

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM, THALAMBUR, PERIYAPALAYAM-CHENNAI
ACCREDITED BY NAAC WITH 'A++' GRADE

UNDERGRADUATE DEGREE PROGRAMME

B.Sc., Animation

Three Years

/

B.Sc., (Hons) Animation

Four Years

CURRICULUM & SYLLABUS

REGULATION 2024

Choice Based Credit System (CBCS)

&

Learning Outcomes Based Curriculum Framework (LOCF)

Effective from the Academic Year

2024 -2025

Department of Animation

School of Mass Communication

VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
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DEPARTMENT OF ANIMATION

VISION OF THE DEPARTMENT
To be the leading program that provides Animation Knowledge and produces highly professional Industry oriented Designer, Animators & Artists.

MISSION OF THE DEPARTMENT	
M1	To develop animators with a strong foundation in the arts, design and animation techniques via comprehensive training.
M2	To use cutting-edge resources to develop novel approaches towards problem-solving in the animation industry..
M3	To provide students with an environment in which they can nurture themselves, develop self-confidence, and learn the value of teamwork, dedication, determination, and discipline.
M4	Our goal is to develop confident professionals who will be trend-setters and leaders for benefiting humanity and the environment

PROGRAMME EDUCATIONAL OUTCOMES (PEO)	
PEO1	Have strong foundations in creative, analytical, and technical fundamentals necessary to formulate, analyse and solve communication problems.
PEO2	Have an exposure to a variety of Animation Industries, Such as, 2D & 3D production, Graphic Design & Visual Effects in a competitive Digital Media environment.
PEO3	Demonstrate the impact of media on the society along with ethical, social, and professional responsibilities/implications of their work.
PEO4	Have strong communication skills, ability to work in multicultural contexts and to work effectively in multidisciplinary teams.
PEO5	Engage life-long learning to become successful in their professional work.

PROGRAMME OUTCOMES (PO)	
PO1	Develop a creative attitude by preparing to explore the realm of visual art.
PO2	Learn the art of empathy in order to delve deeply into the problem statement.
PO3	Enhancing skills in articulation and communication
PO4	Creating an analytical thinking method that can look into the risks and promises of future intelligent products and technology, as well as identify design opportunities to improve people's lives.
PO5	Acquire the capacity to think creatively, take calculated chances, and create and effectively market solutions in a changing environment.
PO6	Exhibit an awareness and comprehension of design principles and apply them to one's own work, as a team member and leader, to manage projects, and in multidisciplinary settings

PO7	Understand how design impacts the society and the environment, and exhibit an awareness of and ability for developing sustainable solutions.
PO8	Understand the importance of independent, lifelong learning and acquire the skills necessary to do it in the broadest context of technological change

PROGRAMME SPECIFIC OUTCOMES (PSO)	
PSO1	Obtained a significant knowledge on fundamentals and advanced in Drawing, Graphic Design, VFX, 2D & 3D Animation.
PSO2	Gain knowledge of developing story boards for any given concept aspects of drawing and Anatomy study.
PSO3	Gain in-depth knowledge on pre-production and post-production process in 2D&3D Animation Film Making.
PSO4	Gain insight into the various aspects of script writing, direction, and editing.
PSO5	Assimilate technical skills on 2D&3D Animation, Photography, cinematography, audio editing and video Editing.

KNOWLEDGE IS POWER

BOARD OF STUDIES

List of Members

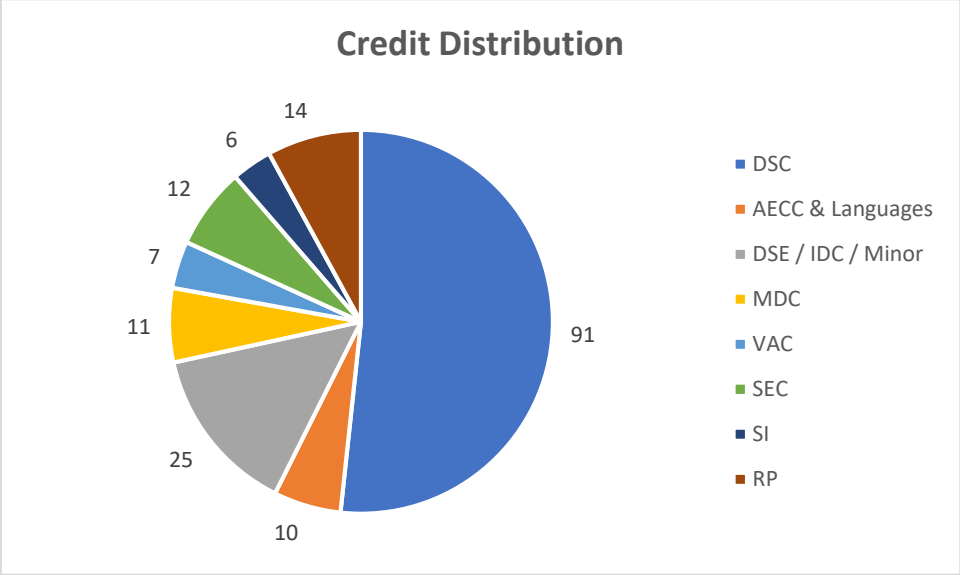
Department of Animation

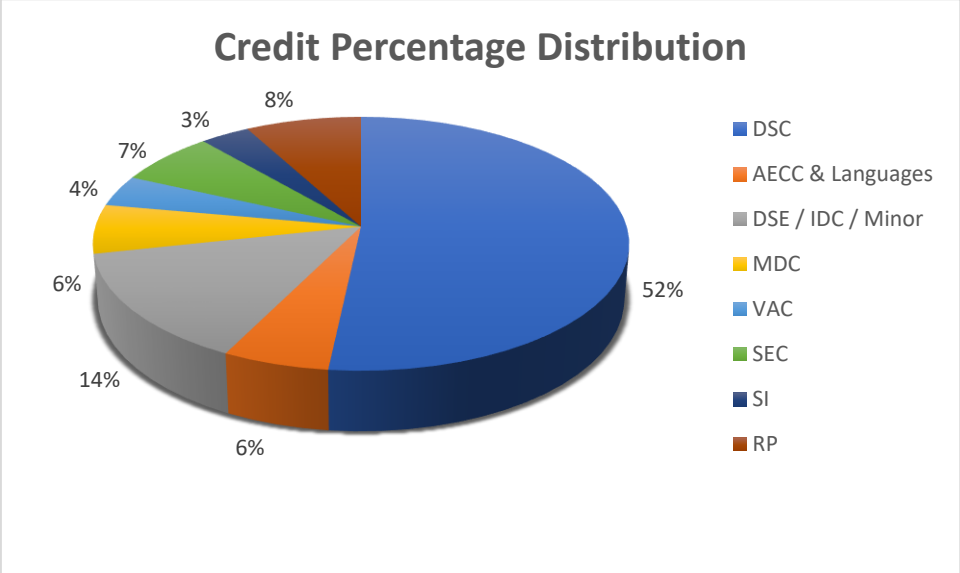
S. No	Name & Designation	Address	Role
1.	Mr S Kalaiselvan	Assistant Professor and Head Department of Animation School of Mass Communication Vels Institute of Science Technology and Advanced Studies, Pallavaram, Chennai-600 117	Chair Person
2.	Dr Abinesh A K	Assistant Professor Department of journalism Madras Christian College	Academic Expert (External Member)
3.	Dr. Ezhil Vendan	Director, Emagic Animation Company and Academy	Industrial Expert (External Member)
4.	Mr. Dakshnamoorthy Gnanavelu	VFX Artist In Double Negative (Mumbai)	Alumni Member (External Member)
5.	Dr Thulasi Barathy M	Assistant Professor Department of Animation School of Mass Communication Vels Institute of Science Technology and Advanced Studies, Pallavaram, Chennai-600 117	Internal Member
6.	Mr Branesh A K	Assistant Professor Department of Animation Vels Institute of Science Technology and Advanced Studies, Pallavaram, Chennai-600 117	Internal Member

CREDIT DISTRIBUTION

B.Sc., (Hons) in Animation
Minimum credits to be earned: 176
B.Sc., Animation
Minimum credits to be earned: 132

Component	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem	3 Yrs. Total Credits	VII Sem	VIII Sem	4 Yrs Total Credits
DSC	8	9	6	8	12	15	58	12	11	81
AECC & Languages	4	4	4	7	-	-	19	-	-	19
DSE / IDC / Minor	3	2	4	3	4	4	20	2	3	25
MDC	4	4	4	-	-	-	12	-	-	12
MDE	-	-	2	-	3	-	2	-	-	5
VAC	2	2	0	2	2		8	-	-	8
SEC	2	2	2	2	2	2	12	2	-	14
SI	-	-	2	-	2	-	4	0	0	4
RP	-	-	-	-	-	-	0	6	8	14
Total Credits	23	23	24	22	25	21	138	22	22	182





ABBREVIATIONS

DSC	Disciplinary Specific Core
AECC	Ability Enhancement Compulsory Courses
DSE	Disciplinary Specific Elective
IDC	Interdisciplinary / Minor Courses
MDC	Multidisciplinary Courses
VAC	Value Added Courses
SEC	Skill Enhancement Courses
SI	Summer Internship
RP	Research Project
MDE	Multidisciplinary Electives

CURRICULUM STURCTURE

B.Sc., Animation Three Years
/
B.Sc., (Hons) Animation Four Years

Total number of Credits: 179

	B.Sc., (Hons) in Animation Minimum Credits to be earned :179 **B.Sc., in Animation Minimum Credits to be earned: 135**									
			Hours/Week					**Maximum Marks**		
SEMESTER 1										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
LANG 1	24LTAM11 24LFRE11 24LHIN11	Tamil I / Hindi I/ French I	2	0	0	1	2	40	60	100
ENG 1	24LENG11	English I	2	0	0	1	2	40	60	100
DSC 1	24PBAN11	Fundamentals of Drawing	0	1	6	2	4	40	60	100
DSC 2	24CBAN11	Introduction to Animation Concepts	4	0	0	2	4	40	60	100
MDC 1	24MBAN11	History of Visual Arts	4	0	0	1	4	40	60	100
DSE 1/ **IDC 1 /** **Minor 1**	24PBAN12	Graphic Design	0	1	5	2	3	40	60	100
VAC 1	24DVAC11	Universal Human Values	2	0	0	1	2	-	100	100
SEC 1	24SSKU11	Soft Skills 1	2	0	0	1	2	40	60	100
SEC 2	24SBAN12	Orientation programme / Industrial Visit	-	-	-	-	-	-	-	-
			16	**2**	**11**	**-**	**23**	**-**	**-**	**-**

CIA - Continuous Internal Assessment SEE - Semester End Examination

***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

SEMESTER 2										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
LANG	24LTAM21 24LFRE21 24LHIN21	Tamil II / Hindi II / French II	2	0	0	2	2	40	60	100
ENG / AECC	24LENG21	English II	2	0	0	2	2	40	60	100
DSC 3	24CBAN21	Color Theory Principles	3	1	2	1	5	40	60	100
DSC 4	24PBAN21	Foundation to 2D Animation	2	0	4	2	4	40	60	100
MDC 2	24BVC002	Understanding UI & UX	4	0	0	2	4	40	60	100
DSE 2 **IDC 2** **Minor 2**	24DBAN21	Drawing – II	0	0	4	2	2	40	60	100
VAC 2	24DVAC22	Communication Skills	2	0	0	1	2	40	60	100
SEC 3	24SSKU21	Soft Skills 2	2	0	0	1	2	40	60	100
			17	**1**	**10**	**-**	**23**	**-**	**-**	**-**

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***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

SEMESTER 3										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
LANG 3	24LTAM31 24LFRE31 24LHIN31	Tamil III / Hindi III / French III	2	0	0	2	2	40	60	100
ENG 3	24LENG31	English III	2	0	0	2	2	40	60	100
DSC 5	24PBAN31	Understanding Anatomy: Human and Animal Form	0	1	4	2	3	40	60	100
DSC 6	24PBAN32	3D Environment Modelling & Texturing	0	1	4	2	3	40	60	100
MDC 3	24MBAN31	Fundamentals of Script writing & Story Boarding techniques	4	0	0	2	4	40	60	100
DSE 3 **IDC 3** **Minor 3**	24DBAN31	Foundation of Acting & Direction for Animation	4	0	0	2	4	40	60	100
MDE 1	24EMDE31	Indian Knowledge System	1	1	0	1	2	40	60	100
SEC 4	24SSKU31	Soft Skills 3	2	0	0	2	2	40	60	100
SI 1	24IBAN31	Internship I	0	0	0	2	2	-	100	100
			13	**-**	**17**	**-**	**24**	**-**	**-**	**-**

CIA - Continuous Internal Assessment SEE- Semester End Examination

***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

SEMESTER 4										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
LANG 4	24LTAM41 24LFRE41 24LHIN41	Tamil IV / Hindi IV / French IV	2	0	0	1	2	40	60	100
ENG 4	24LENG41	English IV	2	0	0	1	2	40	60	100
AECC 1	24EVS042	Environmental Studies	3	0	0	2	3	40	60	100
DSC 7	24CBAN41	Understanding Photography and Videography	3	0	2	1	4	40	60	100
DSC 8	24PBAN41	Character Modelling & Sculpting techniques	1	1	3	2	4	40	60	100
DSE 4 / IDC 4 / Minor 4	24DBAN41	Concepts of Lighting & Rendering	0	0	6	2	3	40	60	100
SEC 5	24SIOE41	Industry Oriented Employability skills	-	-	-	2	2	-	-	-
VAC 3	24DVAC41	Yoga Education / NSS / NCC	2	0	0	1	2	-	100	100
SEC 6	24SBAN41	In-plant Training/ Industrial Tour	-	-	-	-	-	-	-	-
			13	**1**	**11**	**-**	**22**	**-**	**-**	**-**

CIA - Continuous Internal Assessment SEE - Semester End Examination

***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

SEMESTER 5										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
DSC 9	24CBAN51	Contemporary media & AI in Animation	3	0	2	2	4	40	60	100
DSC 10	24PBAN51	Understanding Dynamics and Physics based Simulation	1	1	6	2	4	40	60	100
DSC 11	24PBAN52	Rigging and Animation practice	0	2	4	2	4	40	60	100
DSE 5 / IDC 5 / Minor 5	24DBAN51	Understanding Motion Tracking and Camera techniques	0	1	6	2	4	40	60	100
SEC 7	24SBAN51	Entrepreneurial Development	2	0	0	1	2	40	60	100
VAC 4	24GVAC51	Digital Matte Painting	2	0	0	1	2	40	60	100
SI 2	24IBAN51	Internship II	0	0	0	2	2	-	100	100
MDE 2	24EMDE51	Cyber Security	3	0	0	2	3			
			11	**4**	**18**	**-**	**25**	**-**	**-**	**-**

CIA - Continuous Internal Assessment SEE - Semester End Examination

***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

SEMESTER 6										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
DSC 12	24PBAN61	Post Production – techniques and practices	2	1	2	2	4	40	60	100
DSC 13	24PBAN62	Advanced Compositing Techniques		2	4	2	4	40	60	100
DSC 14	24PBAN63	Advanced Texturing	0	1	5	2	3	40	60	100
DSC 15	24PBAN64	Miniature set creation	0	2	3	2	4	40	60	100
DSE 6 / IDC 6 / Minor 6	24DBAN61	Web Designing & Publishing	4	0	0	2	4	40	60	100
SEC 8	24SBAN61	Mini Project	0	0	4	2	2	-	100	100
SEC 9	24SBAN62	On Job Training / Apprenticeship / Startup	-	-	-	-	-	-	-	-
			6	**6**	**18**	**12**	**21**	**-**	**-**	**-**

CIA - Continuous Internal Assessment SEE - Semester End Examination

***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

SEMESTER 7										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
DSC 16	24PBAN71	Advanced 2D Animation techniques	-	2	4	2	4	40	60	100
DSC 17	24PBAN72	Advanced character acting practice in 3d animation	0	1	4	2	3	40	60	100
DSC 18	24CBAN71	Artificial Intelligence for Game development	5	0	0	2	5	40	60	100
DSE 7 / IDC 7 / Minor 7	24DBAN71	Game Level Design	0	0	4	2	2	40	60	100
RP 1	24RBAN71	Research Project I (2D Show reel –A)(group)	0	2	8	2	6	40	60	100
SEC10	24SBAN71	In-plant Training/ Industrial Tour	0	0	0	2	2			
			5	**5**	**20**	**0**	**22**	**-**	**-**	**-**

CIA - Continuous Internal Assessment SEE - Semester End Examination

***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

SEMESTER 8										
Category	**Code**	**Course**	**L**	**T**	**P**	**O**	**C**	**CIA**	**SEE**	**Total**
DSC 19	24PBAN81	Animation Research	4	0	0	2	4	40	60	100
DSC 20	24PBAN82	Emerging Technologies: principles and practices (AR/VR/MR/XR)	0	1	4	2	3	40	60	100
DSC 21	24CBAN81	Advanced Dynamics and Physics based Simulation	0	2	4	2	4	40	60	100
DSE 8 / IDC 8 / Minor 8	24DBAN81	Advanced 3d Animation techniques	0	1	4	2	3	40	60	100
RP 2	24RBAN81	Research Project II (3D Demo reel – A)(Specialization)	0	4	6	2	8	-	60	100
			4	**8**	**18**		**22**	**-**	**-**	**-**

CIA - Continuous Internal Assessment SEE- Semester End Examination

***L – Lecture, *T- Tutorial, *P- Practical, *O - Outside the class effort / self-study *C - Credits**

DISCIPLINE SPECIFIC CORE COURSES

Category	Code	Course	L	T	P	O	C
DSC 1	24PBAN11	Fundamentals of Drawing	0	1	6	2	4
DSC 2	24CBAN12	Introduction to Animation Concepts	4	0	0	2	4
DSC 3	24CBAN21	Colour Theory Principles	3	1	2	1	5
DSC 4	24PBAN21	Foundation to 2D Animation	2	0	4	2	4
DSC 5	24PBAN31	Understanding Anatomy: Human and Animal Form	0	1	4	2	3
DSC 6	24PBAN32	3D Environment Modelling & Texturing	0	1	4	2	3
DSC 7	24CBAN41	Understanding Photography and Videography	4	0	2	1	5
DSC 8	24PBAN41	Character Modelling & Sculpting techniques	1	1	3	2	4
DSC 9	24CBAN51	Contemporary media & AI in Animation	3	0	2	2	4
DSC 10	24PBAN51	Understanding Dynamics and Physics based Simulation	1	1	6	2	4
DSC 11	24PBAN52	Rigging and Animation practice	0	2	4	2	4
DSC 12	24PBAN61	Post Production – techniques and practices	2	1	2	2	4
DSC 13	24PBAN62	Advanced Compositing Techniques		2	4	2	4
DSC 14	24PBAN63	Advanced Texturing	0	1	5	2	3
DSC 15	24PBAN64	Miniature set creation	0	2	3	2	4
DSC 16	24PBAN71	Advanced 2D Animation techniques	0	2	4	2	4
DSC 17	24PBAN72	Advanced character acting practice in 3d animation	0	1	4	2	3
DSC 18	24CBAN71	Artificial Intelligence for Game development	5	0	0	2	5
DSC 19	24PBAN81	Animation Research	4	0	0	2	4
DSC 20	24PBAN82	Emerging Technologies: principles and practices (AR/VR/MR/XR)	0	1	4	2	3
DSC 21	24CBAN81	Advanced Dynamics and Physics based Simulation	0	2	4	2	4

DISCIPLINE SPECIFIC ELECTIVE COURSES

Category	Code	Course	L	T	P	O	C
DSE 1	24DBAN12	Graphic Design	0	1	5	2	3
DSE 2	24DBAN21	Drawing – II / Commercial Art / Digital Painting & Concept Art	0	0	4	2	2
DSE 3	24DBAN31	Foundation of Acting & Direction for Animation	4	0	0	2	4
DSE 4	24DBAN41	Concepts of Lighting & Rendering / Print & Packaging / Special Effect (Sfx)	0	0	6	2	3
DSE 5	24DBAN51	Understanding Motion Tracking and Camera techniques / Design Game Art	0	1	6	2	4
DSE 6	24DBAN61	Web Designing & Publishing	4	0	0	2	4
DSE 7	24DBAN71	Game Level Design	0	1	4	2	2
DSE 8	24DBAN81	Advanced 3d Animation techniques	0	1	4	2	3

AECC & LANGUAGES

Category	Code	Course	L	T	P	O	C
LANG 1	24LTAM11/ 24LHIN11/ 24LFRE11	Tamil I / Hindi I/ French I	2	0	0	1	2
ENG 1	24LENG11	English I	2	0	0	1	2
LANG 2	24LTAM21/ 24LHIN21/ 24LFRE21	Tamil II / Hindi II / French II	2	0	0	2	2
ENG 2	24LENG21	English II	2	0	0	2	2
LANG 3	24LTAM31/ 24LHIN31/ 24LFRE31	Tamil III / Hindi III / French III	2	0	0	2	2
ENG 3	24LENG31	English III	2	0	0	2	2
AECC 1	24EVS031	Environmental Studies	3	0	0	2	3

MULTIDISCIPLINARY COURSES

Category	Code	Course	L	T	P	O	C
MDC 1	24BVC001	History of Visual Arts	4	0	0	1	4
MDC 2	24BVC002	Understanding UI & UX	4	0	0	2	4
MDC 3	24BVC003	Fundamentals of Script writing & Story Boarding techniques	4	0	0	2	4

VALUE ADDED COURSES

Category	Code	Course	L	T	P	O	C
VAC 1	22VAC21	Communication Skills	0	0	2	1	1
VAC 2	22VAC11	Universal Human Values	2	0	0	1	2
VAC 3	24SNSS41	Yoga Education / NSS / NCC	0	0	2	1	1
VAC 4	24VAC51	Web Designing	2	0	0	1	2

SKILL ENHANCEMENT COURSES

Category	Code	Course	L	T	P	O	C
SEC 1	24SSKU11	Soft Skills I	2	0	0	1	2
SEC 2		Orientation Programme / Industrial Visit	-	-	-	-	-
SEC 3	24SSKU21	Soft Skills II	2	0	0	1	2
SEC 4	24SSKU31	Soft Skills III	2	0	0	2	2
SEC 5	24SBAN41	Industry Oriented Employability skills	1	0	2	1	2
SEC 6		In-plant Training/ Industrial Tour/ Summer Term	-	-	-	-	-
SEC 7	24SBAN51	Entrepreneurial Development	2	0	0	1	2
SEC 8	24SBAN61	Mini Project	0	0	4	2	2
SEC 9	24SBAN62	On Job Training / Apprenticeship / Startup	-	-	-	-	-
SEC 10	24SBAN71	In-plant Training/ Industrial Tour	0	0	0	2	2

SUMMER INTERNSHIP

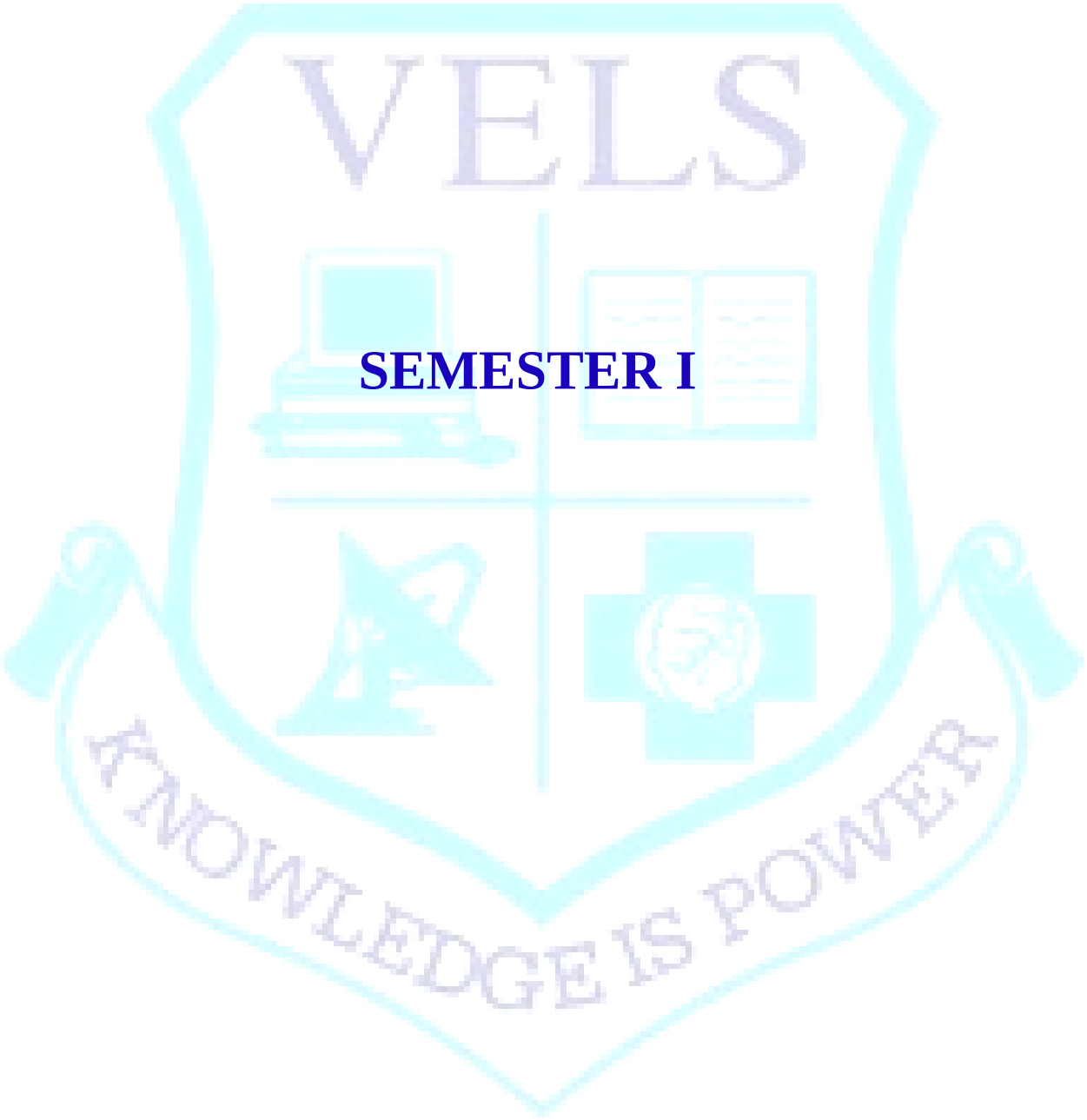
Category	Code	Course	L	T	P	O	C
SI 1	24IBAN31	Internship I	0	0	0	2	2
SI 2	24IBAN51	Internship II	0	0	2	1	1

RESEARCH PROJECT

Category	Code	Course	L	T	P	O	C
RP 1	24RBAN71	Research Project I (2D Show reel – A)(group)	0	2	8	2	6
RP 2	24RBAN81	Research Project II (3D Demo reel – A)(Specialization)	0	4	6	2	8

MULTIDISCIPLINARY ELECTIVES

Category	Code	Course	L	T	P	O	C
MDE 1		Indian Knowledge System	1	1	0	1	2



SEMESTER I

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LTAM11	TAMIL -I	2	0	0	1	2

தாள்-1

மொழிவரலாறு – சங்க இலக்கியம் – அற இலக்கியம் – மொழித்திறன்

பாடத்திட்ட நோக்கம்:

மாணவர்களின் இலக்கிய நாட்டத்தை மேம்படுத்துதல், தற்கால தமிழ் இலக்கிய வகைமைகளான மரபுக்கவிதை, புதுக்கவிதை, உரைநடை ஆகியவற்றை அறிமுகப்படுத்துதல், தமிழர்தம் வாழ்வியல் நெறிகளையும் பண்பாட்டுச் செழுமைகளையும் இன்றைய தலைமுறையினர் அறியச் செய்தல், மாணவர்களுக்குத் தமிழைத் தவறின்றி எழுதுவதற்குத் தேவையான பயிற்சி அளித்து அவர்களின் மொழித்திறனை மேம்படுத்துதல், செய்யுளின் நலத்தைப் பாராட்டும் முறைமையை அறியச் செய்து அதன்வழி சிந்தனை வளத்தைப் பெருகச் செய்தல் என்பனவும் மேற்கண்டவழி மாணவர்களை ஆளுமை மிக்கவர்களாக உருவாக்கி, போட்டித்தேர்வுகளுக்குத் தயார் செய்து அவர்களுக்கு வேலைவாய்ப்பை உருவாக்குவதும் இந்தப் பாடத்திட்டத்தின் முக்கிய நோக்கமாகும்.

அலகு- 1: தமிழ் மொழி வரலாறு 8 மணி நேரம்

மொழிக்குடும்பம் - இந்திய மொழிக்குடும்பங்கள் - இந்திய ஆட்சி மொழிகள் - திராவிட மொழிக்குடும்பங்கள் - திராவிட மொழிகளின் வகைகள் –திராவிட மொழிகளின் சிறப்புகள் - திராவிட மொழிகளின் வழங்கிடங்கள் - திராவிட மொழிகளுள் தமிழின் இடம் - தமிழ்மொழியின் சிறப்புகள் - தமிழ் பிறமொழித் தொடர்புகள்.

அலகு -2 8 மணி நேரம்

புறநானூறு- பாடல் எண்: , 182, 183, – இரண்டு பாடல்கள்.

குறுந்தொகை- பாடல் எண்: 2, 167, - இரண்டு பாடல்கள்

பரிபாடல் - முருகன். வையை - இரண்டு பாடல்கள்

அலகு - 3 அற இலக்கியங்கள் 8 மணி நேரம்

திருக்குறள்- வான்சிறப்பு (அறம்), பெருமை (பொருள்), பிரிவாற்றாமை (இன்பம்),. மூன்று அதிகாரங்கள் முழுமையும்

1. நாலடியார் - இரண்டு பாடல்கள். (2, 3)
2. மூதுரை - இரண்டு பாடல்கள். (2, 8)

அலகு 4 மொழி 06 மணி நேரம்

பிழை நீக்கி எழுதுதல் - ஒற்றுப்பிழை நீக்கி எழுதுதல் - தொடர்பிழை நீக்கி எழுதுதல் - ஒற்று மிகும் இடங்கள் - ஒற்று மிகா இடங்கள் - பிற மொழிச் சொற்களை நீக்கி எழுதுதல் – பயிற்சிகள்.

மொத்தம்: 30 மணி நேரம்

பார்வை நூல்கள்

1. **தமிழர் நாகரிகமும் பண்பாடும்,** டாக்டர் அ. தட்சிணாமூர்த்தி, ஐந்திணைப் பதிப்பகம், 2001.
2. **தவறின்றித் தமிழ் எழுதுவோம்**, மா. நன்னன், ஏகம் பதிப்பகம், 1999.
3. **தவறின்றித் தமிழ் எழுத** - மருதூர் அரங்கராசன், ஐந்திணைப் பதிப்பகம், 2003.
4. **தமிழ் இலக்கிய வரலாறு**, வரதராசன், மு., புது தில்லி : சாகித்திய அக்காதெமி, 2002.
5. **புதிய தமிழ் இலக்கிய வரலாறு**, நீல. பத்மநாபன், சிற்பி பாலசுப்ரமணியம், சாகித்திய அகாடெமி, 2007.
6. **செம்மொழி தமிழின் சிறப்பியல்புகள்** - முனைவர் மறைமலை இலக்குவனார்; https://www.youtube.com/watch?v=HHZnmJb4jSY
7. **பாடநூல் தேடலுக்கான இணையம் -** https://archive.org/

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LHIN11	HINDI -1	2	0	0	1	2

वर्ष I – सत्र I (गद्य, पत्र लेखन & व्यावहारिक हिन्दी)

I Year- Sem I (Prose, Letter Writing & Functional Words)

Course Objectives:

- To understand the rural life style, social responsibilities and social values
- To create awareness about the importance of varied culture
- To enable the students to develop communication skill in Hindi and to use Azhagi, Azhagi+ fonts

UNIT I: पं.श्रीराम शर्मा कृत 'स्मृति' (कहानी)
'Smruti' (Kahani) by Pandit Sriram Sharma. 6hrs.

UNIT II: शरद जोशी कृत 'अतिथि तुम कब जावोगे' (व्यंग्य)
'Athiti tum kab jaaoge' (Vyangy) by Sharad Joshi. 6hrs.

UNIT III: राहुल सांस्कृतयायन कृत 'अथातो घुमक्कड़ जिज्ञासा'(यात्रा वृत्तान्त)
'Atatho Ghumakkad Jigyasa' (Yatra Vruthanth) by Rahul Sanskrityayan. 6hrs.

UNIT IV: व्यावहारिक हिन्दी- पत्र लेखन में प्रयुक्त वाक्यांश, कौशल विकास – भाव एक भाषा अनेक 6hrs.
Functional Hindi-Phrases used in Letter Writing.
Skill development - Bhav Ek Bhasha Anek

UNIT V: पत्र लेखन – परिचय व प्रकार, 3 अनोपचारिक पत्र
अलगी, अलगी + फ़ॉन्ट का परिचय
Letter Writing- Intro. & Types & 3 Personal Letters 6hrs.
Introduction to Azhagi, Azhagi + fonts

Total: 30hrs.

Course Outcome:

At the end of this course Students will be able to

CO 1	Gain knowledge about the rural life style
CO 2	Understand social values
CO 3	Understand importance of varied culture
CO 4	Journalise in Functional Hindi
CO 5	Use Azhagi, Azhagi+ fonts

Text Books:

Pandit Shriram Sharma, Shikaar, Sahitya Sadan, 1932.
Sharad Joshi, Yatha Sambhav, Bharatiya Gyanpeet, 2014.
Rahul Sanskrityayan, Ghumakkad Shastra, Rajkamal Prakashan, 1949.

Reference Book:

Kendriya Hindi Sansthan, Banking Hindi Patyakram, 2012.
NCERT, Sparsh, Class 9.
Main Aur Mera Vyakaran, New Saraswati House, New Delhi.
Govind Ballabh Sharma, Hindi Vyavaharik Tankan Kala Evam Tankan Abhyas, Neelkanth Publishers Pvt. Ltd., 2022.

Weblinks :

Pandit Sriram Sharma ka kahani: https://www.evidyarthi.in
Harishankar parasayi ka Vyangy: http://gadyakosh.org
Rahul Sanskrityayan ka yatravruttant: https://www.hindwi.org
Prayojanmoolak Hindi:https://hi.mwikipedia.org
https://www.azhagi.com/hnd/helphtml/Introduction.html

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LFRE11	**FRENCH PAPER I**	2	0	0	1	2

Course Objectives:

The lessons are being chosen:

1) To greet, to express excuse and to introduce oneself

2) To introduce another person

3) To express his/her ideas, opinions and weekend projects

4) To request someone to do something, polite manners

5) To accept, refuse, enquire and indicate the time and date

6) To express himself / herself in positive and negative manner

UNITS:

1) Salut

les nombres, Les jours de la semaine et du mois, La nationalité 4

2) Enchanté

Les verbes Etre, Avoir, Aller, Regular ER verbes, Present tense. 6

3) J'Adore

La negation, l'adjectif possessif, le futur proche
4

4) Tu veux bien

Les articles de finis/indéfinis, Les pronoms après une préposition (avec lui, chez moi), Le passé composé **7**

5) On se voit quand

Les pronoms compléments directs me, te, nous, vous, L'interrogation avec est-ce que, L'heure et la date. **5**

6) Bonne idée

Les articles partitifs, Le masculin et le féminin des adjectifs, Les pronoms compléments directs le, la, les, La négation : ne… pas de**.**
4

Total no. of hours - 30 hours

Course Outcome:

CO 1	The students would be able to greet, to excuse and to introduce himself
CO 2	The students would be able to introduce someone
CO 3	The students would be able to express his ideas, opinions and weekend projects
CO 4	The students would be able to ask someone to do something, polite manner
CO 5	The students would be able to express himself in positive and negative manner

Text / Reference Book:

Prescribed book: LATITUDES 1 (A1/A2) MÉTHODE DE FRANÇAIS - Régine Mérieux and Yves Loiseau

Reference book: SAISON A1 - MÉTHODE DE FRANÇAIS - Marie-Noëlle Cocton, Élodie Heu, Catherine Houssa, Émilie Kasazian

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
24LENG11	**ENGLISH – I**	L	T	P	O	Credit
		2	0	0	1	2

Course Objectives:

CO1: To enable students to develop their communication skills effectively.

CO2: To make students familiar with usage skills in the English Language.

CO3: To enrich their vocabulary in English.

CO4: To develop communicative competence.

Unit I- Prose **Credit Hours**

- Dangers of drug abuse - Hardin B.Jones 06
- Tight corners - E.V.Lucas

Unit II -Poetry **06**

- Ecology - A.K.Ramanujan
- The owl and the chimpanzee - Jo Camacho

Unit III - Short story **06**

- The Dear Departed - Stanley Houghton
- The Fool's Paradise- Isaac Bashevis Singer

Unit IV -Grammar **06**

- Parts of speech, Articles

Unit V -Grammar **06**

- One-word substitution, prefix, suffix, synonym, antonym.

Total 30 hours

Course Outcomes:

At the end of this course, the students would have learnt to

CO1	Understand the characteristic features of the language used in the text.
CO2	Strengthen their knowledge of basic grammar
CO3	Improve narrative skills after studying diverse prose and play.
CO4	Understand to classify parts of speech and articles.
CO5	Develop critical writing skills in the textual content of the syllabus

References:

- English for Communication Enrichment: by Jeya Santhi June 2015.
- Dr. M. Narayana Rao and Dr. B. G.Barki–Anu's Current English for Communication (AnuChitra). June 2012.
- Dr. Ananthan, R. Effective Communication. Ed. Chennai: Anu Chithra Pub.2010.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN11	HISTORY OF VISUAL ARTS	3	0	3	2	4

COURSE OBJECTIVE:

To provide students with a thorough understanding of the evolution of visual arts from ancient times to the present, fostering an appreciation for diverse artistic traditions and their cultural, social, and historical contexts. Students will develop critical thinking skills to analyze and interpret artworks, gain insight into the influence of artistic movements on society, and explore the ways in which visual art reflects and shapes human experience across different periods and cultures.

UNIT- I PRE-HISTORIC ANCIENT ART 15

Palaeolithic – Mesolithic- Neolithic- Venus of Willendorf- Hall of the Running Bulls- Stonehenge. The Bhimbetka Rock Shelters, Ancient Egyptian Art: Tombs, Pyramids, and Temples. Indus Valley Civilization. Harappa Seals, and Ceramic, Terracotta Figurines. Mauryan Shunga Sculpture.

EXERCISE: Write an article on Bhimbetka Rock Art

UNIT-II MEDIEVAL ART 15

Kingdoms Hagia Sophia, Byzantine Art, Renaissance Art, Baroque Art, Rococo Art. Temple Architecture – Rock-Cut Temples, Structural Temples, Sculpture, and Fresco Paintings, Gothic Art Period. Islamic Influence – Indo-Islamic Architecture, Calligraphy and Ornamentation,and Miniature Paintings. Regional Variations – Rajput Paintings, and Vijayanagara Art. Ajanta, Ellora, Badami, Chola, Pallava and Hoysala.

EXERCISE: Identify a few Traditional art forms of Southern India

UNIT-III 19TH CENTURY ART 15

Western Art Forms – Romanticism, Realism, Surrealism, Impressionism,Symbolism, and Art Nouveau. Colonial Influence – British Patronage, Art Schools, Western Adaptation. Indian Modernism – Raja Ravi Varma, Bengal School of Art, Lithography and Printing Press, Printmaking. Traditional Art and Craft – Madhubani Painting, Warli Art, Pattachitra, Tanjare Painting, Gond Art, and Kalamkari..Artists and Art Forms – Raja Ravi Varma, Abanindranath Tagore, Jamini Roy,Amrita Sher-Gil, M F Husain, and Tyeb Mehta.

EXERCISE: Collect paintings that reflect Indian tradition

UNIT – IV CONTEMPORARY ART 15

Diverse Media in Art – Digital Media and Technique, Integrating Local tradition to Global Art, Social and Political Commentary, and Environmental concerns in Art. Western Art – Globalization and Cultural Exchange, Social and Political Engagement and Notable Contemporary Western Artists. Major Art Institute and Events – Kochi-Muziris Biennale, National Gallery of Modern Art (NGMA), Indian Art Fair, and Kiran Nadar Museum of Art, Raqs Media Collective. Notable Contemporary Indian Artists – Subodh Gupta, Anish Kapoor, BhartiKher, Nalini Malini, Jitish Kallat, and Sudrashan Shetty.

EXERCISE: Explore art in other media forms- Installation- contemporary modern art

UNIT– V GLOBAL PERSPECTIVE 15

Hybrid art – Cultural exchange resulting in hybrid form, Merging technology and techniques, impact of cultural narratives. Transnational art – Decolonization and representation, Joint exhibition,Collaborations across borders. Digital Connectivity – Non-demographic audience – Digital art and social media,Collaging art, and digital platform. Artists in Digital age – Nalini Malini, Cai Guo-Qiang, Yinka Shonibare, ElAnatsui, Shirin Neshat, and Ai Weiwei

EXERCISE: Identify transnational artwork that depicts mixed cultural aspects

Total: 90 Hours

Evaluation Method

- **Quiz** to check recall memory of students on the history of art.
- Comparative **analysis report** on traditional and digital art work.
- Engaging in **group discussions** on evaluating emerging art forms influenced bydigital technology
- **Seminar** on any interesting topic or **Interactive Discussion** on contemporary artforms

Course Outcome:

At the end of this course students will be able to,

CO 1	Students can explore connections between visual art and other disciplines, fostering interdisciplinary approaches in their creative work
CO 2	Students would get an idea of various art techniques in various media including drawing, painting, sculpture, digital art, and mixed media.
CO 3	Students can integrate artistic patterns for effective communication in their Works

CO 4	Students will conduct critical and analytical research studies on artwork
CO 5	Students will exhibit ethical and cultural sensitivity in the creation and interpretation of artworks

Text Books:

Edith Tomory, The history of Fine Arts and the west, Orient Longman, Hyderabad.

Roy C Craven, Concise History of Indian Art, Thames and Hudson, London.

Agarwala, Studies in Indian Art, Varanasi,

Gupta, SP. Elements of Indian Art, Indraprastha museum. New Delhi.

Karl Khandalawala, Indian sculpture and Painting, Publication Division, New Delhi.

Marcia Pointon - History of Art_ A Student's Handbook-Routledge (2014)

Regent Wharf, 10,000 years of Art, Phaidon, 2009

Reference Books:

Dipti Desai_ Jessica Hamlin_ Rachel Mattson - History As Art, Art As History _ Contemporary Art and Social Studies Education-Taylor & Francis Group (2009)

Dan Karlholm, Keith Moxey - Time in the History of Art_ Temporality, Chronology, and Anachrony-Routledge (2018)

Web Sources:

https://theartspread.or
/https://map-
india.org/

https://megapencil.co

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN12	INTRODUCTION TO ANIMATION CONCEPTS	4	0	0	2	4

Course Objective:

1. To develop the skills on animation concept
2. To understand the techniques of Animation
3. To understand the detailed process of Preproduction, production and post-production
4. To develop the knowledge of character design, BG layout and Animation Techniques
5. To understand the process and pipeline of 2D animation and 3D animation

Unit-I - History of Animation 12

Animation has a rich history that begins with basic traditional animation techniques. Over time, the field has evolved significantly, incorporating new technologies and methods. The principles of animation, such as timing, spacing, and squash and stretch, form the foundation of creating lifelike and engaging animations. Various animation studios have produced famous movies that have left a lasting impact on audiences worldwide. Additionally, mastering drawing techniques is essential for animators to bring their creative visions to life.

Unit-II – Production Concepts 12

The 2D animation process involves several key steps, starting with understanding the different types of animations. This includes traditional hand-drawn animation, digital 2D animation, and other styles. Within this process, animators focus on creating key poses, in-betweens, and breakdown keys to ensure smooth and expressive movement. Voice acting plays a crucial role in bringing animated characters to life, adding depth and personality to the visuals. Additionally, background creation and layer 2D compositing are essential for building the environment and integrating all elements seamlessly into the final animation.

Unit-III –2D Animation Production 12

The 2D animation process involves several key steps, starting with understanding the different types of animations. This includes traditional hand-drawn animation, digital 2D animation, and other styles. Within this process, animators focus on creating key poses, in-betweens, and breakdown keys to ensure smooth and expressive movement. Voice acting plays a crucial role in bringing animated characters to life, adding depth and personality to the visuals. Additionally, background creation and layer 2D compositing are essential for building the environment and integrating all elements seamlessly into the final animation.

Unit - IV –3D Animation Production **12**

The 3D production pipeline encompasses various stages, starting with the 3D production pipeline itself. This is followed by the diverse usages of 3D software across different industries. Within this pipeline, both organic and inorganic modeling play crucial roles, contributing to the creation of detailed and realistic models. Additionally, 3D modeling and texturing are essential processes that add depth and realism to the models. Finally, rigging and animation bring these models to life, allowing for dynamic and engaging visual content

Unit – V- Post Production in Animation **12**

The process of creating a movie involves several key stages, including special effects, rendering techniques, 2D and 3D compositing, video editing techniques, and exporting the final movie. Special effects are used to enhance the visual appeal and create scenes that would be impossible or impractical to film in real life. Rendering techniques are crucial for generating high-quality images and animations from 3D models. 2D and 3D compositing involves combining visual elements from different sources into a single image, creating a seamless final product. Video editing techniques are applied to arrange and modify the footage, ensuring a coherent and engaging narrative. Exporting the movie involves converting the edited project into a format suitable for distribution and viewing.

Total Hours: 60

Practical / Assignments

•Students will create character design

•Students will create a Background

• Students will create key poses

Course Outcomes

CO 1	Students can understand the technique of traditional hand drawing methods.
CO 2	Students would developing a smooth animation, basic walk cycle technique and facial expressions

CO 3	Students can design character, background creation and etc.
CO 4	Students will get knowledge on animation project, editing techniques for end product of post-production and visualization.
CO 5	Students can understand Advanced techniques used for 2d production and post-production

TEXT BOOKS

1. Richard Williams “The Animator’s Survival Kit”, Faber & Faber, 4th *Edition*, 2012.
2. Preston Blair’s “Learn Techniques for Drawing and Animating Cartoon Characters”2020.

REFERENCE BOOKS:

1. Bob Godfrey and Anna Jackson “The Do-It-Yourself Film Animation Book', BBC Publications, Edition I, 1974 ISBN 978-0-563-10829-0
2. Thomas, Frank and Johnston Ollie “Disney Animation: The Illusion of Life”, Abbeville Publications, 1981

WEB SOURCES

1. https://www.tutorialspoint.com/computer_graphics/computer_animation.htm
2. https://99designs.com/blog/video-animation/what-is-animation/

REFERENCE BOOK LINK

1. https://web.stanford.edu/class/cs248/pdf/class_03_animation.pdf
2. https://youtu.be/8oM5qBORXmM.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
24PBAN11	FUNDAMENTALS OF DRAWING	L	T	P	O	Credit
		0	1	6	2	4

COURSE OBJECTIVE:

An introduction to the fundamentals of drawing techniques is essential for any aspiring artist, laying the groundwork for skill development. Developing observation skills sharpens an artist's ability to capture details accurately. Understanding the principles of composition, including balance, rhythm, and focal points, helps create visually appealing artwork. Mastering perspective drawing is crucial for depicting three-dimensional objects on a two-dimensional surface. Finally, exploring personal expression and artistic style through drawing allows artists to convey their unique vision and creativity. Together, these elements form a comprehensive foundation for artistic growth and expression.

UNIT I BASICS OF DRAWING 15

Drawing basics, material handling and understanding, teaching variety of lines, vertical, horizontal, diagonal, curved lines, dotted lines, and basic shapes, forms, geometrical shapes and non-geometrical shapes, drawing balance, paper balance, freehand drawings, creating image using combinations of different lines.

UNIT II SHADING TECHNIQUE 15

Light and Dark, and teaching different tonal values, teaching different shading technique, shading with different objects, Fine shading and academic style shading, natural light shading and artificial light shading, study of different textured shading objects, creating different textured shading, study of low and high light tonal values, explain mid tone shadings creating art image using all shading technique.

UNIT III STILL LIFE 15

Still life, and variety of still life's, composing of still life, teaching portrait composing, and landscape composing, composing still life using basic geometrical shapes, Explain

Different between organic still life and inorganic still life, doing still life drawing using different shading style, study of organic still life, study of fruit, vegetables, flower, plants, and study of inorganic still life, wooden geometrical objects, cloths studies, metal objects, glass objects

UNIT IV PERSPECTIVE DRAWING **15**

Perspective drawings, eyelevel line, vanishing line and vanishing point, teaching types of perspectives - one point perspective, two-point perspective, and three-point perspectives. Study of perspective in buildings cape, learning intercross measuring meatheads, applying all three perspectives in basic geometrical shape, seascape, cityscape.

UNIT V BASICS OF PORTRAIT **15**

Study of face features Eyes, Nose, Ear, lip, Study of different views and features, Front view, profile view, one third view, key sketch drawing measurement of portrait, Geometrical understanding in face features, Shading in different views and angle.

Total: 75hrs

Course Outcome:

At the end of this course, the students would have learnt to

COC1	Understand and apply techniques about drawing and sketching
COC2	Acquire knowledge about the basics forms of arts required for animation courses
COC3	Students will develop the ability to observe and interpret the visual world accurately.
COC4	Through experimenting with various drawing mediums, styles, and techniques, students will be exposed to a variety of artistic expressions.
COC5	Students will engage in critiques, self-assessment, and reflection, analyzing their own artwork and the work of others to identify strengths, weaknesses, and areas for growth.

Text Books:

1. Novak and Henry C. Spencer, “Basic Technical Drawing,” Student Text, Glencoe/Mcgraw-Hill; 6th Revised edition, March 1994

2. Wayne Enstice and Melody Peters, “Drawing: Space, Form, and Expression,” Pearson, 2 edition, Aug. 7. 1995.

Reference Books:

1. Philip W. Metzger “The Art of Perspective”, North Light Books; illustrated edition, 2007
2. Wolf Rachel, “Basic Drawing Techniques”, North Light Books, Sept. 15 1991.
3. Victor Perard, Anatomy and Drawing (Dover Art Instruction)
4. David H. Ross, Freehand Figure Drawing for Illustrators: Mastering the Art of Drawing from Memory, 28 July 2015

Web Sources:

1. https://mymodernmet.com/perspective-drawing/
2. https://youtu.be/ePv-9mVnTVk

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN21	GRAPHIC DESIGN	0	2	4	2	4

COURSE OBJECTIVE:

To gain a comprehensive understanding of digital design, including the intricacies of pixel and vector software. This involves developing skills in designing and manipulating digital content effectively. Additionally, it's crucial to grasp the processes involved in both digital and print modes within graphic design. Finally, acquiring knowledge of various digital design tools is essential to enhance one's ability to create and innovate in the field. This holistic approach ensures a well-rounded proficiency in digital design, equipping individuals with the necessary skills to excel in the ever-evolving landscape of graphic design.

UNIT I INTERFACE OF PIXEL GRAPHICS APPLICATION 12

Understanding the interface of raster software is fundamental for digital design, as it allows users to navigate and utilize various tools effectively. Mastery of selection tools and the transform tool is crucial for manipulating images with precision. Skills in photo cropping and resizing the canvas are essential for adjusting the composition and dimensions of digital artwork. Knowledge of color modes and color adjustment techniques enables designers to enhance and modify the visual appeal of their creations. Lastly, grasping layer concepts is vital for organizing and managing different elements within a design.

UNIT II DIGITAL PAINTING AND TYPOGRAPHY CONCEPTS 12

Mastering the stamp, patch tool, and cloning techniques is essential for repairing and retouching images seamlessly. Utilizing paint brushes, the pen tool, and smart objects allows for precise drawing and scalable designs. Understanding the application of solid colors and gradients is crucial for creating visually appealing backgrounds and effects. Proficiency in handling text, character, paragraph, and layer effects enhances the ability to add and style text elements creatively. Finally, leveraging content-aware tools, filters, alpha channels, quick masks, and AI generators significantly boosts efficiency and creativity in digital design, enabling sophisticated image manipulation and innovative design solutions.

UNIT III INTERFACE OF VECTOR GRAPHICS APPLICATION 12

The interface of vector software includes various features such as selection tools, fill and stroke options, and symbols. It also encompasses the pen tool, which allows for the use of solid colors and gradients. Additionally, the software provides pathfinder and shape builder tools for reshaping objects. Furthermore, it supports 3D conversion, along with a range of filters and effects to enhance the design process.

UNIT IV BRANDING DESIGN 12

The design process encompasses various elements, starting with logo design, which establishes the brand's visual identity. This is followed by the creation of business cards and letterheads, essential for professional communication. Poster making is another crucial aspect, often used for promotional purposes. Additionally, brochure design plays a significant role in providing detailed information about products or services. Lastly, dangler design is utilized for in-store marketing to attract customer attention.

UNIT V PRINTING TECHNIQUES AND CANVAS SETTING **12**

Study of face features Eyes, Nose, Ear, lip, Study of different views and features, Front view, profile view, one third view, key sketch drawing measurement of portrait, Geometrical understanding in face features, Shading in different views and angle.

Total: 60hrs

Practical / Assignments :

•Students will create a Photo manipulation

•Students will have to design Branding design for the Promotion

• Students will create a digital painting

Course Outcome:

At the end of this course students will be able to,

COC1	Understanding graphic design and working in Photoshop with images and layers
COC2	Acquire knowledge about idea of special effects and web templates and exporting in different formats.
COC3	Students can design Business cards, Banners, posters, brochures, Pamphlets and etc.
COC4	Students will get knowledge on typography and elements of design

COC5	Students will exhibit print ads and understand the techniques to print process

Text Books:

1. Foley, Van Damn, Feiner and Hughes, Computer Graphics: "Principles and Practice" Addison Wesly"2003.
2. Gomez and Velho "Image Processing for Computer Graphics", library of congress, September 2013.

Reference Books:

1. Graphic Design, "Referenced: A Visual Guide to the Language, Applications, and History of Graphic Design", Bryony Gomez-Palacio), Armin Vit, 2012.
2. Adobe Photoshop CS6 Classroom in a Book by Adobe Creative Team,2012.
3. Adobe Photoshop CS6: Learn by Video: Core Training in Visual Communication by Kelly
4. Mc Cathran and video2brain, 2012.

Web Sources:

1.https://www.slideshare.net/EngineeroBono/principles-of-design-graphic-design-theory
2.https://youtu.be/YqQx75OPRa0

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
22VAC11	UNIVERSAL HUMAN VALUES	2	0	0	1	2

COURSE OBJECTIVES:

- To appreciate the complementarity between the values and skills for sustained happiness and prosperity.
- To influence the students to approach life and profession with a holistic perspective towards value-based living in a natural way.
- To highlight plausible implications of holistic understanding of ethical human conduct.

UNIT- I INTRODUCTION TO VALUE EDUCATION 5

Living a fulfilling life. Value education. Skill education. Complementarity of Values and Skills. Development of a holistic perspective. Right understanding, relationship and physical facility. Understanding happiness and prosperity.

UNIT-II HARMONY AT MULTIPLE LEVELS 5

Human being as co-existence of the self and the human body. Understanding harmony in theself. Harmony in the family and understanding values in human-human relationships. Harmony in the society and understanding universal human order. Harmony in nature and understanding the interconnectedness, self-regulation and mutual fulfillment. Harmony in existence and understanding co-existence at various levels.

UNIT-III IMPLICATIONS OF THE RIGHT UNDERSTANDING 5

Ethical human conduct, implications of value-based living, right understanding of professional ethics, humanistic education, holistic technologies, production systems, and management models, and strategies for transitioning to a value-based life and profession are the topics covered.

Total: 15 Hours

Course Outcomes:

At the end of the course, learners will be able to:

CO1: Develop qualities like responsibility and the ability to handle problems with sustainablesolutions.

CO2: Appraise human values and the harmony at various levels.

CO3: Perceive a better critical ability.

CO4: Develop qualities pertaining to value-based living.

CO5: Apply what they have learnt to their own self in real life settings.

Reference Books:

- R.R. Gaur, R. Asthana, G.P. Bagaria. (2023). A Foundation Course in Human Values andProfessional Ethics. 3rd Revised Edition. Excel Books, New Delhi.
- A. Nagaraj, Jeevan Vidya Prakashan, Amar Kantak. Jeevan Vidya (1999), Ek Parichaya
- Rakesh Gupta. Jeevan Vidya (2008), An Introduction (Introductory Book to Madhyasth Darshan-Coexistentialism). English Version.
- A. N. Tripathi (2004), Human Values. First Edition. New Age International Publishers, NewDelhi.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24SSKU11	SOFT SKILLS -I	2	0	0	1	2

Course Objectives:

CO1: To learn and apply basic etiquette for personal and professional interactions.

CO2: To develop effective stress management techniques for maintaining mental and emotional well-being.

CO3:To enhance self-awareness for personal growth and informed decision-making.

CO4: To gain an overview of essential 21st-century skills necessary for success in a rapidly changing world.

CO5: To foster creativity and critical thinking skills for innovative problem-solving and adaptability.

Credit Hours

Unit I Introduction to Soft skills **6**

- Soft Skills vs Hard Skills
- 15 important Soft Skills
- Communication Skills, Time Management, Leadership Skills

Unit II - Overview of 21st Century Skills. 6

- Lateral Thinking – Left Brain/Right Brain Functionality
- Problem solving skills

Unit III - Self Awareness **6**

- Human Values
- Mindfulness
- SWOT Analysis
- PDCA Approach

Unit IV - Creativity/Critical Thinking **6**

- Six Thinking Traits
- Creative writing exercises
- Open mindedness

Unit V - Personal Hygiene and Stress Management **6**

- Basic Etiquettes
- Health and Personal Grooming
- Stress-meaning and nature, Eustress, Distress
- Stress management strategies

Total Hours 30

Course Outcomes:

At the end of this course, the students would have learnt to

COC1 demonstrate basic etiquette in various personal and professional settings.

COC2 effectively manage stress using learned techniques.

COC3 show increased self-awareness and make informed decisions.

COC4 understand and articulate key 21st-century skills.

COC5 apply creativity and critical thinking to solve problems innovatively.

References:

- Alex, Dr. K. (2014). Soft Skills (1st edition) S Chand & Company
- Taylor. Grant English Conversation Practice. Tata McGraw Hill Education Pvt. Ltd 2005
- Tiko, Champa& Jaya Sasikumar. Writing with a purpose. OUP New Delhi 1979
- Nelson-Jones, R. (1992). Life skills, a handbook, Trowbridge, Wilts: Detesios Ltd.
- Tuhovsky, Ian (2019). Communication Skills Training (2nd edition) Rupa Publication



SEMESTER II

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LTAM21	TAMIL II	2	0	0	1	2

தாள்-2

காப்பியம், பக்தி இலக்கியம், கலைகள், நாகரிகம்-பண்பாடு

பாடத்திட்ட நோக்கம்:

மாணவர்களின் இலக்கிய நாட்டத்தை மேம்படுத்துதல், அற இலக்கியங்கள், சிற்றிலக்கியம், சிறுகதை ஆகியவற்றை அறிமுகப்படுத்துதல், தற்காலப் பேச்சுத் தமிழ் எழுத்துத்தமிழ் ஆகியவற்றின் வளர்நிலைகளை மாணவர்களை அறியச் செய்தல், அதன்வழி சிந்தனை வளத்தைப் பெருகச் செய்தல் என்பனவும் மேற்கண்டவழி மாணவர்களை ஆளுமை மிக்கவர்களாக உருவாக்கி, போட்டித்தேர்வுகளுக்குத் தயார் செய்து அவர்களின் மொழித் திறனை மேம்படுத்த அவர்களுக்குக் கடிதம் எழுதும் கலையைக் கற்றுக்கொடுத்தல், அணி இலக்கணத்தை அறியச் செய்தல் என்பன இந்தப் பாடத்திட்டத்தின் முக்கிய நோக்கமாகும்.

அலகு 1 காப்பியங்கள் 8 மணி நேரம்

சிலப்பதிகாரம்- கனாத்திறம் உரைத்தக் காதை முழுவதும்.

மணிமேகலை- மலர்வனம் புக்க காதை முழுவதும்.

கம்பராமாயணம் - குகப் படலம் (தேர்ந்தெடுக்கப்பட்ட ஒன்பது பாடல்கள்)

அலகு 2: பக்தி இலக்கியம் 8 மணி நேரம்

1. மாணிக்கவாசகர் - திருவாசகம் – மூன்று பாடல்கள்
   - ✓ புல்லாகி பூடாகி (சிவபுராணம்)
   - ✓ எல்லாப் பிறப்பும் (சிவபுராணம்)
   - ✓ உற்றாரை யான் வேண்டேன் (திருப்புலம்பல்)
2. ஆண்டாள் - திருப்பாவை – மூன்று பாடல்கள் (1, 3, 4)
   - ✓ மார்கழித் திங்கள் ... (பாசுரம் 1)
   - ✓ ஓங்கி உலகளந்த... (பாசுரம் 3)
   - ✓ ஆழிமழைக் கண்ணா... (பாசுரம் 4)
3. வீரமாமுனிவர் - தேம்பாவணி – வளன் சினித்தப் படலம்
4. சீறாப்புராணம்- மானுக்கு பிணை நின்ற படலம்

அலகு 3 கலைகள் 07 மணி நேரம்

சிற்பம் - ஓவியம் - இசை - கூத்து - ஒப்பனை - ஆடை அணிகலன்கள்.

அலகு 4 நாகரிகம், பண்பாடு **7 மணி நேரம்**

சொற்பொருள் விளக்கம் - பண்டைத் தமிழர் வாழ்வியல் - அகம் - களவு - கற்பு - குடும்பம் - விருந்தோம்பல் - உறவு முறைகள் - சடங்குகள் - நம்பிக்கைகள் - பொழுதுபோக்கு - புறம் - போர் முறைகள் - நடுகல் வழிபாடு - கொடைப்பண்பு.

மொத்தம்: 30 மணி நேரம்

பார்வை நூல்கள்

8. **தமிழர் நாகரிகமும் பண்பாடும்,** டாக்டர் அ. தட்சிணாமூர்த்தி, ஐந்திணைப் பதிப்பகம், 2001.
9. **தவறின்றித் தமிழ் எழுதுவோம்**, மா. நன்னன், ஏகம் பதிப்பகம், 1999.
10. **தவறின்றித் தமிழ் எழுத** - மருதூர் அரங்கராசன், ஐந்திணைப் பதிப்பகம், 2003.
11. **தமிழ் இலக்கிய வரலாறு**, வரதராசன், மு., புது தில்லி : சாகித்திய அக்காதெமி, 2002.
12. **புதிய தமிழ் இலக்கிய வரலாறு**, நீல. பத்மநாபன், சிற்பி பாலசுப்ரமணியம், சாகித்திய அகாடெமி, 2007.
13. **செம்மொழி தமிழின் சிறப்பியல்புகள்** - முனைவர் மறைமலை இலக்குவனார்; https://www.youtube.com/watch?v=HHZnmJb4jSY
14. **பாடநூல் தேடலுக்கான இணையம் -** https://archive.org/

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LHIN21	HINDI II	2	0	0	1	2

Course Objectives:

- To train students in translation
- To develop reading & writing skills
- To create interest towards reading different types of literature
- To understand the value of Senior citizen
- To understand the importance of hard work
- To understand the patriotism and women empowerment
- To introduce the usage of Inscript keyboard

UNIT I: Boodee kaki" (Kahani) by Munshi Premchand 6hrs.

UNIT II: Puraskar' (Kahani) by Prasad 6hrs.

UNIT III: Main Narak Se Bhol Raha Hun' (Vyangy) by Harishankar Parsayi, 6hrs.

UNIT IV: Functional Hindi- Technical & Designation & Department Names-50., Bhav Ek Bhasha Anek 6hrs.

UNIT V: Functional Hindi-Letter Writing- 3 Official Letters. 6hrs.

Inscript Keyboard knowledge

Total: 30hrs

Course Outcome:

At the end of this course Students will be able to

CO1 Know to the value senior citizen , their love and affection towards the family members

CO2 Know the importance of patriotism and women empowerment in the society

CO3 Know the value of hardwork in human life

CO4 Gain fair knowledge of Functional Hindi and fluency in speaking Hindi

CO5 Equip themselves in writing official letters in Hindi

importance of translation of technical words and equip knowledge in using

inscript keyboard thereby improving their employability

Text/Reference book/Weblink:

Munshi Premchand, Manasarovar, 2007, http://gadyakosh.org

Jaishankar Prasad/ http://gadyakosh.org

Harishankar Parsai/ https://hindikahani.hindi-kavita.com

Prayojanmoolak Hindi:https://hi.mwikipedia.org

https://rajbhasha.gov.in/en/introduction

SE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LFRE21	FRENCH PAPER II	2	0	0	1	2

Course Objectives:

The lessons are being chosen:

1) To express his / her where about and to ask seek direction

2) To express obligation and restriction

3) To describe a place

4) To narrate and to question

5) To describe someone

6) To express his desire and to speak about the futur

Units:

7) C'est où

L'impératif, Les articles contractés au, à la…, Le passé composé et l'accord du participe passé avec être. 5 hours

8) N'oubliez pas

Le pronom relatif Qui, que, où, Les pronoms compléments indirects (me, te, lui, leur…) 5 hours

9) Belle vue sur la mer --

Les adjectifs démonstratifs, Y- pronom complément. 4 hours

10) Quel beau voyage!

Les verbes pronominaux, En- pronom complément. 4 hours

11) Oh ! joli

L'imparfait, L'imparfait ou le passé composé. 5 hours

12) Et après ?

Le futur simple, Le subjonctif présent. 7 hours

Total no. of hours - 30 hours

Course Outcome:

1) The students would be able to express his/her where about and to ask direction

2) The students would be able to express obligation and restriction

3) The students would be able to describe a place

4) The students would be able to narrate and to question

5) The students would be able to describe someone

6) The students would be able to express his desire and to speak about the futur

Text / Reference Book:

Prescribed book: LATITUDES 1 (A1/A2) MÉTHODE DE FRANÇAIS - Régine Mérieux and Yves Loiseau

Reference book: SAISON A1 - MÉTHODE DE FRANÇAIS - Marie-Noëlle Cocton, Élodie Heu, Catherine Houssa, Émilie Kasazian

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LENG21	ENGLISH II	2	0	0	1	2

COURSE OBJECTIVE:

1. To read and understand different types of prose, poetry, and fiction.
2. To think critically about texts and express ideas clearly.
3. To recognize and discuss key themes and styles in literary works
4. To learn and use grammar rules correctly in writing and speaking
5. To write more effectively by applying grammar and literary techniques.

UNIT- I PROSE 6

- If you are wrong, admit it- Dale Garnegie
- Words of Wisdom- Chetan Bhaghat

UNIT-II POETRY 6

- La Belle Dame Sans Merci - John Keats
- Ozymandias- P.B.Shelley

UNIT-III FICTION 6

- The School for Empathy - E.V. Lucas
- The Lamb to the Slaughter-Roald Dahl

UNIT – IV GRAMMAR 6

- Types of sentences, Concord

UNIT – IV GRAMMAR 6

- Tenses, Voices

Total: 30 Hours

Course Outcome:

At the end of this course students will be able to,

CO 1	identify poetic expressions in the course of daily speech
CO 2	students will develop skills that enable them to communicate effectively inwriting.
CO 3	students will develop skills that enable them to communicate effectively inwriting.
CO 4	discriminate against different sensibilities in approaching life.
CO 5	strengthen the ability to solve life's problems, as highlighted in the selections.

Reference Books:

- Dr. M. Narayana Rao and Dr. B. G. Barki–Anu's Current English for Communication(AnuChitra). June 2012.
- General English for competitive examinations by V.Rajagopalan (Mcgraw HillEducation) -2010.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN21	COLOR THEORY PRINCIPLES	3	1	2	1	5

Course Objectives

1. To introduce students to the basics of color.
2. To study the color theory and color characteristics of color
3. To analyze the importance of color harmonies
4 To improve the color psychology for media field needs and design solutions
5. To analyze the importance of color in Design

UNIT I INTRODUCTION TO COLOR 15

Brief History of colors, Color fundamentals, Primary Colors, Secondary Colors, Tertiary Colors, Properties of color. Hue, Value, Tints and Shades, Saturation, Tones, neutral Colors.

UNIT II COLOUR CHARECTERISTICS 15

Physics of color, color Temperature, Warm Colors, Cool Colors, **C**olor Systems, Color Wheel, Munsell, Goethe theory, Runge theory Itten theory, color mixing and color-discernment, color effects: Subtractive Color, Additive Color

UNIT III COLOUR SCHEMS

Monochromatic scheme, Analogous scheme, Diad, Triad scheme, Tetrad scheme, Complementary scheme, Split Complementary scheme, Natural scheme .Achromatic and Polychromatic,

UNIT IV COLOUR PSYCHOLOGY 15

Color Symbolism, Color Psychology, Historical& Contemporary use of Color, Local color and subjective use of color, Emotional effects of colors Personal Color preferences, Harmony and Contrast colors.

UNIT V COLOR IN ART &DESIGN 15

Color Value and Intensity in Product Art & Design, Aesthetics in Design, Modern Art & Design-Architecture & Design, the Bauhaus, Influence of Bauhaus on Modern Design, Minimalist Approach.

Total Hours: 75

Practical / Assignments

- Students Will Have To Submit color theory Record Book (color wheel, tint and shade, complementary color, Mansell color).
- Assignments for color theory and color psychology (written 20 pages)

Course Outcomes

CO 1	Students Would Be Able to Understand the Art and Master the Techniques of color palate
CO 2	Students Would Be Able to acquire knowledge to express ideas in the form of color
CO 3	Students would be able to enhance their knowledge through practicing art in color
CO 4	Students can develop the knowledge of color using skills in the field media
CO 5	Students would be able to produce problem solving designs for the media industry

TEXT BOOKS:

1. Albers, Joseph, “The Interaction of Color”, Yale University Press, Revised edition Sep 1975.
2. Eiseman, Leatrice, “Messages and Meanings, A Pantone Color Resource”, Han Books Press, 2006
1. Itten, Johannes, “The Elements of Color”, New York, John Wiley & Sons, Inc, 1970.
2. Koenig Becky, “Color Workbook”, Upper Saddle River, NJ: Prentice Hall, 2003

Web Link:

https://www.colormatters.com/color-and-design/basic-color-theory

https://www.designwizard.com/blog/design-tips/color-theory

Web Sources:

https://www.slideshare.net/slhallman/color-theory-533704

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN22	**FOUNDATION TO 2D ANIMATION**	0	2	4	2	4

Course Objective:

6. To understand the fundamentals of Animation and its Concepts.
7. To Gain knowledge about the 2D Animation Techniques.
8. To inculcate knowledge about Developing Creativity.
9. To acquaint learners with the Clear idea about the animation.
10. To understand the process of 2D animation.

Unit-I - Interface of 2D software **12**

1.1 Introduction to 2D software
1.2 Workspace Overview
1.3 Principles of Animation
1.4 Types of Animation
1.5 Tools and Techniques

Unit-II – Creating Animation **12**

4.1 Appropriate Frame Rate
4.2 Fundamentals of Key frame Animation
2.3 Shape, Classic & Motion Tweens
2.4 Control the Tween Path using a Guide
2.5 Animation Content using Layers

Unit-III – Working with Text, Audio and Video **12**

3.1 Static, Dynamic & Input Text
3.2 Infographics Animation
3.3 Key Frame, In-betweens and Breakdown keys
3.4 Text field with text-wrapping
3.5 Video & Audio Files

Unit - IV – Working with Symbols **12**

4.1 Various Benefits of using Symbols
4.2 Movie Clip, Buttons & Graphic Symbols
4.3 Button Symbol for Interactivity
4.4 Bitmap & Vector Graphics
4.5 Assets using The Library Panel

Unit – V- Publishing Animation **12**

a. Bone, Wrap and Parenting rigs
b. Add Sound Effects & Music to Animation
c. Preview & Test the Performance
d. Publish Settings for The Output

e. Exporting movie

Total Hours: 60

Practical / Assignments

- Students will create character design
- Students will create character animation
- Students will create a Background
- Students will create Infographics

Course Outcomes

CO 1	Students can understand the technique of 2D animation.
CO 2	Students would developing a smooth animation, basic walk cycle technique and facial expressions
CO 3	Students can design character, background creation and etc.
CO 4	Students will get knowledge on animation project, Info graphic Animation techniques.
CO 5	Students can implement their creativity and ideas through animation

TEXT BOOKS

1. Cartoon Animation (Collector's Series) Paperback – 1 January 1994
2. The Animator's Survival Kit Paperback – 5 November 2009

REFERENCE BOOKS:

3. Bob Godfrey and Anna Jackson "The Do-It-Yourself Film Animation Book', BBC Publications, Edition I, 1974 ISBN 978-0-563-10829-0
4. Draw Great Characters and Creatures: 75 Art Exercises for Comics and Animation Paperback – Illustrated, 3 December 2019

WEB SOURCES

3. https://www.tutorialspoint.com/computer_graphics/computer_animation.htm
4. https://www.renderforest.com/blog/2d-animation

REFERENCE BOOK LINK

3. https://web.stanford.edu/class/cs248/pdf/class_03_animation.pdf

4. https://www.bloopanimation.com/animation-for-beginners/

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24BVC002	**UNDERSTANDING UI & UX**	0	2	4	2	4

Course Objective:

Our design program is meticulously structured to provide a thorough understanding of UI/UX design principles, ensuring you can craft user-friendly and aesthetically pleasing interfaces. You'll become proficient in using design tools like Sketch, Figma, and Adobe XD, gaining practical skills with these essential applications. The curriculum also focuses on developing knowledge in creating user personas, wireframes, and prototypes, which are fundamental to the design process. Additionally, you'll learn to conduct usability testing and interpret the results, allowing you to enhance and perfect your designs

Unit-I - Introduction to UI/UX Design **12**

An introduction to UI and UX, laying the foundation for understanding these crucial aspects of design. You'll explore the history and evolution of UI/UX design, gaining insights into how these fields have developed over time. We provide an overview of design thinking, a methodology that drives innovative solutions. You'll learn about the difference between User Experience Design and User Interface Design, clarifying the distinct roles each plays in creating effective digital products. Additionally, you'll engage in competitive research, analyzing industry trends and competitor strategies to inform your design decisions.

Unit-II – Knowing Your User **12**

Creating effective user experiences involves several key steps. Creating user personas helps in understanding the target audience and their needs. Case studies of successful UX provide valuable insights and best practices. Information architecture principles guide the organization of content to ensure it is intuitive and accessible. Creating sitemaps is essential for planning the structure of a website, while navigation design ensures users can easily find their way around. Together, these elements form the foundation of a user-centered design process.

Unit-III – Wire framing, Sketching, Prototyping **12**

Creating a well-rounded design involves several crucial steps. Tools for wireframing like Figma, Sketch, and Adobe XD help designers visualize their ideas. Creating low-fidelity wireframes allows

for quick iteration and feedback. Understanding colour theory, typography, and iconography is essential for creating visually appealing designs. Designing for different devices ensures that the user experience is consistent across various screen sizes. Tools for prototyping such as Figma, Sketch, and Adobe XD enable designers to create interactive prototypes, bringing their designs to life.

Unit - IV – Color, Typography & Fonts **12**

Creating visually appealing and readable content involves several important aspects. Color harmonies ensure that the color scheme is aesthetically pleasing and cohesive. Creating contrast with color helps to highlight important elements and improve readability. Differentiating display text (such as headings) versus body text is crucial for guiding the reader's attention and structuring the content. Ensuring legibility is key to making text easy to read, while hyphenation and justification help in managing text flow and alignment, enhancing the overall readability and appearance of the content. Together, these elements contribute to an effective and engaging design.

Unit – V- Multiple Screen Sizes and Idea to Design **12**

Designing for modern user experiences involves addressing several key areas. Mobile considerations and limitations are crucial, as designers must account for smaller screens and varying device capabilities. Tools for testing accessibility ensure that designs are inclusive and usable by everyone, including those with disabilities. Motion design adds a dynamic element to interfaces, enhancing user engagement and providing visual feedback. Designing for emerging technologies like AR, VR, and voice interfaces requires innovative approaches to create immersive and intuitive experiences.

Total Hours: 60

Practical / Assignments

•Students will Create Visual Designs & Clickable Prototypes

•Students will have to design prototype responsive Webpages

•Students will create ideas to make an application using research methodology

Course Outcomes

CO 1	Students can understand User Experience Design and User Interface Design
CO 2	Students would get an idea of special effects and web templates and exporting in different formats.

CO 3	Students can design Interface of Mobile Application, Web Page and etc.
CO 4	Students will get knowledge on Colour, Text and Graphic elements
CO 5	Students will exhibit Web ads and understand the techniques to Publishing.

TEXT BOOKS

1. Joel Marsh, "UX for Beginners", O'Reilly, 2022

2. Jon Yablonski, "Laws of UX using Psychology to Design Better Product & Services"

REFERENCES BOOKS

1. Jenifer Tidwell, Charles Brewer, Aynne Valencia, "Designing Interface" 3 rd. Edition, O'Reilly- 2020

2. Steve Schoger, Adam Wathan "Refactoring UI", 2018

WEB SOURCES

1. https://www.slideshare.net/EngineeroBono/principles-of-design-graphic-design-theory
2. https://youtu.be/YqQx75OPRa0

WEB LINK

1. https://edu.gcfglobal.org/en/beginning-graphic-design/fundamentals-of-design/1/

   https://99designs.com/blog/design-history-movements/history-graphic design/#:~:text=Graphic%20design%20proper%20really%20began,world%20was%20ready %20for%20it.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DPAN21	**DRAWING II**	0	0	4	2	2

Course Objective:

This course is intended for those who wish to learn the skill of coloring. Basic artistic ideas related to the medium, such as transparency, composition, basic color theory, and value, will be discussed. Students will gain practical experience with the medium and tools. The emphasis will be on problem solving, skill development, and assisting students in developing their own personal styles.

Unit I Water Color **15**

Color mixing, painting in watercolour, basic techniques with brushes and paints, different brush strokes, mono tone, cut color technique, single wash technique, Wed on wed technique, dry brush technique, organic still-life and inorganic still life' plants, tree, flowers, Glass, wooden objects cloth, landscapes, portrait, seascapes.

Unit II Dry Pastels Color **15**

An introduction to pastel materials, color mixing, painting in dry pastels, mono tone, blending technique cut color technique, smudge technique, rough technique, dry brush technique, organic still life, inorganic still life, plants, tree flowers, cloth, landscapes, portrait, and seascapes, Pastel papers

Unit III Drapery **10**

Study different types of cloth, and different styles of folding, silk. Cotton, shadows, shapes, folds, lighting and folds, adjusting the edges, mixing the colors, Sanded board using pastel medium, Composition, black and white value studies to color studies, drapery study in different lighting

Unit IV Landscape Painting **10**

Pastel sketch, choosing a color palette, demo on layering color, pastels to keep color clean, demo on simplifying cloud shapes, shadows and reflected light, tree study, soft pastels work, study of sky, study of buildings, study of different climates with landscapes.

Unit V Portrait in Color **10**

Study of face features eyes, nose, Ear, lip, Contemporary Portrait, tribal portrait, children portraits,

mono tone painting, dry brush coloring, black and white portraits, old man portraits, Light to dark technique, dark to light technique, live modal portrait, artificial light portrait.

Total: 60 Hrs

Practicals / Assignments

Students Will Have to Submit Drawings Record Book (Water Colors, Basics of Portrait in Color, Landscape Painting, and Drapery study).
Assignments for Indian and western art (written 20 pages)

Course Outcomes

CO 1	Students would be able to understand the art and master the techniques of and painting.
CO 2	Students would be able to acquire knowledge to express ideas in the form of paintings.
CO 3	Students would be able to create posters and banners thumbnail for media.
CO 4	Students can develop the knowledge of recreation of any image.
CO 5	Students would be able to enhance their color knowledge through practicing painting

TEXT BOOKS:

1. Jean Haines, “World of Watercolor”, Search Press 1 edition, 2015.
2. Gordon MacKenzie , “The Complete Watercolorist's”, North Light Books**,** 2010.

REFERENCE BOOKS:

1. Margaret Kessler, “Painting Better Landscapes”, Watson-Guptill, Reprint edition, 1992.
2. Barron's, “Drawing and Painting Fantasy Landscapes and Cityscapes”, Barron's Educational Series, 2006.

WEBSITE

1.https://www.skillshare.com

2.https://www.artspace.com

WEB SOURES

1.https://www.artisera.com/pages/fine-art

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DVAC21	COMMUNICATION SKILLS	2	0	0	1	2

COURSE OBJECTIVE:

1. **To** develop effective verbal and non-verbal communication techniques for various contexts.
2. To enhance listening skills for better comprehension and engagement in conversations.
3. To improve written communication abilities, focusing on clarity, coherence, and style.
4. To build confidence in public speaking through practice and constructive feedback.
5. To cultivate interpersonal skills for successful collaboration and professional interactions.

UNIT- I INTRODUCTION TO COMMUNICATION SKILLS 6

- Fundamentals of Communications
- Elements of Communication, Types of Communication

UNIT-II PRACTICAL ENGLISH 6

- Importance of the language - Word Usage and Jargon
- Tenses and the effectiveness - Basics of grammar (Noun/Verb/Adverb/Conjunction)

UNIT-III EFFECTIVE COMMUNICATION 6

- LSRW (Listening, Speaking, Reading & Writing)
- Pronunciation - Vocabulary Building
- Intonations & its importance

UNIT – IV WORK PLACE COMMUNICATION 6

- Basics of telephone etiquette
- E-Mail writing
- Presentation Skills
- Interpersonal Skills
- Business English

UNIT – IV QUANTITATIVE ABILITY 6

- Verbal Ability - Verbal Analogy
- Debating Skills - Public Speaking

Total: 30 Hours

Course Outcome:

At the end of this course students will be able to,

CO 1	enhance participants' business communication skills
CO 2	enhance LSRW Skills (LSRW – Listening, Speaking, Reading & Writing)
CO 3	express opinions at free will in social/ personal gathering
CO 4	impact leadership qualities among participants
CO 5	engage in conversation with others to exchange ideas

Reference Books:

- Basic communication skills for Technology, Andreja. J. Ruther Ford, 2nd Edition,Pearson Education, 2011
- Personality development and soft skills, Barun K Mitra, 1 stEdition, Oxford Press,2011
- Elizabeth Harren, 7 April 2022, last updated: 16 November, 2023
- Kerry Patterson, Joseph Grenny, Ron McMillan, Al Switzler (McGraw-Hill)
- Ethan Beute and Stephen Pacinelli (Greenleaf)
- Soft skills and professional communication, Francis Peters SJ, 1stEdition, McGraw Hill Education, 2011

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24SSKU21	SOFT SKILLS -II	2	0	0	1	2

Course Objectives:

- To develop strategies to enhance teamwork and collaboration in professional settings.
- To cultivate a positive attitude and mindset to foster constructive relationships and productivity.
- To develop leadership, decision-making and team bonding skills.

Credit Hours

Unit I PROFESSIONAL BEHAVIOUR **6**

- Team Building – Team Bonding
- Inter-Personal Relationship– Intra-Personal Relationship

Unit II - PERSONALITY DEVELOPMENT **6**

- Types of Personality
- Self-Confidence - Confidence Building
- Attitude (Positive/Negative)

Unit III - TELEPHONE ETIQUETTE **6**

- Basics of telephone etiquette
- Giving clear and concise information
- Tone & rate of speech
- Intonations & its Importance
- Whatsapp Communications

Unit IV - DECISION MAKING **6**

- Types of Decisions – planned-unplanned, individual-group, major-minor
- Types of Leadership styles – Autocratic, democratic, lesse-faire, participative, beurocratic
- Open mindedness

Unit V - PROFESSIONAL ETIQUETTE **6**

- Respect – Salutations
- Official Behaviour

Total Hours 30

Course Outcomes:

At the end of this course, the students would have learnt to

CO1 understand the principles of effective team building and apply strategies to foster team bonding and cohesion in professional settings.

CO2 become self-confident individuals by mastering interpersonal skills, team management skills, and leadership skills.

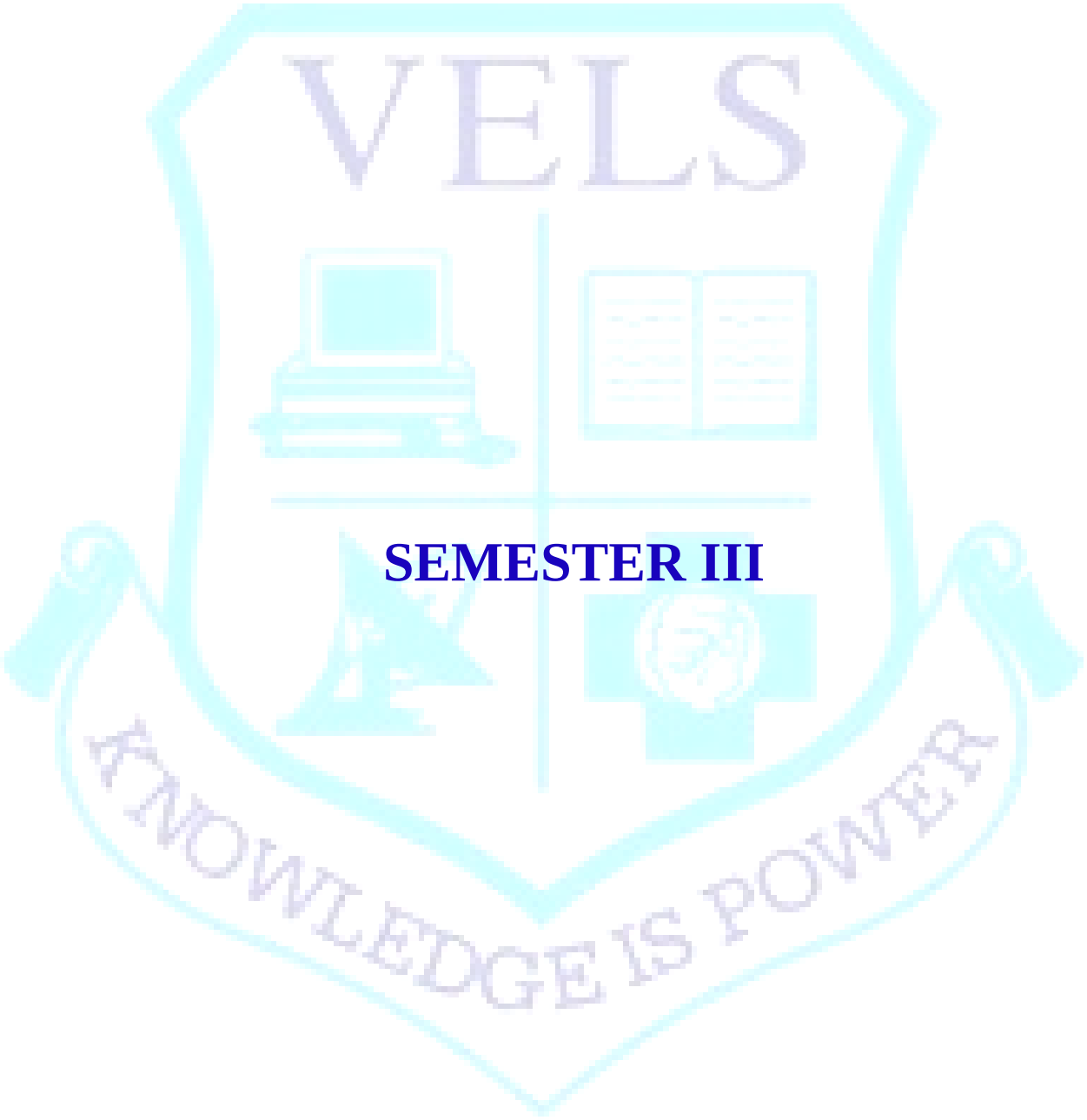
CO3 practice techniques for effective communication in telephone conversations.

CO4 evaluate decision-making processes and their implications in professional settings.

CO5 exhibit professional conduct and demeanour in various professional situations..

References:

- Language Service, Universitat Oberta de Catalunya
- Taylor. Grant English Conversation Practice. Tata McGraw Hill Education Pvt. Ltd 2005.
- Tiko, Champa& Jaya Sasikumar. Writing with a purpose. OUP New Delhi 1979
- Nelson-Jones, R. (1992). Life skills, a handbook, Trowbridge, Wilts: Detesios Ltd.
- Alex, Dr. K. (2014). Soft Skills (1st edition) S Chand & Company.



SEMESTER III

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LTAM31	TAMIL III	2	0	0	1	2

COURSE OBJECTIVES

மாணவர்களின் இலக்கிய நாட்டத்தை மேம்படுத்துதல், பக்தி இலக்கியத்தை மாணவர்களுக்கு அறிமுகப்படுத்தி, அதன்வழி தமிழர்தம் பக்தி உணர்வையும் அதன் மேன்மையையும், கலைத்திறனையும் வெளிப்படுத்துதல், காப்பியம், புதினம் என்ற இலக்கிய வகைமைகளை அறிமுகப்படுத்துதல், மாணவர்களின் மொழித்திறனை மேம்படுத்தும் வகையில் மொழிபெயர்ப்பு, இலக்கணக் குறிப்பு என்பனவற்றை அறியச் செய்தல், மேற்கண்டவழி மாணவர்களைப் போட்டித்தேர்வுகளுக்குத் தயார் செய்தல் இந்தப் பாடத்திட்டத்தின் முக்கிய நோக்கமாகும்.

அலகு 1: சிற்றிலக்கியம் 8 மணி நேரம்

1. நந்திக்கலம்பகம் - உரைவரம் பிகந்த உயர்புகழ்ப்
   வானுறுமதியை அடைந்தது உன்வதனம்
2. தமிழ்விடு தூது – 10 கண்ணிகள்
3. திருக்குற்றாலக் குறவஞ்சி – மலைவளம் கூறுதல் – முதல் 5 பாடல்கள்
4. கலிங்கத்துப் பரணி – பாலை பாடியது – முதல் 5 பாடல்கள்

அலகு 2: சிறுகதை 8 மணிநேரம்

1. அறிஞர் அண்ணா - செவ்வாழை
2. புதுமைப்பித்தன் - கடவுளும் கந்தசாமிப் பிள்ளையும்
3. கி.ராஜநாராயணன் - கதவு

அலகு 3 எழுதுதிறன் 7மணி நேரம்

கலைச்சொல்லாக்கம் - தேவைகள் - கலைச்சொற்களின் பண்புகள் - கலைச்சொல்லாக்கத்தில் தவிர்க்க வேண்டியவை - அறிவியல் கலைச்சொற்கள். கடிதம் - வகைகள் - அலுவலகக் கடிதங்கள் - பயிற்சி - அறிஞர்களின் கடிதங்கள் - கடிதங்களின் வழி கற்பித்தல் - சில அறிஞர்களின் கடிதங்கள் - நேரு...,

அலகு 4: பேச்சுக் கலை 8 மணி நேரம்

பேச்சுத் திறன் – விளக்கம் – பேச்சுத்திறனின் அடிப்படைகள் – வகைகள் – மேடைப்பேச்சு – உடையாடல் - பயிற்சிகள்

மொத்தம்: 30 மணி நேரம்

பார்னவ நூல்கள்

பார்வை நூல்கள்

1. தமிழர் நாகரிகமும் பண்பாடும், டாக்டர் அ. தட்சிணாமூர்த்தி, ஐந்திணைப் பதிப்பகம், 2001.

2. தவறின்றித் தமிழ் எழுதுவோம், மா. நன்னன், ஏகம் பதிப்பகம், 1999.

3. தவறின்றித் தமிழ் எழுத - மருதூர் அரங்கராசன், ஐந்திணைப் பதிப்பகம், 2003.

4. தமிழ் இலக்கிய வரலாறு, வரதராசன், மு., புது தில்லி : சாகித்திய அக்காதெமி, 2002.

5. புதிய தமிழ் இலக்கிய வரலாறு, நீல. பத்மநாபன், சிற்பி பாலசுப்ரமணியம், சாகித்திய அகாடெமி, 2007.

6. செம்மொழி தமிழின் சிறப்பியல்புகள் - முனைவர் மறைமலை இலக்குவனார்; https://www.youtube.com/watch?v=HHZnmJb4jSY

பாடநூல் தேடலுக்கான இணையம் –

https://archive.org/

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LHIN31	HINDI -III	2	0	0	1	2

COURSE OBJECTIVES:

- To enrich the knowledge of students about through Thirukkural
- To enable them to learn life values through ancient and medievial poems of Hindi Literature
- To develop translation and advertisements skills in Hindi

UNIT I: तिरुवल्लुवर कृत तिरुक्कुरल – 5, अमीर खुसरो कृत पहेलियाँ –5
'Thirukkural'- 5 Kural-by Thiruvalluvar & Amir Khusro-5 Paheliyan 6hrs.

UNIT II: कबीर के दोहे – 5
Kabir Ke Dohe,-5 6hrs.

UNIT III: तुलसीदास के पद – 2 & सूरदास के पद – 2
Tulsidas Ke Pad-2 & Surdas Ke Pad-2 6hrs.

UNIT IV: व्यावहारिक हिन्दी 1 – अनुवाद का परिचय (अर्थ, परिभाषा व प्रकार) & 5 – अभ्यास अनुछेद
Functional Hindi 1 - Introduction to Translation (Meaning, Definition &Types) & Exercise passages – 5 6hrs.

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UNIT V: व्यावहारिक हिन्दी 2 - विज्ञापन का परिचय (अर्थ, परिभाषा व प्रकार) & 4 – नमूना विज्ञापन
Advertisement –Introduction (Meaning, Definition & Types) & Model Advertisement – 4 6hrs.

Total: 30hrs

Course Outcome:
At the end of this course Students will
CO1 Know the valuable messages in social responsibilities
CO2 & CO3 Know the life values
CO4 Gain knowledge of translation in functional Hindi
CO5 Gain knowledge about advertisement skills in Hindi

Text/Reference book/Weblinks:

Thirukkural hindi translation by Venkata Krishnan

Ameer khusro ki paheliyan - https://www.hktbharat.com

Kabir ke Dohe - Kabir granthavali , Surhranthavali-http://kavitakosh.org

Tulsidas ke pad - http://kavitakosh.org

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LFRE31	FRENCH -III	2	0	0	1	2

Course Objectives:

The lessons are being chosen:

1. to express certainty and uncertainty
2. to express one's desire to do something
3. to express one's willingness and unwillingness to do something
4. to express one's joy and sorrow
5. to express one's fear, concern and astonishment
6. to express one's anger and regrets

Units:

1. Très drôle
   le passe recent, passe compose et l'imparfait 6 hours

2. Vous avez dit culture
   l'interrogation et le subjonctif. 5 hours

3. Envie d'ailleurs les verbes aller/ retourner, venir/ revenir, ne...pas...ni, ne…ni…ni. 4 hours

4. Voila l'été
   le comparatif, superlatif et l'accord du participe passe avec avoir. 7 hours

5. Terre inconnue
   le plus-que parfait 3 hours

6. Vivement dimanche

   le pronom en et y, le subjonctif et les conjugaisons irrégulières. 5 hours

Course Outcome:

1. The students would be able to express certainty and uncertainty
2. The students would be able to express one's desire to do something

3. The students would be able to express one's willingness and unwillingness to do something
4. The students would be able to express one's joy and sorrow
5. The students would be able to express one's fear, concern and astonishment
6. The students would be able to express one's anger and regrets

Text / Reference Book:

1. Prescribed book: LATITUDES 1 (A2/B1) MÉTHODE DE FRANÇAIS - Régine Mérieux and Yves Loiseau
2. Reference book: SAISON A2 - MÉTHODE DE FRANÇAIS - Marie-Noëlle Cocton, Élodie Heu, Catherine Houssa, Émilie Kasazian

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LENGE31	ENGLISH III - ENGLISH FOR COMPETITIVE EXAMINATIONS	2	0	0	1	2

COURSE OBJECTIVES:

- To enhance reading comprehension skills for understanding complex texts in competitive exams.
- To develop vocabulary and language proficiency to tackle verbal reasoning sections effectively.
- To improve grammar and writing skills for precise and coherent expression in written exams.
- To practice critical thinking and analytical reasoning abilities required for exam questions.

UNIT- I VERBAL ABILITY **06**

- Homophones, Homonyms, Jumbled sentences, Spot the Errors

UNIT-II COMPREHENSION **06**

- Reading Comprehension, Critical Reading, Cloze Test

UNIT-III GRAMMAR **06**

- Idioms and Phrases, Question Tag, Verbal Phrases, Prepositions

UNIT – IV GRAMMAR **06**

- Voices, Direct and Indirect Speech, Simple, Compound, Complex

UNIT– V ACADEMIC WRITING **06**

- Precis Writing, Letter Writing

Total: 30 Hours

Course Outcomes:

At the end of this course, students will be able to:

CO1: imbibe the rules of language unconsciously and tune in to deduce language structure and usage.

CO2: develop their abilities as critical readers and writers.

CO3: decipher the mechanism of language and use it for success in competitive examinations and job-related speaking and writing tasks.

CO4: construct grammatically flawless sentences in oral and written communication.

CO5: express their thoughts and views in a concise manner in writing.

Reference Books:

- General English for competitive examinations by V. Rajagopalan (McGraw Hill Education) -2010.
- Technical Communication – Principles and Practices By Meenakshi Raman & Sangeeta K. Sharma, Oxford Univ. Press, 2016, New Delhi.
- Ibbotson, Mark. Professional English in Use: Engineering: Technical English for Professionals. Cambridge University Press, 2009.
- Wallwork, Adrian. User guides, manuals, and technical writing: A guide to professional English. Springer, 2014.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN31	UNDERSTANDING ANATOMY: HUMAN AND ANIMAL FORM	0	1	4	2	3

COURSE OBJECTIVE:

1. Provide a comprehensive understanding of human and animal anatomy
2. Develop the ability to accurately depict human and animal forms in various artistic contexts.
3. Explore the similarities and differences between human and animal anatomical structures.
4. Foster an appreciation for the functional and evolutionary aspects of anatomy.

UNIT- I INTRODUCTION TO ANATOMY 12

Importance of anatomy in art. Overview of human and animal anatomy. Human and animal body proportions. Basic structures and their artistic relevance. Gesture drawing techniques for humans and animals.

UNIT- II THE SKELETAL SYSTEM 12

Overview of the human and animal skeletal system. Major bones and their landmarks. Skeletal proportions and their impact on form.

UNIT- III THE MUSCULAR SYSTEM 12

Major muscle groups and their functions. Muscle structure and function in animals. Differences in muscle arrangement for different modes of locomotion. Studying muscle movement in animals.

UNIT- IV: TORSO, SPINE AND LIMBS 12

Human torso and spinal structure. Animal torso and spinal structure. Human head and neck anatomy: Skull, facial muscles. Animal head and neck anatomy: Skull variations, neck musculature. Analyzing motion and its impact on anatomical form.

UNIT- V: HEAD, NECK, HANDS AND FEET 12

Human and animal head and neck anatomy: Skull, facial muscles. Anatomy of human hands and feet. Understanding human and animal movement. Depicting dynamic poses in humans and animals.

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO 1	Identify and describe major anatomical structures of both humans and animals.
CO 2	Understand the relationship between structure and function in anatomical forms.
CO 3	Depict human and animal anatomy accurately in artistic representations.
CO 4	Compare human and animal anatomy, recognizing evolutionary adaptations and functional differences.
CO 5	Apply anatomical knowledge creatively in various artistic fields.
CO 6	Analyze and critique anatomical accuracy in artistic works and scientific illustrations

TEXT BOOKS:

1. V Winslow- Classic Human Anatomy: The Artist's Guide to Form, Function, and Movement, Watson - Guptill Publications Inc., U.S., 2008

2. Eliot Goldfinger "Animal Anatomy for Artists: The Elements of Form" OUP USA, 2004.

REFERENCE BOOKS:

1. Sarah Simblet - Anatomy for the Artist – Publisher DK (2008)

2. Gottfried Bammes - The Artist's Guide to Animal Anatomy, Dover Publications Inc., 2005

Web links:

Web Link:
1. https://youtu.be/AmoW_LqwQ40?si=dWSyDsTeKa7UdLjr
2. https://youtu.be/2DVbargQCaY?si=dUmmaEnbUwtMRc9s
3. https://youtu.be/mA77noU56_8?si=LDTJ4D1fGOAjSygE
4. https://youtu.be/bPWLFp-XpmU?si=0gUeVQlyheUKU023

Web Sources:
1. https://www.clipstudio.net/how-to-draw/archives/161109
2. https://design.tutsplus.com/articles/human-anatomy-fundamentals-basic-body-proportions--vector-18254

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN32	3D ENVIRONMENT MODELLING & TEXTURING	0	1	4	2	3

COURSE OBJECTIVES:

1. This course teaches the principles and practice of 3D digital modeling, with some instruction on materials, textures, lighting, rigging, and rendering

2. Students will gain a fundamental understanding of polygons, subdivision surfaces, NURBS and splines
along with deformations and editing in order to create models using 3D software.

UNIT- I INTRODUCTION USER INTERFACE 09

Introduction to 3D Software, UI elements – view ports, Perspective and Orthographic Views, different Types of Menus, project settings – hotkeys, Understanding the 3 Dimensions

UNIT- II MODELING TOOLS 09

Introduction to modeling tools, Basic primitives- Attribute editors - Introduction of different types of modeling geometries - Establishing different types of geometries.

UNIT- III TEXTURING 09

Types of Materials – HD Materials - UV Layouts - Understand texturing and Apply texture for the created models - UV resolution settings - Capture a UV snapshot from Maya UV - Texture editor and getting in to paint / Photoshop software.

UNIT- IV: LIGHTING 09

Types of Light - Create, group & modify light in scene with light editor-turn default light on or off - Control lights - Shadow catching – remove shadows absorption - Reflection & refraction of light

UNIT- V: RENDERING 09

Rendering: Render Settings - IPR- Software Rendering - Hardware Rendering - Using Plugins for Rendering - Exporting Images

TOTAL HOURS :45

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	A solid understanding of the principles and practice of 3D modelling.
CO2	Know what makes a model "good", including a clean topology and edge flow, project structure, and texture-mapping.
CO3	Gain proficiency at the techniques of environment modelling, lighting and rendering.
CO4	Gain comfort working in Maya software to create a model, texture and rig.
CO5	Design and execute a character model that is fully rigged and ready to animate

.

TEXT BOOKS:

1. Autodesk Maya 2023 Basics Guide: Modeling by Kelly L. Murdock

2. Getting Started in 3D with Maya: Create a Project from Start to Finish—Model, Texture, Rig, Animate, and Render in Maya by Adam Watkins July 2017

REFERENCE BOOKS:

1. Maya for Games: Modeling and Texturing Techniques with Maya and Mudbox by Michael Ingrassia

2. 3D Animation for the Raw Beginner Using Autodesk Maya 2e By Roger King (2019)

Web links:

Web Link:
1. https://youtu.be/LJLo6MafPVM?si=RIOossUYMHGFa69h
2. https://youtu.be/a_GbI-au6v4?si=5UhU7rK7mS6ThCcr
3. https://youtu.be/REUu3R0LgOM?si=CaDUnHvF91WbY9b7

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN31	FUNDAMENTALS OF SCRIPTWRITING & STORYBOARDING TECHNIQUES	4	0		2	4

COURSE OBJECTIVE:

1. Introduce students to the fundamentals of scriptwriting and storyboarding.
2. Develop skills for crafting engaging scripts for various media.
3. Provide hands-on experience in creating visual storyboards that effectively communicate ideas.
4. Foster a comprehensive understanding of the integration between scripts and storyboards in the production process.

UNIT- I INTRODUCTION TO SCRIPTWRITING 12

Definition and importance of scriptwriting, overview of different types of scripts: Screenplays, teleplays, and more, the scriptwriting process and workflow. Elements of Storytelling – Understanding plot structure: Three-act structure, Character arcs and development, Setting and themes in storytelling.

UNIT- II SCRIPT FORMATTING AND STRUCTURE 12

Standard script format (e.g., Final Draft format). Scene construction and sequence development. Crafting engaging dialogue and effective action lines.

UNIT- III GENRE AND AUDIENCE CONSIDERATION 12

Exploring different genres: Drama, comedy, thriller, etc. Their tropes and expectations. Identifying and writing for target audiences. Writing for different media: Film, TV, web series, and video games.

UNIT- IV: INTRODUCTION TO STORYBOARDING 12

Role and purpose of storyboarding in the production process. Basic tools and techniques for storyboarding. Understanding visual language and symbolism. Fundamentals of Visual Storytelling - Key concepts: Composition, framing, and perspective. Camera angles and their impact on storytelling. Timing and pacing in visual narratives.

UNIT- V: ADVANCED STORYBOARDING TECHNIQUES 12

Storyboarding for action, animation, and special effects. Creating mood and atmosphere through visual elements. Exploring different formats: Live-action, animation, and commercials. Integration of Scripts and Storyboards - Refining scripts based on storyboard feedback. Ensuring narrative coherence between scripts and storyboards.

TOTAL HOURS: 60

PRACTICAL / ASSIGNMENTS

- Students Will Have to Submit storyboard Record Book (Script & Storyboard).
- Assignments for short script and Storyboard

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Analyze and understand storytelling elements such as plot, character development, and narrative structure.
CO2	Create well-structured scripts using proper formatting and industry standards.
CO3	Translate written scripts into visual storyboards that effectively communicate the narrative.
CO4	Demonstrate proficiency in visual storytelling techniques, including composition, framing, and timing.
CO5	Collaborate effectively in a production environment, integrating feedback to refine scripts and storyboards.

TEXT BOOKS:

1. Syd Field - Screenplay: The Foundations of Screenwriting, Random House Publishing Group, 2007

2. Giuseppe Cristiano “Storyboard Artist: A Guide to Freelancing in Film, TV, and Advertising” Michael Wiese Productions, 2012.

REFERENCE BOOKS:

1. Francis Glebas - Directing the Story_ Professional Storytelling and Storyboarding Techniques for Live Action and Animation-Focal Press (2008)

2. Blake Snyder - Save the Cat! The Last Book on Screenwriting You'll Ever Need, Michael Wiese Productions, 2005

WEB LINKS:

Web Link:
1. https://www.alexandercowan.com/storyboarding-tutorial/
2. https://www.skwigly.co.uk/storyboarding-tutorial-pt-1-the-dos-and-donts/
3. https://www.studiobinder.com/blog/what-is-script-writing/
4. https://boords.com/how-to-write-a-script

Web Sources:
1. https://www.slideshare.net/ciellauren/storyboarding-1412888
2. https://www.slideshare.net/MoiraZahra/storyboarding-7229015

KNOWLEDGE IS POWER

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DBAN31	FOUNDATION OF ACTING & DIRECTION FOR ANIMATION	4	0	0	2	4

COURSE OBJECTIVES:

1. This course introduces the students into the craft and art of Acting & Direction for Animation
2. The student can begin conceptualizing a full length Animated movie.
3. The students are trained to develop the skills of critical analysis story,
4. Skills needed to pitch a treatment and work collaboratively and most importantly the skills that awaken imagination,
5. Originality and inventiveness in the dramatic medium to helps them to direct the characterizations of animation

UNIT: 1 ASPECTS OF ACTING AND DIRECTION **12**

This Introductory unit cover the Aspects of Acting and Direction , Animation Principles, Becoming and Animator, Becoming an Actor, Becoming a Story teller and Becoming a creative practitioner over the process of animation Pre production.

UNIT: 2 CREATIVE APPROACH **12**

A brief process of understanding the animation concepts, Creative approaches to Animation followed by Simulation, Understanding the Characterization, Emotional Memory, What is stage appearance and stage presence, Golden era of Indian cinema

UNIT: 3 ACTING METHODOLOGIES **14**

The variety of acting methodologies involves Mime Acting, Method Acting, The Chekhov Technique, Meisner Technique, Practical Aesthetics, Neurostethic Acting, Shake Acting and Voice Characterization

UNIT: 4 DIRECTORIAL TECHNIQUES FOR ANIMATION **11**

Anatomy of an Animation Director, Directing the Story, The art of Professional Story-telling, Responsibilities of a story artist, Creative handling of the content, Implementing or feeding the concept onto the character over a brief characterization, Directing the voice actors, Detailing of the facial expressions and emotions

UNIT: 5 PARTICIPATION 11

Introduction to screenplay and storyboarding concepts, Lip-sync for animation, Challenges in Animation Directing, Directing for Different Animation Styles

Total Hours: 60

PRACTICAL / ASSIGNMENTS

- Acting forming a group and submit a video based on the story they have prepared and submit (duration2mins)

COURSE OUTCOME:

CO1	Students will learn about the Aspects of Acting and Direction
CO2	Students will understand the art of Storytelling and how to become a creative person
CO3	Students will learn and understand how to challenge themselves for stage performance
CO4	Students will adapt to different learning techniques and ways of acting to be done
CO5	Students will get the practical knowledge about the film making

TEXT BOOKS:

1. Ed-Hooks,"Acting for Animators - A Complete Guide to Performance Animation" Published by Routledge 2011.

2. Tony Bancroft, "Directing for Animation: Everything You Didn't Learn in Art School", Published by Focal press - 2014.

REFERENCE BOOK:

1. Hayes, Chris Webster, "Acting and Performance for Animation by Derek" Published by Focal press - 2013.

Web Link:

1.https://www.skwigly.co.uk/acting-animation-observation/

2.https://www.awn.com/animationworld/performance-and-acting-animators

Web Sources:

1.https://youtu.be/BTLkDnsmnQU

2.https://grail.cs.washington.edu/projects/rapid-anim/paper.pdf

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
24DVAC31	INDIAN KNOWLEDGE SYSTEM	L	T	P	O	Credit
		2	0	0	2	2

Course Objectives

- To Gain an understanding of Indian Knowledge System.
- To develop an ability to apply the Indian Knowledge System to societal challenges faced today in areas such as holistic health, governance, public administration and sustainable living.
- To promote the youths to do research in the various fields of Indian knowledge system.

Unit1: An Overview of Indian Knowledge System (6 Hours)

Introduction- Organization of Indian Knowledge System- The IKS corpus- A Classification framework- Historicity of Indian Knowledge System -Some salient aspects of Indian Knowledge System

Unit 2: Philosophical system (6 Hours)

Introduction to Philosophy- Development of Indian Philosophical system - Unique features of Indian Philosophical system- Introduction to Yoga.

Unit 3: Governance and Public Administration (6 Hours)

Introduction - Understanding Governance from ancient to modern times- Relevance of Arthashastra- Glimpses of Nitishastra- Vidura Niti.

Unit 4 : Wisdom through the Ages (6 Hours)

Gateways of ancestral wisdoms-Introduction to Purāṇa- The Purāṇic repository- Issues of interest in Purāṇas- Introduction to Itihāsas- Key messages in Itihāsa-Wisdom through Nīti-śāstra.

Unit 5 Mathematics (6 Hours)

Introduction to Indian Mathematics- Unique aspects of Indian Mathematics- Indian Mathematicians and their Contributions.

Total hours: 30 hrs

Text Books:

1. Mahadevan B., Bhat V R, Nagendra Pavana R.N., Indian Knowledge System Concepts andApplication, PHI Learning Pvt. Ltd., 2022.

2. Kapoor Kapil, and Singh Avadesh Kumar, Indian Knowledge System Vol.1, DK Print World,Ltd., 2005.

Course Outcomes

CO1	Classify the key concepts of Indian Knowledge System and discuss the multi-faceted nature of knowledge contained in the Traditional Systems of India.
CO2	Identify the rich heritage of governance in Indian Knowledge System.
CO3	Recognize the relevance of Arthashastra in public administration.
CO4	Identify the Wisdom through Ages through Ithihasas.
CO5	Knowledge of Indian Mathematicians and their contributions

.

Reference Books:

1. Textbook on the Knowledge System of Bhārata by Bhag Chand Chauhan.

2. Histrory of Science in India Volume-1, Part-I, Part-II, Volume VIII, by Sibaji Raha, et al. National Academy of Sciences, India and The Ramkrishan Mission Institute of Culture, Kolkata

Weblink:

1. https://onlinecourses.swayam2.ac.in/imb23_mg54/preview

2. https://digest.iimb.ac.in/2022/04/book-indian-knowledge-systems-co-authored-dr-b-mahadevan/

3. https://www.summarize.tech/www.youtube.com/watch?v=jcV0LIp570A

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24SSKU31	SOFT SKILLS –III	2	0	0	2	2

COURSE OBJECTIVES:

- To enhance students' listening, speaking, and presentation skills for effective communication in both personal and professional contexts.
- To develop leadership qualities, decision-making, and problem-solving abilities, while fostering an understanding of non-verbal communication cues.

UNIT- I LISTENING SKILLS 06

- Basics of LSRW Skills
- Listening Skills: Active Listening and Feedback

UNIT-II SPEAKING SKILLS 06

- Public Speaking - Essential Elements of a Successful Speech
- Voice Modulation and Effective Use of Tone
- Presentation Skills

UNIT-III LEADERSHIP SKILLS 06

- Basics of Leadership: Traits and Styles
- Decision-Making and Problem-Solving
- Delegation and Accountability

UNIT – IV NON VERBAL CUES 06

- Facial Expressions, Body Language, Gestures, Posture and Eye Contact
- Professional Grooming and Appearance

UNIT– V WORK PLACE ETHICS AND PROFESSIONALISM 06

- Workplace Etiquette and Professional Behavior
- Integrity, Responsibility, and Ethical Decision-Making

Total: 30 Hours

Course Outcomes:

At the end of this course, students will be able to:

CO1: acquire the ability to actively listen, provide constructive feedback, and enhance comprehension skills.

CO2: effectively deliver speeches using appropriate voice modulation and presentation techniques.

CO3: understand different leadership traits, develop critical decision-making and problem-solving skills.

CO4: foster better communication and interaction in both professional and social contexts.

CO5: develop a strong sense of professional ethics and etiquette to maintain integrity and professionalism.

Reference Books:

- Guffey, Mary Ellen, and Dana Loewy. *Essentials of Business Communication*. 11th ed., Cengage Learning, 2017.
- Northouse, Peter G. *Leadership: Theory and Practice*. 8th ed., Sage Publications, 2018.
- Ciulla, Joanne B. *Ethics, the Heart of Leadership*. 2nd ed., Praeger, 2014.
- Adler, Ronald B., and Jeanne Marquardt Elmhorst. *Communication in the Real World: An Introduction to Communication Studies*. 2nd ed., Pearson, 2019.
- Brownell, Judith. *Listening: Attitudes, Principles, and Skills*. 7th ed., Pearson, 2017.
- Carnegie, Dale. *The Quick and Easy Way to Effective Speaking*. Pocket Books, 2010.
- Guffey, Mary Ellen, and Dana Loewy. *Essentials of Business Communication*. 11th ed., Cengage Learning, 2019.
- Hackman, Michael Z., and Craig E. Johnson. *Leadership: A Communication Perspective*. 6th ed., Waveland Press, 2013.
- Lewis, Michael. *The Art of Public Speaking*. McGraw-Hill Education, 2014.
- Mehrabian, Albert. *Nonverbal Communication*. Aldine Transaction, 2007.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
24IBAN31	**Internship I**	**L**	**T**	**P**	**O**	**Credit**
		0	**0**	**0**	**2**	**2**

COURSE OBJECTIVE

The goal of the student internship program is to have professional training and growth in various media companies.

PURPOSE

- The purpose of the student internship program is to provide students with an opportunity to gain workplace skills and learn more about the media field. This is also an opportunity to contribute to the local community by reaching out to future professionals.

PARTIES INVOLVED

- The student internship program involves two parties:
- The Intern Supervisor (The Company)
- The Intern (The Student)

CATEGORY REQUIREMENTS

Status: Individual Internship.

Length: Period of 2 weeks

Hours: Hours will be agreed upon between the intern and the intern supervisor.

Reports: To the Intern Supervisor

Required Meetings 1. Attend Orientation

2. Attend meetings as requested by the Intern Supervisor.

DUTIES

1. Perform all duties as assigned by the Intern Supervisor

2. If performing the internship for school credit, the intern will be responsible for providing and submitting the required forms to the Intern Supervisor.

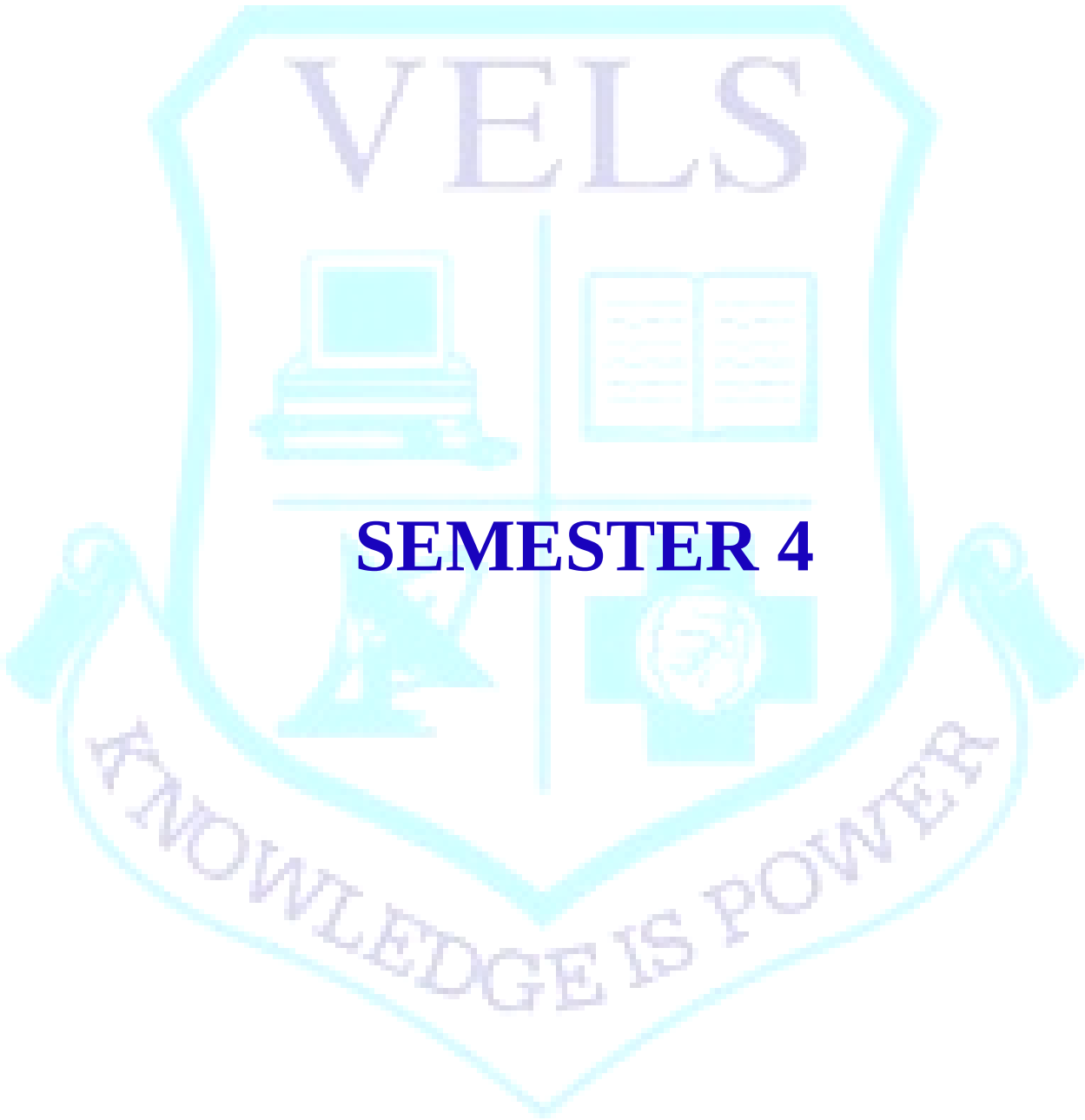
EVALUATION PROCESS FOR INTERNSHIP:

A copy of the certificate issued by the company along with the presentation of their learning will be considered.

COURSE OUTCOMES

At the end of this course

CO1	To contribute to organizations of all types and sizes by managing critical internships.
CO2	To provide creative solutions to key challenges
CO3	To design marketing strategies
CO4	To provide a variety of ways to engage in experiential learning
CO5	To lay the foundation for a strong relationship and subsequent job offers
CO6	To apply the knowledge and skills acquired in the classroom to a professional context.



SEMESTER 4

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	CREDIT
24LTAM41	TAMIL - IV	2	0	0	1	2

பாடத்திட்ட நோக்கம்:

தமிழர்தம் தொன்மைச் சிறப்பையும், பண்பாட்டுச் செழுமையையும் உலகிற்குப் பறைசாற்றும் சங்க இலக்கியங்களான எட்டுத்தொகை, பத்துப்பாட்டு நூல்களை அறியச் செய்தல், அதன்வழி பண்டைத் தமிழரின் விழுமியங்களை எடுத்துரைத்தல், இலக்கால இலக்கிய வகைமையான நாடக இலக்கியத்தை அறியச் செய்தல், ஊடகங்களில் தமிழின் பயன்பாடு, கணினியில் தமிழ்ப்பயன்பாடு என்பனவற்றை மாணவர்களுக்கு கற்றுக்கொடுத்தல், மாணவர்களை ஆளுமை மிக்கவர்களாக உருவாக்கி, போட்டித்தேர்வுகளுக்குத் தயார் செய்தல் என்பன இந்தப் பாடத்திட்டத்தின் முக்கிய நோக்கமாகும்.

அலகு 1: மரபுக்கவிதை 8 மணி நேரம்

1. பாரதியார் - பாரத தேசம் என்னும் தலைப்பில் ஆறு பாடல்கள்.

   (பாடல் எண்கள் 1, 6, 7, 9, 12, 13)
2. பாரதிதாசன் – தமிழுக்கும் அமுதென்று பேர் என்னும் தலைப்பிலான கவிதை.
3. தேசிக விநாயகம் பிள்ளை - உடல் நலம் பேணல் என்னும் தலைப்பிலான கவிதை
4. முடியரசன் - காவியப் பாவை – "புண்படுமா" என்னும் கவிதை.

அலகு 2: புதுக்கவிதை 8 மணி நேரம்

1. நா. காமராசன் - *கறுப்பு மலர்கள்* தொகுப்பில் *காகிதப்பூக்கள்* என்னும் தலைப்பிலான கவிதை.
2. அப்துல் ரகுமான் - *ஆலாபனை* தொகுப்பில் *போட்டி* என்னும் தலைப்பிலான கவிதை
3. ஆண்டாள் பிரியதர்ஷினி – *முத்தங்கள் தீர்ந்துவிட்டன* தொகுப்பில் *'இங்கே வரும் போது'* என்னும் தலைப்பிலான கவிதை

அலகு 3 : ஊடகத் தமிழ்

இதழியல் - ஊடக வகைகள் - தலையங்கம்- நிகழ்ச்சியை செய்தியாக மாற்றுதல்- கருத்துப்

பரிமாற்றம் நாடகம், திரைப்படம்,- வானொலி- தொலைக்காட்சி- மொழி நடையின் தன்மை -

அலகு 4 : கணினித் தமிழ்

கணினித் தமிழ்: கணினித் தமிழின் அடிப்படையும் பயன்பாடும் -கணிப்பொறியின் வரலாறும் வளர்ச்சியும், கணினியும் தமிழும், விசைப்பலகை (Keyboard) - எழுத்துருக்கள் (Fonts) - தமிழைத் தட்டச்சு செய்ய உதவும் மென்பொருள்கள், தமிழைத் தட்டச்சு செய்யும் முறைகள் - தமிழ்த் தட்டச்சுப் பயிற்சி - இணையமும் தமிழ்ப் பயன்பாடும் - தேடுபொறி (Search) - வலைப்பூ (Blog), மின்னூலகம் (Online e-Library), - மின்னகராதி(e-Dictionary), - மின் செய்தித்தாள் - e-Paper, - இணையவழித் தமிழ்க் கற்றலும்-கற்பித்தலும் - மின்வழிக் கற்றல் - e Learning.

மொத்தம்: 30 மணி நேரம்

பார்வை நூல்கள்

15. **தமிழர் நாகரிகமும் பண்பாடும்,** டாக்டர் அ. தட்சிணாமூர்த்தி, ஐந்திணைப் பதிப்பகம், 2001.
16. **தவறின்றித் தமிழ் எழுதுவோம்**, மா. நன்னன், ஏகம் பதிப்பகம், 1999.
17. **தவறின்றித் தமிழ் எழுத** - மருதூர் அரங்கராசன், ஐந்திணைப் பதிப்பகம், 2003.
18. **தமிழ் இலக்கிய வரலாறு**, வரதராசன், மு., புது தில்லி : சாகித்திய அக்காதெமி, 2002.
19. **புதிய தமிழ் இலக்கிய வரலாறு**, நீல. பத்மநாபன், சிற்பி பாலசுப்ரமணியம், சாகித்திய அகாடெமி, 2007.
20. **செம்மொழி தமிழின் சிறப்பியல்புகள்** - முனைவர் மறைமலை இலக்குவனார்; https://www.youtube.com/watch?v=HHZnmJb4jSY
21. **பாடநூல் தேடலுக்கான இணையம் -** https://archive.org/

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	CREDIT
24LHIN41	HINDI - IV	2	0	0	1	2

Course Objectives:

- To develop interest in various style of Modern and Contemporary Hindi Poetry
- To enable them to know about the Official Language Hindi
- To enable them to converse in Hindi

UNIT I : भारतेन्दु हरिश्चंद्र की मुखरियाँ – 4
Bharatendu Harishchandra ki Mukhariyan-4. 6hrs.

UNIT II : सुमित्रानंदन पंत कृत 'भारतमाता ग्रामवासी' (कविता)
'Bharatmata Gramavasi' (Kavita) by Sumitranand Pant 6hrs.

UNIT III: ज्ञानेन्द्रपति कृत 'बीज व्यथा' (कविता)
'Beej Vyatha' (Kavita) by Gyanendrapati 6hrs.

UNIT IV: राजभाषा हिन्दी का परिचय, अनुछेद से प्रश्न निर्माण
Introduction to Official Language Hindi, framing questions from passages 6hrs.

UNIT V : मंच संचालन (साक्षात्कार) का परिचय
Introduction to Stage Management(Interview) 6hrs.

Total: 30hrs

Course Outcome:

At the end of this course Students will
CO1 CO2 & CO3 Familiar with the different poetic expressions of Modern & Contemporary Hindi Poetry
CO4 Know the importance of official language Hindi
CO5 Become conversant in Hindi

TextBook:

Bhartendu Harishchandra, Ed.Ramji Yadav, Bharatendu Sanchayan, Bharatiya Pustak Parishad, 2011.
Sumitranandan Pant, Gramya, Lokbharti Prakashan, 2017.
Gyanedrapati, Gyanendrapati, Prabhakar Publication, 2022.
Bhatia Kailashchandra, Rajbhasha Hindi, Vani Prakashan,2018.

Reference Book:

Mahesh Sharma, Bhashan Kala, Prabhat Prakashan, 2019.
Raghavan T.E.S. Rajbhasha Hindi Amarkosh.

Weblinks:

-http://kavitakosh.org
Bharatendu Harishchandra
https://www.amarujala.com/kavya/kavya-charcha/bhartendu-harishchandra-poems-naye-jamane-ki-mukariyan?page=5
Sumitranandan Pant- http://kavitakosh.org
https://www.hindiadda.com/beej-vyatha-gyanendrapati/
Hindi Rajbhasha: https://navodaya.gov.in

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24LFRE41	FRENCH - IV	2	0	0	0	2

Course Objectives:

The lessons are being chosen:

1) to propose to do something and respond to a proposal
2) to respond to a request
3) to accuse, to blame
4) to complain, to protest
5) to express cause and consequence
6) to express opinion about facts

Units:

7) Entreprendre
Les pronoms démonstratifs, les pronoms interrogatifs. 6 hours

8) Vous avez gagne
Les pronoms en et y, les formation des adverbes en-ment 5 hours

9) Ne quittez pas
La mise en relief (c'est ..... qui, c'est …….que). 4 hours

10) Argent trop cher
l'opposition- toujours/ne…jamais. 4 hours

11) Le pétrole fou
la cause et la consequence. 5 hours

12) Parlez-moi d'amour
le conditionnel present, le gérondif. 6 hours

Course Outcome:

1) The students would be able to propose to do something and respond to a proposal
2) The students would be able to respond to a request
3) The students would be able to accuse, to blame
4) The students would be able to complain, to protest
5) The students would be able to express cause and consequence

Text / Reference Book:

Prescribed book: LATITUDES 1 (A2/B1) MÉTHODE DE FRANÇAIS - Régine Mérieux and Yves Loiseau
Reference book: SAISON A2 - MÉTHODE DE FRANÇAIS - Marie-Noëlle Cocton, Élodie Heu, Catherine Houssa, Émilie Kasazian

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	CREDIT
24LENG41	ENGLISH IV - PROFESSIONAL ENGLISH	2	0	0	1	2

COURSE OBJECTIVES:

- To improve professional vocabulary and language usage appropriate for various fields and industries.
- To practice critical thinking and problem-solving skills through case studies and discussions.
- To prepare students for job interviews and career advancement through professional English proficiency.

UNIT- I REPORT WRITING AND DATA INTERPRETATION **06**

- Report Writing – Business Report, Progress Report, Technical Report
- Instructions and Recommendations
- Interpretation of Graphs, Charts and Pictures

UNIT-II PROFESSIONAL WRITING I **06**

- Agenda
- Minutes of the Meeting
- Review Writing
- Circular

UNIT-III PROFESSIONAL WRITING II **06**

- Paragraph Writing
- Essay Writing
- Proposal Writing
- E-mail Writing

UNIT – IV SPEECH WRITING **06**

- Tailoring the Speech for the Target Audience
- Writing for Professional Events - Welcome Address, Vote of Thanks
- Maintaining Clarity, Conciseness, and Precision

UNIT– V MEDIA WRITING **06**

- Introduction to Media Writing - News, Feature, Editorial, and PR

- Writing for Social Media and Digital Platforms, Freelance Writing

Total: 30 Hours

Course Outcomes:

At the end of this course students will be able to:

CO1: demonstrate proficiency in language use.

CO2: master the nuances of Spoken and Written Communication skills in professional contexts.

CO3: develop confidence and clarity in Professional English usage.

CO4: organize their ideas coherently in writing for formal contexts.

CO5: exhibit their oral and written communication skills for professional contexts such aspresentations and meetings.

Reference Books:

- Alley, Michael. *The Craft of Scientific Writing*. 4th ed., Springer, 2013.
- Bailey, Stephen. *Academic Writing: A Handbook for International Students*. 5th ed., Routledge, 2018.
- Caponigri, A. E., and William A. H. McNeill. *Business Writing: Process and Forms*. Prentice Hall, 2012.
- Lannon, John M., and Laura J. Gurak. *Technical Communication*. 14th ed., Pearson, 2021.
- Locker, Kitty O. *Business and Administrative Communication*. 11th ed., McGraw-Hill Education, 2015.
- O'Hara, Michael. *Writing for the Media: A Practical Guide*. Routledge, 2014.
- Rymer, Jane. *Effective Business Writing: A Guide for the Global Professional*. Wiley-Blackwell, 2014.
- Zinsser, William. *On Writing Well: The Classic Guide to Writing Nonfiction*. 30th Anniversary ed., HarperCollins, 2006.

- Alley, Michael. *The Craft of Scientific Writing*. 4th ed., Springer, 2013.
- Bailey, Stephen. *Academic Writing: A Handbook for International Students*. 5th ed., Routledge, 2018.
- Caponigri, A. E., and William A. H. McNeill. *Business Writing: Process and Forms*. Prentice Hall, 2012.
- Lannon, John M., and Laura J. Gurak. *Technical Communication*. 14th ed., Pearson, 2021.
- Locker, Kitty O. *Business and Administrative Communication*. 11th ed., McGraw-Hill Education, 2015.
- O'Hara, Michael. *Writing for the Media: A Practical Guide*. Routledge, 2014.

. COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	CREDIT
24EVS041	ENVIRONMENTAL STUDIES	3	0	0	2	3

Course Objective

- To inculcate the importance of environmental pollution, preservation of nature and environmental management for human welfare.

UNIT-I HUMAN COMMUNITIES AND THE ENVIRONMENT 9

The man-environment interaction: Humans as hunter-gatherers; Mastery of fire; Origin of agriculture; Emergence of city-states; Great ancient civilizations and the environment, Indic Knowledge and Culture of sustainability; Middle Ages and Renaissance; Industrial revolution and its impact on the environment;
Environmental Ethics and emergence of environmentalism: Anthropocentric and eco-centric perspectives (Major thinkers); The Club of Rome- Limits to Growth; UN Conference on Human Environment 1972; World Commission on Environment and Development and the concept of sustainable development; Rio Summit and subsequent international efforts.

UNIT II NATURAL RESOURCES AND SUSTAINABLE DEVELOPMENT 9

Renewable and non-renewable resources - Natural resources and associated problems. a) Forest resources b) Water resources c) Mineral resources d) Food resources e) Energy resources: f) Land resources; Role of an individual in conservation of natural resources- Equitable use of resources for sustainable lifestyles.
Introduction to sustainable development: Sustainable Development Goals (SDGs)- targets and indicators, challenges and strategies for SDGs.

UNIT-III ECOSYSTEM AND BIODIVERSITY 9

Ecosystems and ecosystem services: Major ecosystem types in India and their basic characteristics- forests, wetlands, grasslands, agriculture, coastal and marine; Ecosystem services- classification and their significance.
Biodiversity and its distribution: Biodiversity as a natural resource; Levels and types of biodiversity; Biodiversity in India and the world; Biodiversity hotspots; Species and ecosystem threat categories. Threats to biodiversity and ecosystems: Land use and land cover change; Commercial exploitation of species; Invasive species; Fire, disasters and climate change. Major conservation policies: in-situ and ex-situ conservation approaches;

UNIT-IV ENVIRONMENTAL POLLUTION AND HEALTH 9

Understanding pollution: Production processes and generation of wastes; Assimilative capacity of the environment; Definition of pollution; Point sources and non-point sources of pollution; Causes, effects and control measures of a) Air pollution b) Water pollution c) Soil pollution d) Marine pollution e) Noise pollution f) Thermal pollution g) Nuclear hazards. Solid waste Management. Causes, effects and control measures of urban and industrial wastes. Role of an individual in prevention of pollution. Pollution case studies.

UNIT-V ENVIRONMENTAL TREATIES AND LEGISLATION 9

Major International Environmental Agreements: Convention on Biological Diversity (CBD); Cartagena Protocol on Biosafety; Nagoya Protocol on Access and Benefit-sharing; Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES); Ramsar Convention on Wetlands of International Importance; United Nations Convention to Combat Desertification (UNCCD); Vienna Convention for the Protection of the Ozone Layer;
Environmental laws:
Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act - Issues involved in enforcement of environmental legislation. Public awareness.

Total: 45 hours

Text Books

1. Fisher, Michael H. (2018) An Environmental History of India- From Earliest Times to the Twenty-First Century, Cambridge University Press.
2. William P. Cunningham and Mary Ann Cunningham, Environmental Science: A Global Concern 14th Edition, 2021.
3. Sinha, N. (2020) Wild and Wilful. Harper Collins, India.
4. Climate change: Science and politics (2021), Centre science and Environment, New Delhi,

Reference Books

1. Daniel B. Botkin and Edward A. Keller, **Environmental Science: Earth as a Living Planet,** 9th Edition, New Age International 2022.
2. Jadhav H and Bhosale VM, Environmental Protection and Laws. Himalaya Publishing House, Delhi 284pgs 2023.

Web link and we source

https://easyengineering.net/ge6351-environmental-science-and/
https://learnengineering.in/ge8291-environmental-science-and-engineering
https://cpcb.nic.in/ standards/

Course Outcomes (CO): At the end of this course, learners will be able to:

Course Outcomes		K Level
CO1:	Gain insights into the international efforts to safeguard the Earth's environment and resources.	**K2**
CO2:	Understand the concept of natural resources; identify types of natural resources, their distribution and use with special reference to India.	**K4**
CO3:	Understand the concepts of ecosystems, biodiversity and conservation.	**K1**
CO4:	Sensitize themselves to adverse health impacts of pollution.	**K3**
CO5:	Understand the sectoral effects on the local, regional, and global environmental issues	**K2**

Mapping of Program outcomes with course outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	2	2	3	2
CO2	3	3	3	2	2	2	2	2	3	3
CO3	3	3	3	2	3	1	1	2	2	3
CO4	3	2	3	3	2	2	2	2	2	3
CO5	3	2	3	2	3	2	2	2	2	2
Average	3	2.4	3	2.2	2.4	1.8	1.8	2	2.4	2.6

Assessment Methods:

CAT1	CAT2	Model Exam	End Semester Exams	Assignments
✓	✓	✓	✓	✓
Quiz	**MCQ**	**Projects**	**Seminars**	**Demonstration/Presentation**
			✓	✓

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	CREDIT
24CBAN41	Understanding Photography and Videography	3	0	2	0	4

COURSE OBJECTIVE:

This course will teach basics of Photography & Videography techniques and concepts. It covers topics such as digital Photography and video terms, cutaways and establishing shots, capture images, video, montage sequence, incorporating visual elements such as transitions, color correction, Chroma key and track matte into a video.

UNIT I INTRODUCTION OF CAMERA 15

Introduction to the Camera, History and types of cameras, Camera lenses and filter, Technicalities of photography, Electronic imaging devices.

UNIT II VIDEOGRAPHY EQUIPMENTS 10

Camera mounts and Camera Operations, Mounting plates, Variety of heads, friction heads, fluid heads, cradle heads, Variety of bases – pedestals, Tripods, dollies, cranes, camera mounts for Teleprompters

UNIT III INTRODUCTION TO CAMERA PARTS 10

Recording sound on camera, In-built microphones in a camera, adjusting audio channels.
Recording live sounds on camera, Emphasizing different portraitures, Practice camera exercises, Composition, camera angles, camera movements (pan, tilt, zoom)

UNIT IV VIDEOGRAPHY TECHNIQUES 13

Fundamentals of Composition: Aspect ratio ,TV picture cutoff , Types of shots – extreme close up, close up, mid close up, mid shot, mid long shot, long shot, extreme long shot , Central point of interest and horizontal balance , Rule of thirds , Principle of lead rule , Shot angles , Creating compositional emphasis.

UNTT V LIGHTING TECHNIQUES 12

Psychology of light Human Vision, Light Sources Setting Mood through Lighting Lighting as a Story Element, Visual Environment Dealing with Natural Lighting Directional Effect of Light, Lighting

design process Controlling the Intensity of Light, Color and Color Temperature of Light Three-point lighting, High-Key lighting & Low Key lighting Indoor and Outdoor Lighting Reflectors, Role of reflectors Techniques

Total: 60 Hrs.

COURSE OUTCOME:

CO1	Student will learn the basic information about various types of cameras, lenses, filters, lighting etc.
CO2	Students can understand the various information and equipment in videography.
CO3	Student can learn the different parts in the camera.
CO4	Students will understand the fundamentals of camera techniques and compositions.
CO5	Students can learn the different types of lighting techniques

TEXT BOOKS:

1. Kris. Mickiewicz, “Cinematography”, Initial publication, Third edition, 2005

2. Paul Wheeler, “Digital Cinematography”, Focal press, 2002.

REFERENCE BOOKS:

1. Paul Wheeler, “High Definition Cinematography”, Focal press, 2007.

2. Rob Hummel, “American cinematographer manual”, ASC Press, 2001.

Web Link:

https://veprit.com/photography-guide/basic-concepts/aperture-shutter-speed-iso

https://www.photographytalk.com/beginner-photography-tips/8747-learn-beginner-videography-techniques-in-this-tutorial-for-photographers

Web Sources:

https://passionpassport.com/videography-basics-tips-for-beginners/

https://iceland-photo-tours.com/articles/time-lapse-and-videography/the-beginner-s-guide-to-videography

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN41	CHARACTER MODELLING & SCULPTING TECHNIQUES	1	1	3	2	4

COURSE OBJECTIVES:

- Students will develop the knowledge of human anatomy for 3D modelling
- Students will Understand and apply modeling tools to form proper topology
- Students will gain knowledge to develop the knowledge of sculpting character
- Students will understand the process in showcasing realistic human characters

UNIT- I PREPERATION USING REFERENCE 12

Principles of Modeling - Character Design Preparation - Basic Anatomy Creating Reference Images - Topology and Edge Flow, Box Modeling, Edge Loop Modeling - Poly count.

UNIT- II CHARACTER BLOCKING 12

Cartoon Character Modeling - Hand Modeling, Foot Modeling, Body Modeling and Head Modeling - Cloths, Hair and Props Modeling - Construction Techniques for Clean Edge Flow - Rendering Cartoon Shapes

UNIT- III REFINING THE MODEL 12

Photorealistic Character Modeling - Hand Modeling, Foot Modeling, Body Modeling and Head Modeling - Cloths, Hair and Props Modeling - Construction Techniques for Clean Edge Flow - Rendering Cartoon Shapes

UNIT- IV: SCULPTING 12

Sculpting a Character - Tool User interface – Geometry – Brushes - Import and Export

UNIT- V TEXTURING 12

Texturing Techniques - Types of Mapping - Unwrapping Techniques - Skin Shader Techniques - Creating Hair and Fur

TOTAL HOURS :60

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Student will learn the human anatomy
CO2	Student can understand the various types of modelling
CO3	Student will get understanding on polygon modeling techniques
CO4	Understanding on Texturing and its types
CO5	Student can learn the different types Skin shaders and will get knowledge on editing a texture using supporting software

TEXT BOOKS:

1. Anatomy for 3D Artists by Chris Legaspi 2015

2. Anatomy for Sculptors, Understanding the Human Figure by Uldis Zarins with Sandis Kondrats

REFERENCE BOOKS:

1. Fundamentals of Character Design: How to Create Engaging Characters for Illustration, Animation & Visual Development by 3dtotal

Web Link:

1.https://area.autodesk.com/tutorials/
2.https://cgcookie.com/course/introduction-to-character-modeling

Web Sources:
1.https://www.creativeblog.com/features/the-17-best-zbrush-tutorials

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DBAN41	CONCEPTS OF LIGHTING & RENDERING	0	0	6	2	3

COURSE OBJECTIVES:

- Students will develop the knowledge of Lighting Techniques in 3D environment
- Students will Understand and apply different types of lights
- Students will gain knowledge Texturing Techniques
- Students will understand the process in creating Realistic Texturing

UNIT- I INTRODUCTION TO LIGHTING **09**

Understanding the Art of Lighting - Understanding the color and composition - Understanding Lighting with the basics of Color and composition - Introducing Modifiers and Using the Modifier Stack - Drawing and Editing 2D Splines and Shapes

UNIT- II LINKING LIGHTS **09**

Applying the Correct Light for the project - Linking and Unlinking the Lights Using Light Fog and Light Glow - Environment and Volume Fog - Lighting an Interior with sunlight - Cloning Objects and Creating Object Arrays

UNIT- III PRINCIPLES OF LIGHT **09**

Preparing for Successful Light rigs - 1-2-3 Light Rig - Interior Light set and Exterior Light Set - Environment Light Set and Layered Based Light set - Using Plugin Lights - converting objects to lights

UNIT- IV: REFLECTION & REFRACTION **09**

Basic Texturing - Types of material - Refraction reflection Techniques - UV Texturing - Exporting and importing textures from graphic design Tools

UNIT- V: LIGHTS USING TEXTURES **09**

User interface of texturing tools - Metal texturing - Layer texturing - Importing and exporting - Applying imported texture

TOTAL HOURS :45

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Student will learn the basic information about various types of Lights and its uses
CO2	Student can understand how to setup lighting according to time and environment
CO3	Student can learn the different types of rigging in lighting
CO4	Students will understand the fundamentals of camera techniques and compositions.
CO5	Students can learn the different types of lighting techniques.

TEXT BOOKS:

1. Kelly L. Murdock, “Kelly L. Murdock's Autodesk 3ds Max 2015 Complete Reference Guide”, Perfect Paperback , 2014.
2. Todd Palamar “Mastering Autodesk Maya 2016”, Autodesk Official Press, First Edition

REFERENCE BOOKS:

1. Jeremy Birn, “Digital Lighting and Rendering”, New Riders, 2013.
2. Kelly L. Murdock, “Autodesk Maya Basics Guide 2015”, 2014.

Web Link:

1.https://area.autodesk.com/tutorials/
2.https://cgcookie.com/course/introduction-to-character-modeling

Web Sources:

1.https://www.creativeblog.com/features/the-17-best-zbrush-tutorials

24DVAC41 **YOGA EDUCATION**

L	T	P	O	C
0	0	2	1	1

Course Objective

The students will be able to:

- Understand the philosophy, aims, and health benefits of Yoga.
- Gain practical knowledge of yogic postures, breathing techniques, and relaxation practices.
- Apply yogic methods for stress reduction, emotional balance, and focus enhancement.
- Incorporate Yoga as a tool for lifestyle improvement, well-being, and inner awareness.

UNIT-I INTRODUCTION TO YOGA 5

Definition and meaning of Yoga – Classical and modern perspectives. -Philosophy and objectives of Yoga-Benefits of Yoga for physical, mental, and emotional health -Relevance of Yoga in daily life, especially for students and professionals - Guidelines for safe and mindful Yoga practice

UNIT II YOGA PRACTICES – ASANAS AND BREATHING 5

Loosening and warm-up exercises Neck, shoulder, spine, and joint movements - Standing AsanasTadasana, Trikonasana, Vrikshasana - Sitting AsanasVajrasana, Ardha Matsyendrasana, Bhadrasana - Prone and Supine AsanasBhujangasana, Shalabhasana, Pavanamuktasana - Breathing Practices (Pranayama)Anulom Vilom, Bhramari, Sheetali, Sheetkari - Relaxation TechniquesDeep Relaxation Technique (DRT)

UNIT-III YOGA FOR MENTAL WELL-BEING & LIFESTYLE MANAGEMENT 5

Ecosystems and ecosystem services: Major ecosystem types in India and their basic Role of Yoga in managing stress, anxiety, and fatigue - Importance of meditation and breath regulation - Basics of meditation: breath-based and mindfulness - Yogic lifestyle guidelines – diet, discipline, sleep, and conduct - Integrating Yoga into student routine for balance and productivity

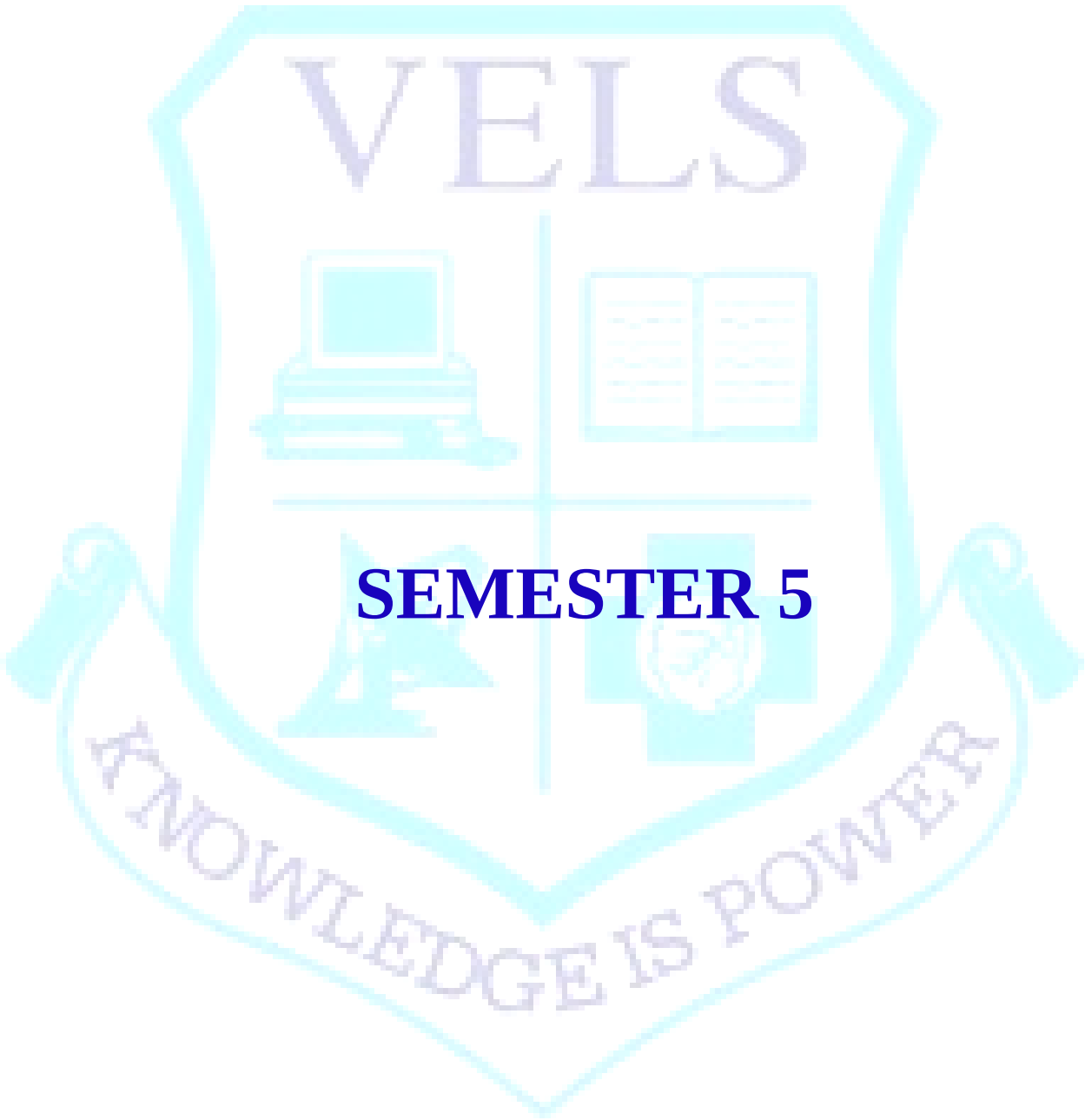
Total: 15 hours

Text Books & Reference Books

1. Ministry of AYUSH. (2023). Common Yoga Protocol. Government of India
2. Swami Satyananda Saraswati. Asana, Pranayama, Mudra, Bandha. Bihar School of Yoga
3. Dr. R. Nagarathna & Dr. H. R. Nagendra. Yoga for Students. SVYASA
4. NCERT. (2020). Yoga – A Healthy Way of Living (Upper Primary and Secondary)

Course Outcomes (CO): At the end of this course, learners will be able to:

Course Outcomes	
CO1:	Explain the meaning and relevance of Yoga for overall well-being.
CO2:	Demonstrate basic asanas and breathing techniques with proper alignment.
CO3:	Practice guided relaxation and introductory meditation.



SEMESTER 5

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN51	CONTEMPORARY MEDIA & AI IN ANIMATION	3	0	2	2	4

COURSE OBJECTIVES:

- Understand the fundamentals of AI and its applications in animation.
- Explore AI-driven animation tools and software.
- Analyze the impact of AI on the animation industry.
- Develop skills to create animations using AI techniques

UNIT- I INTRODUCTION TO AI IN ANIMATION 12

Overview of AI and its role in animation, History and evolution of AI in the creative industries, Key concepts and terminology in AI.

AI Techniques and Algorithms - Machine learning, deep learning, and neural networks, Computer vision and natural language processing, Overview of generative models (GANs, VAEs).

UNIT- II AI TOOLS FOR ANIMATION 12

Introduction to AI-powered animation software and tools, Demonstration of popular AI animation tools (e.g., Adobe Character Animator, DeepMotion), Hands-on practice with basic AI animation tools.

AI-Driven Character Animation - Automating character rigging and motion capture with AI, Using AI for realistic facial animation and lip-syncing, Case studies of AI-driven character animation in the industry.

UNIT- III PROCEDURAL ANIMATION AND AI 12

Understanding procedural animation techniques, Implementing AI for procedural content generation, Examples of procedural animation in games and films.

AI in Visual Effects (VFX) - AI applications in visual effects and post-production, Enhancing VFX with AI-driven simulations and compositing, Hands-on practice with AI tools for VFX.

UNIT- IV AI IN STORYTELLING AND SCRIPTWRITING 12

Using AI to generate story ideas and scripts, Natural language processing for dialogue creation, Case studies of AI-assisted storytelling in animation.

AI for Animation Optimization - Streamlining the animation workflow with AI, AI for asset management and scene optimization, reducing rendering times using AI techniques.

UNIT- V: ETHICAL CONSIDERATIONS AND CHALLENGES **12**

Ethical implications of AI in animation, Addressing bias and fairness in AI-generated content, Legal and copyright issues related to AI creations.

Future Trends and Innovations - Emerging trends in AI and animation, Potential future applications and innovations, Preparing for a career in AI-driven animation.

TOTAL HOURS :60

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Understand current animation techniques, styles, and the role of animation in modern media such as films, games, and interactive content.
CO2	Gain practical skills in using AI tools to automate workflows, enhance animation production, and improve creative processes like character design and motion capture.
CO3	Explore the ethical challenges AI poses in animation, including issues of creativity, authorship, and job automation.
CO4	Engage in teamwork to produce professional-level animation projects, integrating both traditional and AI-driven techniques.
CO5	Develop a portfolio showcasing your ability to use contemporary media tools and AI technologies in innovative animation projects

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TEXT BOOKS:

1. Animation and Artificial Intelligence by Luke Stark (2024)

2. The New Creatives: How AI Changes the Face of the Creative Industry – Seema Sharma

REFERENCE BOOKS:

1. Co-Intelligence: Living and Working with AI – Ethan Mollick

2. The Coming Wave: Technology, Power, and the Twenty-first Century's Greatest

Dilemma – Mustafa Suleyman

Web links:

Web Link:
1. https://youtu.be/Cd2SS6U6dGY?si=tFWjl7QTXGiDvQ6a
2. https://youtu.be/a_GbI-au6v4?si=5UhU7rK7mS6ThCcr
3. https://youtu.be/OrwlqS1xl8g?si=6xNSdTubReCNs1za

Web Sources:

https://wow-how.com/articles/impact-of-ai-in-animation

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN51	UNDERSTANDING DYNAMICS AND PHYSICS BASED SIMULATION	1	1	6	2	4

COURSE OBJECTIVES:

- Students will Develop Skills and Techniques to Create Special effects
- Students will understand to create effects in 3D environment.
- Students will develop knowledge on Collisions and simulations
- Students will understand different types of 3D fluids

UNIT- I Introduction to PHYSICS 12

Introduction to dynamics - Rules of physics to simulate natural forces - Using different types of emitters - Animating particle by using different types of fields - 2D and 3D grid particle

UNIT- II RIGID BODY ANIMATION 12

Understanding the behavior of soft body and rigid body - Rigid body Constraints - Nail, pin, hinge, barrier and spring using different types of emitters - Painting the soft body weights tool - Creating Rigid animation series

UNIT- III PARTICLES RENDERING 12

Hardware rendered particles - Rig use the particle cloud shader - particle sampler info node - Static attributes, dynamic attributes - Advance hardware render techniques.

UNIT- IV FLUIDS 12

Introduction to Fluid Effects - Coloring the fluids - Designing Clouds Background - Explosion Effects and Fire Effects - Space Effects and designs

UNIT- V: HAIR AND FUR 12

Designing Special Effects - Designing effects of Fur and shape - Designing Cloth & Clothes and effects - Conversion from 2D to 3D Pictures - Differentiation 2D effects and 3D effects

TOTAL HOURS : 60

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Understanding particles and animating them to create effects with the understanding of the
CO2	difference between Hardware render and software render
CO3	Working with soft body and rigid body
CO4	Learning to render the particles with advance hardware rendering techniques
CO5	Handling Fluid effects to create various effects like fog, fire, etc.
CO1	Creating cloth fur effects with the understanding of 2D effects and 3D effects

TEXT BOOKS:

1. Doug Kelly, “Digital Compositing in Depth”, Coriolis Publication, 2003.

2. Angie Taylor, “Creative After Effects 5.0”, Focal Press, 2002.

REFERENCE BOOKS:

1. Ron Brinkmann,. “The Art and Science of Digital Compositing: Techniques for Visual Effects, Animation and Motion, Morgan Kaufmann Publishers, 2008.
2. Steve Wright, “Digital Compositing for Film and Video”, Focal Press, 2010.
3. Lee Lanier, ”Professional Digital Compositing: Essential Tools and Techniques”, Wiley Publishing Inc., 2010.

Web Link:

1.https://www.fogcoastproductions.com/19-fantastic-tutorial-youtube-channels-for-animation-visual-effects-and-motion-graphics/
2.https://area.autodesk.com/tutorials/

Web Sources:

1.https://www.pulldownit.com/tutorials.php

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN52	RIGGING AND ANIMATION PRACTICE	0	2	4	2	4

COURSE OBJECTIVES:

- Students will develop the knowledge of Animation in 3D environment
- Students will develop knowledge on timing, Frames and Keys
- Students will understand a human model walk, run and jump in a pat
- Students will gain knowledge on how to lip sync with the dialogues with two or more characters.

UNIT- I INTRODUCTION TO RIGGING 12

Concept of Rigging - Ik and Fk Constraints - A Simple Leg Example - Constraints Working with Locators - Set Driven Key

UNIT- I JOINTS SOLVERS 12

Intro To IK Solver And IK Chain - Working with the IK Rotate Plane solver - Creating the arm joints and setting preferred angle - Setting up the IK Rotate Plane solver - Translating the end effector of the IK chain.

UNIT- III CONSTRAINS 12

Bending And Twisting Of Knee - IK and FK combination foot - Skeleton set-up-Setting up Single Chain IK- Parenting the lK - Orient constraints Parenting the lK - Bending toes and twisting the knee - Adding attributes

UNIT- IV ANIMATION PRINCIPLES 12

Animation Principles and Process - Basic Animation with types of Balls - Working with Animation Editor and Tools, Animation Basics - Key frame Animation, Nonlinear Animation, Path Animation - Motion Capture Animation

UNIT- V ANIMATING CHARACTER 12

Advanced Character Animation with Two Leg Animation (walk, run, Jump, Weightlifting etc.) -

Four Leg Animation (walk, run, Jump) Lip sync Animation - Single Character Animation with Dialogues - two or more character interacting animation with Dialogues - Workflow with Graph, Trax, Dope.

TOTAL HOURS: 60

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1: Understand how to animate a model in 3D Viewport
CO2: Will Gain key knowledge in Key frames and graph editor
CO3: Will understand various types of constraints to constrain a character model
CO4: Understand rigging human model and constrain the rig as per anatomy of the model
CO5: Applying a real world motion to a 3D Created object

TEXT BOOKS:

1. Susan JolliffeNapier, “Anime from Akira to Princess Mononoke: Experiencing Contemporary 2008

2. Japanese Animation” , Palgrave Macmillan Limited, 2007.

REFERENCE BOOKS:

1. Richard Williams, “The Animator's Survival Kit”, Faber & Faber, Limited

Web Link:

1. https://area.autodesk.com/tutorials/
2. https://3dtotal.com/tutorials/t/maya-rigging-introduction-to-rigging-jahirul-amin-animation-character-vehicle#article-so-what-exactly-is-rigging

Web Sources:
1. https://conceptartempire.com/what-is-rigging/

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DBAN51	UNDERSTANDING MOTION TRACKING AND CAMERA TECHNIQUES	0	1	6	2	4

COURSE OBJECTIVE:

- To learn the techniques and understand the various methods in matchmoving.
- To develop skills and techniques to create tracking points and to know the interface used in creating matchmoving.
- To know the basics of matchmoving with live footage and 2D, 3D tracking techniques.

UNIT I INTRODUCTION TO MATCHMOVING **12**

Understanding the importance of Matchmoving for integrating CG elements into live action footage. The movement ensures the angles of 3D rendered output are same angles of the live footage. Basic application with matchmoving capabilities. Basics of tracking algorithm,basics of motion tracking algorithm.

UNIT II FUNDAMENTALS OF MATCHMOVING **12**

Matchmoving is related with motion tracking or camera solving, rotoscoping and photogrammetry. Template matching, basics of 2D & 3D camera tracking, ground plane determination. Reconstruction. Tracking mattes. Study and making of live footage.

UNIT III CREATING TRACKING MARKERS **12**

Hard body physics, Basic of Camera animation, Matte tracking, Body tracking, Face tracking, Ray tracing, Basic motion capture, Green matte painting, Basic of motion capturing. Basic features of placing tracking points based on the footage.

UNIT IV INTERFACE WITH MATCHMOVING **12**

To discover 2D tracking and how to make every track count, Work step by step through each stage calibration. Understand how real camera work. Explore the match mover's role on a live

action set. To learn the matchamation,match your CG character or object live, action plate . Learning of basic composting.

UNIT V ADVANCED MATCHMOVING 12

Learning to track the motion of an object seen in the footage. Apply matchmove data for painting, compositing and lighting. Examine how 3D movies affect match moving. Learn how 3D/stereo movies are made and how it affects matchmovers , advanced matchmoving capabilities and algorithm

Total: 60 Hrs

TEXT BOOK:

1. Tim Dobbert, "Matchmaking: The Invisible art of Camera Tracking", John Wiley & Sons, Second Edition, 2012. Menache, A. (2000).
2. Morgan Kaufmann *"Understanding motion capture for computer animation and video games"* (illustrated ed.)..

REFERENCE BOOK:

1. Erica Hornung, "The Art and Technique of Matchmoving: Solutions for the VFX Artist", Taylor & Francis, 2013
2. Kerlow, I. V. (2009). *The art of 3D computer animation and effects* (3rd ed.). Wiley.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24SBAN51	ENTREPRENEURIAL DEVELOPMENT	2	0	0	1	2

COURSE OBJECTIVE:

To enrich the students towards the knowledge of entrepreneurial skills and to make the students understand the approaches to attain the goals of the business.

Unit 1: Introduction to Entrepreneurship 06

Introduction, Concept of Entrepreneur, Entrepreneurship and Enterprise, Definition of Entrepreneurship, Objectives of Entrepreneurship Development, Phases of Entrepreneurship Development, Role of Entrepreneurship, The Entrepreneurial Mindset, Characteristics of Entrepreneurship, Traits of Entrepreneurship, Introduction to Entrepreneurship Skills

Unit 2: Entrepreneurship Development Skills 06

Meaning of Entrepreneurship skill, Types of Entrepreneurship Skills: Business management skills, Teamwork and leadership skills, Communication and listening, Customer service skills, Financial skills, Analytical and problem-solving skills, Critical thinking skills, Strategic thinking and planning skills, Technical skills, Time management and organizational skills, Branding, marketing and networking skills, How to improve entrepreneurial skills, Entrepreneurial skills in the workplace.

Unit 3: Types of Entrepreneurs 06

Classification and Types of Entrepreneurs; Women Entrepreneurs; Social Entrepreneurship; Corporate Entrepreneurs, Family Business: Concept, structure, and kinds of family firms; Culture and evolution of family firm; Managing Business.

Unit 4: Entrepreneur Project Development & Business Plan 06

Generation of Ideas-Innovation, Invention, Creativity, Business Idea and change. Idea generation. Kinds of Business Analysis-Concept of Environmental scanning and SWOT analysis. Business Planning Process-The business plan as an Entrepreneurial tool, scope and value of Business plan. Fundamental Elements of Business-Plan, Objectives, Market and Feasibility Analysis, Marketing, Finance, Organisation & Management and Ownership.

Unit 5: Mobilizing Resources 06

Resource Mobilization for entrepreneurship: Resources mobilization, types of resources, Process of resource mobilization, Arrangement of funds; writing a Funding Proposal, Traditional sources of financing, Venture capital, Angel investors, Business Incubators

Total: 30 Hrs

Course Outcome:

At the end of the course, a student will be able to

CO1 T o Understand the concept of Entrepreneurship

CO2 To Identify, create and analyze entrepreneurial opportunities.

CO3 To Assess techno economic feasibility of a Business Plan

CO4 To Create Business Plans

CO5 To State various statutory institutions involved in the process of Entrepreneurship development

Text books:

1. Madhurima Lall and Sultan Ahmad (2021). Fundamentals of Entrepreneurship and Project Planning. S. Chand & Sons.
2. Bhatia. RC (2020). Entrepreneurship: Business and Management. S. Chand & Sons.
3. Nitin Zaware, Shilpa R Kankonkar and Yogesh S. Daudkhane (2019), Entrepreneurship Development. Thakur Publications Pvt. Ltd.

Web References:

1. https://openpress.usask.ca/entrepreneurshipandinnovationtoolkit/chapter/chapter-1-introduction- to-entrepreneurship/
2. https://articles.bplans.com/10-great-websites-for-entrepreneurs/
3. https://www.entrepreneur.com/article/272185

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
24DVAC51	DIGITAL MATTE PAINTING	L	T	P	O	Credit
		0	0	4	2	2

COURSE OBJECTIVES

1. To introduce the fundamentals of digital matte painting techniques.
2. To develop proficiency in industry-standard software for creating digital environments.
3. To explore creative and technical aspects of integrating 2D and 3D elements.
4. To provide hands-on experience in building cinematic compositions.

UNIT I INTRODUCTION TO DIGITAL MATTE PAINTING 12

History and evolution of matte painting in cinema. Key principles of composition, perspective, and color theory. Overview of software and tools: Photoshop, Maya, Nuke. Types of matte paintings: Static, Parallax, and Dynamic.

UNIT II ENVIRONMENT AND BACKGROUND DESIGN 12

Designing natural landscapes (mountains, forests, oceans). Urban and sci-fi environments. Understanding light, shadow, and atmospheric perspective. Texturing and blending techniques for seamless integration.

UNIT III INTEGRATION OF 3D AND 2D ELEMENTS 12

Basics of 3D modeling for matte painting. Rendering techniques and integrating 3D renders with 2D elements. Camera projection and mapping in After Effects. Working with multiple passes (lighting, depth, and texture).

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UNIT IV ADVANCED TECHNIQUES IN MATTE PAINTING 12

Photo-bashing techniques for creating realistic textures. Advanced masking and blending in Photoshop. Adding motion effects to matte paintings. Fine-tuning details: Edge work and adding storytelling elements.

UNIT V PORTFOLIO AND INDUSTRY APPLICATION 12

Building a professional digital matte painting portfolio. Understanding client briefs and working under deadlines. Case studies of iconic matte paintings in films and games. Preparing for industry practices and job opportunities.

TOTAL: 60 Hrs

Course Outcome:

At the end of this course students will be able to,

CO 1	Mastery of Digital Matte Painting Techniques
CO 2	Integration of 2D and 3D Elements
CO 3	Advanced Visual Composition and Design
CO 4	Development of Cinematic Matte Painting Sequences
CO 5	Professional Portfolio Development and Industry Application

TEXT BOOKS:

1. David B. Mattingly, (2021), *The Digital Matte Painting Handbook*, 2nd Edition, Sybex Inc.
2. G. Beloeil, A. Riabovitchev, R. F. Castro, (2020), *Art Fundamentals: Color, Light, Composition, Anatomy, Perspective, and Depth*, 3DTotal Publishing.
3. Foster Caddell, (2020), *Keys to Successful Color: A Guide for Landscape Painters in Oil*, Echo Point Books & Media, LLC.

REFERENCES AND SUGGESTED READINGS

1. Marcos Mateu-Mestre, (2021), Framed Perspective: The Rules of Perspective and Visual Storytelling, Design Studio Press.
2. 3DTotal Publishing, (2020), Beginner's Guide to Digital Painting in Procreate, 3DTotal Publishing.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
	Internship II	**L**	**T**	**P**	**O**	**Credit**
		0	**0**	**0**	**2**	**2**

COURSE OBJECTIVE

The goal of the student internship program is to have professional training and growth in various media companies.

PURPOSE

- The purpose of the student internship program is to provide students with an opportunity to gain workplace skills and learn more about the corporate field. This is also an opportunity to contribute to the local community by reaching out to future professionals.

PARTIES INVOLVED

- The student internship program involves two parties:
- The Intern Supervisor (The Company)
- The Intern (The Student)

CATEGORY REQUIREMENTS

Status: Individual Internship.

Length: Period of 2 weeks

Hours: Hours will be agreed upon between the intern and the intern supervisor.

Reports: To the Intern Supervisor

Required Meetings 1. Attend Orientation

2. Attend meetings as requested by the Intern Supervisor.

DUTIES

1. Perform all duties as assigned by the Intern Supervisor

2. If performing the internship for school credit, the intern will be responsible for providing and submitting the required forms to the Intern Supervisor.

EVALUATION PROCESS FOR INTERNSHIP:

A copy of the certificate issued by the company along with the presentation of their learning will be considered.

COURSE OUTCOMES

At the end of this course

CO1	To contribute to organizations of all types and sizes by managing critical internships.
CO2	To provide creative solutions to key challenges
CO3	To design marketing strategies
CO4	To provide a variety of ways to engage in experiential learning
CO5	To lay the foundation for a strong relationship and subsequent job offers
CO6	To apply the knowledge and skills acquired in the classroom to a professional context.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
	Cyber Security	3	0	0	2	3

COURSE OBJECTIVE

- To provide foundational knowledge of cyberspace, web technologies, and the evolving landscape of cyber security and its challenges.
- To familiarize students with the types of cybercrimes, legal frameworks including the IT Act 2000, and organizational measures for mitigating cyber threats.
- To equip students with practical understanding of securing digital devices, social media usage, e-commerce platforms, and digital payment systems.

UNIT I - INTRODUCTION TO CYBER SECURITY 9

Defining Cyberspace and Overview of Computer and Web-technology, Architecture of cyberspace, Communication and web technology, Internet, World wide web, Advent of internet, Internet infrastructure for data transfer and governance, Internet society, Regulation of cyberspace, Concept of cyber security, Issues and challenges of cyber security.

UNIT II - CYBER CRIMEAND CYBER LAW 9

Classification of cyber crimes, Common cyber crimes- cyber crime targeting computers and mobiles, cyber crime against women and children, financial frauds, social engineering attacks, malware and ransomware attacks, zero day and zero click attacks, Cybercriminals modus-operandi , Reporting of cyber crimes, Remedial and mitigation measures, Legal perspective of cyber crime, IT Act 2000 and its amendments, Cyber crime and offences, Organisations dealing with Cyber crime and Cyber security in India, Case studies.

UNIT III - SOCIAL MEDIA OVERVIEW AND SECURITY 9

Introduction to Social networks. Types of Social media, Social media platforms, Social media monitoring, Hashtag, Viral content, Social media marketing, Social media privacy, Challenges, opportunities and pitfalls in online social network, Security issues related to social media, Flagging and reporting of inappropriate content, Laws regarding posting of inappropriate content, Best practices for the use of Social media, Case studies.

UNIT IV - E – COMMERCE AND DIGITAL PAYMENTS 9

Definition of E- Commerce, Main components of E-Commerce, Elements of E-Commerce security, E-Commerce threats, E-Commerce security best practices, Introduction to digital payments, Components of digital payment and stake holders, Modes of digital payments- Banking Cards, Unified Payment Interface (UPI), eWallets, Unstructured Supplementary Service Data (USSD), Aadhar enabled payments, Digital payments related common frauds and preventive measures. RBI guidelines on digital payments and customer protection in unauthorised banking transactions. Relevant provisions of Payament Settlement Act,2007

UNIT V - DIGITAL DEVICES SECURITY, TOOLS AND TECHNOLOGIES FOR CYBER SECURITY 9

End Point device and Mobile phone security, Password policy, Security patch management, Data backup, Downloading and management of third party software, Device security policy, Cyber Security best practices, Significance of host firewall and Ant-virus, Management of host firewall and Anti-virus, Wi-Fi security, Configuration of basic security policy and permissions.

COURSE OUTCOME

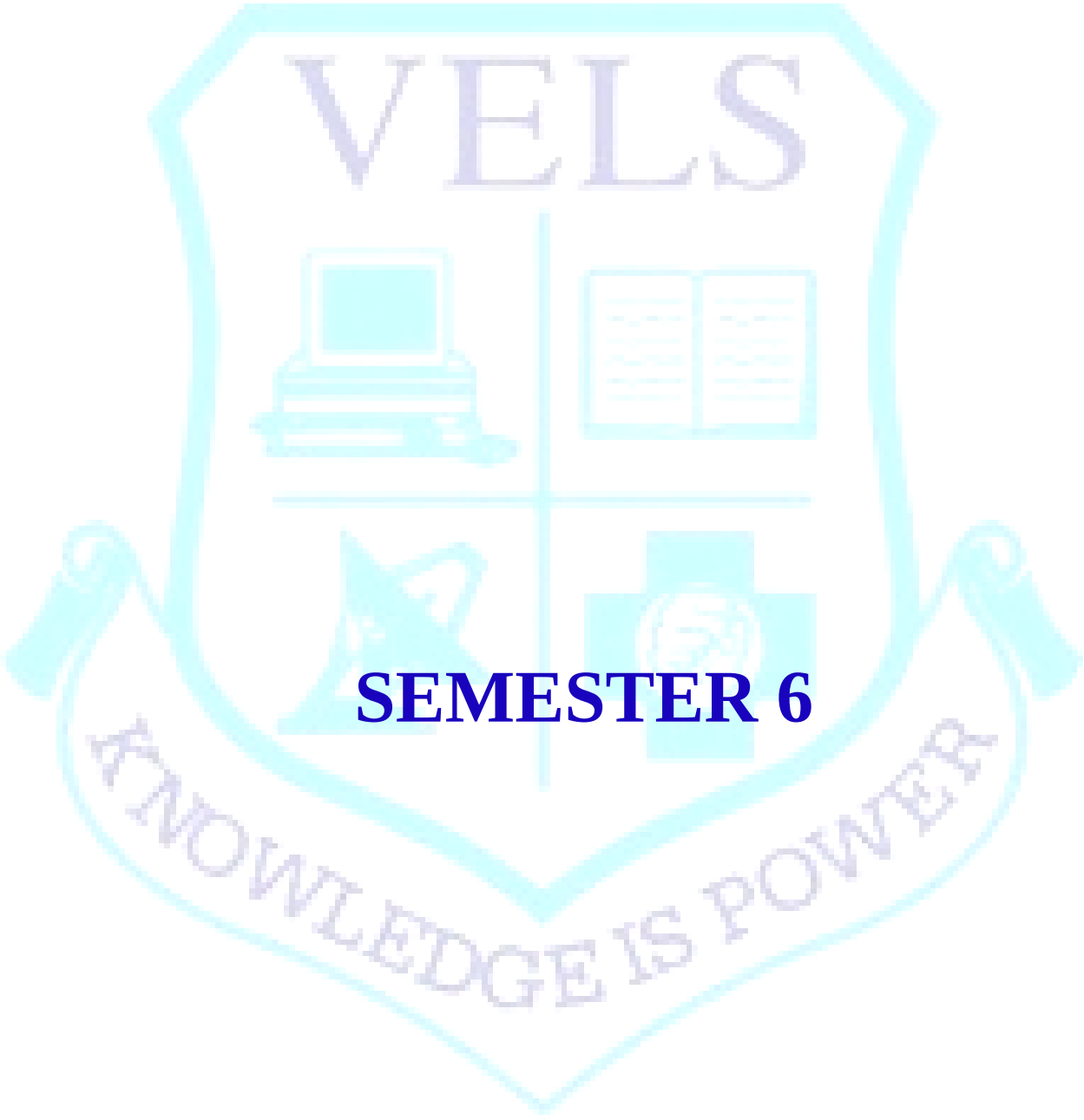
CO1: To explain the architecture of cyberspace, web technologies, and internet infrastructure with respect to cyber security.

CO2: To identify various cybercrimes and evaluate legal remedies under the IT Act 2000 and associated cyber laws in India.

CO3: To Analyse the structure and impact of social media platforms and assess the security risks and legal implications of online content.

CO4: To understand e-commerce and digital payment mechanisms, including associated frauds, security practices, and relevant legal provisions.

CO5: To apply cyber security tools and best practices for securing personal and organizational digital devices, networks, and systems.



SEMESTER 6

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN61	POST PRODUCTION – TECHNIQUES AND PRACTICES	2	1	2	2	4

COURSE OBJECTIVE:

- To learn various aspects of audio and video post -production tools and techniques
- To understand the concepts of Non Linear Edit Systems, multi-track recording systems
- To lesrn audio mixing techniques and taking Final video out.

UNIT I: UNDERSTANDING OF FILM AND VIDEO EDITING 9

Study of different kinds of NLE Editing systems FCP and file formats, SD & HD Video Formats and study of the using of Editing equipment's, cue sheet & Video cut-list reports, Understanding Interfaces , Saving project Setting scratch Disc and Loading Bin ,Working with different formats and Studying of Editing tools and accessories , Importing Video and Audio sample rates, frame rates ,DV/HDV/HD formats. Understanding inserts – overwrite, marking In and Out, Non -Linear Techniques Adding & Deleting, Moving Edits in time line – Cut, Copy, and Paste.

UNIT II: PRINCIPLES OF FILM AND VIDEO EDITING 12

Working with Bins Organizing your footages, viewing clips of rush videos Separation of ok takes and deletion of NG takes Assembly of Rushes in story order & story Board , Basic systems in Video Editing , The shot, The Scene, Sequences , Study of Transitions , Study of optical effects , Study of video effects, Using of bridging shot - Cut away and cutting in action – smooth cut ,Cutting on movement - Inter cutting- Parallel cutting and constructive editing, Montage ,Creative editing, Real time and Artificial time, rhythm-pace-space, Creative editing. Basic Transitions, visual Effects and Optical effects, Understanding Editing modes in off and on line.

UNIT III: EDITING SPECIALIZATION EXCERCISES 12

Editing Decision ,Editing Functions , Combination of timing , Pacing , Rhythm & Tempo, time code Editing Split Edits Drag & Drop Editing ,smooth cut, constructing a lucid continuity , constructing physical continuity , Slow and fast motion actions, change in image size and camera angle, sense of screen direction, , Editors cut, match cut, movement and look, The cut away ,The reverse shot, imaginary compositions, Exciting images, Cumulative effect, Direct contrast and matching Tone. Montage making, Extending & Reducing Clips Rendering setting Effects Applying, Bridging the action.

UNIT IV: BASIC AUDIO TOOLS FOR VIDEO EDITING 12

Actual Sound, continuous sound track , Relational Editing , Dialogue counterparts , Editing Dialogue sequence , Natural Rhythm, Adding ambience sound, Effects, Bridging the dialogue , Controlling the volume between the channels ,True and natural presentation Intro to audio mixing, sweetening, and sound design ,Study of Background music, Voice dubbing, Effects dubbing, synchronous and non-synchronous sounds, using special sounds effect, Re-recording and Mixing and power of sound, sound as a counter point, mechanism of sound in editing of films creating the mixed track, according to Camera movement and Visual Audio Techniques.

UNIT V: COLOUR CORRECTION AND FINAL DELIVERY 12

Harsh cut jerky cut Cause and effect Smooth Continuity Sound edit Dramatic cure punctuation and Amplification, Song Editing, Specific goals, Transition & Sound. Action sequences , Physical conflict, Timing, rate of cutting, problems in editing action sequence, Russian montage, French montage and American montage Montage as a Transitional device Emotional significance Arranging the visuals slow and fast Pleasing Visual Continuity Dissolves, wipes, realistic dialogue.

Total Hours: 60

TEXT BOOKS:

1. Ken Dancyger, “The Technique of Film and Video Editing” Focal Press, 2010
2. Roy Thompson, Christopher J. Bowen “Grammar of the Edit” Focal Press, 2013

REFERENCE BOOKS:

1. Bobbie O’Steen, “The Invisible Cut: How Editors Make Movie Magic” Michael Wiese Productions; 1st edition 2009
2. Gael Chandler, “Film Editing: Great Cuts Every Filmmaker Should Know”, Michael Wiese Productions 2009

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN62	ADVANCED COMPOSITING TECHNIQUES	0	2	4	2	4

COURSE OBJECTIVE:

1. To teach how Compositing involves combining visual elements from separate sources into a single image.
2. Illustrate basic knowledge of create the illusion that all elements belong to the same scene.
3. To instruct significant role in modern entertainment industry productions
4. To teach the various elements seamlessly into one cohesive image.
5. To explain the technique is widely used in films, TV shows, and other media to enhance visual storytelling

UNIT- I ROTOSCOPY & KEYING 9

Rotoscopy involves creating shapes, elements in footage such as characters, vehicles, buildings etc. color correction, adding additional layers, dynamic effects etc. process of digital compositing. Luma key and Chroma key. RGB channels and its uses. Unique technique and accurate way to extract an object. Multiple layers, foreground and background compositing, dynamic effects etc.

UNIT- II 2D& 3D TRACKING 9

2D & 3D tracking Concepts, how to track the live footage in 2D and 3D, the techniques involved in this process. Track the camera in 2D and 3D layers for compositing. Origins of 3D tracking technologies lie in the science of photogrammetry, the scientific method of calculating positions and distances of points referenced in one or more images.

UNIT-III LIVE ACTION COMPOSITING 9

Process of combining real-world footage (live action) with other elements such as computer-generated imagery (CGI), visual effects (VFX), and matte paintings. Properly integrating the lighting of live action and CGI elements is vital. Compositors often adjust

shadows, highlights, and reflections to ensure that the visual elements match each other realistically in terms of light and depth

UNIT-IV STEREO SCOPYPI PELINE AND ITS PROCESS 9

Stereoscopy pipeline, gaining an in-depth understanding of the process. Workflow involved in stereoscopy, four key departments: Rotoscopy, Matte Extraction, Clean Plate creation, and Stereo Conversion. role in producing 3D images and ensuring a seamless final output. Processes interact to create depth and dimension in visual media, preparing them for practical applications in film and animation.

UNIT– V RENDERING AND OUTPUT FORMATS 9

Prepareing the final shot for rendering. This process can involve additional adjustments, such as adding final effects, tweaks, or optimizing for different output formats (e.g., TV, film, web). Bit depth of colors and various output formats with aspect ratio. In this session we teach how to put render for broad casting and filming (size differs).

Total: 45 Hours

COURSE OUTCOMES:

At the end of the course students will be able to:

CO1	Students learn the rotoscopy technique to isolate elements in footage, such as characters and objects, using color correction, keying, and effects after analyzing the footage multiple times.
CO2	Students explore 2D and 3D tracking and compositing techniques, using photogrammetry tools to combine different layers into a unified output.
CO3	Live action compositing teaches students to merge elements from different shots and 3D outputs into a single background, with an emphasis on match moving and camera data for CGI programs.
CO4	Students learn the stereoscopy workflow, covering rotoscopy, matte extraction, clean plate creation, and stereo conversion, with a focus on 3D output analysis using glasses.

CO5	Students learn about render processes, bit depth, color, output formats, and aspect ratios for broadcasting and film compositing.

Text Books:

1.Ron Ganbar, “Nuke 101: Professional Compositing and Visual Effects”,Peachpit Press; Second Edition, 2014

2.Steve Wright, “Composting Visual Effects”, Focal Press; Second Edition, 2011

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN63	ADVANCED TEXTURING	0	1	5	2	3

COURSE OBJECTIVES:

- Students will understand UV Texturing using udims
- Students will understand the Shader Networks
- Students will develop Photo Realistic Materials
- Students will develop inculcate the knowledge Hi-res Texturing techniques

UNIT- I Introduction to PBR **09**

Understanding PBR Texturing - Shader Network Essentials - Color and Compositing - Non Photo real Materials - Exporting Maya maps with Convert to File Texture

UNIT- II UV LAYOUT **09**

Understanding UV workflows - Rules of UV Layouts - To Uv or not to UV - Understanding on mapping types - Applying multiple map coordinates with UV sets

UNIT- III MAPPING **09**

Textures in Maya and Photoshop - Review reference materials - Remove shadows from the base texture - Texture scale - Create a Texture using Photoshop

UNIT- IV 2.5D TEXTURING TOOLS **09**

Textures in Substance Painter - Prep your models - Bake maps at base level - Understanding Substance Layers - Understand Smart materials

UNIT- V: MASKING AND ALPHA **09**

Types of Masking in Substance painter - Designing 3d Textures - Using Filters and brushes - Exporting and Importing Textures to 3D Application - Understanding rendering Settings

TOTAL HOURS :45

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Achieved a working understanding of tools related to texturing.
CO2	Understand workflow of substance painter to create photo realistic Texturing.
CO3	Be able to create compelling compositions.
CO4	Be able to create accurate, balanced UVW coordinates & layout
CO5	Be able to create descriptive, detailed and interesting textures & normal maps.

TEXT BOOKS:

1. Doug Kelly, “Digital Compositing in Depth”, Coriolis Publication, 2003.

2. Angie Taylor, “Creative After Effects 5.0”, Focal Press, 2002.

REFERENCE BOOKS:

1. Ron Brinkmann,. “The Art and Science of Digital Compositing: Techniques for Visual Effects, Animation and Motion, Morgan Kaufmann Publishers, 2008.
2. Steve Wright, “Digital Compositing for Film and Video”, Focal Press, 2010.
3. Lee Lanier, ”Professional Digital Compositing: Essential Tools and Techniques”, Wiley Publishing Inc., 2010.

Web Link:
1.https://academy.substance3d.com/
2.https://www.cginspiringartist.com/substance-painter-tutorials/

Web Sources:
https://youtu.be/uXtyI9ChlN4

COURSE OBJECTIVES

- To learn art of creating miniature sets for film, theater, and visual arts..

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN64	MINIATURE SET CREATION	0	2	3	2	4

- To emphasis on design, construction, and detailing of scaled-down models..
- To explore of various materials, techniques, and processes to bring miniatures to life.

UNIT-I INTRODUCTION TO MINIATURE SET DESIGN: 9

Overview of miniature set creation, exploring its history and relevance across various industries such as theater and film. Principles of scale, understand different scales like 1:12 and 1:24, and emphasizes the importance of proportion in model-making. Common materials used in miniature creation, including foam, wood, plastic, and paper. Essential tools and equipment, highlighting safety protocols, cutting tools, adhesives, and basic modeling tools. Create a simple miniature object, such as a chair or a table, to practice their skills in scale and proportion.

UNIT-II: PLANNING AND DESIGN FOR MINIATURE SETS 9

Design process, creation of sketches, blueprints, and digital models for miniature sets. Importance of understanding lighting and perspective, how lighting impacts miniatures, how to achieve realistic perspectives on a small scale. Manual and digital sketching techniques are covered, Create detailed designs for miniature sets. Additionally, focuses on blueprint creation, develop comprehensive plans for set construction. Small-scale miniature set, such as a room or outdoor space.

UNIT-III: METHODS AND MATERIALS 9

Miniature Set for Special Effects - Creating miniatures for specific visual effects like explosions, fire, or weather effects, working with pyrotechnics and water effects in miniature sets. Miniature Set Integration with Live Action, Matching lighting and perspective, Designing movable parts or animatronics within miniatures creating mechanical elements like doors, windows, or moving vehicles.

UNIT-IV: DETAILING AND FINISHING 9

Creating realistic details for miniature sets by adding furniture, props, and intricate elements like textures, fabrics, and finishes. Students will learn various techniques for applying textures

to surfaces such as stone, wood, and fabric, as well as painting techniques to achieve a high degree of realism.

UNIT-V: PROJECT WORK AND PROFESSIONAL PRESENTATION 9

Project Planning and Execution - Developing a project brief based on a scene or narrative, Time management and resource allocation. Building the Final Model -Constructing a detailed, fully realized miniature set, Final painting, detailing, and lighting setup. Presentation and Critique - Presenting the final project to the class, Discussing design choices, materials, and the creative process.

Total Hours: 60

COURSE OUTCOMES

At the end of this course the students will be able to,

CO1	Have an in-depth knowledge about basic drawing.
CO2	Have detailed understanding of Perspective drawings.
CO3	Gain knowledge of anatomy study.
CO4	Acquire knowledge of the technique and procedure in cartoon character study
CO5	Have a thorough knowledge of Creating Environment study

Textbook

1. Kolman, Busby, Ross and Rehman, Discrete Mathematical Structures for Computer Science, Pearson Education, 5th Edition, 2003.

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DBAN61	WEB DESIGNING & PUBLISHING	4	0	0	2	4

REFERENCE BOOKS:

1. Bob Godfery and Anna Jackson The Do It, Yourself Film Animation Book, , BBC Publications, Edition III, 2014.
2. Thomas, Frank and Johnston, "Disney Animation: The Illusion of Life", Ollie Abbeville Publications, 2007.

Web Links:

1. https://www.geeksforgeeks.org/mathematics-partial-orders-lattices/

2. https://www.ipsgwalior.org/download/number%20system.pdf

COURSE OBJECTIVES:

- Students will understand the principles of web design, including layout, typography, and user experience.
- Students will learn to use web design tools and technologies such as HTML, CSS, and web publishing platforms.
- Students will Gain practical experience in creating and publishing websites.
- Students will develop an understanding of responsive web design and modern web practices.

UNIT- I INTRODUCTION TO WEB DESIGN 12

Overview of web design principles: layout, usability, and accessibility - Understanding different types of websites: static, dynamic, and e-commerce - Understanding the structure of a webpage: HTML tags, elements, and attributes - Common HTML tags: headings, paragraphs, lists, links, and images - Creating a simple webpage using HTML

UNIT- II ADVANCED CSS & RESPONSIVE DESIGN 12

Introduction to CSS and styling web pages - CSS selectors, properties, and values - Layout techniques: margins, padding, borders, and positioning- Advanced CSS techniques: Flexbox, Grid, and media queries - Mobile-first design principles

UNIT- III WEB TYPOGRAPHY & COLOR THEORY 12

Understanding fonts, font families, and web-safe fonts - Exploring color schemes, color theory, and web color codes - Implementing typography and color in your design - Hands-on exercise: Styling text and applying color theory

UNIT- IV: WEB PUBLISHING PLATFORMS AND CMS 12

Introduction to content management systems (CMS): WordPress, Wix, and Squarespace - Understanding website hosting and domain registration -

UNIT- V: SEO BASICS (SEARCH ENGINE OPTIMIZATION) 12

Introduction to SEO and its importance for websites - Optimizing on-page SEO: keywords, titles, and meta tags - Improving website visibility and user engagement

TOTAL HOURS :60

COURSE OUTCOMES:

By the end of this course, students will be able to:

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
24SBAN61	**Mini Project**	**L**	**T**	**P**	**O**	**Credit**
		0	**0**	**4**	**2**	**2**

CO1	Students will learn about Basic tags, Attributes, Creating HTML page
CO2	Students will understand how to Creating HTML tables, Adding pictures, HTML and page accessibility
CO3	Students will learn and understand E-learning Theory and Graphics Content creation
CO4	Students will get the knowledge of how to do coding for websites and develop websites easily
CO5	Students will get the practical knowledge of how to host a website client/server interactions

TEXT BOOKS:

1. Modern Web Essentials Using JavaScript and HTML5,David Pitt, published May 2014.
2. Tablet Web Design Best Practices,Mobify,2013

REFERENCE BOOKS:

1. "Losing Our Religion: The Liberal Media's Attack", S. E. Cupp, Rupa Release, Edition I, 2001
2. "Media Planning and Buying – Principles and Practice in the Indian Context", by ArpitaMenon, MacMillan India Public Limited, First Edition, 2007
3. Spring Into HTML and CSSAuthor: Molly E. Holzschlag [Emeritus]Publisher: Addison-Wesley Professional

Web Link:

https://www.computer-pdf.com/web-programming/css/387-tutorial-web-design-an-introduction.html
https://www.jotform.com/pdf-templates/web-design
Web Sources:
https://www.w3schools.com/whatis/

COURSE OBJECTIVES:

- Students will apply their skills in modeling, texturing, rigging, lighting, and rendering, with a focus on delivering a polished, professional final product.
- Students will understand the Shader Networks
- Students will gain knowledge to integrate the various techniques learned throughout previous modules, culminating in a complete, industry-standard 3D project.

SUBMISSION:

The Students identify the area of specialization and to expertise themselves, they do new creative projects based on their interesting field. Art and Illustration, 2D/3D Animation and Graphics, Advertising, Photography, Audio / Video Production, Multimedia production, Web based production.

PROJECT REVIEWS:

The students should present before the review committee to finalise the work,
First-review to present their Phase Creative ideation, scope and purpose of the work.
Second-Review to present the Phase II-Production stage.
Third- review to present their output after completion of Phase III.

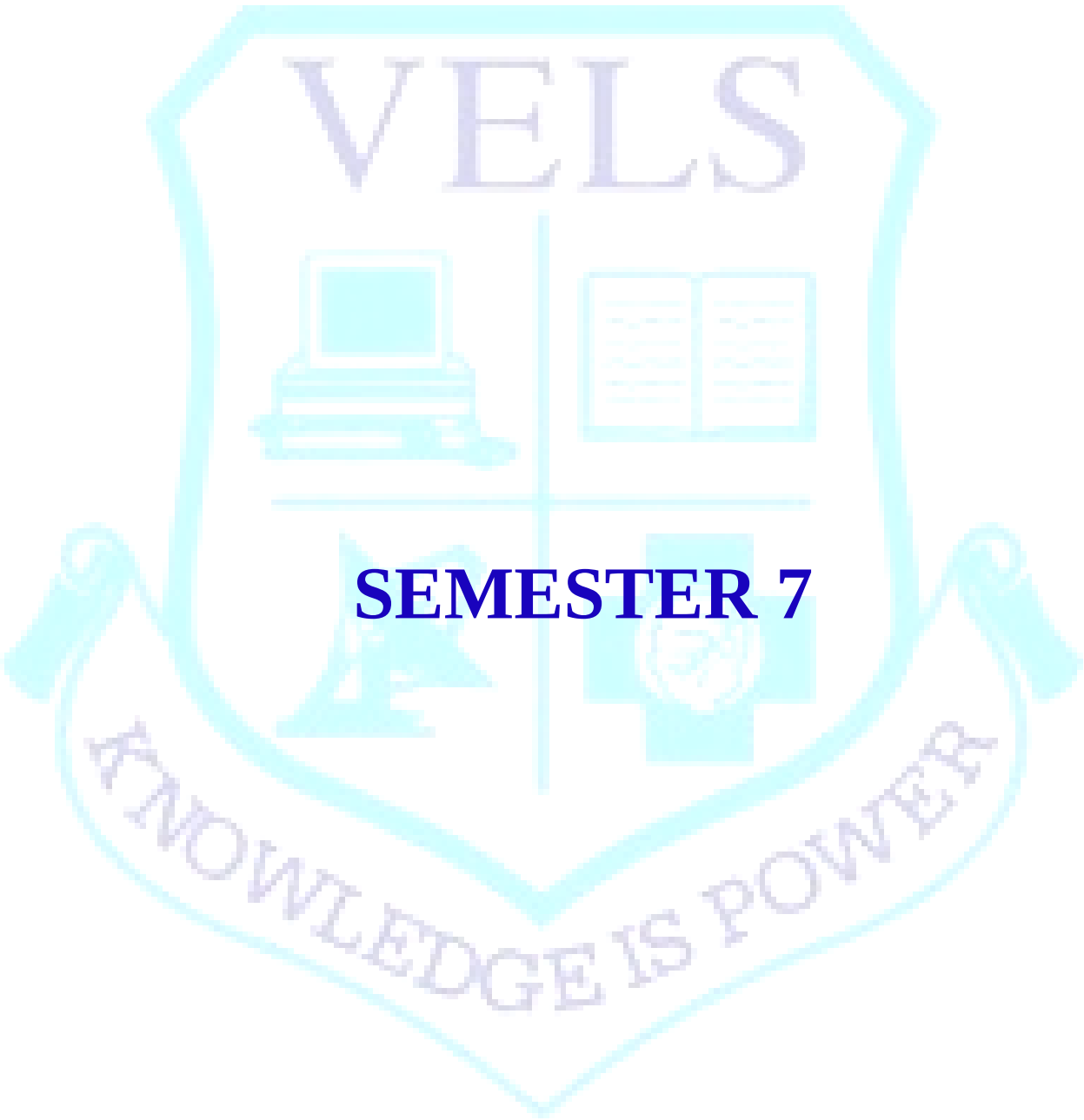
FINAL VIVA-VOCE EXAMINATION AND PROJECT SUBMISSION:

The final evaluation will be by the expert evaluation, where the students have to present their output through a presentation and also by submitting the work. The students have to follow VITAS guidelines for the project preparation.

TOTAL HOURS : 30

COURSE OUTCOMES: By the end of this course, students will be able to:

CO1	Develop Proficiency in creating complex 3D models, whether for characters, environments, or props.
CO2	Create and apply realistic textures using both image-based and procedural techniques.
CO3	Be able to rig 3D models, creating skeletons and control rigs for animation.
CO4	Be able to set up lighting for their 3D scene, choosing appropriate light types and setups for realism or stylistic purposes.
CO5	Be able to produce a fully rendered, polished 3D project that demonstrates their skills across modeling, texturing, lighting, animation and rendering..



SEMESTER 7

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN71	ADVANCED 2D ANIMATION TECHNIQUES	0	2	4	2	4

COURSE OBJECTIVES:

- To understand core 2D Animation concepts and the techniques
- To develop skills in Character design, vector design and interactive presentation.
- To gain practical experience with the 2d software authoring environment

UNIT I CREATING VECTOR SHAPES 10

Introducing 2d animation software interface of using tools, Stage, Symbols, Scene, Color swatches, Library, Transformation, Object properties, Bitmap, Ruler, Grid, Guide, Snapping. Teaching how to create basic vector shapes using drawing tools, intersecting shapes within a single layer, Creating Complex Shapes with Intersecting Lines. Creating complex shapes using the combination of tools and techniques.

UNIT II CHARACTER CREATION, ANIMATION AND RIGGING CONCEPT 15

Animating Walk cycle, Breaking down a Character and Animating. Story Board Basics, Stop Motion Animation. Basic Multi planning and Scene planning. Visual Break Down and Lip sync. Understanding of how the timeline organizes and controls a document's content in layers and frames. It also provides the knowledge in components of the Timeline like Layers, Frames (Key frames, In-betweens) and the play head. In this unit student will get a completed knowledge about animation techniques and rigging concepts.

UNIT III ANIMATION IN PRESENTATION AND E- LEARNING 15

Story Boarding Staging and Exploring current trends in web design and development.

Examining Flash sites. Publishing , Publishing and Output Calling Movie Clips and Creating a Multi,SWF site , Preparing a Flash movie, Including tools and best practices , Movie optimization and publishing Movie protocols , Calling Movie Clip Instances = Multi SWF site creation .

UNIT IV INTERACTIVE PRESENTATION **10**

Creating motion , Creating key frames , Representations of animation in the Timeline , Frame rates , Frame,by,frame animation , Onion skinning , Extend still images , Mask layers , Using Timeline effects , Twinned animation , Special effects , Filter , Animation Filters , Create preset filter libraries , Blend modes in Flash , Working with text , Working with sound , Working with video .

UNIT V AUDIO AND VIDEO **10**

Techniques involved in compositing the foreground, background (characters, text, props, objects and elements) and syncing the audio to give weightage for the content/script in much more interesting way.

Total: 60 Hrs

COURSE OUTCOMES

On completion of this course, the students can able to,

CO1	Create vector shapes and backgrounds that incorporate principles of composition, perspective and color, with speed, accuracy and dexterity, using a variety of tools.
CO2	Create 2D characters and environments that reflect the integration of graphic clarity, Design Principles, animation principles and concepts.
CO3	Incorporate technology effectively in the development of animation projects.
CO4	Communicate ideas, believable action and emotion effectively by employing principles of animation and development in all aspects with layer concepts
CO5	Refine personal narrative voice that holistically integrates with the elements of visuals and perform in order to deliver the quality outputs in animation.

TEXT BOOK:

1. Pakhira Malay K, "Computer Graphics, Multimedia and Animation", Second Edition, 2010.
2. Preston Blair, "Cartooning: Animation 1 with Preston Blair: Learn to animate cartoons step by step (How to Draw & Paint)", Walter Foster Publishing, 2003

REFERENCE BOOK:

1. Preston Blair," Cartoon Walter T. Foster , Apple Press Limited, Eight Edition,1994
2. Amid Amidi "Cartoon Modern : Style and Design in Fifties Animation", Chronicle Books LLC, Second Edition, 2006

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN72	ADVANCED CHARACTER ACTING PRACTICE IN 3D ANIMATION	0	1	4	2	3

COURSE OBJECTIVES:

- This course focuses on introducing students to a complex understanding of movement through acting and choreography that will strengthen the animator's ability to communicate visually.
- Students learn how to apply their previous motion mechanics knowledge to qualitative character movement.
- This course will also teach the student about the body, the flow of weight in space and time, changing movement in relation to other characters

UNIT- I INTRODUCTION TO ACTING **09**

Acting for animators - Difference between acting for drama and acting for animation - Studies from movies, Basics of animation acting - Posing, Timing, Staging - Voice acting

UNIT- II BODY ANATOMY **09**

Breaking down complex movement into simple actions - Understanding Body language, Body Acting and Gestures - Lip sync with expression - Facial expressions - Acting with senses

UNIT- III FEELING THE ACTIONS **09**

Feeling of the Character – reactions - Actions that show Joy or Inner Torments - Emotion and Empathy - Heroes and Villains - Good Versus Evil

UNIT- IV: EMOTIONS **09**

Eight effort actions: Wringing – Pressing – Gliding - Floating – Flicking – Slashing – Punching – Dabbing, Walks: Acting and Attitudes , Exaggeration, Blinks have Meaning, Status transactions

UNIT- V: ACTING FOR CAMERA **09**

Camera itself an Actor - Acting for Camera - Pantomime - Psychological objectives - Mechanical objectives

TOTAL HOURS: 45

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Demonstrating character motivation and conflict through movement
CO2	Understand theories of acting on character movement
CO3	Adapt and apply advanced character acting techniques to various animation styles, from realistic to stylized animations
CO4	Applying theories of choreography on character movement
CO5	Create a story-based acting demo reel for character animation.

TEXT BOOKS:

1. The Illusion of Life, Disney Animation: Frank Thomas and Ollie Johnston
2. Timing for Animation: Harold Whittaker, John Halas

REFERENCE BOOKS:

1. The Animator's Survival Kit: Richard Williams
2. Acting in Animation: A Look at 12 Films: Ed Hooks
3. Action: Acting Lessons for CG Animators: Gibbs and Gibbs

Web links:

Web Link:
1. https://youtu.be/H8bsqnKqkQs?si=7cblGGSuU9JehvNJ
2. https://youtu.be/EUpkzNZwKIc?si=Ca5uJmqHqoeSM2nI
3. https://youtu.be/qVNjayDznUs?si=Ea6GGhYuMMWYYGdE

Web Sources:

https://www.skillshare.com/en/blog/how-to-animate-a-character-a-beginners-guide/?srsltid=AfmBOooPvCNZnYtPiJB6UHVGrcvbEgMHAGYOG6ElKX4IFzqyCoWr34lA

COURSE OBJECTIVES:

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN71	ARTIFICIAL INTELLIGENCE FOR GAMES	5	0	0	2	5

- Students will understand the AI Technology used for Game Development
- Students will understand the working of NPC
- Students will develop knowledge in AI Algorithms and Data structures character
- Students will understand the pre planning Steps in AI Game development

UNIT- I Model of Game AI **15**

Model of Game AI - Algorithms, Data Structures and Representations - Kinds OF AI in Games - Speed and Memory-Processor issues - The AI Engine-Structure of AI Engine

UNIT- II Algorithms **15**

Basics of Movement Algorithm - Steering Behaviors - Variable matching Path following - Jumping & Motor Control - Movement in 3rd Dimension

UNIT- III GRAPHS AND TREES **15**

Graphs - Path smoothing - Movement Planning - Decision Trees - Behavior trees – Fuzzy Logic, Markov Systems

UNIT- IV: NPC THEORY **15**

Goal Oriented - Rule based systems - Scripting, Board Game Theory, Minimaxing - Transposition tables and memory - Turn based strategy in board games

UNIT- V: LEVEL DESIGN **15**

Scheduling execution - Level of Detail - The Design Shooters, Driving - Real-Time strategy - AI Based Game Genres.

TOTAL HOURS: 75

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Identify aspects of computer games, which benefit from artificial intelligence.
CO2	Understand the Physics for gaming
CO3	Understand the software and its usage in Game development
CO4	Implement artificial intelligence and machine learning techniques for traditional and modern computer games.

REFERENCE BOOKS:

1. Ian Millington and Morgan Kaufmann, "Artificial Intelligence for Games", 2nd edition, Taylor & Francis, 2012.
2. Jeff Heaton, "Artificial Intelligence for Humans, Fundamental Algorithms", 1 edition, Create Space Independent Publishing Platform, 2013.
3.

WEB LINK:

1. https://www.artificial-intelligence.blog/
2. https://aboveintelligent.com/top-10-artificial-intelligence-blogs-40f048bf8a70

Web Sources:
https://builtin.com/artificial-intelligence

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DBAN71	GAME LEVEL DESIGN	0	1	4	2	2

COURSE OBJECTIVES:

- This course introduces students to the principles and techniques of game level design
- This course covers the conceptualization, planning, and execution of immersive and engaging game levels.
- Students develop strategies to approach the design of game levels, and the processes and best practices for prototyping, testing and balancing game level design.

UNIT- I INTRODUCTION TO GAME LEVEL 06

Overview of game level design and its importance - Key concepts and terminology in level design - Level Design Process - Mechanics and Rules - Physical, paper and digital puzzle design

UNIT- II PRINCIPLES AND THEORY 06

Understanding player psychology and behavior - Principles of spatial design and player navigation - Introduction of Flow State theory and implications to Level Design - Defining challenge vs difficulty - Pacing and Cadence planning

UNIT- III TOOLS FOR LEVELDESIGN 06

Introduction to level design tools (e.g., Unity, Unreal Engine, Tiled) - basics of level design tools - Creating simple 2D level layouts and prototypes - Brainstorming and generating level design ideas - Creating level design documents and sketches

UNIT- IV: GAME ENGINE 06

Setting up a level in a game engine - Placing and arranging game objects and assets - Using level design to tell a story and build atmosphere - Case studies of effective environmental storytelling - Planning the flow and pacing of a game level

UNIT- V: PLAYERS AND PLATFORMS 06

Level design considerations for various game genres (e.g., platformers, shooters, RPGs) - Principles of designing levels for multiplayer games - Conducting playtests and gathering player feedback - Analysing playtest data to improve level design - Ensuring smooth gameplay and minimal loading

times.

TOTAL HOURS: 30

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Define level design as a component of game development.
CO2	Recognize and evaluate the criteria for successful game levels.
CO3	Design an original level for an existing game
CO4	Illustrate the intent of a level through paper prototypes.
CO5	Develop a test plan that evaluates a design through functional, useful and aesthetic criteria

TEXT BOOKS:

1. An Architectural Approach to Level Design: Second Edition, Totten, Christopher W., 2nd Edition, 2019
2. A Practical Guide to Level Design From Theory to Practice, Diplomacy and Production By Benjamin Bauer 2023

REFERENCE BOOKS:

1. Architectural Approach to Level Design Second edition By Christopher W. Totten 2019

2. Level Design: Processes and Experiences 1st Edition by Christopher W. Totten 2022

WEB LINKS:

Web Link:
1. https://youtu.be/lAs5UngYPRs?si=AgUPo93f_BMAnesD
2. https://youtu.be/PMXf0e8n2Oc?si=5C3f7WIviCDocatn

Web Sources:

http://www.gamelevellearn.com/

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24RBAN71	PROJECT I (2D SHOW REEL –A) (GROUP)	0	2	8	2	6

COURSE OBJECTIVES:

- To understand the principles of both 2D animation and info graphic design.
- To apply design and animation techniques to create visually compelling info graphics and animated projects.
- To develop strong skills in storytelling, data visualization, and effective communication through visuals.

UNIT I: 2D ANIMATION AND INFOGRAPHICS FUNDAMENTALS 18

History and evolution of 2D animation. Overview of the 12 principles of animation. Introduction to key frames, in-betweens, and timing. Understanding different animation styles and techniques. Types of info graphics: Statistical, informational, timeline, comparison, etc. Visual hierarchy, color theory, and typography in info graphics.

UNIT II: STORYBOARDING & CONCEPT DESIGN 18

The role of storyboarding in animation. Character design basics and mood boards. Planning scenes and camera angles. Writing short animation scripts. Thumbnails and rough sketching techniques.

UNIT III: ANIMATION PRODUCTION TECHNIQUES 18

Creating animation using key frames and intermediate drawings. Timing and spacing for realistic movement. Tweening and frame-by-frame animation. Introduction to character rigging and simple mechanical animations. Advanced character animation (acting and expressions). Complex motion techniques (walking cycles, running cycles, etc.).

UNIT IV: ADVANCED 2D ANIMATION TECHNIQUES & MOTION DESIGN 18

Animation techniques and motion design principles. Working with motion graphics: transitions, easing, and visual effects. Integrating sound and music with animated info graphics. Interactive animations for web or multimedia platforms. Special effects in 2D animation (shadows, lighting, etc.).

UNIT V: FINAL PROJECT AND PORTFOLIO DEVELOPMENT 18

Conceptualizing and producing a full 2D animated short or sequence. Refining and polishing animations. Feedback and revision cycles. Creating a professional animation portfolio.

TOTAL HOURS: 90

Course Outcomes:

Upon successful completion of this course, students will be able to:

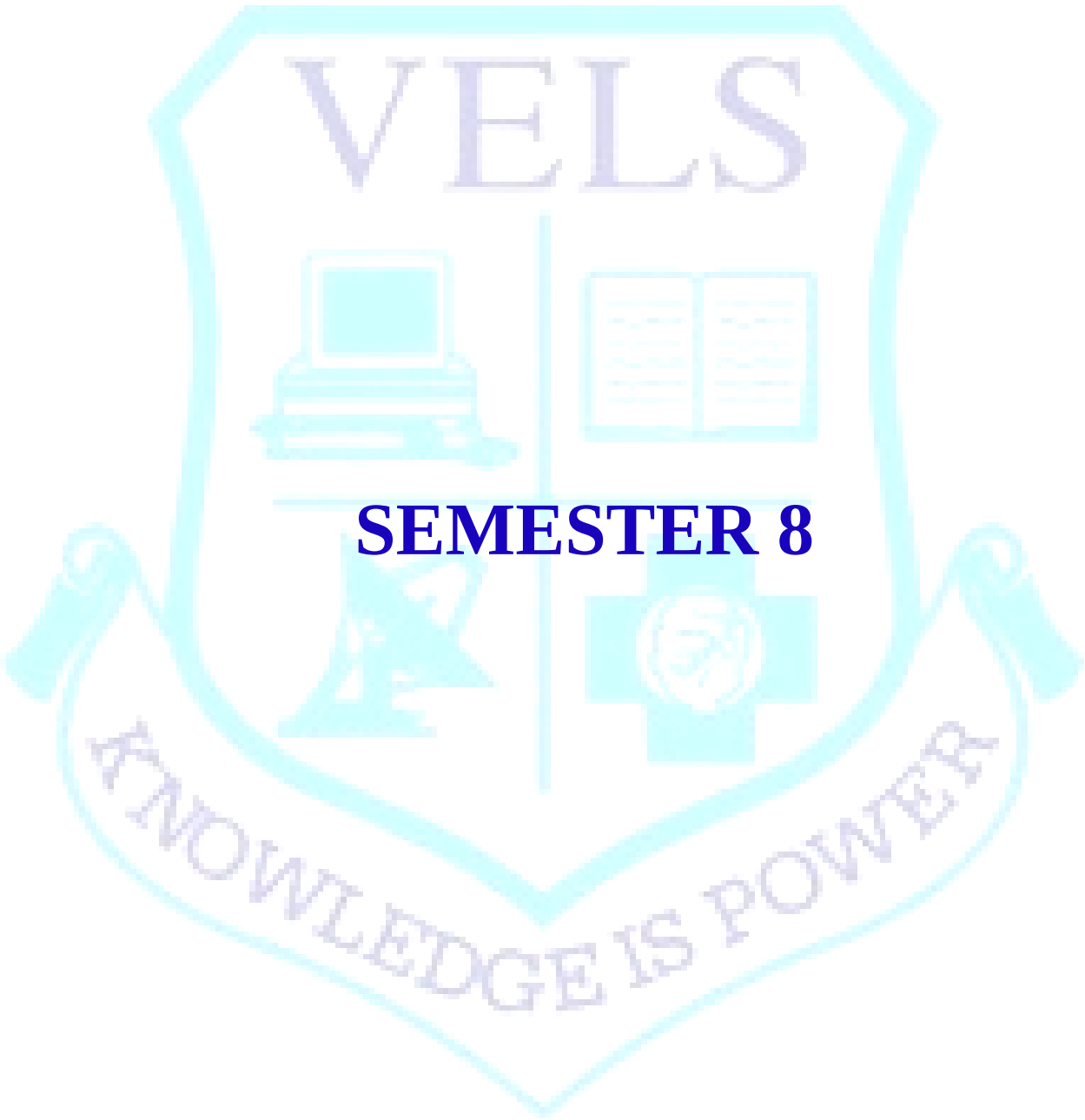
CO1	Design and animate a 2D project that effectively communicates complex information through visual storytelling.
CO2	Apply the principles of graphic design and animation to create engaging and informative content.
CO3	Utilize industry-standard software tools for info graphic creation and 2D animation.
CO4	Create dynamic, clear, and aesthetically pleasing info graphics that enhance understanding and engagement.
CO5	Present and critique projects professionally, showcasing creativity and technical proficiency in both animation and info graphic design.

TEXTBOOK:

1. Tufte, E. R.. *The visual display of quantitative information* (2nd ed.). Graphics Press. 2001
2. Crook, I., & Beare, P. (2012). *Motion graphics: Principles and practices from the ground up*. Focal Press. 2010

REFRENCE BOOK:

1. Williams, R. *The animator's survival kit: A manual of methods, principles, and formulas for classical, computer, games, stop-motion, and internet animators.* Faber & Faber. 2009



SEMESTER 8

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN81	ANIMATION RESEARCH	4	0	0	2	4

COURSE OBJECTIVES:

- To provide students with an understanding of the role of research and development (R&D) in animation.
- To explore how R&D drives innovation in animation techniques, storytelling, and technology.
- To develop students' ability to integrate cutting-edge R&D into their own animation projects.

UNIT I: INTRODUCTION TO ANIMATION RESEARCH 15

Overview of Animation Research, The interdisciplinary nature of animation research (art, technology, psychology, etc.). Research Methodologies, Qualitative vs. quantitative research methods in animation. Approaches to data collection and analysis (e.g., surveys, interviews, experiments). Literature review techniques and sources. Identifying research gaps. How to identify areas in animation that require research and innovation.

UNIT- II: RESEARCH AND DEVELOPMENT IN ANIMATION 15

Overview of R&D in Animation, scope of R&D in animation. History and evolution of animation technologies. Key players in animation R&D (studios, universities, independent researchers) Types of Research in Animation-Theoretical research vs. applied research, Technological innovation and artistic experimentation, R&D Process in Animation, Stages of R&D: ideation, prototyping, testing, and iteration.

UNIT III: STORYTELLING AND NARRATIVE INNOVATION IN ANIMATION 15

Innovations in Animation Storytelling, New narrative forms: interactive storytelling, nonlinear narratives, and trans media storytelling, How technology influences storytelling in animation (e.g., AI-

driven scripts, VR/AR storytelling). Character Design and Development. Research into realistic character design and animation techniques. Emotional expression and psychological depth in animated characters, Exploring Diversity and Representation, Research in diversity and representation in animation storytelling.

UNIT IV: ANIMATION TECHNOLOGIES AND TOOLS IN R&D 15

Cutting-Edge Animation Technologies - Computer-generated imagery (CGI) advancements, Motion capture and performance capture technologies Virtual reality (VR) and augmented reality (AR) in animation. Software and Tools for Animation R&D 3D modeling and animation software (e.g., Autodesk Maya, Blender, Houdini). Simulation software for realistic effects, Artificial intelligence in animation, The Role of R&D in tool development In-house software creation. Open-source R&D tools and their impact on the industry.

UNIT V ANIMATION PRODUCTION RESEARCH 15

Animation Production Pipelines, How research improves animation production workflows (from pre-production to post-production).Efficiency and automation in the animation pipeline (e.g., procedural modeling, rendering). Collaborative and Remote Animation Production, Research on team collaboration tools for animation (e.g., cloud-based systems, collaborative software). The impact of remote work and digital tools on animation production R&D in Studio Environments.

TOTAL HOURS: 90

COURSE OUTCOMES

By the end of this course, students will be able to:

CO1	Analyze and critique contemporary research in animation and its impact on the industry.
CO2	Conduct original research in animation, exploring both artistic and technological aspects.
CO3	Identify and evaluate emerging trends and technologies within the animation field.
CO4	Create a research-driven animation project that incorporates innovative techniques and

	technologies.
CO5	Present and communicate research findings effectively, both verbally and in writing.

TEXT BOOK:

1. Wells, P., & Quinn, J. (Eds.). *Animation studies*. Palgrave Macmillan. 2011

2. Preston Blair, "Cartooning: Animation 1 with Preston Blair: Learn to animate cartoons step by step (How to Draw & Paint)", Walter Foster Publishing, 2003.

REFERENCE BOOK:

1. Kerlow, I. V. *The art of 3D computer animation and effects* (3rd ed.). Wiley. 2009
2. Block, B*The visual story: Creating the visual structure of film, TV, and digital media* (2nd ed.). Focal Press. . 2008

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24PBAN82	EMERGING TECHNOLOGIES: PRINCIPLES AND PRACTICES (AR/VR/MR/XR)	0	1	4	2	3

COURSE OBJECTIVES:

- This course introduces students to the principles and practices of emerging technologies, focusing on AR, VR, MR, and XR
- The course covers the fundamental concepts, development tools, design principles, and practical applications of these technologies
- Students will gain hands-on experience by creating projects that explore the potential of AR/VR/MR/XR in various fields.

UNIT- I INTRODUCTION TO AR, VR, MR, AND XR 09

Overview of AR, VR, MR, and XR - History and evolution of immersive technologies - Current trends and future outlook - Getting Started with UNITY 3D or Unreal Engine - Setting up development environments (Unity and Unreal Engine)

UNIT- II TOOLS FOR VR AR XR 09

VR evolution Google CARDBOARDVR, 360 VR, 3DOF vs 6DOF - AR /VR systems with IOT, AI and Haptics - VR Concepts - VR Technologies - AR Concepts - AR Technologies

UNIT- III VR vs AR 09

VR vs. AR - VR SDK integration - Camera Control - UI concept for VR application - Creating a Browser-Based AR Project

UNIT- IV: Pipeline 09

Understanding the AR workflow - Exploring AR SDK - Developing AR App - Basic Setup - AI module in AR app - Publishing and viewing the VR app

UNIT- V: CONCEPTS AND TECHNOLOGIES 09

XR Concepts & Technologies - Principles of animation in XR - XR game design principles - Designing effective training simulators using XR - Techniques for tracking and navigation in XR environments

TOTAL HOURS: 45

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Understanding the basics of AR/VR technologies, content creation, and hardware design for AR/VR applications.
CO2	Understanding the principles behind game design, medical applications, AR/VR-based training simulators, and navigation and tracking in AR/VR.
CO3	Knowledge of image synthesis, rendering, and animation.
CO4	Staying informed about the latest trends in AR/VR systems.
CO5	Applying acquired knowledge to analyze and design AR/VR systems.

TEXT BOOKS:

1. UX for XR: User Experience Design and Strategies for Immersive Technologies (Design Thinking) by Cornel Hillmann, Apress, 2021

2. The VR Book: Human-Centered Design for Virtual Reality by Jason Jerald, Morgan & Claypool Publishers, 2015

REFERENCE BOOKS:

1. Charlie Fink's Metaverse - An AR Enabled Guide to AR & VR by Charlie Fink, 2018

2. The History of the Future: Oculus, Facebook, and the Revolution That Swept Virtual Reality by Blake J. Harris, Dey Street Books, 2019

WEB LINKS:

1. https://youtu.be/pF--YKCCUMw?si=sPV2x5WjJMhwriuS
2. https://youtu.be/tX8jAmcrJgk?si=a92EMg2FKG9U1gT5
3. https://youtu.be/REUu3R0LgOM?si=CaDUnHvF91WbY9b7

WEB SOURCES:

https://www.autodesk.com/support/technical/article/caas/tsarticles/ts/3KRP60l41xW1GMjuqq7yfk.html

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24CBAN81	ADVANCED DYNAMICS AND PHYSICS BASED SIMULATION	0	2	4	2	4

COURSE OBJECTIVES:

- Students will implement realistic simulations of rigid bodies, soft bodies, fluids, and particles.
- Students will understand the mathematical and physical principles behind simulations.
- Students will develop advanced dynamics and physics engines within 3D animation software (e.g., Houdini, Maya, Blender).
- Students will develop workflows for integrating physics simulations into production pipelines.

UNIT- I Introduction to Maya Paint Effects 12

User Interface for Paint Effects - Paint Effect tools - Pressure Mapping - Brush Settings - Cycle Animations - Pressure Curves - Mesh Settings and Mesh Environment - Shading Attributes - Texture settings - Spiral and Bend Attributes

UNIT- II Fluid Dynamics in Animation 12

Fundamentals of Fluid Dynamics: The Navier-Stokes equations and their role in fluid simulation, Pressure, viscosity, and velocity fields

Techniques for Fluid Simulation - Lattice-Boltzmann and Smoothed Particle Hydrodynamics (SPH) , Grid-based simulation (Eulerian vs. Lagrangian methods) , Particle-based fluid simulation and animation

Creating Realistic Water, Smoke, and Fire Effects - Water simulation: Waves, splashes, and interaction with objects - Smoke and fire effects using fluid simulations

UNIT- III Advanced Simulation Techniques 12

Simulating Hair and Fur - Modeling hair dynamics and collisions with rigid bodies, Solving for stiffness, drag, and elasticity in hair simulation, Using particle-based methods for fur and hair

Character Dynamics and Muscle Simulations - Simulating character movement with skin and muscle deformation, Ragdoll physics and integration with animation systems - Biceps, Upper Arm Volume, The flexi chain, Twist rig, Joints as Influences, Adding custom Muscles, Adding jiggle Effect to Muscle, Complete Muscle set up rig

Real-Time Simulation Considerations - Optimizing simulations for real-time rendering (e.g., video games), Using GPU acceleration and parallel processing for faster simulations

UNIT- IV: Integration with Animation Pipelines **12**

Physics Simulation Tools in 3D Animation Software - Houdini's dynamic solvers (Pyro, FLIP fluids, Rigid Bodies, etc.), Maya's nCloth, nHair, and Bullet Physics,Blender's rigid body, cloth, and fluid systems

Exporting and Integrating Simulations - Exporting simulations to game engines (Unity, Unreal), Baking and pre-rendering physics effects, managing data for cross-software workflows

Animation and Simulation: Collaboration - Coordinating animation with physics effects (keyframes vs. simulations), Timing and artistic control over simulated effects

UNIT- V: Particle Systems in Unity **12**

Introduction to Unity's Particle System - Basic particle system setup and parameters, Particle lifetime, speed, and behaviour, Using particle effects for visual realism (fire, smoke, explosions)

Advanced Particle System Techniques - Forces applied to particles (gravity, wind, turbulence), Collision detection with particles and other objects, Creating complex particle effects (rain, fireworks, blood splatters)

Interaction Between Particles and Rigid Bodies - Using particle systems to simulate debris, dust, and destructible environments, Integrating particles with physics systems for gameplay effects (e.g., explosions interacting with objects)

TOTAL HOURS: 60

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	Achieved a working understanding of tools related to texturing.
CO2	Understand workflow of substance painter to create photo realistic Texturing.
CO3	Be able to create compelling compositions.
CO4	Be able to create accurate, balanced UVW coordinates & layout
CO5	Be able to create descriptive, detailed and interesting textures & normal maps.

TEXT BOOKS:

1. The Art of 3D Computer Animation and Imaging" by Isaac V. Kerlow, John Wiley & Sons, 2000

2. "Animation Physics" by Peter Tsai

REFERENCE BOOKS:

1. Houdini Foundations" by SideFX
2. Steve Wright, “Digital Compositing for Film and Video”, Focal Press, 2010.
3. "Physically Based Rendering: From Theory to Implementation" by Matt Pharr, Wenzel Jakob, and Greg Humphreys

Web Link:
1.https://academy.substance3d.com/
2.https://www.cginspiringartist.com/substance-painter-tutorials/

Web Sources:
https://youtu.be/uXtyI9ChlN4

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24DBAN81	ADVANCED 3D ANIMATION TECHNIQUES	0	1	4	2	3

COURSE OBJECTIVES:

- This course is designed for students with foundational skills in 3D animation who wish to advance their knowledge and expertise in Autodesk Maya
- The course will delve into sophisticated techniques for animation and rendering, culminating in a professional-quality animated short film.

UNIT- I ADVANCED ANIMATION TECHNIQUES 09

In-depth use of the Graph Editor - Animation layers and non-linear animation techniques - Creating fluid and natural character movements - Using reference footage to study acting - Principles of weight and balance in animation

UNIT- II CHARACTER ANIMATION AND PERFORMANCE 09

Principles of character acting - Blocking out key poses and movements - Refining blocked animations into smooth sequences - Developing character arcs through animation - Timing for different types of character actions (e.g., walk, Run, Jump) - Using exaggeration to enhance animation

UNIT- III ANIMATING DIALOGUE AND FACIAL EXPRESSIONS 09

Principles of facial anatomy and expression - Refining blend shapes for detailed expressions - Understanding phonemes and visemes - Blocking out keyframes for lip-sync - Coordinating facial expressions with body movements

UNIT- IV: TIMING AND SPACING FOR CHARACTER INTERACTIONS 09

Principles of timing and spacing in animation - Focus on timing and spacing - Timing for different types of actions (e.g., fast, slow, heavy, light) - Timing for anticipation and reaction - Using reference footage for realistic timing - Fine-tuning animations for polished results

UNIT- V: CAMERA TECHNIQUES AND CINEMATOGRAPHY 09

Advanced camera controls in Maya - Planning and executing cinematic shots - Storyboarding and

animatics for animation planning - Understanding depth of field and its cinematic use - Using light to enhance mood and storytelling

TOTAL HOURS: 45

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1: Define level design as a component of game development.

CO2: Recognize and evaluate the criteria for successful game levels.

CO3: Design an original level for an existing game

CO4: Illustrate the intent of a level through paper prototypes.

CO5: Develop a test plan that evaluates a design through functional, useful and aesthetic criteria

TEXT BOOKS:

1. The Illusion of Life, Disney Animation: Frank Thomas and Ollie Johnston. Fisicalbook, 1995

2. Timing for Animation: Harold Whittaker, John Halas, Taylor & Francis, 2013

REFERENCE BOOKS:

1. The Animator's Survival Kit: Richard Williams, Faber & Faber, 2021

2. Acting in Animation: A Look at 12 Films: Ed Hooks

Web links:

Web Link:
1. https://youtu.be/pF--YKCCUMw?si=sPV2x5WjJMhwriuS
2. https://youtu.be/tX8jAmcrJgk?si=a92EMg2FKG9U1gT5
3. https://youtu.be/REUu3R0LgOM?si=CaDUnHvF91WbY9b7

Web Sources:

https://www.autodesk.com/support/technical/article/caas/tsarticles/ts/3KRP60l41xW1GMjuqq7yfk.html

COURSE CODE	COURSE NAME	COURSE CREDIT STRUCTURE				
		L	T	P	O	Credit
24RBAN81	Research Project II (3D Demo reel – A)(Specialization)	0	4	6	2	8

COURSE OBJECTIVES:

- Students will be allowed to choose the area of specialization for their project
- Students will gain knowledge to integrate the various techniques learned throughout previous modules, culminating in a complete, industry-standard 3D project.

SUBMISSION:

The Students identify the area of specialization and to expertise themselves, they do new creative projects based on their interesting field. Art and Illustration, Game Development, 2D/3D Animation and Graphics, Advertising, Photography, Audio / Video Production, Multimedia production, Web based production.

PROJECT REVIEWS:

The students should present before the review committee to finalize the work,
First-review to present their Phase Creative ideation, scope and purpose of the work.
Second-Review to present the Phase II-Production stage.
Third- review to present their output after completion of Phase III.

FINAL VIVA-VOCE EXAMINATION AND PROJECT SUBMISSION:

The final evaluation will be by the expert evaluation, where the students have to present their output through a presentation and also by submitting the work. The students have to follow VITAS guidelines for the project preparation.

TOTAL HOURS: 90

COURSE OUTCOMES:

By the end of this course, students will be able to:

CO1	**CO1:** Develop Proficiency in creating complex 3D models, whether for characters, environments, or props.
CO2	**CO2:** Create and apply realistic textures using both image-based and procedural techniques.
CO3	**CO3**: Be able to rig 3D models, creating skeletons and control rigs for animation.
CO4	**CO4:** Be able to set up lighting for their 3D scene, choosing appropriate light types and setups for realism or stylistic purposes.
CO5	**CO5:** Be able to produce a fully rendered, polished 3D project that demonstrates their skills across modeling, texturing, lighting, animation and rendering..

VELS
KNOWLEDGE IS POWER