image.

- Type anatomy and font classification
- Establishing hierarchy and readability
- Grid-based layout and alignment systems
- Title cards, posters and UI text
-

Module 6 -Design Portfolio & Critique

Synthesising all principles into finished compositions; presenting and defending design rationale; the professional critique process and iterative refinement.

- Design rationale and decision documentation
- Structured peer critique and revision
- Portfolio assembly and presentation
- Self-evaluation against design standards

Textbooks:

Title	Design Basics
Author	David A. Lauer, Stephen Pentak
Publisher · Year	Cengage Learning · 2015 (9th ed.)
Relevance	Comprehensive elements-and-principles foundation (Modules 1–2).
Title	Interaction of Color
Author	Josef Albers
Publisher · Year	Yale University Press · 2013 (50th Anniversary ed.)
Relevance	The definitive study of colour perception and relationships.
Title	The Elements of Graphic Design
Author	Alex W. White
Publisher · Year	Allworth Press · 2011 (2nd ed.)
Relevance	Space, unity, hierarchy, and layout for visual communicators.
Title	Thinking with Type
Author	Ellen Lupton
Publisher · Year	Princeton Architectural Press · 2010 (2nd ed.)
Relevance	The standard accessible typography text (Module 5).
Title	Picture This: How Pictures Work
Author	Molly Bang
Publisher · Year	Chronicle Books · 2016 (25th Anniversary ed.)
Relevance	Composition and emotional structure of the frame (Module 4).
Title	Color and Light: A Guide for the Realist Painter
Author	James Gurney
Publisher · Year	Andrews McMeel · 2010
Relevance	Applied colour and light for visual-content artists (Module 3).

26AG1103E – Digital Photography

L-T-P-S : 0-0-9-6 **Credits: 4** **Contact Hours: 15** **Pre-requisite: NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain camera mechanics, the exposure triangle (aperture, shutter, ISO), and digital sensor fundamentals.	PO1, PO2, PO5, PO9, PO10	2
CO2	Apply optics, lens choice, and depth-of-field control to achieve intended photographic results.	PO1, PO2, PO3, PO5, PO9, PO10	3
CO3	Apply lighting setups (natural and studio) and composition rules to capture compelling images.	PO1, PO2, PO3, PO9, PO10	3
CO4	Analyze and process RAW images colour, tone, correction within a non-destructive workflow.	PO1, PO2, PO5, PO9, PO10	4
CO5	Analyze and execute advanced Photoshop compositing, retouching, and photo-manipulation techniques.	PO1, PO2, PO3, PO5, PO7, PO9, PO10	4
CO6	Evaluate a curated photographic portfolio and demonstrate certification-level Photoshop proficiency.	PO1, PO2, PO3, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module-I: Camera, Sensor & the Exposure Triangle

Camera types and anatomy; the digital sensor; the exposure triangle of aperture, shutter speed and ISO and their creative trade-offs; metering, histograms and dynamic range; file formats (RAW vs JPEG).

- DSLR/mirrorless anatomy and controls
- Aperture/shutter/ISO interdependence
- Metering modes and reading the histogram
- RAW capture and why it matters for post

Module-II: Optics, Lenses & Depth of Field

Focal length and field of view; prime vs zoom; depth of field and the circle of confusion; bokeh; perspective compression; lens distortion and selection for purpose.

- Focal length and its storytelling effect
- Controlling depth of field for subject isolation
- Perspective and compression in portraiture/landscape
- Choosing the right lens for the shot

Module-III: Lighting & Composition

Quality, direction and colour of light; natural light and golden hour; three-point and studio lighting; modifiers; white balance and colour temperature; applying composition (rule of thirds, leading lines, framing).

- Hard vs soft light; key/fill/rim
- Studio strobe and continuous setups
- White balance and colour temperature control
- Photographic composition in practice

Module-IV: RAW Processing & Non-Destructive Workflow

Adobe Camera Raw/Lightroom workflow; exposure and tone correction; colour grading; white balance correction; lens corrections; export pipelines; bit depth and colour spaces.

- Non-destructive editing principles
- Tone curve, HSL and colour grading
- Cataloguing, culling and metadata
- Export for web, print and pipeline

Module-V: Advanced Photoshop — Compositing & Retouching

Layers, masks, blending modes; selections and channels; frequency-separation retouching; photo-manipulation and matte-painting basics; smart objects; AI-assisted tools (Generative Fill, neural filters) for content-aware work.

- Non-destructive layer/mask compositing
- Advanced selection and channel masking
- Retouching and clean-up workflows
- AI-assisted generative compositing

Module-VI: Portfolio & Certification Readiness

Curating a themed photographic portfolio; print and screen presentation; full review of Adobe Certified Professional — Photoshop exam objectives; timed practice and mock testing.

- Portfolio theme, sequencing and presentation
- Mapping skills to ACP exam domains
- Timed mock exams and remediation
- Professional file delivery and asset management

Text Books:

1. Langford, M., Fox, A., & Smith, R. S. (2015). *Langford's basic photography: The guide for serious photographers* (10th ed.). Focal Press.
2. Kelby, S. (2020). *The digital photography book: The step-by-step secrets for how to make your photos look like the pros* (Part 1, 2nd ed.). New Riders.
3. London, B., Stone, J., & Upton, J. (2019). *Photography* (12th ed.). Pearson.

4. Freeman, M. (2020). *The photographer's eye: Composition and design for better digital photos* (Revised ed.). Ilex Press.

26AG1104E - Digital 2D Animation

L-T-P-S: 2-1-3-0 Credits : 3 Contact Hours : 6 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the history, pipeline and twelve principles of animation and the digital 2D toolset.	1,2,3,9,10	2
CO2	Apply timing, spacing and the slow-in/slow-out principle to create believable basic motion.	1,2,3,9,10	3
CO3	Apply squash & stretch, anticipation, follow-through and overlapping action to weighted motion.	1,2,3,9,10	3
CO4	Analyze and produce locomotion cycles (walk, run) and character performance.	1,2,3,9,10	4
CO5	Analyze acting, lip-sync and staging to convey emotion and narrative in a shot.	1,2,3,6,7,8,9,10	4
CO6	Evaluate and produce a polished 2D animated short demonstrating all principles.		5

Syllabus:

Module-1

Animation Foundations & the Digital Pipeline: History and language of animation; frame rates, the dope sheet/X-sheet; keys, breakdowns and in-betweens; the digital 2D toolset (Toon Boom Harmony / Adobe Animate / open-source OpenToonz/Krita); overview of the twelve principles.

- Persistence of vision; fps and on-ones/twos
- The X-sheet and the key→breakdown→inbetween workflow
- Digital 2D software interface and rigging basics
- The twelve principles as a framework

Module-2

Timing, Spacing & Slow-In/Slow-Out: The relationship between timing and spacing; the bouncing ball as the foundational exercise; ease-in/ease-out; the difference timing makes to weight and material.

- Spacing charts and the bouncing ball
- Heavy vs light ball; material through timing
- Slow-in/slow-out and the arc
- On-ones vs on-twos decisions

Module-3

Weight & the Core Principles: Squash & stretch; anticipation; follow-through and overlapping action; secondary action; the pendulum and flour-sack exercises that teach weight and flexibility.

- Squash & stretch preserving volume
- Anticipation and the wind-up
- Follow-through, overlap and drag
- The flour-sack performance test

Module-4

Locomotion — Walk & Run Cycles: The mechanics of the walk cycle (contact, down, passing, up); personality walks; run cycles; weight shift and balance; four-legged locomotion basics.

- The standard walk and its key poses
- Personality and character through walks
- Run cycles and timing differences
- Quadruped gait introduction

Module-5

Acting, Staging & Lip-Sync: Staging and the readable silhouette; appeal; acting and the conveyance of emotion; phonemes and lip-sync; facial expression; the principle of solid drawing in motion.

- Staging and clear silhouette
- Acting choices and emotional beats
- Phoneme shapes and dialogue sync
- Expression and appeal

Module-6

The Animated Short & Showreel: Planning a short with thumbnails and an animatic; production from key poses to final clean-up and colour; compositing and export; assembling an animation showreel; critique and polish.

- Story idea, thumbnails and animatic
- Production pipeline to clean-up and colour
- Compositing, sound and export
- Showreel assembly and critique

Text Books:

1. Blair, P. (2020). *Cartoon animation*. Walter Foster Publishing. (Original work published 1948)
2. Hooks, E. (2017). *Acting for animators* (4th ed.). Routledge.
3. Thomas, F., & Johnston, O. (1995). *The illusion of life: Disney animation*. Disney Editions.
4. Toon Boom Animation. (2024). *Toon Boom Harmony user guide*. https://docs.toonboom.com/
5. Adobe Inc. (2024). *Adobe Animate user guide*. https://helpx.adobe.com/animate/
6. Whitaker, H., Halas, J., & Sito, T. (2021). *Timing for animation* (3rd ed.). Routledge.
7. Williams, R. (2009). *The animator's survival kit* (Expanded ed.). Faber & Faber.

26AG1104E - Digital 2D Animation

L-T-P-S : 2-1-3-0 Credits : 3 Contact Hours : 6 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the principles of effective verbal and written communication and grammar in professional contexts.	1,2,3,8,9,10	2
CO2	Apply professional writing formats — email, report, proposal, résumé with clarity and correctness.	1,3,7,8,9,10	3
CO3	Apply storytelling structures and creative-writing techniques to craft original narratives.	1,2,3,6,7,9,10	3
CO4	Analyze character, dialogue and scene to write screen-oriented creative pieces.	1,2,3,6,7,9,10	4
CO5	Analyze and deliver effective oral presentations and pitches with appropriate body language.	3,8,9,10	4
CO6	Evaluate and refine a portfolio of professional and creative writing through critique.	1,3,6,7,8,9,10	5

Syllabus:

Module-1
Foundations of Communication & Grammar
The communication process; barriers and clarity; review of functional grammar, sentence construction, vocabulary building and tone for professional and creative registers.

- The communication cycle and noise/barriers
- Grammar, syntax and common error correction
- Register, tone and audience awareness
- Vocabulary for visual-media contexts

Module-2
Professional Writing
Business and professional formats: email etiquette, reports, proposals, the project brief, the artist statement and the résumé/CV and cover letter for creative roles.

- Email and professional correspondence
- Reports, proposals and project briefs
- The creative résumé, cover letter and bio
- Documentation writing for studios

Module-3

Storytelling & Narrative Structure

The elements of story; three-act structure, the hero's journey, plot, theme and premise; show-don't-tell; world-building basics relevant to games and film.

- Premise, theme and the dramatic question
- Three-act and mythic structures
- Conflict, stakes and resolution
- World-building for interactive and screen media

Module-4

Character, Dialogue & Scene

Building memorable characters; want vs need; writing natural, purposeful dialogue and subtext; scene construction and the beat; introduction to script/treatment formatting.

- Character motivation, arc and voice
- Dialogue, subtext and economy
- Scene goals, conflict and turns
- Treatment and basic script format

Module-5

Oral Communication & the Pitch

Public speaking and presentation skills; structuring and delivering a creative pitch; body language, voice modulation; handling Q&A; the elevator pitch and pitch deck.

- Presentation structure and storytelling on stage
- Voice, pace and body language
- The elevator pitch and pitch deck
- Handling questions and feedback live

Module-6

Writing Portfolio & Critique

Editing and revision; the workshop critique method; assembling a mixed portfolio of professional and creative writing; reflective self-evaluation and proofreading discipline.

- Drafting, editing and proofreading
- The peer-workshop critique model
- Portfolio assembly and presentation
- Reflective self-assessment

Reference Books

Title	**Author**	**Publisher · Year**	**Relevance**
Technical Communication	Meenakshi Raman, Sangeeta Sharma	Oxford University Press · 2015 (3rd ed.)	*Core professional/technical communication text (Modules 1–2).*

Title	**Author**	**Publisher · Year**	**Relevance**
Story: Substance, Structure, Style	Robert McKee	HarperCollins (Methuen) · 1997	*The standard reference on dramatic story structure (Module 3).*
On Writing: A Memoir of the Craft	Stephen King	Scribner · 2000	*Accessible, practical guide to the writer's craft.*
The Anatomy of Story	John Truby	Faber & Faber · 2007	*Character-driven story construction (Modules 3–4).*
Save the Cat!	Blake Snyder	Michael Wiese Productions · 2005	*Beat-sheet structure widely used in screen pitching.*
The Elements of Style	Strunk & White	Pearson · 2000 (4th ed.)	*Concise authority on clear written English (Module 1).*

26AG1205E - Game Design Fundamentals (Unity)

L-T-P-S: 2-1-6-0 Credits: 4 Contact Hours : 9 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO	BTL
CO1	Explain core game-design concepts mechanics, dynamics, aesthetics, the game loop and player experience.	1,2,3,4,9,10	2
CO2	Apply the Unity editor scenes, Game Objects, components, the asset pipeline to assemble a playable scene.	1,2,4,10	3
CO3	Apply C# scripting to implement player control, interactions and basic game logic.	1,4,5,10	3
CO4	Analyze physics, collisions, UI and audio systems to build a complete gameplay loop.	1,2,4,5,8,10	4
CO5	Analyze, test and debug a prototype, iterating on player feedback and build/publish settings.	1,4,5,8,9,10	4
CO6	Evaluate a finished playable prototype and demonstrate Unity certification-level proficiency.	1,2,3,4,5,7,8,9,10	5

Syllabus:

Module-1

Game Design Theory & the Game Loop: What makes a game; the MDA (mechanics-dynamics-aesthetics) framework; core loops, player motivation, genres and the game design document (GDD).

- MDA framework and player experience
- Core loop, goals, rules and feedback
- Genres and reference analysis
- Writing a lightweight GDD

Module-2

The Unity Editor & Asset Pipeline: Unity interface; scenes, GameObjects, components, prefabs; the asset and import pipeline; transforms, hierarchy and the inspector; building a static playable scene.

- Editor layout, scene & hierarchy
- GameObjects, components and prefabs
- Importing and organising assets
- Lighting and camera basics

Module-3

C# Scripting & Player Control:

C# fundamentals in Unity; MonoBehaviour lifecycle; variables, methods, input handling; moving and controlling the player; component scripting.

- C# syntax and the MonoBehaviour lifecycle
- Update/Start, input and movement
- Variables, references and the inspector
- Scripting interactions and triggers

Module-4

Physics, UI, Audio & the Gameplay Loop: Rigidbodies, colliders and physics; collision/trigger events; building UI (score, health, menus); audio; assembling a complete win/lose gameplay loop.

- Physics, rigidbodies and collision events
- UI canvas, score and game states
- Audio sources and feedback
- Win/lose conditions and the full loop

Module-5

Playtesting and iteration; the Unity debugger and console; profiling basics; build settings and exporting to PC/WebGL; version control basics with Git.

- Playtesting and iterating on feedback
- Debugging and the console
- Build settings and platform export
- Git/version control fundamentals

Module-6

Prototype Polish & Certification Readiness: Polishing a playable prototype; juice and game-feel; packaging for portfolio/itch.io; full review of Unity Certified User exam objectives with timed practice.

- Game-feel, polish and juice
- Packaging and publishing the build
- Mapping skills to Unity certification domains
- Timed mock exams and remediation

Text Books:

1. Ferrone, H. (2024). *Learning C# by developing games with Unity* (7th ed.). Packt Publishing.
2. ·Hocking, J. (2022). *Unity in action: Multiplatform game development in C#* (3rd ed.). Manning Publications.
3. Nystrom, R. (2014). *Game programming patterns*. Genever Benning. https://gameprogrammingpatterns.com/
4. Rogers, S. (2014). *Level up! The guide to great video game design* (2nd ed.). John Wiley & Sons.
5. Schell, J. (2019). *The art of game design: A book of lenses* (3rd ed.). CRC Press.
6. Unity Technologies. (n.d.). *Unity User Manual*. https://docs.unity3d.com/Manual/
7. Unity Technologies. (n.d.). *Unity Learn*. https://learn.unity.com/

26AG1206E - AI For Visual Design

L-T-P-S: 0-0-6-6 **Credits: 3** **Contact Hours: 12** **Pre-requisite: NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO'S	BTL
CO1	Explain how generative-AI models (diffusion, GANs, LLMs) work and their role in the design pipeline.	PO1, PO2, PO7, PO103	2
CO2	Apply prompt-engineering techniques to generate targeted, high-quality images and concepts.	PO1, PO2, PO3, PO9 PO10	3
CO3	Apply controllable workflows (ControlNet, img2img, inpainting) to direct AI output precisely.	PO1, PO2, PO5 PO10	3
CO4	Analyze and integrate AI-generated assets into a human-led design workflow with post-refinement.	PO1, PO2, PO3, PO5, PO7, PO10	4
CO5	Analyze the ethical, IP, bias and authorship implications of generative AI in design.	PO1, PO2, PO5 PO10	4
CO6	Evaluate and present an AI-augmented design project, justifying tool choices and human authorship.	PO1, PO2, PO5 PO10	5

Syllabus:

Module-1- Foundations of Generative AI: A non-mathematical understanding of how generative models work — diffusion, GANs, transformers and LLMs; the AI tool landscape (Firefly, Midjourney, Stable Diffusion, DALL·E); where AI fits in the design pipeline.

- How diffusion image generation works (conceptually)
- The generative-AI tool ecosystem
- Strengths, limits and failure modes
- AI as co-pilot vs. replacement

Module-2- Prompt Engineering for Visuals: Anatomy of an effective prompt; subject, style, composition, lighting and modifiers; negative prompts; iteration and seed control; prompt libraries for consistent results.

- Prompt structure and modifiers
- Style, medium and artist references
- Negative prompts and parameters
- Iteration, seeds and reproducibility

Module-3: Controllable Workflows: Going beyond text prompts: img2img, inpainting and outpainting; ControlNet (pose, depth, edge, scribble); reference and style conditioning; an intro to node-based pipelines (ComfyUI).

- img2img and strength control

- Inpainting / outpainting for edits
- ControlNet conditioning (pose/depth/edge)
- Node-based generation overview

Module-4: AI in the Human Design Workflow: Integrating AI output with Photoshop and design tools; AI for concept exploration, mood boards, texture and asset variation; refining and finishing AI output by hand; maintaining a consistent art-directed look.

- AI-to-Photoshop refinement pipeline
- Mood boards, concept and variation generation
- Art-directing AI to a target style
- Human finishing and quality control

Module-5: Ethics, IP & Responsible AI: Copyright and training-data debates; authorship and originality; bias and representation in models; deepfakes and consent; content provenance (C2PA); responsible disclosure of AI use.

- Copyright, licensing and training data
- Authorship, originality and attribution
- Bias, fairness and representation
- Provenance, disclosure and consent

Module-6: AI-Augmented Design Project & Critique: Producing a complete AI-augmented design deliverable; documenting the workflow and human contribution; presenting and defending tool and authorship decisions; critique and reflection.

- End-to-end AI-augmented production
- Workflow and authorship documentation
- Presentation and defence of decisions
- Critique and ethical reflection

Text Books

1	Title: The Creativity Code: How AI is Learning to Write, Paint and Think Author: Marcus du Sautoy Publisher · Year 4th Estate / Belknap · 2019 Relevance: Accessible grounding in how creative AI works (Module 1).
2	Title: Artificial Intelligence: A Guide for Thinking Humans Author: Melanie Mitchell Publisher · Year: Pelican / FSG · 2019 Relevance: Clear conceptual model of AI capabilities and limits (Module 1).
3	Title: The Age of AI: And Our Human Future Author: Kissinger, Schmidt, Hutten Locher Publisher · Year: Little, Brown · 2021 Relevance: Ethics and societal context for responsible AI (Module 5).
4	Title: Atlas of AI Author: Kate Crawford Publisher Year: Yale University Press · 2021 Relevance: Bias, data and ethics critique of AI systems (Module 5).

5	Title: Generative AI Art & Design (practical guides) Author: Various (current editions) Publisher · Year: Packt / O'Reilly · 2023–24 Relevance: Hands-on prompt and diffusion workflow reference (Modules 2–4).
6	Title: The Adobe Firefly / Generative Workflows guides Author: Adobe Publisher Year: Adobe Press · current Relevance: Tool-specific generative-design workflow (Modules 2–4).

26AG1207E - Introduction to 3D

L-T-P-S: 0-0-12-0 **Credits: 4** **Contact Hours: 12** **Pre-requisite: NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain 3D coordinate space, the viewport, the production pipeline and core 3D terminology.	PO1, PO2, PO4, PO5, PO10	2
CO2	Apply polygon-modelling techniques to build clean, well-topologised 3D objects.	PO1, PO2, PO4, PO5, PO10	3
CO3	Apply UV mapping and basic material/shader assignment to 3D models.	PO1, PO2, PO4, PO5, PO10	3
CO4	Analyze lighting setups and camera placement to compose and light a 3D scene.	PO1, PO2, PO4, PO5, PO9, PO10	4
CO5	Analyze rendering settings and real-time/virtual-production basics to output a finished image.	PO1, PO2, PO4, PO5, PO9, PO10	4
CO6	Evaluate and present a complete modelled, textured, lit and rendered 3D scene.	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module 1- The 3D Workflow & Viewport: 3D coordinate space and transforms; navigating the viewport; the 3D production pipeline (model → UV → texture → rig → animate → light → render); interface of Maya and Blender; core terminology.

- XYZ space, transforms and pivots
- Viewport navigation and the interface
- The end-to-end 3D pipeline
- Maya vs. Blender orientation

Module 2- Polygon Modelling: Primitives and components (vertex/edge/face); core tools (extrude, bevel, bridge, loop cut); topology and edge flow; modelling props and simple hard-surface objects with clean geometry.

- Primitives and component editing
- Core modelling operations
- Clean topology and edge flow
- Modelling a hard-surface prop

Module 3: UV Mapping & Materials: Why UVs matter; unwrapping, seams and layout; UDIM basics; assigning materials and shaders; intro to PBR; applying textures to a model.

- UV unwrapping and seam placement
- UV layout and texel density
- Material/shader assignment

- Intro to PBR texturing

Module 4: Lighting & Cameras: Light types (directional, point, area, HDRI); three-point lighting in 3D; shadows and exposure; camera setup, focal length and composition; building mood through light.

- 3D light types and properties
- Three-point and HDRI lighting
- Camera, focal length and framing
- Lighting for mood and readability

Module 5: Rendering & Real-Time / VP Basics: Render engines (Arnold / Cycles / EEVEE); render settings, samples and output; offline vs real-time rendering; a first, basic look at real-time engines and virtual-production concepts (why real-time matters for film and games).

- Render engines and settings
- Samples, denoising and output formats
- Offline vs real-time rendering
- Virtual production — basic introduction

Module 6: The 3D Scene Project & Critique: Bringing it together: a complete modelled, UV'd, textured, lit and rendered scene; composition and presentation; turntables; critique and iteration; portfolio export.

- End-to-end scene assembly
- Composition, turntables and beauty render
- Presentation and portfolio export
- Critique and iteration

Reference Books

1	**Title: Introducing Autodesk Maya 2024** **Author**: Dariush Derakhshani **Publisher Year**: Sybex / Wiley · 2023 **Relevance**: *Beginner-to-intermediate Maya across all modules.*
2	**Title:** The Animator's Survival Kit (3D context) **Author**: Richard Williams **Publisher Year**: Faber & Faber · 2009 **Relevance**: *Spatial/timing grounding that informs 3D craft.*
3	**Title:** Digital Modeling **Author**: William Vaughan **Publisher Year:** New Riders · 2011 **Relevance**: *The standard on modelling and topology (Module 2).*
4	**Title:** Blender 4.x: The Complete Guide **Author**: Various (current editions) **Publisher Year:** Packt / No Starch · 2024 **Relevance**: *Open-source 3D workflow reference across modules.*

5	**Title:** Physically Based Rendering (concepts) **Author**: Pharr, Jakob, Humphreys **Publisher Year:** MIT Press · 2023 (4th ed., online free) **Relevance**: *Conceptual grounding for materials and rendering (Modules 3, 5).*
6	**Title: [**digital] Lighting & Rendering **Author**: Jeremy Birn **Publisher Year:** New Riders · 2013 (3rd ed.) **Relevance**: *The classic on 3D lighting and rendering (Modules 4–5).*

26AG1308E - Programming Foundation for Creative Arts

L-T-P-S: 2-1-3-0 Credits: 3 Contact Hours : 6 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain computational thinking, algorithms, and the role of programming in creative pipelines.	1,4,5,10	2
CO2	Apply variables, data types, operators and control flow to solve basic programming problems in Python.	1,4,5,10	3
CO3	Apply functions, loops and data structures (lists, dictionaries) to build reusable logic.	1,4,5,10	3
CO4	Analyze a creative task and decompose it into an automatable script or simple tool.	1,2,4,5,8,10	4
CO5	Analyze and apply version control (Git) and debugging practices to manage and fix code.	1,4,5,8,9,10	4
CO6	Evaluate and present a working creative-coding tool or generative script with documentation.	1,2,4,5,7,8,9,10	5

Syllabus:

Module-1

Computational Thinking & Setup: How computers think; algorithms, pseudocode and flowcharts; problem decomposition; setting up Python and an IDE (VS Code); why artists code.

- Algorithms, logic and pseudocode
- Decomposition and pattern recognition
- Python & VS Code environment setup
- Programming in the creative pipeline

Module-2

Variables, Types & Control Flow: Variables and data types; operators and expressions; input/output; conditionals (if/elif/else); boolean logic; building decision-driven scripts.

- Variables, numbers, strings, booleans
- Operators and expressions
- Conditionals and branching
- Simple interactive scripts

Module-3

Functions, Loops & Data Structures: Defining and calling functions; parameters and return values; for/while loops; lists, tuples and dictionaries; iterating over collections; modular, reusable code.

- Functions, parameters and scope
- Loops and iteration
- Lists, tuples and dictionaries
- Reusable, modular code

Module-4

Automation & Creative Scripting: File handling and batch operations; libraries and modules; intro to scripting inside creative software (e.g., Blender/Maya Python); generative and procedural mini-scripts; turtle/processing-style creative coding.

- File I/O and batch automation
- Importing and using libraries
- Scripting inside DCC tools (intro)
- Generative/creative coding basics

Module-5

Version Control & Debugging: Git fundamentals — repos, commits, branches, push/pull; GitHub workflow; reading error messages; debugging strategies; commenting and clean code style.

- Git: init, commit, branch, merge
- GitHub collaboration workflow
- Errors, exceptions and debugging
- Code style and documentation

Module-6

The Creative Tool Project & Critique: Designing and building a small creative-coding tool or generative script; documentation and a README; presenting code; peer code-review and iteration.

- Tool design and scope
- Building and testing the tool
- README and documentation
- Code review and presentation

Text Books:

1. Downey, A. B. (2015). *Think Python: How to think like a computer scientist* (2nd ed.). O'Reilly Media.
2. Lutz, M. (2013). *Learning Python* (5th ed.). O'Reilly Media.
3. Matthes, E. (2023). *Python crash course* (3rd ed.). No Starch Press.
4. Shiffman, D. (2024). *The nature of code*. No Starch Press.
5. Sweigart, A. (2019). *Automate the boring stuff with Python: Practical programming for total beginners* (2nd ed.). No Starch Press.
6. Chacon, S., & Straub, B. (2014). *Pro Git* (2nd ed.). Apress. https://git-scm.com/book/en/v2

26AG1309E -Previsualization

L-T-P-S : 0-0-9-0 Credits : 3 Contact Hours : 9 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	POs	BTL
CO1	Explain the role of previsualization, the pipeline from script to pre-vis, and shot/scene grammar.	1,2.3,4,8,9,10	2
CO2	Apply storyboarding principles to translate a script or concept into clear visual panels.	1,2.3,4,8,9,10	3
CO3	Apply editing and timing to assemble storyboards into an animatic with sound.	1,2.3,4,8,9,10	3
CO4	Analyze cinematography shot size, angle, movement, lensing to stage shots in a 3D pre-vis tool.	1,2.3,4,5,6,8,9,10	4
CO5	Analyze and build a real-time previsualization sequence with cameras, blocking and timing.	1,2.3,4,5,6,8,9,10	4
CO6	Evaluate and present a complete pre-vis package for a sequence, justifying staging decisions.	1,2.3,4,5,7,8,9,10	5

Syllabus:

Module-1

Previs Foundations & Shot Grammar

What pre-vis is and why it matters; types (storyboard, pitchvis, techvis, postvis); the pipeline from script to screen; shot and scene grammar; reading a script for visualization.

- Pre-vis types and purposes
- Script → board → animatic → pre-vis pipeline
- Shot sizes, angles and coverage
- Scene breakdown from a script

Module-2

Storyboarding

Storyboard composition and clarity; staging and the 180-degree rule; conveying action, camera and continuity in panels; digital boarding tools; the shot list.

- Panel composition and readability

- Staging, eyelines and the 180° rule
- Arrows, action and continuity
- Digital boarding and the shot list

Module-3

Animatics & Timing

Assembling boards into an animatic; timing, pacing and rhythm; scratch dialogue, sound and temp music; reading the edit; revising for clarity and flow.

- Board-to-animatic assembly
- Timing, pacing and beats
- Scratch audio and temp track
- Editing the animatic for flow

Module-4

Cinematography for Previs

Camera language — lenses, movement (dolly, pan, crane, handheld), height and angle; composition and lensing for emotion; coverage and the cutting pattern; applying this to 3D camera setup.

- Lens choice and field of view
- Camera movement vocabulary
- Composition and emotional framing
- Coverage and continuity planning

Module-5

Real-Time 3D Previsualization

Building pre-vis in a real-time engine (Unreal/Blender); blocking characters and environment with proxy assets; setting cameras and shots; sequencer/timeline; exporting a pre-vis movie.

- Proxy blocking and layout
- Camera and shot setup in 3D
- Sequencer/timeline and shots
- Rendering a pre-vis sequence

Module-6

The Previs Package & Critique

Assembling a complete pre-vis package (boards + animatic + 3D pre-vis + shot list); presenting and defending staging/camera decisions; director's notes and revision.

- Assembling the full package
- Presentation and director's intent
- Notes, revision and iteration
- Critique and finalisation

Text Books:

1. Beiman, N. (2017). *Prepare to board! Creating story and characters for animation features and shorts* (3rd ed.). CRC Press.
2. Block, B. (2020). *The visual story: Creating the visual structure of film, TV and digital media* (3rd ed.). Routledge.
3. Epic Games. (n.d.). *Unreal Engine documentation: Virtual production and Sequencer*. https://dev.epicgames.com/documentation/en-us/unreal-engine

4. Katz, S. D. (2019). *Film directing: Shot by shot: Visualizing from concept to screen* (2nd ed.). Michael Wiese Productions.
5. MacLean, F. (2011). *Setting the scene: The art & evolution of animation layout*. Chronicle Books.
6. Mascelli, J. V. (1998). *The five C's of cinematography: Motion picture filming techniques*. Silman-James Press.

26AG1310E – Audio & Video Editing

L-T-P-S : 2-1-3-0 **Credits: 3** **Contact Hours: 6** **Pre-requisite: NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain non-linear editing concepts, the post pipeline, and the DaVinci Resolve interface and pages.	PO1, PO2, PO3, PO9, PO10	2
CO2	Apply ingest, organisation and assembly editing to build a rough cut from footage.	PO1, PO2, PO3,PO8 PO9, PO10	3
CO3	Apply editing techniques — trimming, transitions, pacing, continuity — to refine a fine cut.	PO1, PO2, PO3, PO9, PO10	3
CO4	Analyze and edit sound — dialogue, music, SFX, levels and mix — to support the picture.	PO1, PO2, PO3, PO9, PO10	4
CO5	Analyze and apply basic colour correction and grading, then deliver in correct formats.	PO1, PO2,PO3, PO5, PO9, PO10	4
CO6	Evaluate a finished edited piece and demonstrate DaVinci Resolve certification-level proficiency.	PO1, PO2, PO3, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module-I: NLE Foundations & the Resolve Interface

Non-linear editing concepts; the post-production pipeline; DaVinci Resolve pages (Media, Cut, Edit, Fairlight, Color, Deliver); project setup, frame rates and codecs.

- NLE concepts and timeline basics
- Resolve page-based workflow
- Project, timeline and media settings
- Codecs, frame rate and resolution

Module-II: Ingest, Organisation & Assembly

Importing and organising media; bins, metadata and proxies; logging and selects; building a rough assembly cut; the three-point edit.

- Media import and organisation
- Logging, selects and markers
- Three-point editing
- The rough assembly cut

Module-III: Editing Craft — The Fine Cut

Trimming (ripple, roll, slip, slide); cutting on action; continuity and eyeline; transitions; pacing and rhythm; the language of the cut and emotional editing.

- Advanced trimming techniques
- Continuity and cutting on action
- Transitions and their meaning
- Pacing, rhythm and emotion

Module-IV: Sound Editing & Mixing (Fairlight)

Dialogue editing and clean-up; music and SFX; levels, EQ and dynamics; the Fairlight page; mixing for balance and the final mix; sound's role in storytelling.

- Dialogue editing and clean-up
- Music, SFX and sound design basics
- Levels, EQ and the mix
- Fairlight workflow and delivery

Module-V: Colour Correction, Grading & Delivery

Primary correction (balance, exposure); secondaries and qualifiers; the look/grade; scopes; matching shots; the Color page node tree; export settings and delivery formats.

- Primary colour correction and balance
- Secondary grading and looks
- Scopes and shot matching
- Render settings and delivery

Module-VI: Finished Piece & Certification Readiness

Completing a finished, delivered piece; review and polish; full review of the Blackmagic DaVinci Resolve certification objectives; timed practice and mock testing.

- Final review and polish
- Mapping skills to certification domains
- Timed mock exams and remediation
- Professional delivery and archiving

Text Books:

1. Dancyger, K. (2018). *The technique of film and video editing: History, theory, and practice* (6th ed.). Routledge.
2. Murch, W. (2001). *In the blink of an eye: A perspective on film editing* (2nd ed.). Silman-James Press.
3. Hullfish, S. (2017). *The art of video editing* (2nd ed.). Focal Press.
4. Reisz, K., & Millar, G. (2010). *The technique of film editing* (2nd ed.). Focal Press.

26AG13A1E - 3D Modeling & Sculpting

L-T-P-S: 0-0-9-6 Credits: 4 Contact Hours: 15 Pre-requisite: NIL

Mapping of Course outcomes with POS

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the modelling pipeline, mesh topology principles and hard-surface vs organic approaches	PO1, PO2, PO4, PO5, PO10	2
CO2	Apply polygon-modelling techniques in Maya to build accurate hard-surface assets with clean topology.	PO1, PO2, PO4, PO5, PO10	3
CO3	Apply digital sculpting in ZBrush to create detailed organic forms and characters.	PO1, PO2, PO3, PO4, PO5, PO10	3
CO4	Analyze and execute retopology and UV unwrapping to produce optimised, game/animation-ready meshes.	PO1, PO2, PO4, PO5, PO10	4
CO5	Analyze high-to-low-poly baking workflows to transfer detail via normal/displacement maps.	PO1, PO2, PO4, PO5, PO10	4
CO6	Evaluate and present a portfolio-ready 3D asset and demonstrate Autodesk certification-level proficiency.	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module 1-Modelling Pipeline & Topology: The asset pipeline; hard-surface vs organic; topology principles — quads, edge flow, poles, deformation; reference gathering and blockout; scale and units.

- Asset-creation pipeline overview
- Topology, edge flow and poles
- Reference, blackout and scale
- Hard-surface vs organic strategy

Module 2- Hard-Surface Modelling in Maya: Maya modelling toolkit; extrude, bevel, bridge, Boolean, multi-cut; supporting edges and hard-surface detailing; modelling a props/vehicle/weapon with clean topology.

- Maya modelling toolset mastery
- Supporting edges and bevels
- Booleans and clean-up
- Modelling a hero hard-surface asset

Module 3-Digital Sculpting in ZBrush: ZBrush interface; DynaMesh and ZSpheres; primary/secondary/tertiary forms; sculpting brushes; anatomy and detail; sculpting an organic creature or character bust.

- ZBrush navigation and DynaMesh
- Form blocking and refinement

- Detail brushes and surface noise
- Sculpting a creature/character bust

Module 4- Retopology & UV Mapping: Why retopology; manual and auto retopo; building animation/game-ready low-poly meshes; UV unwrapping, seams, packing and texel density; UDIMs.

- Retopology for deformation/games
- Low-poly mesh construction
- UV unwrapping and packing
- Texel density and UDIMs

Module 5- High-to-Low Baking: Baking high-detail onto low-poly; normal, displacement, AO and curvature maps; cage setup; troubleshooting bake errors; preparing assets for texturing.

- Normal and displacement baking
- AO, curvature and ID maps
- Cage setup and bake troubleshooting
- Handoff to texturing

Module 6-Portfolio Asset & Certification Readiness: Presenting an asset — turntables, wireframes, breakdowns; portfolio standards; full review of Autodesk Maya certification objectives; timed practice and mock testing.

- Turntables, wireframes and breakdowns
- Art Station-ready presentation
- Mapping skills to Autodesk cert domains
- Timed mock exams and remediation

Reference Books

1	**Title: Digital Modeling** **Author**: William Vaughan **Publisher Year**: New Riders · 2011 **Relevance**: *The standard on modelling and topology (Modules 1–2).*
2	**Title:** Introducing Autodesk Maya 2024 **Author**: Dariush Derakhshani **Publisher Year**: Sybex / Wiley · 2023 **Relevance**: *Authoritative Maya modelling reference and cert prep.*
3	**Title:** ZBrush Characters & Creatures **Author**: 3dtotal Publishing **Publisher Year:** 3dtotal · 2015 **Relevance**: *Digital sculpting workflow and detail (Module 3).*
4	**Title:** Anatomy for Sculptors **Author**: Uldis Zarins, Sandis Kondrats **Publisher Year:** Anatomy Next · 2014 **Relevance**: *Anatomy reference for organic sculpting (Module 3).*
5	**Title:** The Game Artist's Guide to Maya / Game Asset Pipeline

	Author: Various (current editions) **Publisher Year:** Packt / 3dtotal · 2022–24 **Relevance**: *Retopology, UV and baking for games (Modules 4–5).*
6	**Title:** Form: The Complete Guide to Game Art / Hard Surface **Author**: Various **Publisher Year:** 3dtotal · 2020 **Relevance**: *Hard-surface technique and presentation (Modules 2, 6).*

26AG13F1E – Screen Writing & Visual Storytelling

L-T-P-S : 0-0-9-6 **Credits: 4** **Contact Hours: 15** **Pre-requisite: NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain story structure, the screenplay form and industry-standard formatting conventions.	PO1, PO2, PO3, PO9, PO10	2
CO2	Apply premise, theme and three-act/sequence structure to outline an original story.	PO1, PO2, PO3,PO6 PO9, PO10	3
CO3	Apply character development and dialogue craft to write believable, dramatic scenes.	PO1, PO2, PO3, PO6, PO7, PO9, PO10	3
CO4	Analyze visual storytelling — show vs tell, image systems, subtext — to write cinematically.	PO1, PO2, PO3, PO9, PO10	4
CO5	Analyze and write properly formatted short scripts and treatments in industry software.	PO1, PO2,PO3, PO7, PO9, PO10	4
CO6	Evaluate and revise an original short screenplay through table reads and structured critique.	PO1, PO2, PO3, PO5,PO6, PO7, PO8, PO9, PO10	5

Syllabus:

Module I: Story & the Screenplay Form

What story is; the screenplay as blueprint; format conventions (scene heading, action, dialogue, parentheticals); the difference between prose and screen; reading screenplays.

- Story fundamentals and the dramatic question
- Screenplay format and conventions
- Prose vs. screen writing
- Reading and analysing scripts

Module-II: Premise, Theme & Structure

Loglines and premise; theme and the controlling idea; three-act structure, sequences and the beat sheet; the hero's journey and alternatives; outlining and the step outline.

- Logline, premise and theme
- Three-act and sequence structure
- Beat sheets and turning points
- Outlining and the step outline

Module-III: Character & Dialogue

Character wants vs need; arc; the antagonist; voice and distinct dialogue; subtext and economy; exposition without telling; writing a scene that turns.

- Character motivation and arc
- Distinct voice and dialogue
- Subtext and economy
- The scene that turns

Module-IV: Visual Storytelling

Show, don't tell; writing the image; visual motifs and image systems; using space, objects and action to carry meaning; writing for the camera without directing on the page.

- Writing visually and economically
- Image systems and motifs
- Action and objects as meaning
- Implying the visual without over-directing

Module-V: Formatting, Treatments & Tools

Industry screenwriting software (Final Draft / open tools); correct formatting; the treatment, synopsis and one-pager; adaptation basics; writing for short form and digital platforms.

- Screenwriting software workflow
- Treatments, synopses and one-pagers
- Short-form and digital writing
- Formatting discipline

Module-VI: The Short Screenplay & Table Read

Completing an original short screenplay; the table read; receiving and applying notes; the rewrite; the workshop critique method and reflective revision.

- Completing the first draft
- The table read and notes
- The rewrite and revision
- Critique and finalisation

Text Books:

1. Field, S. (2005). *Screenplay: The foundations of screenwriting* (Revised ed.). Delta.
2. McKee, R. (1997). *Story: Substance, structure, style, and the principles of screenwriting*. HarperCollins.
3. Snyder, B. (2005). *Save the cat! The last book on screenwriting you'll ever need*. Michael Wiese Productions.
4. Seger, L. (2010). *Making a good script great* (3rd ed.). Silman-James Press.

26AG2111E - Compositing Techniques (Nuke)

L-T-P-S : 0-0-9-0 Credits : 3 Contact Hours : 9 Pre-requisite : NIL

Mapping of Course outcomes with POS:

CO#	Course Outcome	POs	BTL
CO1	Explain compositing theory — the node graph, channels, premultiplication and the comp pipeline.	1,2,5,10	2
CO2	Apply core Nuke nodes — merge, grade, transform, roto — to combine and adjust image elements.	1,2,5,10	3
CO3	Apply multi-pass CG compositing using render layers/AOVs to rebuild and art-direct a render.	1,2,5,10	3
CO4	Analyze keying, rotoscoping and matte extraction to isolate and integrate elements.	1,2,5,10	4
CO5	Analyze colour-matching, grading and 2D effects to integrate elements seamlessly.	1,2,5,9,10	4
CO6	Evaluate and present a finished composited shot with a clean, readable node graph and breakdown.	1,2,3,5,7,8,9,10	5

Syllabus:

Module-1 Compositing Theory & the Node Graph

What compositing is; node vs layer compositing; the Nuke interface and DAG; channels and the alpha; premultiplication; linear colour and the comp pipeline.

- Node-based vs layer compositing
- Nuke interface, DAG and viewer
- Channels, alpha and premult
- Linear workflow and colour spaces

Module-2 Core Nodes & Transformations

Read/Write; Merge operations; Grade, ColorCorrect; Transform, Reformat; Roto and RotoPaint; the Dope sheet and keyframing; basic 2D tracking.

- Merge operations and over
- Grade and colour nodes
- Transform and reformat

- Roto, paint and 2D track

Module-3
Multi-Pass CG Compositing

Render layers and AOVs; rebuilding a beauty from passes; relighting in comp; using IDs/cryptomatte; art-directing the render without re-rendering.

- AOVs and render passes
- Beauty rebuild from passes
- Cryptomatte and ID mattes
- Comp-side relight and adjustment

Module-4 Keying, Roto & Mattes

Green-screen keying (Keyer, Primatte, IBK); despill; edge treatment; rotoscoping animation; combining keys and roto; clean mattes for integration.

- Keying workflows and despill
- Edge extension and matte refinement
- Rotoscoping moving elements
- Combining keys and roto

Module-5 Integration, Grading & 2D FX

Colour-matching elements to a plate/scene; light wrap, grain, lens effects, glows and bloom; 2D effects and atmospherics; selling the integration; AI-assisted matte/clean-up.

- Colour matching and integration
- Light wrap, grain and lens effects
- Atmospherics and 2D FX
- AI roto/clean-up assist

Module-6 Finished Shot & Breakdown

Building a clean, labelled, efficient script; finishing a shot; the comp breakdown reel; render and delivery; critique and iteration.

- Clean, readable node graphs
- Shot finishing and QC
- Comp breakdown presentation
- Render, delivery and critique

Text Books:

1) The Art and Science of Digital Compositing
Brinkmann, R. (2008). The art and science of digital compositing (2nd ed.). Morgan Kaufmann.
2) Nuke 101: Professional Compositing and Visual Effects
Ganbar, R. (2014). Nuke 101: Professional compositing and visual effects (2nd ed.). Peachpit Press.
3) Digital Compositing for Film and Video
Wright, S. (2017). Digital compositing for film and video (4th ed.). Routledge.
4) The VES Handbook of Visual Effects
Visual Effects Society. (2024). The VES handbook of visual effects (3rd ed.). Routledge.
5) Compositing Visual Effects
Wright, S. (2013). Compositing visual effects: Essentials for the aspiring artist (2nd ed.). Routledge.
6) Official documentation
Foundry Nuke User Guide
Foundry. (n.d.). Nuke user guide. Retrieved July 1, 2026, from https://learn.foundry.com/nuke/

26AG21A2E - Texturing & Shading (Substance)

L-T-P-S: 0-0-9-0 **Credits: 3** **Contact Hours: 9** **Pre-requisite: NIL**

Mapping of Course outcomes with POS

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain PBR theory, texture maps (albedo, roughness, metalness, normal) and the texturing pipeline.	PO1, PO2, PO5, PO10	2
CO2	Apply Substance 3D Painter to texture an asset using layers, masks and smart materials.	PO1, PO2, PO4, PO5, PO10	3
CO3	Apply hand-painting, procedural and generator techniques to add detail, wear and storytelling.	PO1, PO2, PO3, PO5, PO10	3
CO4	Analyze and author procedural materials in Substance 3D Designer using nodes.	PO1, PO2, PO4, PO5, PO10	4
CO5	Analyze look-dev and export workflows for different engines/renderers (Unreal, Arnold).	PO1, PO2, PO4, PO5, PO9, PO10	4
CO6	Evaluate and present a textured, look-developed asset and demonstrate Substance certification proficiency.	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module 1- PBR Theory & the Texturing Pipeline: Physically based rendering; metal/rough vs spec/gloss; the texture map set; the bake-to-texture pipeline; importing meshes and maps into Substance Painter.

- PBR theory and energy conservation
- Albedo, roughness, metalness, normal, height
- Workflow from bake to texture
- Project setup in Substance Painter

Module 2- Substance Painter — Layers & Smart Materials: Layer stack; fill layers, paint layers, masks; smart materials and smart masks; using baked maps (curvature, AO) to drive effects; texturing a hard-surface asset.

- Layers, masks and blending
- Smart materials and smart masks
- Map-driven generators
- Texturing a hard-surface asset

Module 3- Hand-Painting, Detail & Storytelling: Hand-painting detail; edge wear, dirt, grime and damage; telling a story through surface history; alphas and stencils; stylised vs realistic texturing.

- Hand-painting and custom brushes
- Wear, dirt and surface history
- Alphas and stencils
- Stylised vs realistic approaches

Module 4- Substance Designer — Procedural Materials: Node-based material authoring; noises and patterns; building a tileable material from scratch; exposing parameters; publishing a custom Substance for reuse.

- Designer node graph basics
- Noises, patterns and blends
- Building a tileable material
- Parameters and publishing spear

Module 5- Look-Dev & Engine Export: Export presets for Unreal, Unity and Arnold; checking textures under different lighting; look-dev turntables; texel-density and resolution decisions; troubleshooting.

- Export presets per engine/renderer
- Look-dev under varied lighting
- Resolution and texel density
- Round-trip troubleshooting

Module 6- Portfolio Asset & Certification Readiness: Presenting textured assets — turntables, breakdowns, beauty renders; portfolio standards; full review of Adobe Substance certification objectives; timed practice.

- Turntables and texture breakdowns
- Beauty render presentation
- Mapping skills to Substance cert domains
- Timed mock exams and remediation

Reference Books

1	Title: *The PBR Guide (Vol. 1 & 2)* Author: Wes McDermott (Adobe/Allegorithmic) Publisher · Year: Adobe · Current Edition Relevance: The definitive free reference for Physically Based Rendering (PBR) theory, covering core material properties, lighting principles, and rendering workflows (Module 1).
2	Title: *The Comprehensive PBR Guide* Author: Algorithmic / Adobe Publisher · Year: Adobe · 2018 Relevance: Provides a comprehensive foundation in Physically Based Rendering principles and Substance 3D workflows, supporting texture creation and material development (Modules 1–2).
3	Title: Substance 3D Painter / Designer Documentation Author: Adobe Publisher · Year: Adobe · Current Edition Relevance: Official documentation covering Adobe Substance 3D Painter and Designer tools, including texturing workflows, procedural materials, and certification preparation (All Modules).
4	Title: Digital Texturing & Painting Author: Owen Demers Publisher · Year: New Riders · 2001 Relevance: Introduces the fundamental principles of digital texturing, UV mapping, texture painting, and material creation for 3D production (Modules 1 & 3).

5	Title: [digital] Texturing & Painting / Game Texturing Author: Various (Current Editions) Publisher · Year: 3dtotal / Packt · 2022–2024 Relevance: Covers modern texturing techniques for games and film, including PBR workflows, texture optimization, and production-ready assets (Modules 2–3).
6	Title: Physically Based Rendering: From Theory to Implementation (4th Edition) Author: Matt Pharr, Wenzel Jakob, Greg Humphreys Publisher · Year: MIT Press · 2023 (Free Online Edition) Relevance: An authoritative resource explaining the scientific principles of light transport, materials, shading, and physically based rendering used in modern animation and game engines (Module 1).

26AG21A3E- Unreal Engine 5 Fundamentals

L-T-P-S : 0-0-12-0 Credits : 4 Contact Hours : 12 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the UE5 editor, project structure, and the real-time rendering pipeline (Nanite, Lumen).	1,2,4,5,10	2
CO2	Apply asset import, the content browser and the material editor to dress a real-time scene.	1,2,4,5,10	3
CO3	Apply Blueprint visual scripting to create interactivity and basic gameplay logic.	1,4,5,10	3
CO4	Analyze lighting, post-process and Lumen GI to art-direct the look of a real-time environment.	1,2,3,4,5,9,10	4
CO5	Analyze and build a real-time cinematic sequence using cameras and Sequencer.	1,2,3,4,5,8,9,10	4
CO6	Evaluate and present a complete interactive scene or cinematic built and rendered in UE5.	1,2,3,4,5,7,8,9,10	5

Syllabus:

Module-1

UE5 Editor & Real-Time Pipeline: Project setup and the editor; viewport, outliner, details; the content browser; Nanite virtualised geometry and Lumen GI; the real-time rendering pipeline; performance basics.

- Editor layout and navigation
- Project and level structure
- Nanite and Lumen explained
- Real-time vs offline rendering

Module-2

Assets, Materials & Scene Dressing: Importing meshes/textures; Quixel Megascans and the material editor; master materials and instances; meshes, foliage and modelling tools; assembling an environment.

- Asset import and organisation
- Material editor and instances
- Megascans and foliage
- Environment assembly

Module-3

Blueprint Visual Scripting: Blueprint basics; events, variables, functions; actors and components; input and interaction; simple gameplay/interactive logic without code.

- Blueprint graph and nodes
- Variables, events and functions
- Actor interaction and input
- Building interactivity

Module-4

Lighting, Lumen & Post-Process: Light types and Lumen GI; exponential height fog and atmosphere; the post-process volume; exposure, colour grading and look; lighting an environment for mood.

- Lights and Lumen global illumination
- Atmosphere, fog and sky
- Post-process and grading
- Lighting for mood and readability

Module-5

Cinematics with Sequencer: Cine cameras and depth of field; Sequencer timeline; keyframing cameras and actors; cuts and shots; Movie Render Queue; rendering a real-time cinematic.

- Cine camera and lensing
- Sequencer keyframing and shots
- Camera cuts and editing
- Movie Render Queue output

Module-6

The Real-Time Project & Critique: Bringing it together — an interactive scene or rendered cinematic; optimisation and packaging; presentation; critique and iteration; portfolio capture.

- Scene/cinematic assembly
- Optimisation and packaging
- Presentation and capture
- Critique and iteration

Text Books:

Li, Z. G. (2023). *Unreal Engine 5 game development with C++ scripting*. Packt Publishing.

Romero, M., & Sewell, B. (2022). *Blueprints visual scripting for Unreal Engine 5* (3rd ed.). Packt Publishing.

Venter, H., & Ogterop, W. (2022). *Unreal Engine 5 character creation, animation & cinematics*. Packt Publishing.

Various Authors. (2023–2024). *Mastering the art of Unreal Engine*. Packt Publishing.

Epic Games. (n.d.). *Unreal Engine documentation*. https://docs.unrealengine.com

Akenine-Möller, T., Haines, E., & Hoffman, N. (2018). *Real-time rendering* (4th ed.). CRC Press.

26AG21A4E - AI and Gen AI for Production

L-T-P-S : 2-1-3-0 Credits : 3 Contact Hours : 6 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain where generative-AI and AI-assisted tools fit across the game/animation production pipeline.	1,2,4,5,7,10	2
CO2	Apply AI tools for concept, texture and material generation within a production workflow.	1,2,4,5,10	3
CO3	Apply AI-assisted 3D/asset and animation tools (text-to-3D, mocap clean-up, retargeting) to speed production.	1,2,4,5,10	3
CO4	Analyze and integrate AI outputs into Unreal/Maya pipelines with human refinement and QC.	1,2,4,5,7,8,10	4
CO5	Analyze and build a simple AI-assisted tool/script and evaluate ethics, IP and provenance.	1,2,4,5,6,7,9,10	4
CO6	Evaluate and present an AI-augmented production workflow, justifying tool choices and human authorship.	1,2,3,4,5,6,7,8,9,10	5

Syllabus:

Module-1

AI in the Production Pipeline

Mapping AI across pre-production, asset creation, animation, tooling and post; the current tool landscape; opportunities and limits; the human-in-the-loop principle.

- AI touchpoints across the pipeline
- Current production-AI tool landscape
- Where AI helps vs hurts
- Human-in-the-loop philosophy

Module-2

AI for Concept, Texture & Material

Generative concept exploration; AI texture/material generation (e.g., Substance Sampler AI, text-to-texture); upscaling and variation; integrating into the texturing pipeline.

- AI concept exploration for production
- Text-to-texture and material AI
- Upscaling and variation
- Pipeline integration

Module-3

AI for 3D & Animation

Text/image-to-3D and the state of generative 3D; AI mocap and video-to-motion; animation retargeting and clean-up; AI auto-rigging; what is and isn't production-ready.

- Generative 3D — current capability
- AI mocap and video-to-motion
- Retargeting and clean-up
- Auto-rigging assists

Module-4

Pipeline Integration & QC

Getting AI output into Unreal/Maya cleanly; retopo/cleanup of AI geometry; fixing AI textures/animation; quality control and consistency; when to use AI vs hand work.

- AI output into DCC/engine
- Cleanup and retopology of AI assets
- QC and consistency
- Cost/benefit decisions

Module-5

AI Tooling, Scripting & Ethics

Using LLMs to write/assist pipeline scripts; simple AI-assisted tools; prompt-to-code; ethics, IP, training-data and provenance in a production context; studio AI policies.

- LLM-assisted scripting and tools
- Prompt-to-code workflows
- IP, provenance and disclosure
- Studio AI policy and consent

Module-6

AI-Augmented Workflow Project & Critique

Producing an asset/sequence via an AI-augmented pipeline; documenting the workflow, time saved and human contribution; presenting and defending; critique and reflection.

- End-to-end AI-augmented production
- Workflow and authorship documentation
- Presentation and defence
- Critique and ethical reflection

Text Books:

1. Crawford, K. (2021). *Atlas of AI: Power, politics, and the planetary costs of artificial intelligence*. Yale University Press.
2. Epic Games, Adobe, & other tool vendors. (n.d.). *Product documentation for AI-assisted production tools (e.g., MetaHuman, Substance 3D Sampler)*. https://dev.epicgames.com/documentation/ ; https://helpx.adobe.com/substance-3d-sampler/
3. Kissinger, H., Schmidt, E., & Huttenlocher, D. (2021). *The age of AI: And our human future*. Little, Brown and Company.
4. Shaker, N., Togelius, J., & Nelson, M. J. (2016). *Procedural content generation in games*. Springer.
5. Various. (2023–2024). *Generative AI for production* (Current eds.). O'Reilly Media; Packt Publishing.
6. Yannakakis, G. N., & Togelius, J. (2018). *Artificial intelligence and games*. Springer.

26AG21F2E – AI for Film Making & Content Creation

L-T-P-S : 0-0-9-0 Credits: 3 Contact Hours: 9 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain where generative-AI and AI tools fit across the filmmaking and content pipeline.	PO1, PO2, PO3, PO5, PO7, PO10	2
CO2	Apply AI tools for ideation, scripting, storyboarding and pre-visualisation.	PO1, PO2, PO3, PO9, PO10	3
CO3	Apply generative video, image and voice/audio tools to create content elements.	PO1, PO2, PO3, PO5, PO10	3
CO4	Analyze and apply AI-assisted editing, post and enhancement within a real workflow.	PO1, PO2, PO3, PO5, PO7, PO9, PO10	4
CO5	Analyze the ethics, IP, deepfake, consent and authorship implications of AI in film/content.	PO1, PO2,PO3, PO7, PO9, PO10	4
CO6	Evaluate and present an AI-augmented short content piece, justifying tools and human authorship.	PO1, PO2, PO3, PO5,PO6, PO7, PO8, PO9, PO10	5

Syllabus:

Module - I: AI Across the Film Pipeline

Mapping AI to development, pre-production, production and post; the generative-video landscape; capabilities and limits; the filmmaker-in-control principle.

- AI touchpoints across filmmaking
- Generative-video tool landscape
- Strengths and current limits
- Human authorship and control

Module-II: AI for Development & Pre-Production

AI for ideation and writing assistance; AI storyboards and shot ideation; AI-assisted pre-vis and concept; mood and look exploration; scheduling/breakdown helpers.

- AI ideation and writing assist
- AI storyboards and concept
- AI-assisted pre-vis
- Look and mood exploration

Module-III: Generative Video, Image & Voice

Text/image-to-video tools; controllable generation; AI voice, dubbing and TTS; AI image elements; consistency and control across shots; blending generative and shot footage.

- Text/image-to-video generation
- Controllable/consistent generation
- AI voice, dubbing and TTS
- Blending generative with live footage

Module-IV: AI-Assisted Editing & Post

AI editing assists (text-based editing, smart reframe, auto-cut); AI rotoscoping/clean-up; upscaling, denoise, restoration; AI colour and audio clean-up; integrating into the edit.

- Text-based and AI-assisted editing
- AI roto, clean-up and restoration
- Upscale, denoise and enhance
- Integration into the post pipeline

Module-V: Ethics, Deepfakes, IP & Consent

Deepfakes and synthetic media; likeness, consent and performers' rights; copyright and training data; provenance (C2PA); disclosure; responsible creator practice. (Legal detail is developed in Media Laws.)

- Deepfakes and synthetic performers
- Likeness, consent and rights
- Copyright, training data and IP
- Provenance and disclosure

Module-VI: AI-Augmented Content Project & Critique

Producing a short AI-augmented content piece; documenting workflow and human authorship; presenting and defending tool/ethics decisions; critique and reflection.

- End-to-end AI-augmented content
- Workflow and authorship documentation
- Presentation and defence
- Critique and ethical reflection

Text Books:

1. Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.
2. Goodfellow, I., Bengio, Y., & Courville, A. (2016). *Deep learning*. MIT Press.
3. Mitchell, M. (2019). *Artificial intelligence: A guide for thinking humans*. Farrar, Straus and Giroux.

26AG21F3E – Media Laws

L-T-P-S : 2-1-3-0 Credits: 3 Contact Hours: 6 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the framework of media law — IP, copyright, the regulatory media landscape and key statutes.	PO1, PO3, PO6, PO7, PO9, PO10	2
CO2	Apply copyright, licensing, fair-use/fair-dealing and contract principles to creative-work scenarios.	PO1, PO3, PO6, PO7, PO8, PO9, PO10	3
CO3	Apply rules on defamation, privacy, publicity rights, censorship and certification to content decisions.	PO1, PO3, PO6, PO7, PO9,PO10	3
CO4	Analyze the legal and ethical issues of AI-generated content, deepfakes and synthetic-media IP.	PO1, PO3, PO4, PO5, PO6, PO7, PO9,PO10	4
CO5	Analyze online-content, data-protection and real-money/skill-gaming (RMG) compliance requirements.	PO1,PO4, PO5, PO6, PO7, PO9,PO10	4
CO6	Evaluate a media/content project for legal and ethical compliance and recommend safeguards.	PO1, PO3, PO4, PO5, PO6, PO7, PO8,PO9 PO10	5

Syllabus:

Module - I: Media Law Foundations & IP

The media legal landscape; types of IP (copyright, trademark, design, patent); the Copyright Act framework; what is protectable; ownership, moral rights and the public domain.

- Sources and structure of media law
- Categories of intellectual property
- Copyright subsistence and ownership
- Moral rights and public domain

Module-II: Copyright, Licensing & Contracts

Licensing models and Creative Commons; assignment vs licence; fair use/fair dealing; music and stock licensing; release forms; key creative-industry contract clauses.

- Licensing, assignment and CC
- Fair use / fair dealing limits
- Music, footage and asset licensing
- Release forms and contract basics

Module-III: Defamation, Privacy, Censorship & Certification

Defamation and content liability; privacy and personality/publicity rights; film certification and content regulation; OTT/digital content rules; obscenity and community standards.

- Defamation and content liability
- Privacy and publicity rights
- Certification and content regulation
- OTT/digital content guidelines

Module-IV: AI, Deepfakes & Synthetic-Media IP

Authorship and ownership of AI-generated work; training-data and copyright disputes; deepfakes, likeness and consent; synthetic performers and voice; emerging AI regulation and disclosure/provenance norms.

- Authorship/ownership of AI output
- Training data and copyright
- Deepfakes, likeness and consent
- AI regulation, disclosure, provenance

Module-V: Data Protection & Online / RMG Compliance

Data-protection principles and user data; intermediary liability and content takedown; online safety; real-money and skill-gaming (RMG) regulation, age-gating, responsible-gaming and advertising compliance.

- Data protection and user data
- Intermediary liability and takedown
- RMG / skill-gaming regulation
- Age-gating and responsible gaming

Module-VI: Compliance Review & Ethics in Practice

Conducting a legal/ethical compliance review of a project; clearances and the rights checklist; ethical decision frameworks; documenting safeguards; presenting a compliance opinion.

- Project clearance and rights checklist
- Ethical decision frameworks
- Documenting safeguards
- Presenting a compliance review

Reference Books

Title	**Author**	**Publisher · Year**	**Relevance**
Law Relating to Intellectual Property Rights	V. K. Ahuja	LexisNexis · 2017 (3rd ed.)	*Comprehensive IP framework (Modules 1–2).*
Media Law & Ethics	M. Neelamalar	PHI Learning · 2009	*Media-specific law and ethics overview (Modules 1, 3).*
The Copyright Handbook	Stephen Fishman	Nolo · 2023	*Practical copyright and licensing (Module 2).*
Deepfakes: The Coming Infocalypse	Nina Schick	Twelve · 2020	*Deepfake/synthetic-media context (Module 4).*
Artificial Intelligence and the Law (current editions)	Various	Routledge / OUP · 2023–24	*AI authorship, IP and regulation (Module 4).*
Entertainment & Media Law Reports / IP & gaming-law guides	Various	current	*Current practice incl. RMG/online compliance (Modules 3, 5).*

26AG21F4E - Lighting for Film & Digital Media

L-T-P-S : 0-0-12-0 Credits: 4 Contact Hours: 12 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain lighting theory, colour, exposure and the role of lighting in film and digital media.	PO1, PO2, PO3, PO5, PO10	2
CO2	Apply lighting fixtures, modifiers and grip safely to shape and control light on set.	PO1, PO2, PO5, PO7, PO8, PO10	3
CO3	Apply three-point and motivated/narrative lighting to light subjects and scenes for mood.	PO1, PO2, PO3, PO5, PO8, PO10	3
CO4	Analyze and execute interview, location and available-light lighting under real constraints.	PO1, PO2, PO3, PO5, PO8, PO9, PO10	4
CO5	Analyze and light for the grade and for VFX — exposure, latitude, plate/green-screen consistency.	PO1, PO2, PO5, PO8, PO10	4
CO6	Evaluate and present cinematically lit footage with a lighting plan and breakdown.	PO1, PO2, PO3, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module - I: Lighting Theory & Exposure

Light behaviour, quality and direction; colour temperature and white balance; exposure, dynamic range and the histogram/false colour; lighting's role in storytelling.

- Quality, direction, colour of light
- Colour temperature/white balance
- Exposure and dynamic range
- Lighting and story

Module – II: Fixtures, Modifiers & Grip

Light sources (LED, HMI, tungsten, fluorescent); modifiers (soft boxes, diffusion, flags, bounce); grip and rigging; power and safety; the lighting/grip package.

- Fixture types
- Modifiers and control
- Grip and rigging
- Power and on-set safety

Module - III: Three-Point & Narrative Lighting

Three-point lighting and ratios; motivated and naturalistic lighting; high-key vs low-key; lighting for mood and genre; matching light to story and character.

- Three-point and ratios
- Motivated/naturalistic light
- High-key vs low-key
- Lighting for mood/genre

Module- IV: Interview, Location & Available Light

Interview lighting setups; lighting on location under constraints; mixing available and added light; day/night exterior; fast, efficient lighting for real shoots.

- Interview lighting
- Location lighting
- Mixing available light
- Efficient run-and-gun lighting

Module - V: Lighting for the Grade & VFX

Exposing for latitude and the grade; log/raw considerations; protecting highlights/shadows; lighting green screen evenly; matching plate lighting for VFX; on-set data for VFX.

- Exposing for the grade
- Log/raw and latitude
- Green-screen lighting
- Plate-consistent lighting for VFX

Module-VI: Lit Scene & Breakdown

Lighting a complete scene to a cinematic standard; the lighting plan/diagram; the light-by-light breakdown; presentation and critique; the cinematography/lighting reel.

- Cinematic lit scene
- Lighting plan/diagram
- Light-by-light breakdown
- Presentation and reel

Reference Books

Title	Author	Publisher · Year	Relevance
Set Lighting Technician's Handbook	Harry Box	Routledge (Focal Press) · 2020 (5th ed.)	*The standard gaffing/grip reference (Modules 2, 4).*
Motion Picture and Video Lighting	Blain Brown	Routledge (Focal Press) · 2018 (3rd ed.)	*Lighting theory and practice (all modules).*
Cinematography: Theory and Practice	Blain Brown	Routledge · 2016 (3rd ed.)	*Exposure and lighting for camera (Modules 1, 5).*
Painting with Light	John Alton	University of California Press · 2013	*Classic cinematic lighting craft (Module 3).*
Light Science & Magic	Hunter, Biver, Fuqua	Routledge (Focal Press) · 2021 (6th ed.)	*The physics of lighting subjects (Modules 1–3).*
The Filmmaker's Eye	Gustavo Mercado	Routledge (Focal Press) · 2019 (2nd ed.)	*Lighting within the frame (Module 3).*

26AG2212E- UI & UX Design

L-T-P-S : 2-1-6-0 Credits: 4 Contact Hours: 9 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain UX/UI principles, the design process, and the difference between UX and UI.	PO1, PO2, Po4,PO9,PO10	2
CO2	Apply UX research methods personas, user journeys, problem framing to define a design brief.	PO1, PO2,PO3, PO4, PO6,PO7 PO8, PO9, PO10	3
CO3	Apply information architecture and wireframing to structure flows and low-fidelity screens.	PO1, PO2, PO3,PO4, PO9,PO10	3
CO4	Analyze and apply visual UI design layout, type, color, components, design systems.	PO1, PO2,PO4, PO9,PO10	4
CO5	Analyze and build interactive prototypes and run usability testing to iterate the design.	PO1, PO2,PO4, PO6,PO7, PO8,PO9 PO10	4
CO6	Evaluate and present a complete, tested UI/UX case study from research to high-fidelity prototype.	PO1, PO2,PO3, PO4,PO6, PO7, PO8,PO9 PO10	5

Syllabus:

Module - I: UX/UI Foundations & Process

UX vs UI; the design-thinking and double-diamond process; human-centred design; usability heuristics; accessibility basics; UI in games vs apps.

- UX vs UI and where they meet
- Design-thinking process
- Usability heuristics
- Accessibility fundamentals

Module – II: UX Research & Problem Framing

User interviews and surveys; personas; empathy maps; user journeys; problem statements and how-might-we; competitive analysis; defining a brief.

- Research methods
- Personas and empathy maps
- User journeys and pain points
- Problem framing and the brief

Module - III: Information Architecture & Wireframing

Information architecture and card sorting; user flows; low-fidelity wireframes; layout and grids; navigation patterns; wireframing in Figma.

- Information architecture
- User flows and task flows
- Low-fi wireframes
- Navigation and layout patterns

Module- IV: Visual UI Design & Design Systems

Visual hierarchy; typography and colour for UI; components and states; design systems and tokens; iconography; HUD/menu design for games; high-fidelity mockups.

- Visual hierarchy and Gestalt
- Type, colour and components
- Design systems and tokens
- Game HUD/menu UI

Module - V: Prototyping & Usability Testing

Interactive prototyping in Figma; micro-interactions and transitions; usability test planning; moderated testing; synthesising findings; iterating the design.

- Interactive prototyping
- Micro-interactions
- Usability test planning & running
- Synthesis and iteration

Module-VI: The Case Study & Critique

Assembling a portfolio case study problem, process, design, test, outcome; presenting design rationale; handoff specs for developers; critique.

- Portfolio case-study structure
- Presenting design rationale
- Developer handoff
- Critique and iteration

Reference Books

Title	Author	Publisher · Year	Relevance
The Design of Everyday Things	Don Norman	Basic Books · 2013 (rev. ed.)	*Foundational human-centred design (Module 1).*
Don't Make Me Think, Revisited	Steve Krug	New Riders · 2014 (3rd ed.)	*Usability essentials (Modules 1, 5).*
The UX Book	Hartson & Pyla	Morgan Kaufmann · 2018 (2nd ed.)	*Comprehensive UX process (Modules 2–5).*
Refactoring UI	Adam Wathan, Steve Schoger	self-published · 2018	*Practical visual UI design (Module 4).*
About Face: The Essentials of Interaction Design	Cooper, Reimann, Cronin, Noessel	Wiley · 2014 (4th ed.)	*Interaction design depth (Modules 3–5).*
100 Things Every Designer Needs to Know About People	Susan Weinschenk	New Riders · 2020 (2nd ed.)	*Psychology behind UX decisions (Modules 1–2).*

26AG22A5E- Environment Design for Games

L-T-P-S : 0-0-6-6 Credits :3 Contact Hours : 12 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain environment-design principles — composition, scale, environmental storytelling and modularity.	1,2,3,4,5,10	2
CO2	Apply concept, reference and greybox blockout to design a playable environment layout.	1,2,3,4,5,10	3
CO3	Apply modular assets and trim-sheet workflows to build a reusable, performant environment kit.	1,2,4,5,10	3
CO4	Analyze and execute set dressing, materials and foliage to build out and detail the scene.	1,2,3,4,5,10	4
CO5	Analyze and apply in-engine lighting, atmosphere and optimisation for mood and performance.	1,2,3,4,5,9,10	4
CO6	Evaluate and present a finished, playable game environment with beauty shots and a breakdown.	1,2,3,4,5,7,8,9,10	5

Syllabus:

Module-1

Environment Design Principles

Composition and visual flow; scale and proportion; environmental storytelling; landmarks and player guidance; modularity as a principle; references and mood boards.

- Composition and leading the eye
- Scale, proportion and human reference
- Environmental storytelling
- Modularity and reuse mindset

Module-2

Concept, Reference & Greybox

Gathering reference; concept and layout sketches; greybox/blockout to scale in-engine; testing sightlines and gameplay flow; iterating the blockout before art.

- Reference and concept
- Layout and floorplan
- Greybox blockout to scale
- Sightlines and gameplay flow

Module-3

Modular Kits & Trim Sheets

Modular building philosophy; grid snapping; trim sheets and tiling textures; kit-bashing; reusable modular pieces; building a kit that assembles a level.

- Modular kit design
- Trim sheets and tileables
- Grid and snapping
- Building a reusable kit

Module-4

Set Dressing, Materials & Foliage

Set dressing and prop placement; material instances and vertex painting; decals; foliage and vegetation tools; composition within the playable space; visual density.

- Set dressing and props
- Materials, decals, vertex paint
- Foliage and vegetation
- Detail pass and density

Module-5

Lighting, Atmosphere & Optimization

Lighting for mood and readability; Lumen/baked lighting; fog and atmosphere; post-process; performance — LODs, draw calls, profiling; optimizing the scene.

- Lighting for mood and gameplay
- Atmosphere and post
- LODs and performance
- Profiling and optimization

Module-6

The Playable Environment & Critique

Finishing the environment; beauty shots and a fly-through; the breakdown (blockout→kit→dressed→lit); presentation; critique and iteration.

- Finishing and polish
- Beauty shots and fly-through
- Breakdown presentation
- Critique and iteration

Text Books:

1. Epic Games. (n.d.). *Unreal Engine documentation: Environment art*. https://dev.epicgames.com/documentation/en-us/unreal-engine
2. Gurney, J. (2010). *Color and light: A guide for the realist painter*. Andrews McMeel Publishing.
3. Mateu-Mestre, M. (2010). *Framed Ink: Drawing and composition for visual storytellers*. Design Studio Press.
4. Schell, J. (2019). *The art of game design: A book of lenses* (3rd ed.). CRC Press.
5. Totten, C. W. (2019). *An architectural approach to level design* (2nd ed.). CRC Press.
6. Various. (2022–2024). *Game environment art and modular workflow guides*. 3dtotal Publishing; Packt Publishing.

26AG22A6E -3D Character Animation and Rigging

L-T-P-S: 2-1-3-0 **Credits: 4** **Contact Hours: 15** **Pre-requisite: NIL**

Mapping of Course outcomes with POS

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain rigging and animation fundamentals skeletons, deformation, the rig, and the 12 principles in 3D.	PO1, PO2, PO4, PO5, PO10	2
CO2	Apply joint setup, skinning and weight painting to deform a character mesh cleanly.	PO1, PO2, PO4, PO5, PO10	3
CO3	Apply control rigs (IK/FK, constraints, controllers) to build an animator-friendly character rig.	PO1, PO2, PO4, PO5, PO10	3
CO4	Analyze and animate body mechanics walk, run, jump, weight with strong timing and spacing.	PO1, PO2, PO3, PO4, PO5, PO10	4
CO5	Analyze and animate acting and performance poses, expression, lip-sync to convey emotion.	PO1, PO2, PO3, PO4, PO5, PO9, PO10	4
CO6	Evaluate and present a polished animated shot and demonstrate advanced Maya certification proficiency.	PO1, PO2, PO3, PO4, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module 1- Rigging & Animation Fundamentals: The rig and the animation pipeline; skeletons and deformation; the 12 principles applied in 3D; the graph editor; reference and planning an animation.

- Rig anatomy and the pipeline
- Skeletons and deformation
- 12 principles in 3D
- Graph editor and curves

Module 2- Joints, Skinning & Weights: Joint placement and orientation; the skeleton hierarchy; binding and skinning; weight painting for clean deformation; corrective fixes; testing the deformation.

- Joint placement and orient
- Skeleton hierarchy
- Binding and skinning
- Weight painting and fixes

Module 3- Control Rigs — IK/FK & Controllers: IK and FK; constraints; control curves and the rig UI; foot rolls and switches; building an animator-friendly biped rig; facial rig basics; rig testing.

- IK/FK and switching
- Constraints and controllers
- Foot roll and rig UI
- Biped + basic facial rig

Module 4- Body Mechanics: Weight and balance; the walk and run cycle; jumps and physical actions; timing, spacing and arcs; blocking, splining and polish; reference-driven mechanics.

- Weight, balance and force
- Walk and run cycles
- Jumps and physical action
- Blocking → spline → polish

Module 5- Acting & Performance: Acting and posing for emotion; facial animation and expression; lip-sync to dialogue; subtext and beats; the acting performance shot; appeal and clarity.

- Acting and posing
- Facial animation and expression
- Lip-sync to dialogue
- Performance and appeal

Module 6- Polished Shot & Certification Readiness: Polishing a shot to demo-reel standard; playblast and presentation; the animation breakdown; full review of advanced Autodesk Maya certification objectives; timed practice.

- Polish to reel standard
- Playblast and presentation
- Mapping skills to advanced Maya cert
- Timed mock exams and remediation

Text Books

1	**Title:** The Animator's Survival Kit **Author**: Richard Williams **Publisher Year**: Faber & Faber · 2009 (rev. ed.) **Relevance**: *The definitive animation-principles bible (Modules 1, 4–5).*
2	**Title:** Cracking Animation **Author**: Peter Lord, Brian Sibley **Publisher Year**: Thames & Hudson · 2015 **Relevance**: *Performance and acting inspiration (Module 5).*
3	**Title:** Body Language: Advanced 3D Character Rigging **Author**: Allan, Palamar, Murdock **Publisher Year:** Sybex / Wiley · 2010 **Relevance**: *Comprehensive Maya rigging (Modules 2–3).*
4	**Title:** Acting for Animators **Author**: Ed Hooks **Publisher Year:** Routledge · 2017 (4th ed.) **Relevance**: *Acting theory for animators (Module 5).*
5	**Title:** Introducing Autodesk Maya (current edition) **Author**: Dariush Derakhshani **Publisher Year:** Sybex / Wiley · 2023 **Relevance**: *Maya animation/rigging reference and cert prep.*
6	**Title:** Timing for Animation **Author**: Whitaker, Halas, Sito **Publisher Year:** Routledge (Focal Press) · 2009 (2nd ed.) **Relevance**: *Timing and spacing craft (Module 4)*

26AG22A7E - Advanced Game Programming

L-T-P-S : 0-0-9-0 Credits : 3 Contact Hours :9 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain object-oriented design and core software-architecture concepts for games.	1,4,5,10	2
CO2	Apply OOP, components and common design patterns to structure gameplay code.	1,4,5,8,10	3
CO3	Apply gameplay-systems programming — state machines, events, save/load, UI logic.	1,4,58,10	3
CO4	Analyze and implement game AI — pathfinding, behavior trees/FSMs, simple decision-making.	1,4,5,10	4
CO5	Analyze physics, collision and performance, and apply profiling and optimization techniques.	1,4,5,10	4
CO6	Evaluate and present a well-architected playable game system with clean, documented code.	1,4,5,7,8,9,10	5

Syllabus:

Module-1

OOP & Architecture for Games: Object-oriented programming in C#; classes, inheritance, interfaces; composition vs inheritance; the component model; clean code and SOLID principles for games.

- C# OOP refresher
- Inheritance, interfaces, composition
- Component-based design
- Clean code and SOLID

Module-2

Design Patterns & Structure: Common game patterns — singleton, observer/events, state, object pool, command; Scriptable Objects/data-driven design; structuring a maintainable codebase.

- Game programming patterns
- Event-driven architecture
- Data-driven design
- Codebase structure

Module-3

Gameplay Systems: State machines for gameplay; inventory/stats systems; save/load and serialization; UI logic and menus; input systems; building reusable gameplay systems.

- Gameplay state machines
- Inventory/stats systems
- Save/load and serialization
- UI and input systems

Module-4

Game AI: Pathfinding (NavMesh/A*); finite state machines and behaviour trees; steering and simple decision-making; sensing and perception; tuning AI behaviour.

- Pathfinding and navigation
- FSM and behaviour trees
- Steering and decisions
- Perception and tuning

Module-5

Physics, Collision & Optimisation: Rigidbodies, colliders and triggers; physics-based movement; raycasting; profiling tools; the performance budget; memory and garbage; optimisation techniques.

- Physics, colliders and triggers
- Raycasting and queries
- Profiling and the frame budget
- Memory and optimisation

Module-6

The Game System Project & Critique: Building a complete, well-architected playable system; documentation and code review; version control; presenting architecture decisions; critique and refactoring.

- System assembly and architecture
- Documentation and code review
- Presenting design decisions
- Critique and refactor

Text Books:

1. Gregory, J. (2018). *Game engine architecture* (3rd ed.). CRC Press.
2. Hocking, J. (2022). *Unity in action: Multiplatform game development in C#* (3rd ed.). Manning Publications.
3. Martin, R. C. (2008). *Clean code: A handbook of agile software craftsmanship*. Prentice Hall.
4. Millington, I. (2019). *AI for games* (3rd ed.). CRC Press.
5. Nystrom, R. (2014). *Game programming patterns*. Genever Benning. https://gameprogrammingpatterns.com/

6. Skeet, J. (2019). *C# in depth* (4th ed.). Manning Publications.
7. Troelsen, A., & Japikse, P. (2022). *Pro C# 10 with .NET 6: Foundational principles and practices in programming*. Apress.

26AG22F5E– Film Editing

L-T-P-S : 2-1-3-0 Credits: 3 Contact Hours: 6 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain narrative editing theory, the Premiere Pro workflow, and professional project organization.	PO1, PO2, PO3,PO9, PO10	2
CO2	Apply assembly and scene construction to build a coherent narrative sequence from rushes.	PO1, PO2, PO3,PO9, PO10	3
CO3	Apply editing craft — performance selection, pacing, continuity, transitions — to a fine cut.	PO1, PO2, PO3,PO9, PO10	3
CO4	Analyze and apply multi-cam, sound, music and titling to enrich the edit.	PO1, PO2, PO3,PO9, PO10	4
CO5	Analyze and apply color, finishing and correct delivery/export for multiple platforms.	PO1,PO2, PO3,PO5, PO9,PO10	4
CO6	Evaluate a finished narrative edit and demonstrate Adobe Premiere Pro certification proficiency.	PO1, PO2, PO3,PO5, PO7, PO8,PO9 PO10	5

Syllabus:

Module - I: Narrative Editing & Premiere Workflow
The editor's role in storytelling; Premiere Pro project setup; media management and proxies; the timeline and tools; professional bin/organisation; sequence settings.

- Editing as the final rewrite
- Premiere project and media management
- Proxies and performance
- Professional organisation

Module - II: Assembly & Scene Construction
Logging and selects; the assembly and rough cut; constructing a scene; coverage and the cutting pattern; building narrative from rushes; the radio edit for dialogue.

- Logging, selects and the script
- Assembly and rough cut
- Scene construction
- Dialogue/radio edit

Module - III: Editing Craft & the Fine Cut
Selecting performance; pacing and rhythm; continuity and matching action; transitions and their meaning; tension and emotional editing; trimming to the fine cut.

- Performance selection

- Pacing, rhythm and tension
- Continuity and matching
- Fine-cut trimming

Module- IV: Multi-Cam, Sound & Titling

Multi-camera editing; sound editing and the Essential Sound panel; music and SFX; the Essential Graphics panel for titles/lower-thirds; motion and keyframing.

- Multi-camera editing
- Sound editing and mixing
- Music and SFX layering
- Titles and motion graphics

Module - V: Colour, Finishing & Delivery

Lumetri colour correction and grading; finishing the piece; export presets for cinema, broadcast, OTT and social; the Adobe Media Encoder; aspect ratios and reframing.

- Lumetri correction and grade
- Finishing and QC
- Export presets per platform
- Reframing and aspect ratios

Module-VI: Finished Edit & Certification Readiness

Completing a finished narrative piece; review and polish; full review of Adobe Premiere Pro certification objectives; timed practice and mock testing.

- Final review and polish
- Mapping skills to Premiere cert
- Timed mock exams and remediation
- Professional delivery and archive

Reference Books

Title	Author	Publisher · Year	Relevance
In the Blink of an Eye	Walter Murch	Silman-James Press · 2001 (2nd ed.)	*The classic on editing philosophy and craft (Module 3).*
The Technique of Film & Video Editing	Ken Dancyger	Routledge (Focal Press) · 2018 (6th ed.)	*Narrative editing theory and technique (Modules 1, 3).*
Adobe Premiere Pro Classroom in a Book	Maxim Jago	Adobe Press · 2023	*Official Premiere training and cert prep (all modules).*
The Healthy Edit	John Rosenberg	Routledge (Focal Press) · 2017 (2nd ed.)	*Editing problem-solving and craft (Module 3).*
On Film Editing	Edward Dmytryk	Routledge · 2018 (rev. ed.)	*Foundational editing principles (Modules 2–3).*
Grammar of the Edit	Roy Thompson, Christopher Bowen	Routledge (Focal Press) · 2009 (2nd ed.)	*Practical editing grammar and continuity (Module 3).*

26AG22F6E- Tracking & Match Moving

L-T-P-S : 0-0-9-0 Credits: 3 Contact Hours: 9 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain match move concepts — camera solve, parallax, lens distortion and the tracking pipeline.	PO1, PO2, PO5,PO10	2
CO2	Apply 2D point and planar tracking to stabilize, match-move and replace elements.	PO1, PO2, PO5,PO10	3
CO3	Apply 3D camera tracking and solving to recover a moving camera from a plate.	PO1, PO2, PO5,PO10	3
CO4	Analyze and execute object/body tracking and set reconstruction for CG integration.	PO1, PO2, PO5,PO10	4
CO5	Analyze lens distortion, set survey data and scale to refine and validate a solve.	PO1, PO2, PO5,PO10	4
CO6	Evaluate and deliver a clean solved scene to 3D, validated by a CG integration test.	PO1, PO2,PO5, PO7, PO8,PO9 PO10	5

Syllabus:

Module - I: Matchmove Concepts & Pipeline

What matchmove is and why; parallax and depth cues; camera intrinsics/extrinsics; lens distortion; the tracking pipeline and tools (3DEqualizer/PFTrack/SynthEyes); on-set data.

- Why matchmove matters
- Parallax, depth and the camera
- Lens distortion basics
- The tracking pipeline and tools

Module - II: 2D Tracking

Point tracking; planar tracking; stabilisation; match-moving 2D elements; corner-pin and screen replacement; tracking for roto; troubleshooting noisy tracks.

- Point and planar tracking
- Stabilisation and match-move
- Screen replacement
- Track troubleshooting

Module - III: 3D Camera Tracking & Solving

Auto and manual tracking; feature selection; the camera solve; reducing solve error; setting scene scale, ground and orientation; reading the solved camera.

- Auto vs manual tracking
- Feature selection and refinement
- The camera solve and error
- Scale, ground plane, orientation

Module- IV: Object & Body Tracking, Set Recon Object/rigid tracking; basic body/mocap-style tracking; set reconstruction and point clouds; building geo from the solve; survey/LiDAR data; matching multiple solves.

- Object and rigid tracking

- Body/mocap-style tracking intro
- Set reconstruction and point cloud
- Survey/LiDAR integration
-

Module - V: Lens, Survey & Solve Validation

Lens-distortion calibration and undistort/redistort; using set-survey measurements; validating a solve; reprojection error; quality control; common pitfalls and fixes.

- Lens calibration and (un)distort
- Using survey measurements
- Solve validation and reprojection
- QC and common fixes

Module-VI: Export, Integration Test & Critique

Exporting camera, geo and points to Maya/Nuke; the CG integration test (cube/sphere lock-off); delivering a clean solve; the matchmove breakdown; critique.

- Export to Maya/Nuke
- CG integration test
- Clean solve delivery
- Breakdown and critique

Reference Books

Matchmoving: The Invisible Art of Camera Tracking	Tim Dobbert	Sybex / Wiley · 2012 (2nd ed.)	*The definitive matchmove text (all modules).*
The VES Handbook of Visual Effects	Visual Effects Society	Routledge · 2024 (3rd ed.)	*Matchmove within the wider VFX pipeline.*
Multiple View Geometry in Computer Vision	Hartley & Zisserman	Cambridge University Press · 2004	*The mathematics behind solving (Modules 1, 5).*
Digital Compositing for Film and Video	Steve Wright	Routledge (Focal Press) · 2017	*Tracking's role in integration (Modules 2, 6).*
3DEqualizer / PFTrack / SynthEyes documentation	Respective vendors	current	*Authoritative tool references (Modules 2–5).*
Filming the Fantastic	Mark Sawicki	Routledge (Focal Press) · 2011 (2nd ed.)	*On-set data and VFX integration context (Module 1).*

26AG22F7E - Commercial Video Production

L-T-P-S : 0-0-12-0 Credits: 4 Contact Hours: 12 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the commercial production landscape, formats, the agency/brand workflow and the brief.	PO1, PO2, PO3,PO7, PO8,PO9 PO10	2
CO2	Apply brief interpretation and concept development to pitch a persuasive commercial idea.	PO1, PO2, PO3,PO7, PO8,PO9 PO10	3
CO3	Apply pre-production treatment, storyboard, shot list, schedule, budget to plan a shoot.	PO1, PO2, PO3, PO8,PO9 PO10	3
CO4	Analyze and execute a high-production-value shoot camera, lighting, art direction, direction.	PO1, PO2, PO3,PO5, PO8,PO9 PO10	4
CO5	Analyze and apply post edit, sound, grade, graphics to finish a persuasive commercial.	PO1,PO2, PO3,PO5, PO9,PO10	4
CO6	Evaluate and present a finished commercial against the brief and deliver to client standard.	PO1, PO2, PO3,PO5, PO6, PO7, PO8,PO9 PO10	5

Syllabus:

Module - I: The Commercial Landscape & the Brief

Commercial formats (TVC, product film, social ad, brand film); the agency/brand/production-house workflow; the creative brief; target audience and the single-minded proposition.

- Commercial formats and platforms
- Agency/brand/production workflow
- Reading the creative brief
- Audience and proposition

Module - II: Concept & the Pitch

Idea generation and the big idea; the storytelling angle; tone and brand fit; the pitch deck and treatment; selling an idea to a client; the persuasive hook.

- Big-idea generation
- Storytelling and tone for brands
- The treatment and pitch deck
- Pitching to a client

Module - III: Pre-Production & Planning

Storyboard and shot list; scheduling and call sheets; budgeting and resourcing; location/casting/art; the production book; planning for production value within constraints.

- Storyboard and shot list
- Schedule, call sheet, budget
- Location, casting, art direction
- Production value on a budget

Module- IV: The Shoot — Production Value

Directing for commercials; camera and lensing for polish; lighting for product/beauty; art direction and styling; product hero shots; managing the set and the client on set.

- Directing the commercial
- Camera and lighting for polish
- Product and hero shots
- Set and client management

Module - V: Post & Finishing for Impact

Edit for persuasion and pace; sound design and music for brands; grade for product appeal; motion graphics, logo and supers; versioning (cutdowns, aspect ratios) for platforms.

- Persuasive editing and pace
- Sound and music for brands
- Grade for product appeal
- Graphics, supers and versioning

Module-VI: Client Delivery & Critique

Presenting against the brief; client review and notes; revisions; delivery specs and master/cutdowns; the campaign case study; critique and reflection.

- Presenting to the brief
- Client notes and revisions
- Delivery and cutdowns
- Case study and critique

Reference Books

Title	Author	Publisher · Year	Relevance
Hey Whipple, Squeeze This	Luke Sullivan, Edward Boches	Wiley · 2016 (5th ed.)	*The classic on creating great advertising (Modules 1–2).*
Directing the Commercial	Various / industry guides	Routledge / industry · current	*Directing and production value (Module 4).*
The Filmmaker's Handbook	Steven Ascher, Edward Pincus	Plume · 2012	*Production craft reference (Modules 3–4).*
Cinematography: Theory and Practice	Blain Brown	Routledge · 2016 (3rd ed.)	*Camera and lighting for polish (Module 4).*
Ogilvy on Advertising	David Ogilvy	Vintage · 1985	*Persuasion and brand fundamentals (Modules 1–2).*
The Advertising Concept Book	Pete Barry	Thames & Hudson · 2016 (3rd ed.)	*Concept generation and craft (Module 2).*

26AG2313E - Corporate Communications

L-T-P-S: 2-1-3-0 Credits: 3 Contact Hours: 6 Pre-requisite: NIL

Mapping of Course outcomes with POS

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain professional and corporate communication principles and the creative-industry workplace.	PO1, PO3, PO6, PO7, PO8, PO9, PO10	2
CO2	Apply effective verbal, non-verbal and digital communication in workplace and client scenarios.	PO1, PO3, PO6, PO7, PO8, PO9, PO10	3
CO3	Apply professional written communication email, documentation, proposals, reports.	PO1, PO3, PO7, PO8, PO9, PO10	3
CO4	Analyze and apply presentation and pitching skills to communicate creative ideas persuasively.	PO1, PO2, PO3, PO7, PO8, PO9, PO10	4
CO5	Analyze team dynamics and production coordination — schedules, roles, pipeline communication.	PO1, PO3, PO4, PO6 PO7, PO8, PO9, PO10	4
CO6	Evaluate and present a personal professional brand and a communication/coordination portfolio.	PO1, PO2, PO3, PO6, PO7, PO8, PO9, PO10	5

Syllabus:

Module1- Professional & Corporate Communication

Communication models; the creative-industry workplace and culture; internal vs external communication; professional etiquette; cross-cultural and remote communication.

- Communication models and barriers
- Studio/agency culture and norms
- Professional etiquette
- Remote and cross-cultural comms

Module 2 -Verbal, Non-Verbal & Client Communication

Active listening; giving and receiving feedback/critique; non-verbal cues; difficult conversations; client communication and managing expectations; meetings.

- Active listening and feedback
- Non-verbal communication
- Client/stakeholder communication
- Meetings and difficult conversations

Module 3 -Professional Writing

Professional email; proposals and briefs; documentation and reports; the creative brief response; tone and clarity; writing for different audiences.

- Email and professional tone
- Proposals, briefs and reports
- Documentation
- Audience-appropriate writing

Module 4 -Presentation & Pitching

Presentation structure and delivery; the pitch deck; storytelling for ideas; public speaking and stage presence; handling Q&A; pitching creative work to clients/leadership.

- Presentation structure and delivery
- The pitch and the deck
- Public speaking and presence
- Q&A and persuasion

Module 5 -Team & Production Coordination (Line/Film Production)

Team dynamics and roles; the production pipeline and coordination; line/film-production craft — scheduling, budgeting, call sheets, resourcing; pipeline communication; conflict and leadership.

- Team roles and dynamics
- Line/film production coordination
- Schedules, budgets, call sheets
- Pipeline communication and leadership

Module -6 Personal Brand & Professional Portfolio

Personal professional brand; CV/resume and cover letters; LinkedIn/ArtStation presence; the interview; networking; presenting oneself as a creative professional.

- Personal brand and online presence
- CV, cover letter, portfolio framing
- Interview skills
- Networking and professionalism

Text Books

1	**Title Crucial Conversations** Author: Patterson, Grenny, McMillan, Switzler Publisher · McGraw-Hill · 2021 (3rd ed.) Relevance: *Difficult conversations and feedback (Module 2*
2	**Title:** Made to Stick Author: Chip Heath, Dan Heath Publisher · Random House · 2007 Relevance: *Communicating ideas memorably (Module 4).*
3	**Title:** Talk Like TED Author: Carmine Gallo Publisher · St. Martin's Press · 2014 Relevance: *Presentation and public speaking (Module 4).*

4	**Title:** The Film Production Handbook / Producer's Business Handbook Author: Honthaner / Lee & Gillen Publisher · Routledge · current Relevance: *Line/film production coordination (Module 5).*
5	**Title:** HBR Guide to Better Business Writing Author: Bryan A. Garner Publisher · Harvard Business Review · 2012 Relevance: *Professional writing (Module 3).*
6	**Title:** Creative, Inc. / The Freelancer's Bible Author: Crawford / Sara Horowitz Publisher · Chronicle / Workman · current Relevance: *Personal brand and creative career (Module 6).*

26AG23A8E - Lighting, Look-Dev & Rendering

L-T-P-S : 0-0-9-0 **Credits : 3** **Contact Hours : 9** **Pre-requisite : NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain lighting theory, colour, exposure and the offline vs real-time rendering pipelines.	1,2.3.4.5.10	2
CO2	Apply three-point, naturalistic and cinematic lighting setups to light a scene for mood.	1,2.3.4.5.10	3
CO3	Apply look-development — materials, shaders, HDRI, lighting rigs — to develop an asset's look.	1,2.4.5.10	3
CO4	Analyze and execute offline rendering (Arnold) with AOVs, sampling and render settings.	1,2.4.5.10	4
CO5	Analyze and execute real-time rendering and lighting (Unreal/Lumen) and compare to offline.	1,2.4.5.10	4
CO6	Evaluate and present cinematically lit, rendered final frames with a lighting breakdown.	1,2.3.4.5.7,8,9,10	5

Syllabus:

Module-1

Lighting Theory & the Render Pipeline

Light physics and behaviour; colour temperature and exposure; cinematography and mood; offline (ray-trace) vs real-time (raster/Lumen) pipelines; the render pipeline.

- Light behaviour and colour
- Exposure and dynamic range
- Cinematography and mood
- Offline vs real-time rendering

Module-2

Lighting Setups & Mood

Three-point lighting; naturalistic and motivated lighting; key/fill ratios; time-of-day and interior/exterior; lighting for emotion and storytelling; reference matching.

- Three-point and ratios
- Naturalistic/motivated lighting
- Time-of-day and environment
- Lighting for mood/story

Module-3

Look-Development

Look-dev workflow; shaders and materials in a lit context; HDRI and studio lighting rigs; turntables; matching a target look; the look-dev "lighting checklist".

- Look-dev rigs and HDRI
- Shaders in a lit context
- Turntables and presentation
- Matching a target look

Module-4

Offline Rendering (Arnold)

Arnold lights and shaders; sampling and noise; AOVs and render layers; render settings and optimisation; the render-to-comp handoff; render farm basics.

- Arnold lights and shaders
- Sampling, noise and quality
- AOVs and layers
- Render settings and optimisation

Module-5

Real-Time Rendering (Unreal / Lumen)

Real-time lighting with Lumen; reflections and GI; post-process and exposure; Movie Render Queue for high-quality output; real-time vs offline trade-offs; performance.

- Lumen lighting and GI
- Reflections and post-process
- Movie Render Queue output
- Real-time vs offline trade-offs

Module-6

Final Frames & Lighting Breakdown

Producing cinematic final frames; the lighting breakdown (light-by-light); presentation and beauty renders; critique; portfolio lighting reel.

- Cinematic final frames
- Light-by-light breakdown
- Beauty renders and presentation
- Critique and reel

Text Books:

1. Birn, J. (2013). *Digital lighting and rendering* (3rd ed.). New Riders.
2. Epic Games. (n.d.). *Unreal Engine documentation: Lighting and Lumen*. https://dev.epicgames.com/documentation/en-us/unreal-engine
3. Gurney, J. (2010). *Color and light: A guide for the realist painter*. Andrews McMeel Publishing.
4. Mercado, G. (2019). *The filmmaker's eye: Learning (and breaking) the rules of cinematic composition* (2nd ed.). Routledge.
5. Autodesk, & Solid Angle. (n.d.). *Arnold for Maya documentation*. https://help.autodesk.com/view/ARNOL/ENU/
6. Yot, R. (2019). *Light for visual artists: Understanding and using light in art & design* (2nd ed.). Laurence King Publishing.

26AG23A9E -Generative AI & ML Agents

L-T-P-S: 2-1-3-0 Credits : 3 Contact Hours : 6 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain ML fundamentals supervised/unsupervised/reinforcement learning in a game context.	1,4,5,7,10	2
CO2	Apply ML-Agents to set up and train a reinforcement-learning agent in a game environment.	1,4,5,10	3
CO3	Apply reward design, observation and training workflows to shape useful agent behaviour.	1,4,5,10	3
CO4	Analyze and build generative/procedural systems (PCG) for content and behaviour.	1,2,4,5,10	4
CO5	Analyze and integrate trained agents and generative content into a playable game, with ethics.	1,2,4,5,6,7,8,10	4
CO6	Evaluate and present an interactive system using an ML agent or generative AI, justifying design.	1,2,4,5,6,7,8,9,10	5

Syllabus:

Module-1

ML Fundamentals for Games: What machine learning is; supervised/unsupervised/reinforcement learning; neural networks at a conceptual level; where ML fits in games vs classical AI; the tooling landscape.

- ML paradigms overview
- Neural networks conceptually
- ML vs classical game AI
- Tooling and frameworks

Module-2

ML-Agents Setup & Training: Unity ML-Agents toolkit; the training loop; environments, agents and academies; running a first reinforcement-learning training; inference in-game.

- ML-Agents toolkit setup
- Agents, environments, academies
- Running a training session
- Inference and deployment

Module-3

Reward Design & Behaviour Shaping: Observations and actions; reward functions; reward shaping and curriculum learning; debugging training; avoiding reward hacking; tuning for desired behaviour.

- Observations and action spaces
- Reward functions and shaping
- Curriculum learning
- Debugging and tuning

Module-4

Generative & Procedural Systems: Procedural content generation (PCG); noise, grammars and wave-function-collapse; generative systems for levels/items/behaviour; LLM-driven NPC dialogue; controllability.

- PCG techniques
- Grammars and WFC
- Generative levels/items
- LLM-driven NPC behaviour

Module-5

Integration & Ethics: Integrating trained agents/generative content into a playable build; performance and determinism; testing AI behaviour; ethics — fairness, safety, player experience, data.

- Integrating agents into the game
- Performance and determinism
- Testing AI behaviour
- Ethics and player experience

Module-6

The Intelligent System Project & Critique: Building a complete interactive system with an ML agent or generative system; documentation; presenting the design and training; critique and iteration.

- System assembly
- Documentation and metrics
- Presentation of design/training
- Critique and iteration

Text Books:

1. Artificial Intelligence and Games
   Georgios N. Yannakakis, G. N., & Julian Togelius, J. (2018). *Artificial intelligence and games*. Springer.
   Annotation: This book provides a comprehensive introduction to artificial intelligence techniques used in digital games, including machine learning, procedural content generation, and player modeling. It serves as a foundational resource for understanding AI and ML concepts in game development (Modules 1–4).
2. Procedural Content Generation in Games
   Noor Shaker, N., Julian Togelius, J., & Mark J. Nelson, M. J. (2016). *Procedural content generation in games*. Springer.
   Annotation: This text explains the principles and methods of procedural content generation,

covering algorithms for creating levels, maps, and game assets. It is especially useful for studying PCG techniques in Module 4.

3. Reinforcement Learning: An Introduction
   Richard S. Sutton, R. S., & Andrew G. Barto, A. G. (2018). *Reinforcement learning: An introduction* (2nd ed.). MIT Press.
   Annotation: This authoritative textbook introduces the theory and algorithms of reinforcement learning, including Markov decision processes, temporal-difference learning, and policy optimization. It provides the theoretical basis for Unity ML-Agents and reinforcement learning applications in Modules 2 and 3.
4. Deep Learning
   Ian Goodfellow, I., Yoshua Bengio, Y., & Aaron Courville, A. (2016). *Deep learning*. MIT Press.
   Annotation: This book presents the fundamental concepts of deep learning, including neural networks, optimization, and representation learning. It offers the conceptual machine learning background needed for Module 1.
5. Unity Technologies. (n.d.). *Unity ML-Agents documentation*. Retrieved June 30, 2026, from Unity ML-Agents Documentation.
   Annotation: The official documentation provides installation instructions, API references, tutorials, and examples for the Unity ML-Agents toolkit. It is the primary technical resource for implementing reinforcement learning agents in Unity (Modules 2, 3, and 5).
6. AI for Games
   Ian Millington, I. (2019). *AI for games* (3rd ed.). CRC Press.
   Annotation: This book covers both classical and modern game AI techniques, including pathfinding, decision making, behavior trees, steering behaviors, and machine learning. It provides valuable context for comparing traditional game AI with learned AI approaches in Module 1.

26AG23A10E - Mobile Game Development

L-T-P-S : 0-0-6-6 Credits : 3 Contact Hours : 12 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain mobile-game design principles, platforms, the market and the Unity mobile pipeline.	1,2,4,10	2
CO2	Apply mobile-specific design and input (touch, gyro, gestures) to build mobile gameplay.	1,2,4,10	3
CO3	Apply performance optimization assets, draw calls, memory, battery for mobile devices.	1,4,5,10	3
CO4	Analyze and integrate monetization, ads, IAP and analytics responsibly into a mobile game.	1,4,6,7,10	4
CO5	Analyze platform/store requirements and execute the build-test-publish pipeline.	1,4,7,8,10	4
CO6	Evaluate and ship a complete, optimized mobile game and demonstrate Unity certification proficiency.	1,2,4,5,6,7,8,9,10	5

Syllabus:

Module-1

Mobile Game Design & Market: Mobile platforms and the market; mobile-first design; session length and retention; genres that work on mobile; the Unity mobile pipeline; project setup for mobile.

- Mobile market and platforms
- Mobile-first design principles
- Retention and session design
- Unity mobile project setup

Module-2

Mobile Input & Gameplay: Touch input, gestures, multi-touch; accelerometer/gyro; mobile UI and safe areas; responsive layouts for screen sizes; building core mobile gameplay.

- Touch and gestures
- Sensors (gyro/accelerometer)
- Mobile UI and safe areas
- Responsive gameplay

Module-3

Performance Optimisation: Mobile performance constraints; texture/mesh/asset optimisation; draw calls and batching; memory and garbage; battery and thermal; profiling on device.

- Asset and texture optimisation
- Draw calls and batching
- Memory and GC
- On-device profiling

Module-4

Monetisation, Ads & Analytics: Monetisation models (premium, F2P, ads, IAP); ethical monetisation and dark-pattern avoidance; integrating ads and in-app purchases; analytics and live-ops basics.

- Monetisation models
- Ethical monetisation
- Ads and IAP integration
- Analytics and live-ops

Module-5

Build, Test & Publish: Build settings for Android/iOS; signing and store requirements; device testing and QA; store listings and ASO basics; the publish pipeline and compliance.

- Android/iOS build settings
- Signing and store requirements
- Device QA and testing
- Store listing and publishing

Module-6

Finishing and shipping the mobile game; polish and store-ready build; full review of Unity Certified Associate Game Developer objectives; timed practice and mock testing.

- Finishing and shipping
- Store-ready build
- Mapping skills to Unity cert domains
- Timed mock exams and remediation

Text Books:

1. Eyal, N. (2014). *Hooked: How to build habit-forming products*. Portfolio.
2. Hocking, J. (2022). *Unity in action: Multiplatform game development in C#* (3rd ed.). Manning Publications.
3. Manning, J., & Buttfield-Addison, P. (2017). *Mobile game development with Unity*. O'Reilly Media.
4. Nystrom, R. (2014). *Game programming patterns*. Genever Benning. https://gameprogrammingpatterns.com/
5. Schell, J. (2019). *The art of game design: A book of lenses* (3rd ed.). CRC Press.
6. Unity Technologies. (n.d.). *Unity User Manual*. https://docs.unity3d.com/Manual/
7. Unity Technologies. (n.d.). *Unity best practices and optimization*. https://docs.unity3d.com/

26AG23F8E- Camera Projections

L-T-P-S : 0-0-9-0 Credits: 3 Contact Hours: 9 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain matte painting, camera projection, 2.5D vs 3D, and the set-extension pipeline.	PO1, PO2, PO5, PO10	2
CO2	Apply digital matte-painting techniques to create a photoreal environment plate.	PO1, PO2,PO3, PO5, PO10	3
CO3	Apply camera projection onto geometry to give a matte painting parallax and depth.	PO1, PO2, PO5, PO10	3
CO4	Analyze and build 2.5D and full-3D set extensions integrated with a tracked camera.	PO1, PO2, PO5, PO10	4
CO5	Analyze and integrate projected environments with live-action plates in compositing.	PO1, PO2, PO5, PO9, PO10	4
CO6	Evaluate and present a finished projected set-extension shot with a breakdown.	PO1, PO2, PO3, PO5, PO7,PO8, PO9, PO10	5

Syllabus:

Module - I: Matte Painting & Projection Foundations

History and role of matte painting; 2D vs 2.5D vs 3D; camera projection theory; the set-extension pipeline; the relationship to tracking and compositing.

- Matte painting in film
- 2D / 2.5D / 3D approaches
- Projection theory
- Set-extension pipeline

Module – II: Digital Matte Painting

Photo-bashing and painting; perspective and scale; light and atmosphere matching; seamless blending; building a photoreal environment plate in Photoshop/Nuke.

- Photo-bashing and painting
- Perspective and scale
- Light/atmosphere matching
- Building a DMP plate

Module - III: Camera Projection

Projecting a painting onto simple geometry; the projection camera; cards and proxy geo; giving a 2D painting parallax; multi-plane projection; Nuke/Maya projection.

- Projection setup
- Cards and proxy geometry
- Parallax from a still
- Multi-plane projection

Module- IV: 2.5D & 3D Set Extensions

Extending a set onto a tracked plate; 2.5D layered projection; full-3D environment build for big camera moves; combining projection with CG geo; matching the live-action camera.

- Tracked set extension
- 2.5D layered projection
- 3D environment for big moves
- Projection + CG geometry

Module - V: Integration with Live-Action

Compositing the projected environment with the plate; edge blending and atmosphere; colour and grain matching; light interaction; selling the extension invisibly.

- Comp integration with plate
- Edge, atmosphere, blending
- Colour and grain match
- Selling the extension

Module-VI: Finished Shot & Breakdown

Personal professional brand; CV/resume and cover letters; LinkedIn/ArtStation presence; the interview; networking; presenting oneself as a creative professional.

- Personal brand and online presence
- CV, cover letter, portfolio framing
- Interview skills
- Networking and professionalism

Reference Books

Title	Author	Publisher · Year	Relevance
The Invisible Art: The Legends of Movie Matte Painting	Cotta Vaz & Barron	Chronicle Books · 2002	*History and craft of matte painting (Modules 1–2).*
d'artiste: Matte Painting	Ballend, Mattingly et al.	Ballistic Publishing · 2007	*Professional DMP technique (Module 2).*
Digital Compositing for Film and Video	Steve Wright	Routledge (Focal Press) · 2017	*Projection and integration (Modules 3, 5).*
The VES Handbook of Visual Effects	Visual Effects Society	Routledge · 2024 (3rd ed.)	*Set extension within the VFX pipeline.*
Color and Light	James Gurney	Andrews McMeel · 2010	*Light/atmosphere for painted environments (Modules 2, 5).*
Nuke / Maya projection documentation	Foundry / Autodesk	current	*Projection tool reference (Modules 3–4).*

26AG23F9E-Documentary Film Making

L-T-P-S : 0-0-15-0 Credits: 5 Contact Hours: 15 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain documentary modes, history, ethics and the documentary production pipeline.	PO1, PO2, PO3, PO6, PO7, PO9, PO10	2
CO2	Apply research, story-finding and development to build a documentary proposal and access plan.	PO1, PO3, PO6, PO7, PO8, PO9, PO10	3
CO3	Apply verité, observational and interview shooting techniques to capture real footage.	PO1, PO2, PO3, PO6, PO7, PO8, PO9, PO10	3
CO4	Analyze and apply documentary directing — interviewing, ethics, consent, working with subjects.	PO1, PO3, PO6, PO7, PO8, PO9, PO10	4
CO5	Analyze and apply documentary editing — structure, narrative, voice, archive and music.	PO1, PO2, PO3, PO6, PO7, PO9, PO10	4
CO6	Evaluate and present a complete short documentary that tells a true story ethically and well.	PO1, PO2, PO3, PO6, PO7, PO8, PO9, PO10	5

Syllabus:

Module - I: Documentary Modes, History & Ethics

Documentary modes (observational, participatory, expository, poetic); history and landmark films; documentary ethics and truth; the pipeline; consent and representation.

- Documentary modes
- History and landmark films
- Ethics and truth
- Consent and representation

Module – II: Research, Development & Access

Finding a story; research and fact-checking; the documentary proposal and treatment; access and subject relationships; risk and logistics; the shooting plan.

- Story-finding and research
- Proposal and treatment
- Access and relationships
- Logistics and planning

Module - III: Verité & Observational Shooting

Run-and-gun and verité technique; documentary camera and sound; shooting for the edit; capturing moments; available-light and location sound; B-roll and coverage.

- Verité camera technique
- Documentary sound
- Shooting for the edit
- B-roll and coverage

Module- IV: Directing & The Interview

The documentary interview — setup, questions, listening; building trust; ethics of editing real people; directing without fabricating; working with vulnerable subjects.

- Interview craft
- Building trust

- Ethics of representation
- Directing real subjects

Module - V: Documentary Editing & Structure

Finding structure in the footage; the paper edit; narrative and voice; using archive; music and sound; ethics in the edit; pacing a true story.

- Paper edit and structure
- Narrative and voice
- Archive and music
- Ethics in the edit

Module-VI: The Short Documentary & Critique

Completing the short documentary; finishing and delivery; the festival/portfolio cut; presentation; critique and reflection on ethics and craft.

- Finishing the documentary
- Festival/portfolio cut
- Presentation
- Critique and ethical reflection

Reference Books

Title	Author	Publisher · Year	Relevance
Directing the Documentary	Michael Rabiger	Routledge (Focal Press) · 2020 (7th ed.)	*The standard documentary text (all modules).*
Introduction to Documentary	Bill Nichols	Indiana University Press · 2017 (3rd ed.)	*Modes and theory (Module 1).*
Documentary Storytelling	Sheila Curran Bernard	Routledge (Focal Press) · 2016 (4th ed.)	*Structure and narrative (Modules 2, 5).*
Producing & Directing the Short Film and Video	Irving & Rea	Routledge (Focal Press) · 2015	*Production craft (Modules 2–4).*
The Documentary Filmmaking Master Class	Pizzello / various	Allworth · 2016	*Practitioner insight (Modules 3–5).*
Cut to the Chase / documentary editing texts	Various	current	*Documentary editing (Module 5).*

26AG23F10E-Motion Graphics & Generative AI

L-T-P-S : 2-1-3-0 Credits: 3 Contact Hours: 6 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain motion-design principles, the After Effects interface and the motion-graphics pipeline.	PO1, PO2, PO3, PO5, PO9, PO10	2
CO2	Apply animation principles, keyframing and easing to animate shapes, text and logos.	PO1, PO2, PO5, PO9, PO10	3
CO3	Apply kinetic typography and design-in-motion to build an animated title/graphics sequence.	PO1, PO2, PO3, PO5, PO9, PO10	3
CO4	Analyze and apply compositing, effects and expressions for motion VFX and automation.	PO1, PO2, PO5, PO9, PO10	4
CO5	Analyze and integrate generative-AI workflows into motion design responsibly.	PO1, PO2, PO5, PO6, PO7, PO9, PO10	4
CO6	Evaluate and present a finished motion-graphics piece and demonstrate After Effects certification proficiency.	PO1, PO2, PO3, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module - I: Motion Design & After Effects Foundations

Motion-design principles; the After Effects interface; compositions, layers, the timeline; rendering basics; where motion graphics fit across media.

- Motion-design principles
- AE interface and compositions
- Layers and the timeline
- Render and output basics

Module – II: Animation Principles & Keyframing

Keyframing and the graph editor; easing and timing; the 12 principles in motion graphics; animating shapes and logos; the squash/stretch/anticipation of MG.

- Keyframes and easing
- Graph editor
- Principles in motion design
- Shape and logo animation

Module - III: Kinetic Typography & Design-in-Motion

Animating type; kinetic typography; title sequences and lower-thirds; layout and rhythm in motion; brand/style consistency; the animated explainer.

- Type animation
- Kinetic typography
- Titles and lower-thirds
- Rhythm and brand in motion

Module- IV: Compositing, Effects & Expressions

Compositing in AE; masks, track mattes, blending; effects and motion VFX; 3D layers and camera; expressions for automation; basic tracking in AE.

- Masks, mattes, blending
- Effects and motion VFX
- 3D layers and camera
- Expressions and automation

Module - V: Generative-AI Motion Workflows

AI-generated elements and textures for motion; AI-assisted rotoscoping and matte; generative video/transitions; AI upscaling; integrating AI into the MG pipeline; ethics and provenance.

- AI elements for motion
- AI roto/matte assists
- Generative transitions/video
- Pipeline integration and ethic

Module-VI: Finished Piece & Certification Readiness

Completing a finished motion-graphics piece; render and delivery; full review of Adobe After Effects certification objectives; timed practice and mock testing.

- Finishing and delivery
- Mapping skills to AE cert domains
- Timed mock exams and remediation
- Presentation and reel

Reference Books

Title	Author	Publisher · Year	Relevance
Adobe After Effects Classroom in a Book	Lisa Fridsma, Brie Gyncild	Adobe Press · 2023	*Official AE training and cert prep (all modules).*
Creating Motion Graphics with After Effects	Chris & Trish Meyer	Routledge (Focal Press) · 2010 (5th ed.)	*The deep MG/AE reference (Modules 2–4).*
The Animator's Survival Kit	Richard Williams	Faber & Faber · 2009	*Animation principles in motion (Module 2).*
Motion Graphics: Principles and Practices	Crook & Beare	Bloomsbury · 2016	*Motion-design theory and practice (Modules 1, 3).*
Design for Motion	Austin Shaw	Routledge (Focal Press) · 2019 (2nd ed.)	*Motion-design craft and process (Modules 1, 3).*
AI motion / generative-tool documentation	Adobe / vendors	current	*Generative-AI motion workflows (Module 5).*

26AG3114E - Virtual Production & Real-time Cinematics

L-T-P-S : 0-0-9-0 **Credits : 3** **Contact Hours : 9** **Pre-requisite : NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the virtual-production pipeline, LED-volume/ICVFX and the real-time cinematics workflow.	1,2,3,4,5,8,10	2
CO2	Apply Unreal real-time environment and scene setup for virtual production and cinematics.	1,2,4,5,10	3
CO3	Apply virtual cameras, cinematography and Sequencer to build a real-time cinematic sequence.	1,2,3,4,5,9,10	3
CO4	Analyze and execute in-camera VFX / LED-volume technique, including camera tracking and frustum.	1,2,4,5,10	4
CO5	Analyze and apply the on-set VP/brain-bar workflow, live compositing and team roles.	1,4,5,8,9,10	4
CO6	Evaluate and present a virtual-production shot or real-time cinematic and demonstrate Unreal certification proficiency.	1,2,3,4,5,7,8,9,10	5

Syllabus:

Module-1

Virtual Production Foundations: What virtual production is; the VP spectrum (previs, simulcam, LED volume, ICVFX); the real-time pipeline; hardware and the volume; how film and games converge here.

- VP spectrum and history
- LED volume and ICVFX overview
- The real-time pipeline
- Film-games convergence

Module-2

Real-Time Environments in Unreal: Building/assembling real-time environments; lighting for VP; optimisation for real-time; world-building for the volume; environments that read on an LED wall.

- Real-time environment setup
- Lighting for VP
- Real-time optimisation
- Environments for the volume

Module-3

Virtual Cameras & Real-Time Cinematics: Virtual cameras and VCam; cinematography in real-time; Sequencer for cinematics; camera moves and lensing; building a real-time cinematic sequence.

- Virtual cameras / VCam
- Real-time cinematography

- Sequencer cinematics
- Lensing and moves

Module-4

In-Camera VFX & LED Volume: ICVFX technique; the camera frustum and inner/outer; camera tracking on set; nDisplay basics; colour and the wall; common VP pitfalls and how to avoid them.

- ICVFX and the frustum
- Camera tracking
- nDisplay basics
- Colour and the LED wall

Module-5

On-Set Workflow & The Brain Bar: The VP on-set workflow; the brain-bar roles; live compositing and simulcam; communication between film crew and Unreal operators; data and asset management on set.

- On-set VP workflow
- Brain-bar roles
- Live compositing / simulcam
- Crew↔engine communication

Module-6

VP Shot / Cinematic & Certification Readiness: Completing a VP shot or real-time cinematic; rendering/capture; full review of Epic Unreal credential objectives; timed practice and mock testing; presentation.

- Finishing the VP shot/cinematic
- Mapping skills to Unreal cert
- Timed mock testing
- Presentation and reel

Textbooks:

1. The Virtual Production Field Guide, Volume 1. (2021). *The Virtual Production Field Guide* (Vol. 1). Epic Games. Epic Games Virtual Production resources
2. The Virtual Production Field Guide, Volume 2. (2021). *The Virtual Production Field Guide* (Vol. 2). Epic Games. Epic Games Virtual Production resources
3. Epic Games. (n.d.). *Unreal Engine documentation: Virtual Production*. Retrieved June 30, 2026, from Unreal Engine Virtual Production documentation
4. The Filmmaker's Eye. (2019). *The filmmaker's eye: Learning (and breaking) the rules of cinematic composition* (2nd ed.). Routledge.
5. The VES Handbook of Visual Effects. (2024). *The VES handbook of visual effects: Industry standard VFX practices and procedures* (3rd ed.). Routledge.
6. Epic Games. (n.d.). *Cinematics and Sequencer*. Retrieved June 30, 2026, from Unreal Engine cinematics documentation
   Real-Time Rendering. (2018). *Real-time rendering* (4th ed.). CRC Press.

26AG31A11E - 3D Live Integration

L-T-P-S : 0-0-9-0 **Credits : 3** **Contact Hours : 9** **Pre-requisite : NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the CG-to-live-action integration pipeline and what sells a believable composite.	1,2,5,10	2
CO2	Apply plate analysis and match-moving to recover the camera and scene from footage.	1,5,10	3
CO3	Apply CG lighting matched to the plate using HDRI, reference and lighting reconstruction.	1,2,5,10	3
CO4	Analyze and produce shadows, contact, reflections and interaction between CG and plate.	1,2,5,10	4
CO5	Analyze and render integration passes (AOVs, mattes, shadow/reflection) for compositing.	1,2,5,10	4
CO6	Evaluate and present a finished CG-in-live-action shot with an integration breakdown.	1,2,3,5,7,8,9,10	5

Syllabus:

Module-1

Integration Foundations: The CG-to-live pipeline; what sells a composite (lighting, perspective, contact, grain); the integration checklist; the relationship to tracking, lighting and comp.

- The integration pipeline
- What sells a composite
- The integration checklist
- Pipeline relationships

Module-2

Plate Analysis & Match-Move: Reading a plate; lens and sensor; camera tracking and solving; set/scene reconstruction; object tracking; exporting the camera to 3D; scale and ground plane.

- Plate and lens analysis
- Camera tracking/solving
- Scene reconstruction
- Camera export to 3D

Module-3

Lighting to the Plate: HDRI capture and use; reconstructing the plate's lighting; reference balls/charts; matching colour and exposure; lighting CG so it belongs in the shot.

- HDRI and reference
- Reconstructing plate lighting
- Colour/exposure match
- Believable CG lighting

Module-4

Shadows, Contact & Interaction: Contact shadows and grounding; cast shadows onto the plate; reflections and indirect light; interaction (dust, displacement); holdouts and shadow catchers.

- Contact and grounding
- Cast shadows onto plate
- Reflections and bounce
- Holdouts / shadow catchers

Module-5

Render Passes for Integration: AOVs and render layers for comp; beauty, shadow, reflection, ID and utility passes; deep data; render setup for integration; the render-to-comp handoff.

- AOVs and layers
- Shadow/reflection/ID passes
- Deep data basics
- Render-to-comp handoff

Module-6

Final Composite & Breakdown: Compositing the CG into the plate; grain, defocus, grade and integration polish; the final shot; the integration breakdown; presentation and portfolio.

- Comp the CG into the plate
- Grain, defocus, grade
- Integration breakdown
- Presentation and portfolio

Text Books:

- The VES Handbook of Visual Effects. (2024). *The VES handbook of visual effects: Industry standard VFX practices and procedures* (3rd ed.). Routledge.
- Digital Compositing for Film and Video. (2017). *Digital compositing for film and video: Production workflows and techniques* (4th ed.). Routledge.
- Digital Lighting & Rendering. (2013). *Digital lighting & rendering* (3rd ed.). New Riders.
- Matchmoving: The Invisible Art of Camera Tracking. (2012). *Matchmoving: The invisible art of camera tracking* (2nd ed.). Sybex.
- The Art and Science of Digital Compositing. (2008). *The art and science of digital compositing* (2nd ed.). Morgan Kaufmann.
- Foundry Nuke documentation. (n.d.). *Nuke documentation*. Retrieved June 30, 2026.
- Autodesk Maya documentation. (n.d.). *Maya documentation*. Retrieved June 30, 2026.
- Autodesk Arnold documentation. (n.d.). *Arnold documentation*. Retrieved June 30, 2026.

26AG31A13E - Simulations & Procedural Workflow

L-T-P-S: 0-0-9-0 **Credits : 3** **Contact Hours : 9** **Pre-requisite : NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the procedural/node-based paradigm, Houdini's architecture and the FX pipeline.	1,2,4,5,10	2
CO2	Apply procedural modelling and the node workflow to build art-directable procedural systems.	1,2,4,5,10	3
CO3	Apply particle and dynamics simulation to create FX (sparks, debris, crowds).	1,2,4,5,10	3
CO4	Analyze and execute fluid, smoke, fire and pyro simulations with control and art direction.	1,2,5,10	4
CO5	Analyze and execute rigid-body destruction and the simulate-cache-render workflow.	1,2,4,5,10	4
CO6	Evaluate and present a finished, rendered FX/procedural shot with a breakdown.	1,2,3,4,5,7,8,9,10	5

Syllabus:

Module-1

Procedural Thinking & Houdini: The procedural/node-based paradigm; Houdini's architecture (SOPs, DOPs, contexts); attributes and the geometry spreadsheet; why procedural matters; the FX pipeline.

- Procedural paradigm
- Houdini contexts and nodes
- Attributes and geometry
- The FX pipeline

Module-2

Procedural Modelling & Systems: Procedural geometry; scattering and instancing; VEX basics; building reusable procedural systems and digital assets (HDAs); art-directable parameters.

- Procedural geometry
- Scatter and instancing
- VEX basics
- HDAs and parameters

Module-3

Particles & Dynamics: POP particle systems; forces and behavior; sparks, debris, swarms; basic crowd; controlling and art-directing simulations; caching particles.

- POP particle systems
- Forces and behavior
- Sparks/debris/swarms
- Art-directing sims

Module-4

Fluids, Smoke & Pyro: FLIP fluids; smoke and pyro (fire/explosions); volumes; sourcing and shaping sims; resolution vs cost; controlling fluid and pyro for the shot.

- FLIP fluids
- Smoke and pyro
- Volumes and sourcing
- Control vs cost

Module-5

Destruction & the Sim Pipeline: Rigid-body destruction; fracturing and constraints; secondary debris/dust; the simulate→cache→render workflow; passing sims to lighting/comp; optimization.

- RBD destruction
- Fracturing and constraints
- Secondary FX
- Cache and render workflow

Module-6

Rendered FX Shot & Breakdown: Completing a rendered FX/procedural shot; rendering volumes and sims; integrating with a scene; the breakdown; presentation and FX reel.

- Rendered FX shot
- Rendering sims/volumes
- Integration
- Breakdown and reel

Text Books:

1. *Houdini on the spot*. (2008). Routledge (Focal Press).
2. *The art of fluid animation*. (2015). CRC Press.
3. *The magic of Houdini*. (2005). Thomson Course Technology.
4. SideFX. (n.d.). *Houdini documentation*. Retrieved June 30, 2026, from SideFX Houdini documentation
5. Shaker, N., Togelius, J., & Nelson, M. J. (2016). *Procedural content generation in games: A textbook and an overview of current research*. Springer.
6. Visual Effects Society. (2024). *The VES handbook of visual effects: Industry standard VFX practices and procedures* (3rd ed.). Routledge.

26AG31A12E - Multiplayer Games & Networking

L-T-P-S : 0-0-9-0 **Credits : 3** **Contact Hours :9** **Pre-requisite : NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO	BTL
CO1	Explain networking models, client-server vs P2P, and the multiplayer game architecture.	1,4,10	2
CO2	Apply replication and state synchronisation to share game state across the network.	1,4,10	3
CO3	Apply RPCs, authority and ownership to implement networked gameplay actions.	1,4,10	3
CO4	Analyze and implement client-side prediction, interpolation and lag compensation.	1,4,10	4
CO5	Analyze and address bandwidth, security/cheating, matchmaking and session management.	1,4,7,8,10	4
CO6	Evaluate and present a playable, tested networked multiplayer game.	1,4,7,8,9,10	5

Syllabus:

Module-1

Networking Models & Architecture: Networking fundamentals; client-server vs peer-to-peer; authority models; the multiplayer game loop; transport and protocols; the engine's networking model.

- Networking fundamentals
- Client-server vs P2P
- Authority models
- Engine networking overview

Module-2

Replication & State Sync: Replicating actors and variables; relevancy and priority; state synchronisation; replication graphs; keeping clients consistent with the server.

- Actor/variable replication
- Relevancy and priority
- State synchronisation
- Client consistency

Module-3

RPCs, Authority & Gameplay: Remote procedure calls (server/client/multicast); ownership and authority; networked gameplay actions; spawning and possession; networked events.

- RPC types
- Ownership and authority
- Networked gameplay actions
- Spawning and events

Module-4

Prediction & Lag Compensation: Latency and its effects; client-side prediction and reconciliation; interpolation and extrapolation; lag compensation; making networked play feel responsive.

- Latency effects
- Client-side prediction
- Interpolation/extrapolation
- Lag compensation

Module-5

Bandwidth, Security & Sessions: Bandwidth optimisation; cheating and server authority/validation; matchmaking and sessions; connection handling and reconnection; dedicated vs listen servers.

- Bandwidth optimisation
- Anti-cheat / validation
- Matchmaking and sessions
- Server types and connections

Module-6

Networked Game & Testing:
Completing a playable networked game; multi-client testing; simulating latency/packet loss; debugging netcode; presentation and play-test.

- Finishing the networked game
- Multi-client testing
- Simulating poor networks
- Debugging and play-test

Text Books:

1. Epic Games. (n.d.). *Unreal Engine networking documentation*. https://dev.epicgames.com/documentation/
2. Glazer, J., & Madhav, S. (2015). *Multiplayer game programming: Architecting networked games*. Addison-Wesley Professional.
3. Gregory, J. (2018). *Game engine architecture* (3rd ed.). CRC Press.
4. Gaffer On Games. (n.d.). *Network programming resources*. https://gafferongames.com/
5. Nystrom, R. (2014). *Game programming patterns*. Genever Benning. https://gameprogrammingpatterns.com/
6. Unity Technologies. (n.d.). *Netcode for GameObjects documentation*. https://docs.unity3d.com/Packages/com.unity.netcode.gameobjects/

26AG31F11E - Digital Media Strategy and Marketing

L-T-P-S : 2-1-3-0 Credits : 3 Contact Hours :6 Pre-requisite : NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO	BTL
CO1	Explain the digital-media landscape, platforms, formats and the content economy.	1,2,3,4,6,9,10	2
CO2	Apply content strategy and audience analysis to plan platform-targeted content.	1,2,3,4,6,9,10	3
CO3	Apply platform-native design and formats to design content for specific platforms.	1,2,3,4,9,10	3
CO4	Analyze and produce short-form, social and branded content end to end.	1,2,35,8,9,10	4
CO5	Analyze performance and analytics to iterate and improve digital content.	1,2,6,7,9,10	4
CO6	Evaluate and present a cross-platform digital-media campaign or content package.	1,2,3,4,6,9,10	5

Syllabus:

Module 1-The Digital Media Landscape

Platforms and formats (social, streaming, web, interactive); the creator and content economy; how content is distributed and monetised; the digital media professional's roles.

- Platforms and formats
- Creator/content economy
- Distribution and monetisation
- Roles in digital media

Module 2- Content Strategy & Audience

Content strategy; audience and personas; the content funnel; planning and calendars; matching content to platform and goal; brand voice and consistency.

- Strategy and goals
- Audience and personas
- Content planning/calendars
- Platform-goal fit

Module 3- Platform-Native Design

Designing for each platform's format and behaviour; aspect ratios and safe areas; vertical/short-form design; thumbnails and hooks; accessibility and captions.

- Per-platform format design
- Vertical/short-form
- Thumbnails and hooks
- Accessibility

Module 4- Producing Short-Form & Branded Content

End-to-end short-form production; branded content and briefs; the hook-retain-payoff structure; efficient shooting/editing for volume; repurposing across platforms.

- Short-form production
- Branded content/briefs
- Hook-retain-payoff
- Repurposing content

Module 5- Analytics & Iteration

Platform analytics and KPIs; reading performance; A/B and iteration; what to learn from data; ethics of engagement design; sustainable content practice.

- Analytics and KPIs
- Reading performance
- Iteration and A/B
- Ethics and sustainability

Module 6- The Campaign & Critique

Completing a cross-platform content package/campaign; presentation with strategy and results rationale; critique; portfolio of digital content.

- Cross-platform campaign
- Strategy presentation
- Critique
- Digital content portfolio

Reference Books:

Title	Author	Publisher · Year	Relevance
Contagious: How to Build Word of Mouth	Jonah Berger	Simon & Schuster · 2013	Why content spreads (Modules 2, 4).
Made to Stick	Chip Heath, Dan Heath	Random House · 2007	Memorable content design (Modules 3–4).
Don't Make Me Think	Steve Krug	New Riders · 2014 (3rd	Usability/design thinking for digital (Module 3).

Title	Author	Publisher · Year	Relevance
		ed.)	
Digital Marketing / Content Strategy texts	Various	current	Strategy and analytics (Modules 2, 5).
Platform documentation & creator guides	YouTube, Meta, TikTok etc.	online · current	Platform-native formats and analytics (Modules 1, 3, 5).
Universal Principles of Design	Lidwell, Holden, Butler	Rockport · 2010	Design fundamentals for content (Module 3).

26AG31F12E- Digital Film Making

L-T-P-S: 0-0-15-0 Credits: 5 Contact Hours: 15 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the end-to-end film production pipeline and the director's and producer's roles.	PO1, PO2, PO3, PO5, PO8, PO9, PO10	2
CO2	Apply development and pre-production script, breakdown, schedule, budget to plan a short film.	PO1, PO2, PO3, PO7, PO8, PO9, PO10	3
CO3	Apply directing and cinematography to realize the film's vision on set.	PO1, PO2, PO3, PO5, PO8, PO9, PO10	3
CO4	Analyze and execute production and on-set workflow, directing cast and crew.	PO1, PO2, PO3, PO7, PO8, PO9, PO10	4
CO5	Analyze and execute post edit, sound, VFX and grade to finish the film.	PO1, PO2, PO3, PO5, PO8, PO9, PO10	4
CO6	Evaluate and present a complete, delivered, festival-ready short film.	PO1, PO2, PO3, PO5, PO7, PO8, PO9, PO10	5

Syllabus:

Module - I: The Film Pipeline & Authorship

End-to-end film production; the director's and producer's roles; authorship and vision; how all crafts integrate; the short-film form; case studies.

- End-to-end pipeline
- Director/producer roles
- Authorship and vision
- The short-film form

Module – II: Development & Pre-Production

Finalising script; breakdown and shot list; storyboard; schedule and budget; casting; locations; the pre-production package; risk and logistics.

- Script and breakdown
- Shot list and boards
- Schedule and budget
- Casting and locations

Module - III: Directing & Cinematography

Directing for the camera; blocking and coverage; working with the DP; lensing and lighting choices; visual storytelling; the director-actor relationship.

- Directing the camera
- Blocking and coverage
- Cinematography choices
- Directing performance

Module- IV: Production & On-Set

Running the set; the shoot day; AD workflow; cast and crew direction; problem-solving on set; continuity and data management; safety.

- Running the set
- The shoot day / AD flow
- Cast and crew direction
- Continuity and data

Module - V: Post: Edit, Sound, VFX, Grad

Editing the film; sound design and mix; VFX/compositing integration; colour grade; the full finishing pipeline; delivery specs.

- Editing
- Sound design and mix
- VFX and grade
- Finishing and delivery

Module-VI: Delivery, Festival & Critique

Final delivery; the festival cut and strategy; screening and presentation; critique; reflection on authorship and craft; the reel centrepiece.

- Final delivery
- Festival cut and strategy
- Screening/presentation
- Critique and reflection

Reference Books

Title	Author	Publisher · Year	Relevance
Directing: Film Techniques and Aesthetics	Michael Rabiger, Mick Hurbis-Cherrier	Routledge · 2020 (6th ed.)	*The core directing text (Modules 1, 3–4).*
The Filmmaker's Handbook	Ascher & Pincus	Plume · 2012 (revised)	*End-to-end production reference (all modules).*
In the Blink of an Eye	Walter Murch	Silman-James · 2001 (2nd ed.)	*Editing philosophy (Module 5).*
Film Directing Shot by Shot	Steven D. Katz	Michael Wiese · 2019 (2nd ed.)	*Visualisation and coverage (Modules 2–3).*
On Directing Film	David Mamet	Penguin · 1992	*Directing and storytelling (Modules 1, 3).*
Producing & Directing the Short Film and Video	Irving & Rea	Routledge (Focal Press) · 2015	*Short-film production (Modules 2, 4).*

26AG31F13E– Television Production

L-T-P-S : 2-1-6-0 **Credits: 4** **Contact Hours: 9** **Pre-requisite: NIL**

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain the television production pipeline, formats, crew roles and the studio/control-room workflow.	PO1, PO2, PO3, PO8, PO9, PO10	2
CO2	Apply single- and multi-camera setup, framing and movement to capture broadcast-style footage.	PO1, PO2, PO3, PO8, PO9, PO10	3
CO3	Apply studio lighting and audio for television to achieve a clean, professional technical standard.	PO1, PO2, PO3, PO8, PO9, PO10	3
CO4	Analyze and operate live switching, vision mixing and the control-room workflow for a multi-cam show.	PO1, PO2, PO3, PO8, PO9, PO10	4
CO5	Analyze production management — scripting, rundowns, scheduling and crew coordination — for a show.	PO1,PO3, PO7,PO8, PO9,PO10	4
CO6	Evaluate and produce a complete broadcast-style program segment to professional standards.	PO1, PO2, PO3,PO6, PO7, PO8,PO9 PO10	5

Syllabus:

Module - I: TV Pipeline, Formats & Roles

The television production pipeline; genres and formats (news, talk, magazine, episodic, live events); crew roles and the studio/control-room layout; pre-production for TV.

- TV production stages and pipeline
- Formats and genres
- Crew roles and responsibilities
- Studio and control-room layout

Module-II: Single- & Multi-Camera Production

Camera operation for TV; framing and headroom for broadcast; multi-camera coverage and crossing the line; camera blocking; ENG/field vs studio shooting.

- Broadcast framing and composition
- Multi-camera coverage
- Camera blocking and continuity
- Field (ENG) vs studio

Module-III: Studio Lighting & Audio

Studio lighting grids and three-point for TV; lighting for multi-camera; broadcast audio — mics, mixing, levels; talkback and comms; technical broadcast standards.

- Studio lighting for multi-cam
- Broadcast audio and mixing
- Mic selection and placement
- Talkback and broadcast standards

Module-IV: Live Switching & the Control Room

The vision mixer/switcher; live cutting and transitions; graphics, lower-thirds and CG insertion; the director's role and calling a show; recording vs live-to-air.

- Vision mixing and live cutting
- Graphics and lower-thirds
- Directing and calling the show
- Live vs recorded workflow

Module-V: Production Management & the Rundown

Scripting and the rundown/run-of-show; scheduling and call sheets; crew coordination and communication; budgeting basics; working to deadline; the floor manager's role.

- Scripts and rundowns
- Scheduling and call sheets
- Crew coordination
- Deadline and floor management

Module-VI: The Program Segment & Critique

Producing a complete broadcast-style segment in defined crew roles; live or as-live recording; review against broadcast standards; critique and role rotation.

- Full segment production in crew roles
- Live/as-live recording
- Review vs broadcast standards
- Critique and role rotation

Reference Books:

Title	Author	Publisher · Year	Relevance
Television Production Handbook	Herbert Zettl	Cengage Learning · 2014 (12th ed.)	*The standard comprehensive TV-production text (all modules).*
Television Production & Broadcast Journalism	Phillip L. Harris	Goodheart-Willcox · 2017	*Studio workflow and roles (Modules 1, 5).*
Single-Camera Video Production	Robert B. Musburger	Routledge (Focal Press) · 2014 (6th ed.)	*Field/ENG production technique (Module 2).*
Directing & Producing for Television	Ivan Cury	Routledge (Focal Press) · 2016 (4th ed.)	*Directing and the control room (Module 4).*
Audio in Media	Stanley R. Alten	Cengage · 2013 (10th ed.)	*Broadcast audio fundamentals (Module 3).*
The Filmmaker's Handbook	Steven Ascher, Edward Pincus	Plume · 2012	*Production craft reference (Modules 2–3).*

26IE3003E– Portfolio and Showreel Audit

L-T-P-S : 2-1-6-0 Credits: 4 Contact Hours: 9 Pre-requisite: NIL

Mapping of Course outcomes with PO/PSO:

CO#	Course Outcome	PO/PSO	BTL
CO1	Explain what a role-targeted portfolio/showreel requires and how studios evaluate them.	1,2,9,10	2
CO2	Apply a self-audit to select a target role and the work that best supports it.	1,2,9,10	3
CO3	Apply reel editing, shot selection, ordering and pacing to build a compelling showreel.	1,2,3,9,10	3
CO4	Analyze and finish work and breakdowns to portfolio standard, addressing weaknesses.	1,2,3,4,5,9,10	4
CO5	Analyze and build an online presence, CV and applications targeted to the role.	1,2,7,8,9,10	4
CO6	Evaluate and present a market-ready reel/portfolio and demonstrate interview readiness.	1,2,3,7,8,9,10	5

Syllabus:

Module - I: The Industry-Ready Reel & Portfolio

What studios look for; reel vs portfolio by discipline; how reels are reviewed; common mistakes; role archetypes and their expected work; benchmarking against hired reels.

- What studios evaluate
- Reel vs portfolio by role
- How reels are reviewed
- Benchmarking

Module-II: Self-Audit & Role Targeting

Auditing all prior work and Annual Studios; identifying strengths; choosing a target role; mapping work to that role; identifying gaps to fill or fix.

- Full work audit
- Strengths and target role
- Work-to-role mapping
- Gap analysis

Module-III: Reel Editing & Shot Selection

Selecting the strongest shots; ordering and pacing; the first-7-seconds rule; music and titles; reel length by discipline; cutting the showreel.

- Shot selection
- Order and pacing
- Opening strong
- Cutting the reel

Module-IV: Finishing & Breakdowns

Bringing key pieces to portfolio finish; shot breakdowns and role clarity (what you did); fixing weak work; consistency and presentation polish.

- Finishing key pieces
- Breakdowns and credit clarity
- Fixing weaknesses
- Presentation polish

Module-V: Online Presence & Applications

ArtStation/portfolio site/Vimeo/LinkedIn; CV and cover letter for the target role; tailoring applications; where and how to apply; the studio hiring process.

- Portfolio site and presence
- CV and cover letter
- Tailored applications
- Where/how to apply

Module-VI: Final Review & Interview Readiness

Final reel/portfolio review panel; mock interviews and portfolio walk-throughs; handling feedback; the elevator pitch; readiness for T8–9 internships and first roles.

- Final review panel
- Mock interviews
- Portfolio walk-through
- Internship/job readiness

Reference Books

Title	Author	Publisher · Year	Relevance
The Animator's Survival Kit	Richard Williams	Faber & Faber · 2009	*Benchmark of animation quality for reels (Modules 1, 4).*

Setting Up Your Shots	Jeremy Vineyard	Michael Wiese · 2008 (2nd ed.)	*Shot quality awareness for reels (Module 3).*
The Art of the Storyboard / portfolio guides	Various	current	*Portfolio presentation standards (Module 4).*
Creative, Inc.	Joy Deangdeelert Cho, Meg Mateo Ilasco	Chronicle · 2010	*Building a creative career and presence (Module 5).*
What Color Is Your Parachute?	Richard N. Bolles	Ten Speed Press · annual	*Job-search strategy (Modules 5–6).*
Studio recruitment / reel guides (ArtStation, studio blogs)	Various studios	online · current	*Current studio reel expectations (Modules 1–3).*