NEP and Learning Outcome-based Curriculum Framework (LOCF)

For

B.Sc. Animation & Multimedia

Programme

(To be effective from the Academic Session 2022-23)

Department of Media Studies

Gurugram University, Gurugram

(A State Govt. University Established Under Haryana Act 17 Of 2017)

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1. Background

Introduction

The Learning Outcomes-based Curriculum Framework (LOCF) for Bachelor of Science – Animation and Multimedia degree programme to design a broad learning framework to provide the human capital needs of the ever changing Graphic and Entertainment Industry. It also aims to inculcate and empower students with creativity, knowledge, ability, skills and also moral ethical values so that he will able to acquire professional skills along with social-cultural values. It is also designed to make them capable of understanding primary research culture among students to encourage Research and Development (R & D) potentials in the field of gaming, story boarding, designing and film studies. This three years undergraduate programme has been structured to prepare the students to achieve skills for graphic, entertainment as well as animation industries.

Program Educational Objectives (PEOs) B.Sc. Animation & Multimedia undergraduate Program :

1. To impart the specialized knowledge of Animation & Multimedia areas of studies.
2. To develop the students into competent and efficient Media & Entertainment Industry ready professionals.
3. To empower students by creative, technical, communication and life skills.
4. To impart how Information Communication Technologies (ICTs) skills can be designed, developed and used as a promotion and learning tools, including use of digital, media literacy and competencies.
5. To imbibe the understanding of research and social development.
6. To inculcate professional ethics, values of Indian and global culture.
7. To prepare socially responsible media academicians, researchers, professionals with global vision.

2. Programme Outcomes

On completing the **B.Sc. Animation & Multimedia** Programme, the students shall be able to realize following programme outcomes:

PO	Description
PO-1	Shall acquire fundamental knowledge of Animation & Multimedia
PO-2	Shall acquire the knowledge related to media and its impact on industry.
PO-3	Shall be competent enough to undertake professional job as per demands and requirements of market & entertainment (M & E) Industry.
PO-4	Shall solidify foundation of design, animation, visual effects, gaming and problem solving methodology for effective implementation in the area of animation and multimedia.
PO-5	Shall impart advance knowledge about various sub-domains related to the field of animation and multimedia like game design and development.
PO-6	Shall have an understanding of acquiring knowledge throughout life.
PO-7	Shall acquaint students about upcoming technologies like augmented reality and virtual reality.
PO-8	Shall acquire the understanding of importance of leadership and teamwork that is the major quality and responsibility for media personnel.
PO-9	Shall become ethically committed media professionals and entrepreneurs adhering to the human values, the Indian culture and the Global culture.

3. Programme Specific Outcomes

On completing **B.Sc. Animation & Multimedia** Programme, the students shall be able to realize following outcomes:

PSO	**Description**
PSO-1	Design solutions for complex visual communicating problems with knowledge and practice of latest software, technology as well as strong academic knowledge of visual art and communication.
PSO-2	Knowledge of designing, animation, visual effects, gaming to communicate any simple or complex information or message to the society or a particular group of people.
PSO-3	Create audio visual or virtual models for complicated training programs in fields such as medical, defense, engineering, science and research.
PSO-4	Apply foundation and practical skills to initiate an entrepreneurship which creates number of job opportunities for the society.
PSO-5	Apply ethical principles and commit to professional ethics and responsibilities and norms of the educational and entertainment practices.

4. Graduate Attributes

- **Disciplinary Knowledge:** An ability to define the meaning, purpose of communication and demonstrate the theoretical knowledge in the field of animation and multimedia

- **Creative, problem solving, and Critical Thinking:** Gain conceptual and theoretical knowledge and learn to critically think and analyze the dynamics and contemporary phenomenon of mass communication. Develop logical and creative thinking for the solutions in Print media, Electronic media and Communication for development.An ability to test and analyse research findings by demonstrating critical thinking and problem-solving skills.

- **Communication Skills:** Develop the communication skills, theoretical and practical knowledge among the students in print, digital and development communication.Elicit views of others, mediate disagreements and help reach conclusions in group settings.Apply communication skills and practices in context of social and cultural milieu of the North-eastern region.

- **Research Skills:** Conducting research is key to fully understand how to gain the attention of an audience when building an animated movie. The last thing people want with a visual campaign is to find themselves screaming out into the void, because they've failed to engage or interest people. Research brings objectivity and accuracy in animation principles. A good story is always the outcome of research and investigation.

- **Moral and Ethical Values:** Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them. Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through service learning and social commitment.

- **Life skills and Life-long Learning:** Engage in higher studies, research and professional work and be a life- long learner in context of animation technology.

- **Global Competence:** Global Competence is a multi-dimensional construct that that gave students combination of knowledge, skills, attitudes and values successfully applied to global issues Global competency demands effective communication skills that will be provided to student through linguistic and intercultural knowledge in order to make them engage in open, appropriate, and effective interactions with people all around the world (from different backgrounds) and will help students to move from learning about the world to making a difference in it.

5. Qualification descriptors

B.Sc. Animation & Multimedia is 3 years undergraduate course. The main aim of the course is to provide research and development in the field of animation and graphics. This degree provides a solid foundation in core graphic and multimedia, creative visualization and animation and film production skills.

Eligibility

The candidate should have qualified 10+2 examination from Board of School Education, Haryana or of any other Board recognized as equivalent thereto, with a minimum of 50% marks in aggregate (47.5% in case of SC/ST/ Divyang candidates of Haryana only)

6. Scheme of Programme

Course Code	Course Title	Course ID	L	T	P	Credits	Internal Assessment	ESE	TI	TE	PI	PE	Total
Core Course(s)													
CC101	Introduction to oral communication	Paper-1	4	0	0	4	30	70	30	70			100
CC102	Basics of 2D Animation	Paper-2	4	0	0	4	30	70	15	35	15	35	100
CC103	Introduction to Multimedia Lab-1	Paper-3	4	0	0	4	30	70	15	35	15	35	100
General Elective Course(s)													
GEC104 (One from Pool of Courses)	Introduction to Film Making	Paper-4	4	0	0	4	30	70	15	35	15	35	100
Ability Enhancement Course(s)													
AEC105 (One from Pool of Courses)	Basics of Mathematics in 3D Animation	Paper-5	2	0	0	2	15	35	15	35			50
Skill Enhancement Course(s)													
SEC106 (One from Pool of Courses)	Basics Of Computer Application	Paper-6	2	0	0	2	15	35			15	35	50
Value Addition Course(s)													
VAC107 (One from Pool of Courses)	Indian Art of Story Telling “Panchtantra”	Paper-7	2	0	0	2	15	35	15	35			50
Total Credits						**22**							

Details of Courses

	After 3 years		
	No of courses	No of credits per course	Total no of credits
Core Courses	18	4	**72**
Discipline specific Elective Courses	3	4	**12**
General Elective Courses	5	4	**20**
Ability Enhancement Courses	4	2	**8**
Skill enhancement	6	2	**12**
Value Added Courses	4	2	**8**
Internship/Project/training	-	-	**-**
Dissertation	-	-	**-**
TOTAL			**132**

7. Learning Outcome Index

Semester	PSO / Course No.	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
	101									
	102									
	103									
	104									
	105									
	106									
	107									

8. Syllabus

Semester wise Core Course(s)

Semester wise Discipline Specific Elective Course(s)

Semester wise General Elective Course(s)

Semester wise Ability Course(s)

Semester wise Skill Course(s)

Semester wise Value Added Course(s)

Internship/Project/Training

Dissertation

Semester-1
Core Course(s)

B.Sc. Animation and Multimedia
SEMESTER - 1
INTRODUCTION TO COMMUNICATION

Course Code: CC 101	**L: 4**	**T/P: 3-1**	**Credits:4**
TI: 30 TE: 70		PI: 0 PE: 0	

Objectives: with this course students would gain knowledge about basic aspects of Communication. Students would learn about the process and functions of communication and its role in developing self that play crucial role in the process of socialization.

Outcomes: Students will able to speak confidentiality in interpersonal and group communication. They will able to apply ethics of communication in Psychological as well as social context.

Unit 1 Introduction

1.1 Human communication and Process of Socialization
1.2 Process and Functions of Communication
1.3 Barriers of Effective Communication
1.4 Communication and Self (Johari window)

Unit 2 Types of Communication

2.1 Language: Verbal (oral and written) and nonverbal
2.2 Structure: Formal and Informal
2.3 Flow: Horizontal and Vertical (Upward and Downward)
2.4 Medium: Audio, Visual and Audio-visual

Unit 3 Forms of Communication

3.1 Intra-personal communication
3.2 Interpersonal Communication
3.3 Group communication: Small group and Large Group
3.4 Dyad and Triad

Unit 4 Non Verbal Communication

4.1 Kin-sic and Body Movement
4.2 Facial Expressions and Eye Movements
4.3 Para-language and Proxemics
4.4 Personal Appearance, smell and taste
4.5 Gaze, Haptic, Adapter and Artifacts

Suggested Practical:

1 Newspaper Reading
2 Presentation on different themes
3 Group and panel discussion on issues
4 Conducting interview
5 Mock interviews and viva practice
6 Writing skills

Suggested Readings

1. The Process of Communication D.K. Berlo, New York: Halt Renehart and Winston.
2. Introduction to Communication Studies by John Fiske, Routledge
3. Mass Communication in India by Keval J. Kumar, Jaico Publishing House

B.Sc. Animation and Multimedia
SEMESTER - 1
Basics of 2D Animation

Course Code: CC 102	L: 4	T/P: 3-1	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Objectives: Students will heighten their awareness and understanding the basic element of art, basic principal of design and to understanding the psychological, culture and other association with colour theory and to develop shapes in object drawing and nature with shading techniques using light and shadow.

Outcomes: After completion of this course Students would be able to Create designs and artwork using elements of art, implement the principles of design to create art composition, understand the basic color to create an impact composition through color, Students would be able to draw light and shadow on objects and develop shapes in object drawing.

Unit 1 Elements of Art
1.1 Line
1.2 Colour
1.3 Shape
1.4 Texture, Space, Form and Value

Unit 2 Principles of Art

2.1 Balance
2.2 Rhythm
2.2 Pattern, Emphasis,Contrast
2.3 Unity and Movement

Unit 3 Colour Theory

3.1 Primary & Secondary Colour
3.2 Territory colour
3.3 Warm and cool colour
3.4 Psychological aspect of colour

Unit 4 Drawing with Basic shapes

4.1 Object drawing from surroundings
4.2 Light and Shade: Pencil shading techniques- hatching, cross hatching, stippling, scribbling and smudging

B.Sc. Animation and Multimedia
SEMESTER - 1
Introduction to Multimedia Lab-1

Course Code: CC 103	**L: 4**	**T/P: 3-1**	**Credits:4**
TI: 15 TE: 35		PI: 15 PE: 35	

Objectives: this course is design to give basic knowledge and understanding to acquire knowledge of basic pen tool, Techniques, Bitmap Masking and understanding the Visual element and use them appropriately in their design also in different context and how to convert old black and white image to colour, experiment and use expressive style of type sets and effects and to understanding the color scheme and colour balance.

Outcomes: Students would be able to implement knowledge of Raster graphics by using adobe Photoshop Software and understand the concept of creating textures, brushes, abstract and thematic designs and explore the aesthetical aspects of color ans students will be able to typrography and its power for expressive qualities.

Unit 1
1.1 Create visual art with tools (Introduction to digital tools, power and limitations)
1.2 Create Background with filters
1.3 Create wallpaper filters and blending modes

Unit 2
2.1Create artwork with Layers
(basic principles: pixel, vector, layers, resolution, color mode)
2.2 Create 3D effects with layer blending option
2.3 Photo retouching

Unit 3
3.1 Color editing/ Colour balance
3.2 Black and white to colour convert

Unit 4
4.1 Masking
4.2 Create Text Styles and effect

Practical Assignments
1 Graphic art
2 Photo Manupulation
3 Old photo to new

Suggested Readings
1. Adobe Photoshop CC for Dummies by Peter Bauer
1. Adobe CC Classroom in a book(2017) by Andrew Faulkner

Semester-1
General Elective Course(s)

B.SC. Animation And Multimedia
Semester-1
Introduction To Film Making

Course Code: GEC 104	L: 4	T/P: 4-0	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Objectives: The aim this course is to provide students with basic knowledge of Film making and to study about different films and film makers. To acquire the knowledge of different statements like statement, script and story boarding. To create an idea with experimental concept.

Outcomes: Students would be able to know about films film-makers and able to know production pipeline: pre-production, production, post- production and able know to Apply script storyboard for experimental animation film.

Unit 1 Introduction of film
1.1 Brief history of film making
1.2 Type of film - fiction/ non fiction
1.3 Short film/ feature film/ documentary
1.4 Indian film industry

Unit 2 Film production (pre production and script writing)
2.1 Pre production- idea generation
2.2 Research, rough draft
2.3 Budgeting, location
2.4 Script writing

Unit 3 Film Production (Production)
3.1 Introduction camera technology
3.2 Type of shot, angles, movements and uses
3.3 Equipment related to shooting
3.4 Shooting process

Unit 4 Film Production (Post Production) Editing, Effects
4.1 Meaning, definition and process of film editing
4.2 Different software of editing
4.3 Meaning and use of visual effects
4.4 Audio recording, dubbing, editing

Suggested Readings

1. Film-making: An Introduction to the Craft of the Director (2005) by Alexander Mackendrick, edited by Paul Cronin
2. The Filmmaker's Handbook by: Steven Ascher and Edward Pincus

Semester-1
Ability Enhancement Course(s)

B.SC. Animation And Multimedia
Semester-1

Basics of Mathematics in 3D Animation

Course Code: AEC 105	L: 2	T/P: 1-1	Credits: 2
TI: 15 TE: 35		PI: 0 PE: 0	

Objectives: Introduce 2d and 3d coordinates in geometry. Understand the dimensional concept in prospective. Study basic Matrices and Vectors. Familiarize with basic understanding of mathematics in behind 3D.

Outcomes: Students will be able to learn the knowledge 2d and 3d coordinates in geometry and will be able to analyze the dimensional concept in 3d prospective. Able to practice basic Matrices and Vectors. Students will be able to apply the knowledge, skills in 3d concept.

Unit 1 2D Coordinate Geometry:

1.1 Cartesian and Polar coordinate system, Distance, Formula,

Equation of Line, Circle, Ellipse etc.

Unit 2 3D Coordinate Geometry:

2.1 3D coordinate System, Equation of Line, Circle, Ellipse and their attributes, Colour and Grayscale Levels, Area fill Attributes, Character Attributes, Bundled Attributes, Anti-aliasing. Basic of Transformations: translation, Scaling, Rotation etc.

Suggested Readings

1. Plastock: Theory & Problem of Computer Graphics, Schaum Series.

2. M. D. Raisinghania, Vector Calculus, S Chand Co. Pvt. Ltd., 2013.

3. B Spain, Vector Analysis, ELBS, 1994.

Semester-1
Skill Enhancement Course(s)

B.SC. Animation And Multimedia
SEMESTER - 1
Basics of Computer Application

Course Code: SEC 106	L: 2	T/P: 1-1	Credits: 2
TI: 0 TE: 0		PI: 15 PE: 35	

Objectives: Student will learn a basic understanding of history of computer its evolution and use as technology hardware and software. Utilize computer technologies for writing and presentation. Demonstrate basic understanding of basic computer software's.

Outcomes: Solve basic information systems problems using MS Office products appropriate for the solution.Communicate in a business environment using the MS Office product appropriate for the communication. Use computing technology ethically, safely, securely, and legally. Describe and analyze computer hardware, software, and the internet. Use file management techniques for file and directory/folder organization.

Unit 1 Fundamentals of Computer

1.1 History of computer and computer hardware- input-output devices
1.2 Function and types of operating system
1.3 Introduction to windows family
1.4 Working with window

Unit 2 Basic Computer Software and Applications

2.1 MS Word- creation and manipulation of document
2.2 MS Excel- data analyses
2.3 MS PowerPoint- preparation of presentation

Semester-1
Value Added Course(s)

B.SC. Animation And Multimedia
SEMESTER - 1
INDIAN ART OF STORY TELLING "PANCHTANTRA"

Course Code: VAC 107	**L: 2**	**T/P: 1-1**	**Credits:2**
TI: 15 TE: 35		PI: 0 PE: 0	

Objectives: Panchatantra Fables are narrated in a fun-filled manner, which will definitely ignite curiosity among the students. They will learn about human action and reaction in different situations through narratives. Such stories will help them in learning how to handle real-life situations.

Outcomes: Students will able to recall the story and can relate to it in specific ways and problems of everyday life. Also, it provides a strong moral message to them. Raising Curiosity and Furthering Brain Development. These stories are the best guide to en-root moral values in students. These are rich in Indian culture and values and are relevant to all communities across the world.

Unit 1 Art of Storytelling

1.1 Storytelling: content, characterization and character build-up
1.2 Elements of Storytelling: Narrative, interactive, imaginative and attentive
1.3 Language of Story Telling
1.4 Sequence and Connectivity

Unit 2 Storytelling and Moral education

2.1 Abstract concepts and least messages complexity
2.2 Storytelling and behaviour changes
2.3 Visual presentation through words
2.4 Screening of "panchtantra" stories

Course Code	Course Title	Course ID	L	T	P	Credits	Internal Assessment	ESE	TI	TE	PI	PE	Total
Core Course(s)													
CC201	**Basics of Written Communication**	Paper-1	3	0	1	4	30	70	15	35	15	35	100
CC202	**2D Animation**	Paper-2	3	0	1	4	30	70	15	35	15	35	100
CC203	**Visual Design and Classic animation**	Paper-3	3	0	1	4	30	70	15	35	15	35	100
General Elective Course(s)													
GEC204 (One from Pool of Courses)	**Film Making**	Paper-4	2	1	1	4	30	70	15	35	15	35	100
Ability Enhancement Course(s)													
AEC205 (One from Pool of Courses)	**Phonetics and Phonology**	Paper-5	2	0	0	2	15	35	15	35			50
Skill Enhancement Course(s)													
SEC206 (One from Pool of Courses)	**Photoshop and Illustrator**	Paper-6	1	0	1	2	15	35			15	35	50
Value Addition Course(s)													
VAC207 (One from Pool of Courses)	**Life Management & Yoga**	Paper-7	1	0	1	2	15	35			15	35	50
Total Credits						**22**							

B.Sc. Animation and Multimedia
SEMESTER - 2

BASICS OF WRITTEN COMMUNICATION

Course Code: CC 201	L: 3	T/P: 0/1	Credits:4
TI: 15 TE: 35	Time: 3Hrs.	PI: 15 PE: 35	

The question paper will have two questions from each of the five units. Students will be required to answer any one question from each unit. Each unit will carry equal marks.

Course Objectives: Students will learn historical concepts of development and history of writing. They will learn the basic principles and steps needed to write basic forms such as paragraphs and sentences. The course will also enhance their writing mapping process and idea generation on topics and themes.

Course Outcomes: Students will be able to write independently in various basic forms such as essay, paragraph, resume, and various professions at the end of the course, using proper spelling, punctuation, and sentences.

Unit-1 Introduction

1.1 History, Development and Types of Writing and Script
1.2 Principals and Mechanics of Writing
1.3 Techniques of Writing: Issue Tree or Mind Map
1.4 Step and Process of Writing

Unit-2 Developing Writing Skills (Hindi and English)

2.1 Essentials of Grammar
2.2 Usage of Words
2.3 Common Errors and Misappropriations
2.4 Jumbled Sentences

Unit-3 Paragraph Writing

3.1 Introduction and Importance of Paragraph Writing
3.2 Structure and Features of Paragraph
3.3 Constructions of Paragraph
3.4 Types of Paragraph

Unit-4 Essay Writing

4.1 Introduction to Essay
4.2 Types of Essays
4.3 Characteristics of Essay
4.4 Steps of Essay Writing

Unit-5 Professional Writings

5.1 Letter- Element and Style
5.2 Resume Preparation
5.3 Email Writing
5.4 Official/Business Writings: Memo, Circular, Notice, Minutes, and Report

REFERENCES:

Communication Skills, Sanjay Kumar and Pushp Lata, Oxford Higher Education
Personality Development and Soft Skills, Barun Mitra, Oxford Higher Education
Soft Skills, Seema Gupta V & S Publishers
Personality Development for Life Success, Prashant Sharma, BPB Publications

B.Sc. Animation and Multimedia
SEMESTER - 2

2D Animation

Course Code: CC 202	**L: 3**	**T/P: 0/1**	**Credits:4**
TI: 15 TE: 35	**Time: 3Hrs.**	**PI: 15 PE: 35**	

The question paper will have two questions from each of the five units. Students will be required to answer any one question from each unit. Each unit will carry equal marks.

Course Objectives:
To understand advanced drawing techniques for animation with the help of mannequins. To understand all 12 principles of animation and practice it with the help of cell animation technique. Introduction of 2d software.

Course Outcomes: -
Students will be able to create human action figures with enhanced drawing skills.
Students will be able to implement knowledge of light box equipment to create flipbook animation.
Students will be able to implement knowledge of basic animation principles to create cell animation exercises like bounce ball animation, paper fly animation and various similar animations.
Students will be able to develop Pendulum animation using the principle of arc.
Students will be able to develop a foundation for understanding the advanced animation Principles and body mechanics.

UNIT 1: Understanding: Principles of Animation
1.1) Squash & Stretch
1.2) Anticipation
1.3) Staging

UNIT 2: Principles of Animation
2.1) Straight ahead & pose to pose,
2.2) Follow through and Overlapping,
2.3) Slow in, Slow out.

UNIT 3: Principles of Animation
3.1) Arc
3.2) Secondary action
3.3) Timing

UNIT 4: Principles of Animation
4.1) Exaggeration,
4.2) Solid Drawing and Appeal.

UNIT 5: Introduction of 2d software.
5.1) Toon boom
5.2) Adobe Animate
5.3) Adobe character animator.

Final project Submission: Light box
One stickman walk cycle.
One-character walk cycle with any property.
One animation of each principle of animation.

REFERENCES:
Universal principles of design by William led well
The Animator's Survival Kit, Richard Williams, 2001

Timing for Animation, Harold Whitaker, 1981
Acting for Animators, Ed Hooks, 2003
Disney Animation: The illusion of Light, Frank Thomas, 1981

B.Sc. Animation and Multimedia
SEMESTER - 2

Visual Design and Classic Animation

Course Code: CC 203	L: 3	T/P: 0/1	Credits:4
TI: 15 TE: 35 Time: 3Hrs.		PI: 15 PE: 35	

The question paper will have two questions from each of the five units. Students will be required to answer any one question from each unit. Each unit will carry equal marks.

Course Objectives:

Observation is a very important exercise or habit to learn animation. In this semester students will learn to observe and create different perspectives around them. Understanding aspects of color in animation. To understand the connection and importance of visual designing in animation.

Course Outcomes:

Students will be able to visualize their drawings using perspective.
Students will learn to draw Human anatomy and animal anatomy using basic proportions.
Students will be able to demonstrate simple Color designs and compositions, value of colors in a given composition, including color systems and schemes.
Students will be able to create Backgrounds with balanced color and compositions.

Unit 1: Drawing Details

1.1) Perspective Drawing
1.2) Advanced light and shading
1.3) Importance of light and shading in animation.

Unit 2: Color Theory

2.1) Categories of colors
2.2) Advance Color Theory
2.3) Importance of color theory in animation.

Unit 3: Character Design

3.1) Stickman drawing in poses
3.2) Human and animal anatomy
3.3) Human/animal character design (4 view).

Unit 4: Background design/painting

4.1) BG design using perspective drawing and color theory.

Unit 5: Drawing Skill development for animation

5.1) Composition
5.2) Storyboard making
5.3) Concept art design.

Final project submission:

One example of each perspective drawing and eye level drawing involving light and shades in it.
One composition drawing involves all perspective drawing technique and eye level, including light and shading technique.
One background design using color theory.

REFERENCES:

Figure drawing without a model by Ron Tiner
Drawing for Absolute and utter beginner by Claire Garcia

Pencil sketching by Thomas C Wang
Perspective Drawing Hand Book by Joseph D’ Amelio
Design element: A graphic style manual by Timothy Samara
The principles of beautiful web design by Jason Beaird

B.Sc. Animation and Multimedia
SEMESTER - 2

Film Making

Course Code: GEC 204	L: 3	T/P: 0/1	Credits:4
TI: 15 TE: 35	Time: 3Hrs.	PI: 15 PE: 35	

The question paper will have two questions from each of the four units. Students will be required to answer any one question from each unit. Unit V of the question paper will have four questions out of which the student will be required to answer any two questions. Each unit will carry equal marks.

Course Objectives :
To acquire knowledge of the camera's components and function of a digital camera
To acquire knowledge of outdoor photography.
To understand films, themes, and cinematography.

Course Outcomes:
Students will be able to use the camera in films and videos.
Students will be able to apply lights and camera fundamentals and for films and photography.
Students will be able to acquire knowledge of outdoor photography.

Unit 1 Understanding Films
1.1 Short film
1.2 Documentary
1.3 feature film
1.4 Movie genres

Unit 2 Aspects of film making
2.1 Theme
2.2 Story
2.3 Screenplay
2.4 Cinematography

Unit 3 Working on Camera:
3.1 Components, Functions & Types of Camera,
3.2 Camera and lens
3.3 Element of photography
3.4 Understating light & Compositing rules

Unit 4 Introduction to Shooting & Editing
4.1 Outdoor study of photography and video Shooting
4.2 Capture silhouette image & monochromatic image
4.3 Concept of sound & video editing
4.4 Concept of photo editing

REFERENCES:

The beginner’s photography guide by Chris Gatcum
The Filmmaker’s Handbook by: Steven Ascher and Edward Pincus
Film-making: An Introduction to the Craft of the Director (2005) by Alexander Mackendrick, edited by Paul Cronin

B.Sc. Animation and Multimedia
SEMESTER - 2

PHONETICS AND PHONOLOGY

Course Code: AEC 205	L: 2	T/P: 0/0	Credits:2
TI: 15 TE: 35 Time: 3Hrs.		PI: 0 PE: 0	

The question paper will contain a total of nine questions, each with an equal weightage. The question paper will be divided into two parts (A and B), where Part A is compulsory and you may attempt any four questions from Part B.

Course Objectives: Understand the system of sounds and sound combinations in English. Understand how sounds are produced, how they are transmitted, and how they are perceived (phonetics). Differentiate between consonants and vowels. Pronounce English sounds in isolation and in connected speech.

Course Outcomes: Students will be able to understand systematic, conscious consideration of how speech sounds are made, what they sound like, and how they compare with each other. Know the structure of the English syllable. Know the different types of stress in English. Distinguish between strong and weak forms. Know the different intonation patterns of English.

Unit-1 Basics of Phonetics

1.1 Introduction to Phonetics: Consonant and Vowels
1.2 Transcriptions and Sounds
1.3 Role of Syllable in Speaking
1.4 Stress, Intonations and Rhythm

Unit-2 Spoken English

2.1 Difference between British, American and Indian Spoken English
2.2 Difference in Pronunciation
2.3 Characteristics and Problems of Indian English
2.4 Vocalization, Sounds and Reading

REFERENCES:

Communication Skills, Sanjay Kumar and Pushp Lata, Oxford Higher Education

Soft Skills, Seema Gupta, V & S Publishers

B.Sc. Animation and Multimedia
SEMESTER - 2

Photoshop and Illustrator

Course Code: SEC 206	L: 1	T/P: 0/1	Credits:2
TI: 0 TE: 0		PI: 15 PE: 35	Time: 3Hr.

Course Objective: - To learn advanced use of all tools and different workspaces of Photoshop and illustrator. Students will learn character designing and Background designing for 2D animation in Photoshop. Students will learn to design vector arts like logo, brochure, banner, poster, vector character and background for vector animation.

Course Outcomes: -Understand the basic principles and functions of the software, including the tools, workspace, and basic techniques. Create and manipulate shapes, paths, and curves to create complex designs. Apply colors, gradients, patterns, and typography to create visually appealing designs. Manage and organize design elements using layers, blending modes and other techniques. Apply transformations and effects to designs, such as rotation, scaling, and distortion. Understand how to use the digital pen tab for designing. Export and save designs in various file formats, including vector and raster formats, depending on the intended use.

Unit 1: Character & Background Designing and digital painting.

1.1 Painting workspace: Learn to use digital tablets for character design and background design. Learn to use this workspace for concept art development.

1.2 Color Correction and Use of primary, secondary and tertiary colors in any design or image to make them more vibrant

1.3 Blending modes: Applying different blending modes on layers can create different effects on any image, design or illustration.

1.4 Filters, Typography and Exporting files

Unit 2: Introduction to Illustrator

2.1 Introduction to the Illustrator, including the tools, workspace, and basic functions.

2.2 Understanding the Interface: Explore the different menus, palettes, and toolbars available in Illustrator. Learn how to customize your workspace to make your work easier

2.3 Character design: Create vector character.

2.4 logo and BG design: Background design for vector animation, create clip art, logo, poster, brochure design.

Final project Submission:

- Logo design
- Poster Design/ Banner Design/ Brochure Design.
- Character Design.
- Background Design
- One human and one non human character design.
- Detailed background design.

REFERENCES:

Creative Perspective for Artists and Illustrators, Ernest W Watson
https://helpx.adobe.com/pdf/photoshop_reference.pdf
https://help.adobe.com/archive/en/illustrator/cs6/illustrator_reference.pdf

B.Sc. Animation and Multimedia

SEMESTER - 2

LIFE MANAGEMENT AND YOGA

Course Code: VAC 207	**L: 1**	**T/P: 0/1**	**Credits:2**
TI: 0 TE: 0		**PI: 15 PE: 35**	**Time: 3Hr.**

Course Objectives: To acquaint students with the knowledge of Yogasana, Kriya, Bandha Mudra, shatkarma, etc. To gain an understanding of yogic practices and apply that understanding in one's life and living.To develop human values in students. To develop physical, emotional, and mental health through yogic activities.

Course Outcomes: At the end of the course, students will know how to impart skills to introduce yoga awareness for health among the general public. Students can inform others about the benefits of yoga in everyday life and will able to conduct yoga protocols at workplaces. Students will be able to fit themselves physically and mentally.

Unit 1 Introduction

1.1 Yoga: Concept and Importance
1.2 History of Yoga
1.3 Relationship between Meditation & Yoga
1.4 Patanjali Yogsutra: its Importance in Life

Unit 2 Life Management

2.1 Yoga for Concentration
2.2 Yoga for Mental Health
2.3 Yoga for Physical Fitness
2.4 Common Yogic Practice: Yama, Niyama, Asana, Pranayam, Pratyahara, Bandha Mudra, Shatkarma/Kriya, Meditation

REFERENCES:

Yoga A Healthy Way of Living, National Council of Educational Research and Training, 2015

Patanjali Yoga Sutra - Edited by Dr. Karmvedkar, Kaivalyadham Lonawala.

Patanjali Yoga Pradeep - Geeta Press Gorakhpur

Yoga Parichay - Dr. Peetambar Jha - Kaivalyadham Lonawala

Yoga Darasan- Dr. Ramakant Mishra, Dr. Chandra Kant Mishra

Semester 3

Course Code	Course Title	Course ID	L	T	P	Credits	Theory Marks		Practical Marks		Total Marks
							TI	TE	PI	PE	
CC301	Introduction to 3D Animation		48	0	12	4	15	35	15	35	100
CC302	Graphics and Visual Designing		48	0	12	4	15	35	15	35	100
CC303	2D Animation (Advanced)		48	0	12	4	15	35	15	35	100
Discipline Specific Elective Course(s)											
DSE304 (One from Pool of Courses)	Creative Writing		48	0	12	4	15	35	15	35	100
Ability Enhancement Course(s)											
AEC305 (One from Pool of Courses)	Spoken English and Presentation Style		24	1	5	2			15	35	50
Skill Enhancement Course(s)/ Internship/Apprenticeship/project/ Community Outreach											
SEC306 OR PTI306 Project/Training/Internship (One from Pool of Courses)	Audio Editing for Animation		24	0	12	2			15	35	50
Value Addition Course(s)											
VAC307 (One from Pool of Courses)	*"Swachh Bharat"* for Sustainable Development		24	2		2	15	35			50
Total Credits						**22**					550

Semester 4

Course Code	Course Title	Course ID	L	T	P	Credits	Theory Marks		Practical Marks		Total Marks
							TI	TE	PI	PE	
CC401	3D Texturing and Lighting		48	0	12	4	15	35	15	35	100
CC402	Audio-Visual Production		48	0	12	4	15	35	15	35	100
CC403	2D Compositing and VFX		48	0	12	4	15	35	15	35	100
Discipline Specific Elective Course(s)											
GEC404 (One from Pool of Courses)	Writing Beyond News		48	0	12	4	15	35	15	35	100
Ability Enhancement Course(s)											
AEC405 (One from Pool of Courses)	Vocalization and Voice Modulation		24	0	6	2	15	35			50

Skill Enhancement Course(s)/ Internship/Apprenticeship/project/ Community Outreach											
SEC406 OR PTI406 Project/Training/Internship (One from Pool of Courses)	Web Designing and Development		24		12	2			15	35	50
Value Addition Course(s)											
VAC407 (One from Pool of Courses)	Introduction to Indian Art and Folk Culture		24	4		2	15	35			50
Total Credits						**22**					550

Semester 5

Course Code	Course Title	Course ID	L	T	P	Credits	Theory Marks		Practical Marks		Total Marks
							TI	TE	PI	PE	
CC501	3D Rigging and Skinning		48	0	12	4	15	35	15	35	100
CC502	Fundamentals of Match move and 3D Compositing		48	0	12	4	15	35	15	35	100
CC503	Fundamentals of Film Making		48	0	12	4	15	35	15	35	100
Discipline Specific Elective Course(s)											
DSE504 (One from Pool of Courses)	Media Laws and Ethics		48	0	0	4	30	70	0	0	100
General Elective Course(s)											
GEC505 (One from Pool of Courses)	Basics Of Game Designing		24	0	12	2			15	35	50
Skill Enhancement Course(s)/ Internship/Apprenticeship/project/ Community Outreach											
SEC506 OR PTI506 Project/Training/Internship (One from Pool of Courses)	Matte Painting		24	0	12	2			15	35	50
Total Credits						**22**					550

Semester 6

Course Code	Course Title	Course ID	L	T	P	Credits	Theory Marks		Practical Marks		Total Marks
							TI	TE	PI	PE	
CC601	3D Animation		48	0	12	4	15	35	15	35	100
CC602	Advance 3D Dynamics		48	0	12	4	15	35	15	35	100
CC603	Role of AI in Animation		48	0	12	4	15	35	15	35	100
Discipline Specific Elective Course(s)											
DSE604 (One from Pool of Courses)	Multimedia and Advertising		48	0	12	4	15	35	15	35	100
General Elective Course(s)											
GEC605 (One from Pool of Courses)	Advanced Game Designing		24	0	12	2			15	35	50
Skill Enhancement Course(s)/ Internship/Apprenticeship/project/ Community Outreach											
SEC606 OR PTI606 Project/Training/Internship (One from Pool of Courses)	Dissertation/Major Project		24	0	12	2					100
Total Credits						**22**					550

B.Sc. Animation and Multimedia
SEMESTER-3
INTRODUCTION TO 3D ANIMATION

Course Code: CC 301	L: 48	T/P: 0-12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: Study of this subject will familiarize the student with 3D animation.

Outcomes: On completion of the course student should be able to: Model and add animation to 3D Object.

Unit 1 Introduction

1. Exploring Autodesk Maya interface
2. 3D Modeling - Getting into face, edge, vertices, repeat, delete, delete by type, duplicate, duplicate special, group, and ungroup pivot
3. Introduction to different workspaces. Geometry, Sub objects, Extruding, bridging etc.
4. Diving into text, inverse, grow, shrink, convert selection to and freeze and reset transformation, center pivot. Understanding Booleans, combine, separate, fill hole, reduce, smooth, triangulate, quad angulate, mirror, clean up.

Unit 2 Modeling in Maya

1. Using Primitives
2. Polygonal Modeling
3. NURBS Modeling
4. "Box" Modeling

Unit 3 Character Designing

1. Human Anatomy
2. Animal/Cartoon anatomy
3. Object Modeling
4. Human/Character Modeling
5.

Unit 4 Playback Controls

1. Creating the illusion of weight
2. Overview of 3D Animation Preferences
3. Bouncing Ball Exercise
4. Acting for Animation to understood weight

Final Project Submission:

- Submit a Final 3D Character Model.
- Submit an Animation by applying any 4 Principles of Animation.

B.Sc. Animation and Multimedia
SEMESTER - 3
GRAPHICS AND VISUAL DESIGNING

Course Code: CC 302	L: 48	T/P: 0-12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: Students will learn the principles of visual communication and how to apply them in various mediums such as print, digital media, and web design. They are taught the elements of design, such as color theory, typography, composition, and layout.

Outcomes: After compilation of this subject student will be able to design poster, banner, media posts, with principles and elements of design.

Unit 1: Human and Animal Anatomy

1. *Study of human and animal part study*: Head study, hands, foot, torso, nose, lips, muscles.
2. Designing or drawing Characters for animation.
3. Designing properties, clothes, accessories of character for animation.
4. Learn and understand color, size and shape of properties and accessories with character.

Unit 2: Advanced Perspective of figures and backgrounds.

1. Balance and perspective applied to figures.
2. Study dynamic poses of figures.
3. Figures in action and in movement.
4. Advanced Perspectives Design: One-point, two-point, Three-point perspective. Interior andexterior design using perspective, Understanding and Designing Backgrounds

Unit 3: Photoshop and Illustrator III

1. Image Manipulation, Transformation and Retouching, Color Correction
2. Effect, Filters, Typography, Drawing and Painting.
3. Creative logo design, Poster, flier, banner and brochure Design (all in illustrator).
4. Pixel and Vector based design for animation (character, properties and background

Unit 4: Adobe InDesign

1. Looking at the Work Area
2. Setting Up Pages and Types
3. Working with Text, Applying Color
4. Adobe Product Integration

Final Project Submission: -

- Logo, Poster, Brochure, Flyers and Web Banners
- Flyers, Web Banners and social media posts.
- Magazine Design in InDesign

Design a detailed cartoon character with properties and suitable background by your imagination. (First on paper and after that its digital version.)

B.Sc. Animation and Multimedia
SEMESTER-3
2D Animation (Advanced)

Course Code: CC 303	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: This subject will offer skill development in the use of software to develop storyboards and 2-dimentional animation including creating, importing and sequencing media elements to create multi-media presentations

Outcomes: On completion of the course student should be able to make Storyboards according to scene, animating object/elements by applying principles of animation and motion graphic.

Unit 1: Exploring Animation Artistry

1. Studies of 2D animation movies.
2. Study of different animation styles, animation pipeline and job roles in industry.
3. Study and prepare a research report of a cartoon movie.
4. Transition from traditional to digital methods.

Unit 2: Digital 2D Animation

1. Understanding the importance and managing layers in 2D animation for efficient workflow.
2. Rigging characters for movement and flexibility.
3. Mastering walk cycles and fundamental character expressions and movements.
4. learn to apply animation principles on character and accessories.

Unit 3: **Collaboration in Animation**

1. Creating and adding effects like smoke, fire, water, and more.
2. Scene Composition and Backgrounds
3. Assembling animated sequences, adding sound effects, and music.
4. Polishing the final animation.

Unit 4: **Types of 2D animation in Industry**

1. Motion graphics Animation.
2. Logo and GIF Animation.
3. Mobile App and Game Animation.
4. Hybrid Styles Animation.

Final Submission:

Create at least 20 seconds or more clip of a character by applying main animation principles.

- Select a cartoon movie and write a search report on it.
- One Logo animation or a motion graphics animation.
- Hybrid style animation (team project).

B.Sc. Animation and Multimedia
SEMESTER - 3
Creative Writing

Course Code: DSE 304	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: To acquaint the learners with ideas related to creative writing, including the art, the craft, and the basic skills required for a creative writer. To help learners understand the principles of creative writing and the distinction between the literary genres. To explain the differences in writing for various literary and social media. To hone the creative and critical faculties of learners. To enable learners to put into practice the various forms of creative writing that they have studied through the course.

Outcomes: The course will provide the basics of creative writing, such as fundamental principles and elements of writing, and introduce traditional and new modes and forms of creative writing to aspiring and budding writers. At the end of the course, learners will be able to distinguish between literary genres. Write for a variety of literary and social media outlets. critically appreciating various forms of literature. Make innovative use of their creative and critical faculties. Seek employment in various creative fields.

Unit 1: Fundamentals of Creative Writing

1. Meaning and Significance of Creative Writing
2. Various Types of Creative Writing: Poetry, Fiction, non-fiction, drama, etc.
3. Research for Creative Writing
4. Language and Grammar

Unit 2 Elements of Creative Writing

1. Plot, Setting, Character, Dialogue, Point of View
2. Literary Devices and Figurative Language
3. Elements of Style
4. Script Writing: Movies and Documentaries

Unit 3 Traditional Forms of Creative Writing

1. Story, Novel and Fable
2. Drama and Poetry as a form of creative writing
3. Biography, Autobiography and Memoires
4. Travelogue, Diaries and Self Narrative

Unit 4 New Trends in Creative Writing

1. Web content Writing
2. Writing for Advertisements and Jingles
3. Copyrighting
4. Graphic Novels

B.Sc. Animation and Multimedia
SEMESTER – 3
SPOKEN ENGLISH AND PRESENTATION STYLE

Course Code: AEC 305	L: 24	T/P: 1/5	Credits: 2
TI: 0 TE: 0			PI: 15 PE: 35

Objectives: This course will give the opportunity to develop and strengthen skills in preparing and presenting public oral presentations in a variety of situations. This course will focus on instructional strategies to develop the written, verbal, non-verbal and technical communication skills of the students.

Outcomes: After end of the course student will be able express and present themselves clearly, with confidence in variety of speaking situations. They will make them able to plan and structure an effective presentation, its effective delivery and overcome anxiety, fear and nervousness when making a presentation.

Unit-1 Planning and Designing Presentation

1. Types of Presentation (Formal and Informal, Structured and Unstructured)
2. Structure of Presentation
3. Stages of Presentation Designing: Planning, Gathering Information, Writing and Designing
4. Tools for Presentations Designing
5. Do's and Don'ts of presentation

Unit-2 Presentation Behavior

1. Style of Presentation (Storyteller, Freeform, Visual, Closer, Connector, Instructor, Persuader,Interactive)
2. Presentation Skills: Delivering and Handling of Presentation, Practice, Self-Rehearsals, andImprovising
3. Role of non-verbal communication in presentation
4. Behavior Skills: Positive attitude, self-management, problem solving, time management andanger management.
5. Presentation Etiquette: Dressing and Grooming, Meeting Etiquette, Dinning Etiquette

B.Sc. Animation and Multimedia
SEMESTER – 3
AUDIO EDITING FOR ANIMATION

Course Code: SEC 306	L: 24	T/P: 0/12	Credits: 2
TI: 0 TE: 0		PI: 15 PE: 35	

Objectives: Students will learn to understand the basics of audio and audio editing. They will be able to understand the relation and importance between audio and animation.

Outcomes: On completion of the course student should be able to synchronize audio according to timeline, and refining (adding effects to audio) the recorded audio.

Unit 1 Basic of Audio Editing

1. Importance of Audio in animation and role of audio editor in animation.
2. Understand sound waves, frequency, amplitude, sampling rate, bit depth, file format.
3. Introduction of audio software and its workspace.
4. Recording, Importing, organizing, cutting, pasting, Trimming and Adding Audio to Video.

Unit 2 Audio Editing Techniques

1. Adding and syncing sound effects to animation.
2. Layering and mixing multiple SFX for depth and realism. Blending ambience with dialogueand SFX.
3. Timing music to match the animation's emotional beats.
4. Basic Sound Mixing Techniques (pitch, delay, Reverb etc.)
5. Understanding copyright laws for audio content

B.Sc. Animation and Multimedia
SEMESTER – 3
"*SWACHH BHARAT*" FOR SUSTAINABLE DEVELOPMENT

Course Code: VAC 307	L: 24	T/P: 2/0	Credits: 2
TI: 15 TE: 35			PI: 0 PE: 0

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: To inculcate values of cleanliness, hygiene and waste management among students. To teach students about waste management techniques. To teach student a moral values and sense of service towards society and the Nation.

Outcomes: students will able to understand the significance of the Swachh Bharat Abhiyan. They will able to motivate and generate awareness. They will able to monitor the sanitation around their society and workplace. They will able to contribute to the Swachh Bharat Abhiyan through projects and fieldwork.

Unit-1 Introduction to "*Swachh Bharat Abhiyan"*

1.1 Swachh Bharat Mission: Introduction and Objectives
1.2 Strategy of Swachh Bharat Mission
1.3 Components of SBM
1.4 Citizens' Responsibilities: Role of Swacchagrahi

Unit-2 Operation, Monitoring and Report Writing (Practical)

2.1 Monitoring of University Areas to Track waste Management
2.2 Organising Events for community mobilization and Awareness
2.4 Screening: Narratives of Swachh Bharat for Perception Building
2.5 Conduct Interviews and Polls for Monitoring Awareness

B.Sc. Animation and Multimedia
SEMESTER – 4
3D TEXTURING AND LIGHTING

Course Code: CC 401	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: Students will study the processes and techniques for creating shaders and lighting rigs for CG environments. Techniques in UV mapping will be explored for both environments and character creation. Lighting will be approached from the foundation of traditional cinematography, then move into technical implementation.

Outcomes: After completing this course, students will have:
1. Achieved a working understanding of tools related to 3D lighting and texturing.
2. Become comfortable with basics of planned lighting workflow.
3. Understand fundamentals of how 3D lighting works in a professional production setting.
4. Be able to create compelling compositions.
5. Be able to create descriptive, detailed and interesting textures & normal maps.

Unit – I: Introduction to Maya shaders

1. Exploring Autodesk Maya shaders.
2. Getting into material properties.
3. Understanding unwrapping

Unit – II: Texture creation process

1. Developing textures in Photoshop
2. Exploring different types of UV Mapping
3. Unwrapping 3D Models

Unit - III: Introduction to Lights

1. Basic introduction to Maya lights, light source properties
2. Shadows overview, Cast Shadows, decay rate, Depth map shadows explained.
3. Intro to Maya in build software camera, camera nodes and film stock.
4. Introduction to Arnold
5. Arnold lights and its usage

Unit - IV: Render Passes and Techniques Used

1. Pass Types in layer attributes
2. Uses of Render passes & Basic compositing
3. 2-point & 3-point lighting
4. Interior and exterior lighting
5. Artificial sources and indoor lighting, natural light, midday sunshine

B.Sc. Animation and Multimedia
SEMESTER – 4
Audio-Visual Production

Course Code: CC 402	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: In this course students will explore the basics of Audio and Video Production. Students will work in groups to produce short audio and video production projects.

Outcomes: At the end of the course Student will able to understand different stages of production. They will able to differentiate and understand various formats of programmes. They can edit and make shot news videos and documentary projects.

Unit 1 Stages of Production

1. Production: Meaning, Process and Medium
2. Pre-Production (Planning)
3. Production (shooting)
4. Post Production (editing)

Unit 2 Editing Techniques and Programming

1. Method: Linear and Non-linear Editing
2. Tools and Software of Audio & Video Editing
3. Various Formats of News Programmes
4. Making of Radio and TV Programmes

Unit 3 On Location Production Techniques

1. Shooting on Location
2. On Location with a Single Camera
3. Multi Camera Techniques
4. Lighting and Camera Rehearsal

Unit 4: Audio Control and Sound Effects

1. Using Microphones
2. Dynamic Range Control and Sound Balance
3. Building the sound Track
4. Noise Reduction

B.Sc. Animation and Multimedia
SEMESTER – 4
2D COMPOSITING AND VFX

Code: CC 403	**L: 48**	**T/P: 0/12**	**Credits:4**
TI: 15 TE: 35		**PI: 15 PE: 35**	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: To Introduce the basic 2D composting and editing the footage in advance editing techniques. Which helps student to have basic knowledge of VFX in two dimensional footages.

Outcomes: Student will able to add keys, effects, 3D particles and other process. They get the concept of 2D compositing i.e., Layer, Masking, Rotoscoping, Rig-Wire removal and keying.

Unit 1: Introduction to Basic concepts of Compositing

1. What is 2D Compositing?
2. What are Visual Effects (VFX)?
3. The basics introduction about shoot, effects & techniques.
4. Explain the pipeline for adding effects.
5. Understand blue and green screen.

Unit 2: Intro to After Effects

1. Basic Introduction to Motion Graphics
2. Introduction to Effects
3. Adding special effects (In-built in compositing software)

Unit 3 Digital Composting

1. Intro to 3D Camera and Lighting (AE)
2. Keying (Chroma, Luma, Blue screen etc.)
3. Rotoscoping
4. Tracking for roto and cleanup

Unit 4 Concept of 2D Tracking

1. Types of Tracking
2. Auto and Manual Tracking
3. Planner Tracking
4. Mocha Tracking

B.Sc. Animation and Multimedia
SEMESTER - 4
WRITING BEYOND NEWS

Course Code: GEC 404	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: To acquaint students with different styles of writing other than news. To explain the various types of editorials and articles. To give an understanding of creative forms of writing like travelogues and memoirs. To develop the knowledge of understanding texts and writing reviews.

Outcomes: Students will be able to write editorials and articles on contemporary socio-political issues. Students will be able to explore various writing techniques like travelogue and memoir writing. Students will be able to explore other forms of creative writing too.

Unit 1 Editorial and Column

1. Meaning, Definition and types of Editorials (Interpretive, critical, persuasive, phrasing),Letter to the editor
2. Structure of Editorials: Introduction, Argument, Evidence, Counterargument,
3. Refutation and Conclusion
4. Meaning and Types of Columns (in depth, opiniated, gossip, humorous)

Unit 2 Article and Reviews

1. Meaning, Concept and Types of Articles
2. Format and Techniques of Article Writing
3. Meaning and Concept of Reviews
4. Types of Review

Unit 3 Feature, Travelogue and Memoir

1. Feature writing: Meaning, Concept and Types
2. APPLAUSE formula in feature writing
3. Meaning, Concept and Types of Travelogue
4. Meaning, Concept and Types of Memoir

Unit 4 Other Forms of Writing Techniques

1. Satire

2. Blog vs Vlog
3. Writing for social media platforms
4. Purpose and Uses of Hashtag

B.Sc. Animation and Multimedia
SEMESTER – 4
VOCALIZATION AND VOICE MODULATION

Course Code: AEC 405	**L: 24**	**T/P: 0/6**	**Credits: 2**
TI: 15 TE: 35		**PI:0 PE:0**	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: The purpose this course is to improve the voice acting skills of students so that they can able to perfectly record voice overs with correct pronunciation and vocal skills. They can able to record as well as rectify the errors in the recorded content

Outcomes: This course allows students to express their creativity through their voice. After the end of the course student will able to record voice over with different tones, expressions and moods.

Unit 1 Introduction

1. Voice over: Definition and Importance
2. An Emotive Voice
3. Role of Voice over in Radio and Television
4. Techniques of good voiceover

Unit 2 Voice Acting

1. Meaning and Types of Voice Acting (male, female, cartoon and commercial voice over)
2. Role of Voice acting Exercises
3. Voice Changes Apps and Software
4. Mark the Copy: Mark and Meanings

B.Sc. Animation and Multimedia
SEMESTER - 4
WEB DESIGNING AND DEVELOPMENT

Course Code: SEC 406	**L: 24**	**T/P: 0/12**	**Credits: 2**
TI: 0 TE: 0		**PI: 15 PE: 35**	

Objectives: Student will how to Provide quality content on website, regularly adding new information, establishing trust, and marketing your site on other websites and social media

Outcomes: On completion of the course student should be able to do basic coding and having the knowledge about the web designing

Unit 1: Introduction to Web Designing

1. Basics of Web Designing
2. Structure of web pages using HTML
3. Responsive web design (UX)
4. Computer Graphics

Unit 2: Introduction to web Development

1. Introduction to Web Development (History and Evolution)
2. Basic of client server architecture
3. Front End vs Back End Development
4. Web deployment and hosting

B.Sc. Animation and Multimedia
SEMESTER - 4
INTRODUCTION TO INDIAN ARTS AND FOLK CULTURE

Course Code: VAC 407	**L:24**	**T/P: 4/0**	**Credits: 2**
TI: 15 TE: 35		**PI: 0 PE: 0**	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: To explain the similarities and differences between classical and folk-art forms. To explain the evolution of Indian music, dance, paintings and other art forms. To make a strong knowledge base of the student for further exploration in the disciplines or arts and culture.

Outcomes: Student will be able to get an understanding of Indian art forms like classical music, dances, and paintings. It'll give an introduction to the various folk-art forms of India. Student will be able to explore further the field of Indian arts.

Unit 1 Classical Indian Art Forms

1. Indian Classical Music- Hindustani and Carnatic
2. Classical Dance Forms
3. Temple Architecture
4. Prominent Indian Classical Artists

Unit 2 Indian Folk Culture

1. Folk Culture: Concept and Significance
2. Indian Folk Music and Dances
3. Folk Paintings
4. Prominent Indian Folk Artists

B.Sc. Animation and Multimedia
SEMESTER - 5
3D RIGGING AND SKINNING

Course Code: CC 501	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: Explore the performance methodologies and advanced rigging processes used to bring life to 3D characters for games, cinematics, and performance animation.

Outcomes: On completion of the course student should be able to do rigging in 3d human/Animal character and able to move object in 3d space with proper skinning and Muscles

Unit 1: Rigging Basics

1. Understanding the anatomy
2. Binding Kinematics (IK & FK)
3. Parenting and grouping objects using point, orient, parent constrains
4. Creating controllers, set driven keys etc.

Unit 2: Creating Skeletons

1. Creating joints, editing joints, parenting joints, orienting joints
2. Creating hierarchical structures and skeletons for biped and quadruped characters
3. Using IK solvers on skeletons, blending FK and IK
4. Creating facial setups, blend shape deformers

Unit 3: Skinning

1. Understanding Rigid Bind and Smooth Bind
2. Binding skeletons to characters
3. Painting skin weights, editing skin weights
4. Adding influence objects and muscles

Unit 4: Advanced Rigging

1. Ik spine rig, Ik Blend shapes
2. Construct FK-IK switches for hand and palm setup.
3. Set driven Key, character sets
4. Develop facial bones and control with Blend shapes.

B.Sc. Animation and Multimedia
SEMESTER - 5
FUNDAMENTALS OF MATCHMOVE AND 3D COMPOSITING

Course Code: CC 502	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: This subject will help students to understand the process of advance Tracking, Match moving, understanding Camera and geometry depth.

Outcomes: At the end of this course student will able to do CGI integration with footage, along with tracking and 3D compositing. And understand the fundamental of compositing software's (NukeX)

Unit 1: Introduction to Nuke X

1. Intro to Workspace and preference
2. Introduction to Toolset menu
3. Nodes Connection
4. Reading and writing of nuke

Unit 2: 2D and 3D Tracking

1. Working With Geometry and Lights in Nuke
2. Tracker Node Overview
3. Camera Tracking and Solving (Matchmoving)
4. Working with Multi-Channels EXRs (Render Passes)

Unit 3: Advance Tracking and Matchmoving

1. Manual Tracking and solving the scene
2. Exporting camera data to 3d software
3. CGI integration
4. Rendering Process (Passes)

Unit 4: 2D to 3D conversion

1. Roto shape creating fallow focus depth
2. Tracking method (one point, two points etc.)
3. Rig Removal Methods
4. Object Removal using different method

B.Sc. Animation and Multimedia
SEMESTER - 5
FUNDAMENTALS OF FILM MAKING

Course Code: CC 503	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: This course aims to introduce the students to the art, craft and technique of filmmaking. Students are expected to learn basic principles of filmic design, four foundational elements of film style (mise-en-scene, cinematography, editing, sound), tools of camera and editing and be able to visualize a basic story idea.

Outcomes: By the end of the course students should be able to: Identify principles of film design, familiar with the four fundamental elements of film style, use camera and editing equipment at the introductory level, make visual pieces with camera and editing.

Unit 1 Short History of Hindi cinema

1. Era of Silent Film
2. Pre Independence-Talkies
3. Post Independence Cinema
4. Cinema in Modern Society and its Impact

Unit 2 Pre-production (Planning)

1. Concept, Plot, Synopsis, Story Development
2. Scripting/Screen Play (writing first draft, dialogues writing),
3. Short film script writing exercises
4. Creating Storyboard and its Uses

Unit 3 Camera Production (Production)

1. Principles of Cinematography
2. Rule of Cinematography (Rule of Third, 180 Degree, 30 Degree etc.)
3. Different types of shots, Camera angles
4. Film Lighting Techniques

Unit 4 Post-Production

1. Principles of Film Editing
2. Techniques of Film Editing
3. Audio Editing
4. Color Grading

B.Sc. Animation and Multimedia
SEMESTER - 5
MEDIA LAWS AND ETHICS

Course Code: DSE 504	L: 48	T/P: 0/0	Credits:4
TI: 30 TE: 70		PI: 0 PE: 0	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 14 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: Students examine the key ethical and legal principles related to mass communications, including day-to-day legal-ethical dilemmas, big-picture thematic legal-ethical issues, open meeting and records laws, freedom of speech and the press, and major legal constructs and court decisions affecting public relations, journalism, and advertising.

Outcomes: Students will gain knowledge of the laws and ethics related to media. ability to solve problems of competing values, both news values and social values, when making writing and publishing decisions. ability to collect and analyze news, information, and documents in a way that complies with the law but also maintains the boundaries of press freedom and responsibility. Students will be acquainted with various press committees, wage boards, and media acts. Students will understand the media trial and the fair trial.

Unit 1 Press Laws

1.1 Press Laws in India: A Historical Perspective
1.2 Freedom of Speech and Expression in the Constitution of India
1.3 Emergency Provisions and Media
1.4 Right to Privacy

Unit 2 Acts and Laws

2.1 Right to Information Act, 2005 Vs Official Secrets Act, 1923
2.2 Parliamentary Proceedings Protection of Publication Act, 1977
2.3 Press and Registration of Books act 1867
2.4 Copyright Act, 1957

Unit 3 Press Laws and Journalists

3.1 Press Commission I and II
3.2 Working Journalist Act, 1955
3.3 Defamation Law in India (IPC Section 499 and Section 500)
3.4 Media and Contempt of Court

Unit 4 Broadcast and Digital Media Laws

4.1 Cinematography Act, 1952

4.2 Prasar Bharti Act 1990 and Cable Television Network Act 1995
4.4 Information Technology Act, 2000 and its Relevance to Digital Media
4.4 Digital Media Guideline for Intermediaries and Digital Media Ethic Code Rules, 2021

B.Sc. Animation and Multimedia
SEMESTER - 5
BASICS OF GAME DESIGNING

Course Code: GEC 505	L: 24	T/P: 0/12	Credits:2
TI:0 TE:0		PI: 15 PE: 35	

Objectives: The chief aim of this subject is to create games that attract the maximum attention from the users and enable students to develop games individually and in teams.

Outcomes: After the compilation of this course students will able to develop competence necessary for graduate students to be employed in the areas of information technology and the industry of game development.

Unit 1: Introduction

1. Game Production Pipeline
2. 2D Design Documents
3. Intro to Game Development
4. Concept of Game Engines

Unit 2: 2D Game Art/Concept Art

1. Digital & Matte Painting
2. Character Design and Concept Building.
3. Defining ArchTypes
4. Prop & Assets Design
5. Environment Design & Isometric Design

Unit 3: Introduction to Unity

1. Game Engine and Introduction
2. Importing and using Photoshop and illustrator files
3. Unity Terrin System
4. Introduction to Particle System (Unity)

Unit 4: 2D Game Development

1. Introduction to Coding Languages
2. Use of C#, C++ and Java script in Game Development
3. Tile Mapping (sprite sheet creation)
4. Applying scripts to Photoshop and illustrator (Practical)

B.Sc. Animation and Multimedia
SEMESTER - 5
MATTE PAINTING

Course Code: SEC 506	L: 24	T/P: 0/12	Credits: 2
TI:0 TE:0		PI: 15 PE: 35	

Objectives: With 3D Digital Matte Painting at VFX. students will learn the process of painting with 2D and Three-Dimensional Space mainly used for Video Games, Movies, and Other Visual Arts.

Outcomes: After Compilation of this subject student will have clear knowledge about the photoshop, Environment design, Scaling methods in World Axis and image compositing.

Unit 1: Introduction

1. Basics of Photoshop
2. Introduction to digital painting
3. Color Study and ambient occlusion
4. Image Compositing
5. Concept Art speed painting with digital Matte Painting

Unit 2: Practical Examples and Case Studies

B.Sc. Animation and Multimedia
SEMESTER - 6
3D ANIMATION

Course Code: CC 601	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: Student will know about about animation principles, different tools for 3d animation, 3D character animation, and understand Curve Editor, time editor, trax editor, pose editor and Expression editor.

Outcomes: At the end of this course students will able to learn 3d animation, 3D animation tools to create animation for films and videos.

Unit 1: The Art of 3D Animation

1. The idea of using animation and physics
2. Bouncing ball with different weights
3. Introduction to pendulum and secondary animation
4. Incorporate bouncing ball with pendulum and implementing secondary animation in tail

Unit 2: Graph Editor

1. Graph Editor Tool Bar Buttons
2. Introduction to walk cycle animation
3. How weights shift and arcs occur in a human body
4. Applying secondary animation on various parts of the body depending on inertia

Unit 3 : Understanding of the Animation Principles

1. Stretch and Squash Basic Exercise to truly understand the Animation Principles
2. Simple BouncingBall, Understanding of the Animation Principles: Timing and Spacing Animating a ball made ofdifferent materials, surfaces and textures - Metal, Rubber, Plastic, Wood.
3. Arcs Exaggeration Animating collision between two or more different bouncing ball in an environment in side view,
4. Pendulum Animation in 3d, Hinged Pendulum.

Unit 4: Practical (Lab Work)

B.Sc. Animation and Multimedia
SEMESTER - 6
ADVANCE 3D DYNAMICS

Course Code: CC 602	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: *"Dynamics are a complex physics engine inside 3D application"* Dynamics describes how objects move using the laws of physics to simulate real-world forces. Students can specify the different object to take, and the software will figure out how to animate that object in the most realistic way.

Outcomes: At the end of this students were able to understand the physics of 3D World, and will able to make simulations inside the software.

Unit 1: Particle system and options

Create Emitter, emit from the object, use selected Emitter, Pre point emission rates, Make collide -Particle Collision Event Editor - Goal, Instance (Replacement), Sprite Wizard, Emitter types , Omni , Surface, Volume ,Curve, Directional

Unit 2: Introduction to the types of Fields

Air field, Drag field, Gravity field, Newton field, Radial field, turbulence field, Uniform field, Vortex field, Volume axis, turbulence field attributes, Magnitude, Frequency, Noise level - Attenuation, Different types of axis control.

Unit 3: Introduction to Soft body/Rigid body simulation in maya

Create active rigid body, create passive rigid body, create nail constrain, Create Pin constrain, Create Hinge constrain, Create Spring constrain, Set Active Key, Set Passive Key, Break Rigid Body Connections, Paint soft body Weights tool, create two different types of examples using active/ passive rigid body.

Unit 4: Introduction to Particle type

Multipoint, Multi streak, Numeric, Points, Sprits, Introduction to fluid effects, Fluid 2d container, Fluid 3d container, Make collide, Get fluid example, Ramp position, Ramp Velocity, Lifespan PP, World Velocity, Ramp Acceleration.

Unit 5: Rendering

Blobby surface, Cloud, Tube, Conserve, Hardware Rendering, Flip book clap, Clear Flip book options, Hardware render attribute, setting up the camera, Scale buffer, Render alpha sequence frame from software render and hardware render.

Reference

- Maya Visual Effects: The Innovator's Guide [Paperback] Eric Keller
- Learning Autodesk Maya 2008: The Special Effects Handbook by Autodesk Maya Press (Oct 29, 2007)
- Learning Maya 6 - Dynamics by Alias (May 14, 2004)
- Maya studio projects - Dynamics - Todd Palamar 2009
- Fluid Dynamics 31 December 2003 by M.D. Rai Singhania

B.Sc. Animation and Multimedia
SEMESTER - 6
ROLE OF AI IN ANIMATION

Course Code: CC 603	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: To Introduce the basic principle, techniques and application of AI. Gain a historical perspective of AI and its foundations. Explore the current scope, potential, limitations and Implications of AI.

Outcomes: Upon successful completion of this course, the student shall be able to: Demonstrate fundamental of AI in specific fields (Animation), and will be able to use AI tools in creation of animation.

Unit 1 Introduction of AI

1. Intro to AI, Foundation and History of AI
2. Advantages and Disadvantages of AI
3. Needs and Approaches of AI
4. Types of AI: (Strong and Weak)

Unit 2 Use of AI in Different Fields

1. Healthcare: *(AI is used for medical diagnosis, drug discovery, and predictive analysis of diseases)*
2. Finance: *(AI helps in credit scoring, fraud detection, and financial forecasting)*
3. Transportation: *(AI is used for autonomous vehicles, traffic prediction, and route optimization)*
4. Education: *(AI is used for personalized learning, adaptive testing, and intelligent tutoring systems)*

Unit 3 AI Tools and Resources

1. Vyond,
2. VideoScribe,
3. RenderForest,
4. Doodly, Animaker, Raw Shorts, Steve.ai,

Unit 4 Creating Cartoon Animation Film

1. Generating Content Script for Cartoon Film
2. Generating Cartoon Character & Scene Images with Leonardo AI
3. Converting Content Script to Voice with Big Speak AI
4. Animating Cartoon Characters for Film
5. Editing Cartoon Film Using Veed IO

B.Sc. Animation and Multimedia
SEMESTER - 6
MULTIMEDIA AND ADVERTISING

Course Code: DSE 604	L: 48	T/P: 0/12	Credits:4
TI: 15 TE: 35		PI: 15 PE: 35	

Instructions for paper setter: Examiner is requested to set one compulsory and eight other questions, two from each unit. The compulsory question should be of 7 marks and should cover entire syllabus. Student should attempt four other questions i.e., one from each unit.

Objectives: To provide an insight to the student to gain in-depth knowledge on the need and scope of advertising as a medium of communication and product promotion.

Outcomes: To trained student with the required fundamental, conceptual and practical, aspects so that they can produce quality of advertisement.

Unit 1 Introduction to Advertising

1. Evolution of Modern Advertising: Definition, Scope and Present Status
2. Types of Advertising: Classified, Display, Campaign Ads, Public Service Ads
3. Models of Advertising: AIDA, DAGMA, DRIP, ATRN
4. Major Ad Agencies in India

Unit 2 Introduction to Multimedia

1. Introduction to visual communication
2. Image Editing techniques
3. Foundation Art
4. Motion Graphics

Unit 3 Copy Writing for Advertising

1. Headlines, Sub Headlines and Body
2. Logo and Copy Style
3. Slogan and Tagline Writing
4. Creative Strategy for digital media

Unit 4 Ethics in Advertising

1. Importance of Ethics in Advertising
2. Avoiding Stereotypes and Offensive Content
3. Respecting Consumer Privacy
4. Balancing Creativity and Truthfulness

B.Sc. Animation and Multimedia
SEMESTER - 6

ADVANCED GAME DESIGNING AND DEVELOPMENT

Course Code: GEC 605	L: 24	T/P: 0/12	Credits:2
TI:0 TE:0		PI: 15 PE: 35	

Objectives: The Objective of the course is to impart the skill to visualize object in 3D, scripting and will also learn the methodologies of creating 3D environment and texture it.

Outcomes: At the end of this subject student will understand the detailed process of 3D modeling and Texturing involved in Gaming and Animation Film making.

Unit 1: Introduction to AAA games or MMO (Multi Players) RPG Games

1. History of Games
2. Process of making
3. 3D Design Document
4. Case Studies of Famous game

Unit 2: 3D Game Design

1. Concept of game(script)
2. Concept of 3D Modelling
3. Intro to modelling tools
4. Concepts of UV unwrapping
5. Working with UV tools and techniques
6. Lighting and visual Unit

Unit 3: Particle System of Game Engines

1. Introduction to Game Engine
2. 3D Animation
3. Introduction to Particle System
4. Applying particle System and using components
5. Properties of Particles system
6. Scripting of Particles System

Unit 4: Game Development

1. Advance Coding Languages
2. C#, JavaScript
3. Create a walking Robot
4. Animation using auto key

B.Sc. Animation and Multimedia
SEMESTER - 6
DISSERTATION/MAJOR PROJECT

Course Code: SEC 606	**L: 24**	**T/P: 0/12**	**Credits: 2**
TI:0 TE:0		**PI: 0 PE: 0**	

Objectives: The main objective of the subject is to make a short animation film by student as their Project showreel so that the student can be easily assimilated in the industry. The students can choose the area of specialization keeping in view their interest.

- Project (As per student's chosen stream)