

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS)
DIPLOMA IN VISUAL COMMUNICATION WITH VISUAL EFFECTS
COURSE OF STUDY AND SCHEME OF ASSESSMENT
(MINIMUM CREDITS TO BE EARNED: 135)

Code No.	Course	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	SEE	Total
SEMESTER 1								
18ENG11	English – I (T)	5	0	0	5	40	60	100
18CDVC11	History of Animation & VFX (T)	4	0	0	4	40	60	100
18PDVC11	Story Boarding (P)	0	0	6	3	40	60	100
18PDVC12	Anatomy Study (P)	0	0	4	2			
18CDVC12	Introduction to Film Studies (T)	4	0	0	4	40	60	100
18PDVC13	Basics of Drawing (P)	0	0	5	3	40	60	100
SEC	SEC - I	2	0	0	2	40	60	100
		15	0	15	23			
SEMESTER 2								
ENG	English II	5	0	0	5	40	60	100
18PDVC21	Clay Modeling (P)	0	0	6	3	40	60	100
18PDVC22	Graphic Design (P)	0	0	4	2	40	60	100
18CDVC21	Audio & Video Technology (T)	4	0	0	4	40	60	100
18PDVC23	Compositing Basics – AE (P)	0	0	6	3	40	60	100
18PDVC24	Digital Photography (P)	0	0	5	3	40	60	100
		9	0	21	20			

CA - Continuous Assessment

SEE - Semester End Examination

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES

Programme: DIPLOMA IN VISUAL COMMUNICATION WITH VISUALEFFECTS

Code No.	Course	Hours/Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	SEE	Total
SEMESTER 3								
18CDVC31	Basics of 3D Modeling & Texturing (T)	4	0	0	4	40	60	100
18PDVC31	Animation Basics (P)	0	0	4	2	40	60	100
18PDVC32	Matte Painting (P)	0	0	4	2	40	60	100
18PDVC33	Motion Graphics (P)	0	0	5	2	40	60	100
18CDVC32	Film Appreciation (T)	4	0	0	4	40	60	100
DSE	Discipline Specific Elective – I (T)	2	0	0	2	40	60	100
ENG	English III	5	0	0	5	40	60	100
GE	Generic Elective – I (T)	2	0	0	2	40	60	100
		17	0	13	23			
SEMESTER 4								
18PDVC41	Advanced Compositing (P)	0	0	4	2	40	60	100
18CDVC41	Basics of Videography (T)	4	0	0	4	40	60	100
18PDVC42	Audio & Video Editing (P)	0	0	4	2	40	60	100
18CDVC42	Colour Theory (T)	3	0	0	3	40	60	100
18CDVC43	Media Studies (T)	3	0	0	3	40	60	100
DSE	Discipline Specific Elective – II (P)	0	0	3	2	40	60	100
ENG	English IV (T)	5	0	0	5	40	60	100
AECC	AECC – I	2	0	0	2	40	60	100
GE	Generic Elective – II (T)	2	0	0	2	40	60	100
		19	0	11	25			

CA - Continuous Assessment

SEE- Semester End Examination

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Code No.	Course	Hour / Week			Credits	Maximum Marks		
		Lecture	Tutorial	Practical		CA	SEE	Total
SEMESTER 5								
18CDVC51	Television Production (T)	4	0	0	4	40	60	100
18PDVC51	Dynamics (P)	0	0	6	3	40	60	100
18PDVC52	Lighting & Rendering (P)	0	0	4	2	40	60	100
18CDVC52	Pre-Production Concepts (T)	4	0	0	4	40	60	100
DSE	Discipline Specific Elective – III (P)	0	0	4	2	40	60	100
DSE	Discipline Specific Elective – IV (P)	0	0	4	2	40	60	100
18PDVC53	Media Internship-I	0	0	0	2	40	60	100
GE	Generic Elective – III (T)	2	0	0	2	40	60	100
SEC	SEC-II (T)	2	0	0	2	40	60	100
		16	0	14	23			
SEMESTER 6								
18CDVC61	Post Production Concepts (T)	4	0	0	4	40	60	100
18PDVC61	Shooting Techniques & Special Effects (P)	0	0	4	2	40	60	100
18CDVC62	New Media Technologies (T)	4	0	0	4	40	60	100
18PDVC62	VFX Show Reel (P)	0	0	5	2	40	60	100
18CDVC63	Media Internship	0	0	0	2	40	60	100
DSE	Discipline Specific Elective – V (P)	0	0	5	2	40	60	100
DSE	Discipline Specific Elective - VI (P)	0	0	4	2	40	60	100
GE	Generic Elective – IV (T)	2	0	0	2	40	60	100
SEC	SEC – III (T)	2	0	0	2	40	60	100
		12	0	18	22			

List of Discipline Specific Elective Courses:

S.No.	Code	Course
1.	18DVC001	Introduction World Cinema
2.	18DVC002	2D to 3D conversion
3.	18DVC003	Streaming Media
4.	18DVC004	Advanced Rotoscopy
5.	18DVC005	Theory for FX
6.	18DVC006	Visual Effects for Production
7.	18DVC007	Advanced Matchmove
8.	18DVC008	Color Grading
9.	18DVC009	Script Writing
10.	18DVC0010	Live Camera Operation

List of Ability Enhancement Compulsory Courses:

S.No.	Code	Course
1.		
2.		
3.	18BAN201	Advanced Animation
4.	18EVS201	Environmental Studies Paper-I
5.	18BCC251	Ethics and values

List of Generic Elective Courses:

S.No.	Code	Course
1.	18BCF154	E-Commerce
2.	18BCA156	Internet Basics
3.	18BCA153	Office Automation tools
4.	18BCA155	Advanced Excel
5.	18BHM153	Tourism Management

List of Skill Enhancement Elective Courses:

S.No.	Code	Course
1.	18BPD251	Personality Development -I
2.	18BPD252	Personality Development -II
3.	18BPD253	Personality Development -III
4.	18NSS255	NSS – I
5.	18NSS256	NSS – II
6.	18NSS257	NSS – III
7.	18NSS258	NSS – IV
8.	18NSS259	NSS – V
9.	18NSS260	NSS – VI

SYLLABUS
CORE COURSES

ENGLISH- I

5 0 0 5

COURSE OBJECTIVE:

- To enable students to develop their communication skills effectively. To make students familiar with the English Language.
- To enrich their vocabulary in English
- To develop communicative competency

	Credit Hours
UNIT I - Preparatory Lesson	15
1. Competition Matters Suzanne Sievert	
2. A Personal Crisis May Change History Dr. A.P.J. Abdul Kalam	
3. Why Preserve Biodiversity Prof. D. Balasubramanian	
UNIT II –Prose	15
1. The Unexpected Robert Lynd	
2. My Greatest Olympic Prize Jesse Owens	
3. If You are wrong, admit it Dale Carnegie	
UNIT III –Poetry	15
1. The Night of the Scorpion Nissim Ezekiel	
2. Pulley or The Gift of God George Herbert	
3. La Bella Dame Sans Merci John Keats	
UNIT IV- Short Story	15
1. The Gift of Magi O Henry	
2. Three Questions Leo Tolstoy	
UNIT V – One Act Play	15
1. The Shirt Francis Dillion	
2. The Pie and the Tart Hugh Chesterman	

Total: 75 Hours

Books Prescribed:

- Confluence - Anu Chithra Publications

Course objective: After completing this course, students will be able to define and identify animation as a particular form of visual communication and also will be able to identify the major technological developments and aesthetic movements in the history of animated filmmaking.

Course Outcome:

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

CO 1. Understand the characteristics of animation and how the primitive objects are used in film

CO 2. Know the generation of animation from the animation production

CO 3. Understand the animation process from the early approaches

CO 4. Understand the process of animation by using cell, key and screen animation, etc.

CO 5. Understand the importance of VFX and its day to day improvements

UNIT I EARLY ANIMATION 12

It begins with an introduction to film history, basic cinematic terms and concepts, early animation and primitive forms, the beginnings of animation and special effects in film. It also provides a discussion on experimental animation and abstract cinema.

UNIT II EARLY STUDIOS AND ANIMATION PIONEERS 12

This unit provides an overview of the evolution of animation pioneers such as Walt Disney, Pixar studio, DreamWorks, Universal studios, Max Fleischer, Tex Avery, Warner bros and Loony Tunes etc.

UNIT III EARLY APPROACHES TO MOTION IN ART 12

Animation before film: The magic lantern, Thaumatrope, Phenakistoscope, Zoetrope, Flip book, Classical animation, Puppet animation, stop motion animation, Pixilation, Sand animation, Cutout animation.

UNIT IV ANIMATION TECHNIQUES 12

This unit covers techniques such as cell animation, classic characters, cut out animation, stop-motion effects, puppet stop motion, pixilation, optical printing, vector / keyframed animation, sand animation, silhouette animation, pin-screen animation, Chinese shadow puppetry and rotoscope

UNIT V HISTORY OF INDIAN ANIMATION, INDUSTRIES AND STUDIOS 12

It deals with the growth of Indian animation companies and studios. Traces the beginnings of animation art in India and discusses the emerging trends in Indian animation industry and outsourcing demands.

Total: 60 Hrs

TEXT BOOKS:

1. Stephen cavalier (author)“The world history of animation hardcover “Disney animation , Disney editions 1, 9 Sep 2011.
- 2.Frank thomas “the illusion of life” , Disney animation (Disney editions deluxe) hardcover – import, 5 oct 1995

REFERENCE BOOKS:

1. “Cartoon Animation”, Preston Blair, Walter T. Foster, Apple Press, Limited, Eighth Edition, ISBN 1560100842
2. “History of Animation”: Facts and Fictures, Bredson , Philps Cardiff, Pearson Publications,1972
3. “Film and the narrative tradition, Fell, John L., Berkeley Emmanuel, University of California Press, 1986

Course objective: Storyboard is a basic drawing and preproduction course aimed at students from various Visual Communication degrees including Motion Graphics and 2D Animation. This course teaches story-based concept skills and techniques as well as basic animatic production. Students can also apply skills learned in this class in other areas including 3D animation and interaction design, produce a series of cohesive storyboards from a script, recognize and define common storyboard terminology.

Course Outcome:

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

CO 1. Understand the pre-production process, scripts, shots, takes and using these how to design the storyboard

CO 2. Develop storyboard from various inputs such as concept, drawings, photos, text images.

CO 3. Understand the Shot angles inside the movie before going to the production

CO 4. Design the different type of storyboard.

CO 5. Design the Storyboard for some other educational purpose.

UNIT I THE STORYBOARD'S BEGINNINGS 20

Introduction to storyboarding, Preproduction process, Basic of Storyboards, screenplay and picturing, shots and storyboard panels., script, one-line order, types of story board technique, Thumbnail story boards, and the planning processes of visual storytelling. Shot types, continuity, pacing, transitions and sequence, cinematic, storyboard

UNIT II BASIC OF THE STORYBOARD 16

Types of lay outs, concept and story developing, idea, script Foreground, Middle Ground and Background, Developing Drawing Skills, Shot, Angles, Building the Storyboard, study of Classic Film Examples.

UNIT III SHOT ANGLES 18

Shot types, angles cuts, posing, staging and camera move, Shot and every camera angle, tilt, pan close-up extreme close up, Extreme Close-Up Establishing Shot, Long Shot background, Medium Shot, low angle, high angle, different perspectives.

UNIT IV STORY BOARD FOR COMIC 18

Cartoon story boards, Color story board, black and white story board, fantasy story board, storyboard samples, graphic novel storyboard, staging figures, dialogue and captions, manga storyboards, comic-book-like story sketches.

UNIT V**STORY BOARD FOR BOOKS****18**

Introduction to book illustration storyboards, front page story boards, picture book storyboard, scenes for chapters of the stories, story boards for poems, and advertising story board.

Total: 90 Hrs**TEXT BOOKS:**

1. Wendytumminello, "Exploring Storyboarding (Design Exploration Series)", Delmar Cengage Learning, 1st Edition, 2004.
2. John Hart, "The Art of the Storyboard a Filmmaker's Introduction", Focal Press; 2 editions 2013.

REFERENCE BOOK:

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

Course Objective: Students will demonstrate knowledge of the bone structure of the human skeleton and the body's muscle structure. Students will be able to draw the human figure accurately displaying normative proportional relationships of the body's parts to the whole. Students will depict the figure in a variety of poses using foreshortening; Students will convey gesture, the illusion of expressive movement, when drawing the figure spontaneously in very brief periods of time.

Course Outcome:

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

- CO 1. Understand the skeleton study.
- CO 2. Understand anatomy and life drawing.
- CO 3. Learn the male and female anatomy in details.
- CO 4. Create different type of poses and styles.
- CO 5. Learn anatomy movement.

UNIT I SKELETON STUDY 12
 Understanding skeleton forms, head, rib bone, pelvic bone, hand and fingers, legs, three views of the head and the skull, The study of different views of skeleton, movement of bones, front, back, side views of skeleton.

UNIT II MEASUREMENT OF ANATOMY 12
 Measurement of anatomy, male and female, head calculation measurement, eye calculation measurement, different of male anatomy measurement and female measurement, comparing male and female face measurement horizontal and vertical balance of anatomy,

UNIT III MALE AND FEMALE ANATOMY 12
 Comparing muscle of male and female anatomy basic different of male anatomy, and female anatomy, muscle formations on skeleton, comparing feature, head, chest, hip, and pelvic, hand and elbow position, line difference of male and female

UNIT IV POSING AND BALANCE 12
 Human body movements, balance of movement, life of action, forms and postures, Casual possess, sports movements, dancing movements, rest poses, walking movements for old man young man, different walking styles

UNIT V**MOVEMENT STUDY****12**

Live movement study, study human movements in different places, beach, market, road, speed line drawing. Deep study of movement, movement study for painting, statue, story board, and illustration,

Total: 60 Hrs**TEXT BOOKS:**

1. Gottfried Bammes, "Complete Guide to Life Drawing", Search Press, October 1, 2011.
2. George B. Bridgman, "Constructive Anatomy", Dover Publications, June 1, 1973.

REFERENCE BOOKS:

1. David K, "The Human Figure", Penguin Books; Reissue edition Sept 15, 1975.
2. Eliot Goldfinger, "Human Anatomy for Artists", Oxford University Press, 1st edition November 7, 1991.

Course objective: The aim of this course is to provide students with an introduction to the history, social and cultural impact, and aesthetic nature of film. Emphasizing how films produce meanings for viewers, this course will examine the ways that editing, mise-en-scene, sound, color, shot composition, and camera movement, along with such elements as performance, directorial style, and genre, shape our experience of seeing movies. Along with an attention to film language and narrative, this course will also look at key periods and events in film history. In addition, we will briefly examine the national cinemas, considering the social, cultural, and institutional frameworks within which films have been produced and consumed at different times and in different places.

Course Outcome:

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

CO 1. Know about Classical Hollywood Cinema and about the third world cinema

CO 2: Acquire the significant knowledge about the various film movements.

CO 3. Understand the Parallel Cinema Movement in India.

CO 4. Understand the importance of History of Indian Cinema.

CO 6. Acquire an in-depth knowledge about the development of talkies in Tamil.

CO 7. Understand the grammar of studio production and the key roles of production team.

CO 8. Understand the Production & Post production process in detail.

CO 9. Acquire an in-depth knowledge about the techniques to handle and manage the problems in each phase of production.

UNIT I AN OVERVIEW 10

Introduction to film as an art and the nature of art, the spectrum of abstraction and the modes of discourse. The “Rapports de production” where the totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness and Films as Mass Communication.

UNIT II FILM RELATION WITH OTHER ARTS 10

This unit describes the relationship of Film and the other Arts in related to Film photography and painting, Film and the Novel, Film and theater, Film and Music, Film and environment Arts, Films and folk media.

UNIT III HISTORICAL, THEORETICAL AND CRITICAL APPROACH TO FILM 15

History of World Cinema in a Narrative Form of both Linear Perspective and Non-Linear perspective. And Formation of Genres in association with Melodrama, Family and Gender. Standardization of Film Practices and its basic Techniques. Semiotic Analysis of its Codes.

Factors Motivating such Standardization. Mode of production in the Studio System and also the evolution of the Hollywood Film Paradigm.

UNIT IV HISTORICAL AND CULTURAL STUDY OF INDIAN CINEMA 13

The study of history of Indian Cinema covering the whole Indian and Regional Cinema with its history and development. Next the unit discusses the Cinema movements like Phalke and the Swadeshi enterprise and the mythological factors connected with the early genres like social, historical, stunt film and the Saint Films.

UNIT V FILM ANALYSIS 12

The student is taught to know about the Language of film and its tools, its Signs and the physiology of film perception in terms of denotative and connotative meaning with Syntax, Codes, mis-en scene, the framed image, the diachronic shot, sound, image, Elements of Films, Visual Language, Structure and content. And a brief study of Time components of film with spatial components, Creative choices, Macro and micro elements of film language.

Total: 60 Hrs

TEXT BOOKS:

1. Keval J. Kumar, "Mass Communication in India", Jaico Publishing, 2000.
2. Denis McQuail "Mass Communication Theory", Vistaar Publications, 2005

REFERENCE BOOKS:

1. Barry Keith Grant, "The Film Studies Dictionary", Dum Publications, Edition III, Year 2008
2. Emmons, "Film and television: a guide to the reference literature", R, ACEL Release, First Edition, Year 2009, ISBN: 1563089149

Course objective: The students to gain a control of representational drawing skills, and to understand and manipulate the proportional relationships from actual objects, Manipulating the formal elements and principles to achieve better design solutions, importance and control of good craftsmanship and presentation skills.

Course Outcome:

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

CO 1: Understand the fundamentals of drawing by shapes, lines, geometry, paper balance and drawing methods.

CO 2: Studying the process of shading technique form light and texture to create photorealistic things.

CO 3: Understand the process of compositing from various elements and developing the proper still life drawing from various methods

CO 4: Understand the importance of perspective concepts from methods and create a different perspective drawing for single object.

CO 5: Preparing a Portrait of human are living things from the different angle.

UNIT I BASICS OF DRAWING

20

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.

UNIT II SHADING TECHNIQUE

10

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,

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, explain 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,

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**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 editions, 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.

ENGLISH- II

5 0 0 5

COURSE OBJECTIVE:

- To enable students to develop their communication skills effectively
- To make students familiar with various sentence patterns of the English Language
- To enrich their vocabulary in English
- To develop communicative competency

Credit Hours

UNIT-I Prose

15

1. The Words of Wisdom
Chetan Bhagat
2. Forgetting Robert
Lynd
3. My Early Days Dr.
A.P.J.Abdul Kalam

UNIT II –Poetry

15

1. Ozymandias
Percy Bysshe Shelley
2. Mending Wall
Robert Frost
3. Where the Mind is Without Fear
Rabindranath Tagore

UNIT III –Short Story

15

1. Am I Blue?
Alice Walker
2. The Last Leaf
O' Henry
3. The Selfish Giant
Oscar Wilde

UNIT IV – One Act Play

15

1. Soul Gone Home
Langston Hughes

UNIT V

15

1. Lexical Skills
2. Vocabulary
3. Communication and Grammar at the end of all lessons

Total: 75 Hours

Books Prescribed:

- Radiance - Emerald Publications

Course Objective: At the end of the course, the student is able to effectively manipulate the elements and principles of general and relative proportion to create a representational figure and composition. Explore the structural, compositional implications of modeling clays as a sculpting material. Have a basic technical understanding of modeling techniques, clays, modeling tools, armatures for figure sculpture.

Course Outcome:

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

- CO 1.** Create clay basic shapes.
- CO 2.** Understand the handling tools and techniques
- CO 3.** Understand the modeling methods.
- CO 4.** Create Human model.
- CO 5.** Create fantasy model.

UNIT I INTRODUCTION TO CLAY MODELING 15

Introduction to Clay Modeling Sculpture, Eye, Nose, Lips modeling Hand material preparing, exploring 3D form Emphasizes drawing for sculpture, concept development armature, expression - concepts and comprehension of 3D space, material preservation, making basic human forms, animal forms.

UNIT II TOOLS AND HANDLING TECHNIQUE 15

Techniques and tools, carving tools, modeling tools, wire tools, wooden tools, plastic tools, Adding technique, carving technique, roughing out, Removing Clay, Maneuvering, Repositioning and Detailing.

UNIT III MODELING METHODS 20

Pinch pot, coiling and slab techniques, Slab Method, modeling with armature, medaling in block clay, Relief medaling, low relief and high relief modeling, terracotta modeling, hollow modeling, solid medaling.

UNIT IV MODELING HUMAN 20

Drawing for modeling, concept for sculpture, measurement of sculpture, armature design, pedestal design, choosing pose or movement, skeleton forms, adding muscles forms, face modeling, Body modeling, flowing anatomy, detailing, finishing,

UNIT V CREATURE MODELING

20

Idea, concept, scribble drawing, drawing for modeling, adding extra features, creating new textures, measurement of sculpture, armature design, choosing pose or movement, skeleton forms, adding muscles forms, face modeling, Body modeling, flowing anatomy, detailing, finishing, weapons making.

Total: 90 Hrs

TEXT BOOKS:

1. Bruno Lucchesi, "Modeling the Figure in Clay", Watson-Guption Publications, 30th Edition, April 1, 1996.
2. Katherine Dewey "Creating Life-Like Figures in Polymer Clay", Potter Craft, 29 April 2008.

REFERENCE BOOKS:

1. Daisy Grubbs, "Modeling a Likeness in Clay Hardcover", Watson-Guption, August 1, 1982.
2. Susanna Oroyan, "Fantastic Figures: Ideas and Techniques", C&T Publishing, January 1, 1995.

GRAPHIC DESIGN

0042

Course objective: The objective is to learn the techniques of graphical outputs through tools and utilize them. Students will know the process of using the tools for various digital outputs like pencil drawings, double exposure, posters, color gradation and restoration. Thus, enhancing the quality of digital media.

Course Outcome:

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

CO 1. Understand the process of graphic design by using Photoshop various operations.

CO 2. Learn the important tools of Photoshop and its uses.

CO 3. Learn the Illustrator and make a design for various purpose

CO 4. Understand the design principles from various design concepts and making logo from vectors.

CO 5. Create a logo animated version from the vector graphics and study the print media operations.

UNIT I INTERFACE, SELECTION&RETOUCHING 12

Introduction of Graphics design – About Photoshop - Getting Started with Photoshop- Working with Basic selection -Working with Images - Layer concepts - Colour correction – Photo-retouching.

UNIT II USAGE OF TOOLS 12

Painting in Photoshop - Working with the pen tool -Mask effect- Effective Title Making- Creating special effects – Creating Web templates- Exporting your work to various formats. Using HDR toning for images, variations, filters and gallery.

UNIT III CREATING DYNAMIC OUTPUTS 12

Introduction of Illustrator, Interface of illustrator, Dynamic Design Tools, Digital Designing works, Front-page design, Making Clipart, Tracing techniques, Business cards, Banners and posters. Using shapes and lines to complete digital works.

UNIT IV DESIGN PRINCIPLES AND TEXT 12

Vector Art Design principles-Logo/Flier Design, Working with Text, Colour and Graphics and Layout Handling Page Elements Multiple Pages, Typography for any digital work like brochures, Pamphlets etc...

UNIT V TITLE ANIMATION, PRINT MEDIA 12

Image compositing, print ads making, Magazine, Adjusting Print Settings, color grading for printing work and vector for digital printing, Title creation for various designs. Logo design, Banner and poster design.

Total: 60 Hrs

TEXT BOOKS:

1. Foley, Van Dam, Feiner and Hughes, Computer Graphics: “Principles and Practice” Addison Wesley”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 McCathran and video2brain ,2012.

Course objective: This course is designed such that the advanced concepts that are the foundations of today's visual media communication. Professional level standards in audio capturing, processing and transmission is covered. In the similar manner, various video technologies such as color space, various signal standards are covered in this course.

Course Outcome:

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

CO 1. Understand the principle design of Audio and Video

CO 2. Learn the process of analog to digital, digital to analog convertor on both audio and video processing.

CO 3. How to transfer and store the audio data from music instrument

CO 4. Learn the audio file format and interchange in between platforms

CO 5. Understand the video processing and color space controls

CO 6. Understand the digital signal processing for broadcasting

UNIT I: AUDIO TECHNOLOGY AND AUDIO PRINCIPLES

12

Audio Workstations, Audio and the Computer Industry, Audio and Quality, Analog and digital information, Binary number systems, Basic A/D and D/A conversion of control information, A/D conversion of audio signals, D/A conversion, Sound Quality versus sample rates and resolutions, Direct Stream Digital, digital audio signal processing, audio data conversion

UNIT II: MIDI AND SYNTHETIC AUDIO CONTROL

Introduction to MIDI, MIDI and digital audio contrasted, basic MIDI principles, MIDI messages in detail, MIDI control of sound generators, MIDI tuning control, general MIDI, Standard MIDI files, downloadable sounds and sound fonts, RMID and XMF files, MIDI and Synchronization, MIDI machine control, MIDI over USB, MIDI over IEEE1394

UNIT III: AUDIO FORMATS AND DATA INTERCHANGE

12

Audio file formats, disk pre – mastering formats, interconnecting audio devices, computer networks and digital audio interface, dedicated audio interface formats, networking, and streaming audio over computer interfaces.

UNIT IV: VIDEO, COLOR SPACES AND SIGNALS

12

Analog vs Digital, Video timing, video resolution, RGB color space, YUV color space, YCbCr color space, digital component video background, 480i and 480p systems, 576i and 576P systems, 720p systems, 1080i and 1080p systems

UNIT V: DIGITAL VIDEO PROCESSING AND VIDEO STANDARD

12

Rounding Considerations, SDTV- HDTV YCbCr Transform, 4:4:4 to 4:2:2 YCbCr conversion, display enhancement, video mixing and graphics overlay, video scaling, scan rate conversion, interlaced conversion, NTSC and PAL overview, NTSC and PAL encoding, NTSC and PAL digital decoding

Total: 60 hrs

TEXT BOOKS:

1. Francis Rumsey "Desktop audio Technology: Digital audio and MIDI principles" Second Edition
2. Keith Jack, "Video Demystified: A Handbook for the Digital Engineer "

Course objective: Compositing is the combining of visual elements from separate sources into single images, often to create the illusion that all those elements are parts of the same scene. Digital compositing is an essential part of visual effects that are everywhere in the entertainment industry today.

Course Outcome:

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

CO 1. Understand the importance of rotoscopy.

CO 2. Understand the process are involved in the rotoscopy

CO 3. Learn the process of green or blue screen removing.

CO 4. Learn the process of 2d and 3d tracking

CO 5. Learn the process of color corrections

CO 6. Learn the process of Live action compositing

UNIT I ROTOSCOPY

20

In this unit, Students explore the rotoscopy involves creating shapes which are used to isolate or mark elements in footage, such as characters, vehicles, buildings etc. This method of creating selections allows to perform specific operations like color correction, adding additional layers, dynamic effects etc.

UNIT II KEYING

20

In this unit, Students explore keyer techniques which involve Luma key and Chroma key. This topic covers a wide knowledge about the RGB channels and its uses. It's a unique technique teaches the fastest and most accurate way to extract an object.

UNIT III TRACKING & STABILIZE

15

In this unit, student will explore the tracking and stabilizing the footage. This concept teaches the how to track and stabilize the live footage in 2dimentions and techniques involved in this process. This method teaches the student how to track the camera in 2 dimensions and add the layers for compositing.

UNIT IV LIVE ACTION COMPOSITING

20

In this unit, Students explore live action compositing techniques. It covers how to composite various different layers into single image. In this session, students will learn at three general areas where CGI elements are composited. First up is straightforward CGI compositing where a CGI object has been created and needs to be composited into the scene

UNIT V RENDERING AND OUTPUT FORMATS**15**

This is the stage where we teach about the 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: 90 Hhrs**TEXT BOOKS:**

1. Ron Ganbar, “Nuke 101: Professional Compositing and Visual Effects”, Peachpit Press; Second Edition, 2014.
2. Steve Wright, “Compositing Visual Effects”, Focal Press; Second Edition, 2011

REFERENCE BOOKS:

1. Steve Wright “Digital Compositing for Film and Video”, Focal Press; Third Edition, 2010
2. Ron Brinkmann, “The Art and Science of Digital Compositing”, Morgan Kaufmann Publishers In; Second Revised Edition, 2008

DIGITAL PHOTOGRAPHY

0053

Course objective: This course is designed to teach students how to direct a product photo shoot. The expected outcome is for students to learn to create an image that a client would buy to sell their product in the marketplace.

Course Outcome:

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

CO 1. Understand the importance of light in the photography

CO 2. Understand the various elements of cameras

CO 3. Understand the photography grammar and Knowledge about output preparation materials

CO 4. Learn how to take a photo with proper photographic sense.

CO 5. Studying the nature and it's important for background animation or VFX process

UNIT I INTRODUCTION TO PRODUCT PHOTOGRAPHY 15

In this unit, students will learn basic photographic tools and their intended purposes, including the proper use of various camera operation, light meters and film selection. Digital Camera, Image recording systems, memory cards,

UNIT II INDOOR SHOOT 15

This unit describes light characteristics and form: Point light source, Reflectors, Wide light sources, Light banks, Umbrellas, soft boxes, honeycombs, snoots, etc. Understanding light direction, throw of light, soft light, contrast or hard light, the Light cage, etc.

UNIT III OUTDOOR SHOOT 15

This unit describes introduction to Outdoor and Portrait Lighting using in product Photography. Diffuser, Reflector, Mirror etc., five portraits lighting outdoor, working with white balance settings.

UNIT IV PRINCIPLES OF COMPOSITION 15

The student's work in this unit should demonstrate understanding of the principles of Composition, including: unity and variety, balance, emphasis, contrast, rhythm, repetition, proportion and scale.

UNIT V DIGITAL PHOTOGRAPHY PORTFOLIO

15

In this unit, students are to create portfolio presentation which includes, Product Photos, product advertising, Product in setting, Product alone, using the product, Product in package, Product in various design.

Total: 75 Hrs

TEXT BOOKS:

1. Chris Gatum, "The Beginner's Photography Guide", DK Publishing, 2013.
2. Amber Richards, "How to Set Up Photography Lighting for a Home Studio", Amber Richards, 2013

REFERENCE BOOKS:

1. Michael Bearley & John Hedgeese, "New Introductory Photography Course", Read consumer Book Ltd.
2. Eliot Siegel, "Fashion Photography Course: Principles, Practice, and Techniques: An Essential", Barron's Educational Series, 2008

COURSE OBJECTIVE:

- To train students in the use of English language in varied literary and non-literary context
- To teach them soft skills and strengthen their foundation in grammar and composition
- To evaluate their comprehension skills.

Credit Hours

UNIT - I- Prose	15
1. Two Gentleman of Verona - A.J. Cronin	
2. Judas Iscariot - Bonnie Chamberlain	
3. Dangers of Drug Abuse - J. V. S. Henbane	
UNIT II - Short Stories	15
1. Journey by Night - Norah Burke	
2. The 2000-Mile Turtle - Henry Edward Fox	
3. Fools Paradise - Isaac Bashevis Singer	
UNIT III – Fiction	15
1. R. L. Stevenson - Dr. Jekyll & Mr. Hyde (Retold by Kennet) – S. Chand & company Ltd.	
UNIT IV - Functional English	15
1. Paragraph Writing	
2. Comprehension	
3. Letter Writing	
4. Report writing	
a) News Paper Report	
b) Reports for Government Official Attention	
c) Definition	
UNIT V – Conversation In Situations & Conversation Practice	15
1. Conversation in Situations	
a) At the Airport	
b) In a Bank	
c) On the Beach	
d) At the Customs	
e) At the Doctors’	
f) In a Flight	
g) In a Hotel	
h) In a Restaurant	
i) In a Shop	

- j) Tea Time
- k) On the Telephone
- l) In a Travel Agency
- m) On a Country Walk
- n) At the theatre
- o) In a Street

2. Conversation Practice

- a) Daily Activities
- b) Asking Directions
- c) Travel plans
- d) Living in an Apartment
- e) Money Problems
- f) Weather Conditions
- g) Dinner Conversations
- h) Common Health Problems
- i) Tag Questions
- j) Office Conversations

3. Expansion of Hints

Total: 75 Hours

Books Prescribed:

1. Effective English Communications for You – V. Syamala, Emerald Publishers, Chennai.
2. English Conversation Practice by D. H. Spencer, Oxford University Press
3. English Conversation Practice by Grant Taylor, Tata McCraw-Hill, Publishing Company Limited, New Delhi.

BASICS OF 3D MODELING AND TEXTURING

4 0 0 4

Course Objective: In this paper the student is thought how to model a shape in 3D with basic parameters. Building a set modeling or modeling an automotive and giving texturing to the product.

Course Outcome:

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

CO 1. Create a set model using modeling technic such as NURBS and subdivision

CO 2. Create a 3D character, landscape environment and Automotive modeling such as car, bike, and various automobiles.

CO 3. Learning the process of Shading and texturing networks for object details

CO 4. Learning the process of UV mapping for texture placement

CO 5. Learning the process of lighting and rendering for photorealistic outputs.

UNIT I INTRODUCTION TO SET MODELING FOR FILM, GAMING 12

Set Modeling Overview and Objective: Modeling using Nurbs and Polygons in 3D software. Strategies of Modeling, Tips and Techniques of Modeling using Polygons. overview of Polygon selection and creation, Combining, separating and splitting. Editing polygons with Sculpting surface meshes, Coloring polygons with Blind data.

UNIT II INTRODUCTION TO IN – ORGANIC MODELING 12

In-organic Modeling such as Solar systems, mountain, stage show background, gaming background. Automotive like car, bus and van with reference pictures. To create a model as it is in the picture.

UNIT III BASIC TEXTURING 12

Advanced Materials Using Specialized Material Types. Unwrapping UVs and Using Pelt Mapping and Creating Baked Textures and Normal Maps. Working with Advanced Modeling and Light Tracing with Radiosity, Using Atmospheric and Render Effects. Retracing and mental ray effects with Batch and Network Rendering.

UNIT IV TEXTURING THE MODEL USING UV MAPPING 12

Texturing and Shading, Intro to Hyper shade, UV mapping overview, Mapping UVs, Modeling and Texturing effects, UVs menu reference, UVs windows and editors reference, UVs tool reference, Nodes and Materials, General Utilities, Image Based mapping, Editing UVs, UV sets, UV unwrapping overview, UV by Photoshop.

UNIT V RENDERING THE TEXTURE WITH SHADING 12

Texturing and Shading by Unwrapping the Models. Gaming background Texturing, Digital texturing using Photoshop and Texturing via other 2D tools. Applying Mental Ray Shades to the model and Using Final Gather to Fine Tuning Mental Ray Shades.

Total: 60 Hrs

TEXT BOOKS:

1. Kelly L. Murdock , “Kelly L. Murdock's Autodesk 3ds Max 2015 Complete Reference Guide”- Perfect Paperback ,2014.
2. Kelly L. Murdock, “Autodesk Maya Basics Guide 2015”, 2014.

REFERENCE BOOK:

1. William Vaughan, “Digital Modeling”-,First Edition.2004.

ANIMATION BASICS

0 0 4 2

Course objective: The objective is to deliver the techniques of keyframing animation, path animation and reactive animation, students learn the basics of animation.

Course Outcome:

At the end of the course, learners 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 constrains 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

CO6: gain knowledge on Facial expression for 3D Animation

UNIT I ANIMATION TOOLS

12

Timeline, Range slider, Autokey, play blast, Playback settings, Keyframing animation, Path animation, Reactive animation, set driven, Bake animation, Graph editor, Dope Sheet, Track editor, Camera sequencer.

UNIT II PRINCIPLE OF ANIMATION

15Squash and Stretch, Anticipation, Staging, Straight Ahead Action and Pose to Pose, Follow Through and Overlapping Action, Slow In and Slow Out, Arc, Secondary Action, Timing Exaggeration, Solid drawing, Appeal.

UNIT III BOUNCING BALL AND GRAPH EDITOR

12

Animating the ball, setting keys, Editing, Moving, Copying and Pasting Keys, Squash and Stretch, Editing Animation Curves and Tangents, Pre-infinity, Post infinity, bake channels, Mute channels, Pin channels, Simplify curves, Animation filters.

UNIT IV DEFORMERS

12

Nonlinear deformer, bend, squash, flare, sine, twist, wave, soft modification, delta mush, shrink-wrap, Lattice, Blend shapes, Cluster, Wrap, Wire, Wrinkle, Sculpt, Jiggle, Edit deformer, paint weights.

UNIT V CREATING SPACESHIP ANIMATION

12

Create the starfield, creating three planets, Creating the planet textures, create more planet shaders Modeling Spaceship, Motion Path animation, Animate spaceship, Edit the path curves. Animating Camera.

Total: 75 Hrs

TEXT BOOKS:

1. Richard Williams “The Animator’s Survival Kit”, Faber & Faber, 4th Edition, 2012.
2. Mastering Autodesk Maya 2016 by **Todd Palamar** (Author)

REFERENCE BOOKS:

1. Autodesk Maya 2017 Basics Guide By Kelly L. Murdock

UNIT V IMAGE COMPOSITION**11**

Background making in paint material and software layer distribution, Image compositing, understanding the Depth of field, Multi-plane set up in compositing, matte layers extractions Matching with 3d objects or live action.

Total: 60 Hrs**TEXT BOOKS:**

1. Brian Sum, ShaddySafadi, Levi Hopkins, "Digital Painting Techniques: Volume 5", 3D Total Publishing, 2013.
2. John Montague, "Basic Perspective Drawing: A Visual Approach", John Wiley publication, 6th Edition, 2013.

REFERENCE BOOKS:

1. David B. Mattingly, "The Digital Matte Painting Handbook", Sybex publications, 1986
2. David Luong, Damien Mace, Milan Schere, "d'artiste Matte Painting 3", Ballistic, 2013

MOTION GRAPHICS

0052

Course objective: This course focuses on motion graphics which is primarily used in Television industry. The student will learn various tools and techniques used in creating Text and logos to create motion graphics that will be used channel-Ids and program-Ids.

Course Outcome:

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

- CO 1.** Create basic layer animation from photoshop images
- CO 2.** How to import the photoshop layers inside the After Effects project
- CO 3.** Learn the process of different type of mode operations
- CO 4.** Learn the process of Mask operations
- CO 5.** Create a Logo from PSD files
- CO 6.** Create a Logo animation with effects
- CO 7.** Learn procedure tracking methods
- CO 8.** Getting output with client corrections

UNIT I ANIMATION TECHNIQUES 15

Introduction to animation, Basic animation, Keyframe velocity, Animation assistance, Animation curve, Graph editor, Creating a composition, Animation tips and techniques for motion graphics.

UNIT II LAYER MANAGEMENT, MODES, MASKS AND MATTES 15

The layer essentials, Trimming, Motion blur, blending modes, all about masking, all about track mattes, Stencils, cameras, Lighting in 3D, Nesting compositions, Parenting skills, Nesting composition, Pre-composing, Collapsing transformation.

UNIT III TEXT ANIMATION, EFFECTS & PRESETS 15

Creating types of text, animating text, importing 3D text from 3D applications, Applying and using effects, using plugin effect to make more creative. Effects roundup overview, Compound effects, Presets and variations.

UNIT IV COLOR, KEY, TIME, TRACKING, PAINT 15

Color management, Keying, Color difference keyer, Frame rate manipulation, Motion stabilization, Motion tracking, Mocha, Paint, Clone, Roto brush, Shape layers, Paint and clone, vector paint effect, the puppet tools.

UNIT V IMPORTING, EXPORTING AND RENDERING

15

Working with audio, expressions, Import and interpret, Integration 101, Integrating with 3D application, Video issues, Render queue, Advanced rendering, Prerendering and proxies.

Total: 75 Hrs

TEXT BOOK:

1. Creating Motion Graphics with After Effects by Chris Meyer, Trish Meyer

REFERENCE BOOK:

1. Exploring Motion Graphics by Paldy. A.M Author

FILM APPRECIATION

4 0 0 4

Course objective: The aim of this course is to provide students with an introduction to the history, social and cultural impact, and aesthetic nature of film. Emphasizing how films produce meanings for viewers, this course will examine the ways that editing, mise - en - scene, sound, color, shot composition, and camera movement, along with such elements as performance, directorial style, and genre, shape our experience of seeing movies. Along with an attention to film language and narrative, this course will also look at key periods and events in film history. In addition we will briefly examine the national cinemas, considering the social, cultural, and institutional frameworks within which films have been produced and consumed at different times and in different places.

Course Outcome:

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

- CO1:** have a very good knowledge of films, relationship of film and other arts, film and music, film and environment arts
- CO2:** gain knowledge about –media films and folk media, film in theater
- CO3:** have detailed understanding about- history of world cinema, narrative form of linear Perspective and nonlinear perspective, genres in association with melodrama
- CO4:** understand the establishment of film practices and its basic Techniques, semiotic Analysis of its codes Factors Motivating such standardization,
- CO5:** have a thorough knowledge of Film making- production system of Hollywood film Method overview from lumiere brother and Griffith movies.
- CO6:** gain knowledge about the history of Indian cinema, whole Indian and regional cinema with its history and development, cinema movements like phalke
- CO7:** detail about Indian new wave cinema pioneers of Indian cinema namely Ritwik Ghatak,Satyajit Ray
- CO8:** gain knowledge about mis-en scene, the framed image the diachronic shot, sound, image, Film visual

UNIT I: AN OVERVIEW

12

Introduction to film as an art and the nature of art, the spectrum of abstraction and the modes of discourse. The “Rapports de production “where the totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness and Films as Mass Communication.

UNIT II: FILM RELATION WITH OTHER ARTS

12

This unit describes the relationship of Film and the other Arts in related to Film photography and painting, Film and the Novel, Film and theater, Film and Music, Film and environment Arts, Films and folk media.

UNIT III: HISTORICAL, THEORETICAL AND CRITICAL APPROACH TO FILM **12**

History of World Cinema in a Narrative Form of both Linear Perspective and Non Linear perspective. And Formation of Genres in association with Melodrama, Family and Gender. Standardization of Film Practices and its basic Techniques. Semiotic Analysis of its Codes. Factors Motivating such Standardization. Mode of production in the Studio System and also the evolution of the Hollywood Film Paradigm. An Overview from Lumière to Griffith and the Development of European films, Avante grade films and experimental films

UNIT IV: HISTORICAL AND CULTURAL STUDY OF INDIAN CINEMA **12**

The study of history of Indian Cinema covering the whole Indian and Regional Cinema with its history and development. Next the unit discusses the Cinema movements like Phalke and the Swadeshi enterprise and the mythological factors connected with the early genres like social, historical, stunt film and the Saint Films. Imagining the Nation on the Golden 50s and the Authorship, Indian Art Cinema and The Indian New Wave cinema formed by famous pioneers of Indian cinema namely Ritwik Ghatak, Satyajit Ray, Mrinal Sen and the detailed study of the new wave film. Makers Themes from Contemporary Indian Cinema and the 70s cinema to present date dealing in connection with The City, The Underworld and Communalism. Films and its close knitted relation with Indian culture and its various kinds of Indian film genres like Language films and Documentaries and about Stereotypes of our Indian cinema. And last the connection of Indian Films and politics in India.

UNIT V: FILM ANALYSIS **12**

The student is taught to know about the Language of film and its tools, its Signs and the physiology of film perception in terms of denotative and connotative meaning with Syntax, Codes, and mise en scene, the framed image, the diachronic shot, sound, image, Elements of Films, Visual Language, Structure and content. And a brief study of Time components of film with spatial components, Creative choices, and Macro and micro elements of film language.

Total: 60 Hrs

TEXT BOOKS:

3. Keval J. Kumar, "Mass Communication in India", Jaico Publishing, 2000.
4. Denis McQuail "Mass Communication Theory", Vistaar Publications, 2005

REFERENCE BOOKS:

1. Barry Keith Grant, "The Film Studies Dictionary", Dum Publications, Edition III, Year 2008
2. Emmons, "Film and television: a guide to the reference literature", R, ACEL Release, First Edition, Year 2009, ISBN: 1563089149

ENGLISH – IV**5 0 0 5**

- To train students in the use of English language in varied literary and non-literary context - To teach them soft skills and strength their foundation in grammar and composition - To elevate their comprehension skills.

Credit Hours**UNIT I – Prose****15**

- | | | |
|------------------------|---|-----------------|
| 1. Walking Tours | - | R. L. Stevenson |
| 2. All About a Dog | - | A. G. Gardinar |
| 3. No Man is an Island | - | Minno Masani |

UNIT II - Short Stories**15**

- | | | |
|------------------------------|---|--------------|
| 1. The Man Who Likes Dickens | - | Evelyn Waugh |
| 2. Lamb to the Slaughter | - | Roald Dahl |
| 3. Buck Hears the Call | - | Jack London |

UNIT III – Drama**15**

1. Selected Scenes from Shakespeare’s Plays – Book I, Emerald Publishers
 - a) Funeral Oration (Julius Caesar)
 - b) Trial for a Pound of Flesh (The Merchant of Venice)
 - c) Patterns of Love (As You Like It)

UNIT IV**15**

1. General Essay Writing & Group Discussion
2. Persuasive Writing and Role Play

UNIT V**15**

1. Notice, Agenda, Minutes.

Total: 75 Hours**Books Prescribed:**

1. Invitation to English Prose – A. E. Varadarajan & S. Jagadisan, Orient Black Swan, Chennai

UNIT IV STEREOSCOPY PIPELINE AND ITS PROCESS

16

In this Unit, Student will explore the pipeline of stereoscopy. In this session we cover the workflow of stereoscopy which follows the four major departments such as Rotoscopy, Matte Extraction, Clean plate and Stereo conversion process.

UNIT V RENDERING AND OUTPUT FORMATS

10

This is the stage where we teach about the 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: 60 Hrs

TEXT BOOKS:

1. Ron Ganbar, “Nuke 101: Professional Compositing and Visual Effects”, Peachpit Press; Second Edition, 2014.
2. Steve Wright, “Compositing Visual Effects”, Focal Press; Second Edition, 2011.

REFERENCE BOOKS:

1. Steve Wright “Digital Compositing for Film and Video”, Focal Press; Third Edition, 2010
2. Ron Brinkmann, “The Art and Science of Digital Compositing”, Morgan Kaufmann Publishers In; Second Revised Edition, 2008

BASICS OF VIDEOGRAPHY

4004

Course objective: This course will teach basic video camera techniques and concepts. It covers topics such as digital 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.

Course Outcome:

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

CO 1. Learn the camera types and its accessories

CO 2. Learn the lens types and its accessories

CO 3. Learn the procedure of videography

CO 4. Learn the importance of videography equipment's

CO 5. Learn how to recording the audio through microphones and other equal ant product.

CO 6. Learn the lighting technic for different environment

UNIT I INTRODUCTION OF CAMERA

12

Introduction to the Camera: History and types of cameras, Camera lenses – fixed focus length versus zoom lenses, common lens filters, Technicalities of photography – composition, exposure, light sensitivity, depth of field, Portraiture – landscape, product in advertisements, photo feature, Electronic imaging devices – Photo Conductive Tube, Charge Couple Device (CCD)

UNIT II VIDEOGRAPHY EQUIPMENTS

12

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

12

Recording sound on camera: In-built microphones in a camera, adjusting audio channels, Recording live sounds on camera Practical's: The students are required to: Take still photos emphasizing different portraitures, Practice camera exercises and composition, camera angles, camera movements (pan, tilt, zoom)

UNIT IV IDEOGRAPHY TECHNIQUES

12

Fundamentals of Composition: Aspect ratio, TV picture cutoff, Types of shots – extreme closeup, closeup, mid closeup, 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 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**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.

Course objective: This course is intended to give students an introduction to various aspects of audio and video post -production tools and techniques in video and audio editing, Introduction to Audio video editing systems and concepts, Familiarity of Non-Linear Edit Systems, multi-track recording systems and file formats. Digitization, Transcoding, Browsing and planning Sequencing in time line for Edit, change in image size and camera angle, adding transition & Effects preparing Titles and sub titles, adding music, effects / dialogues, voice narrations with audio Mixing Techniques and taking Final video out.

Course Outcome:

CO1: having a good knowledge of NLE Editing systems (Adobe premiere & FCP) and various file formats and Different Editing tools and how to construct stories and Media presentation.

CO2: gain knowledge to analyses and organize, Create story order in NLE projects, Moving Edits, Continuity, Cut, Copy, and Paste. Save, Efx edits render, transitions Film, cut away.

CO3: types and concepts in style -cutting for genre, , three-point edit, shot compositing , match Frame, Split Edits, Transitions Effects, Color correction & Color grading, ,Montage making,

CO4: seamless editing and alpha channel, titling techniques, parallel, Intercut, cross cuts. News and Programmed Editing, Voice dubbing, Background music, Audio Edits for video

CO5: Pleasing color with 3 way color correction, Visual Effects motion title graphics & graphics and animation Final export with Basic Encoding to final Delivery for Screening

UNIT I: UNDERSTANDING OF FILM AND VIDEO EDITING

12

Study of different kinds of NLE Editing systems AVID & 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.

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,

UNIT III: EDITING SPECIALIZATION EXERCISES**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.

UNIT IV: BASIC AUDIO TOOLS FOR VIDEO EDITING**14**

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.

UNIT V: COLOUR CORRECTION AND FINAL DELIVERY**10**

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.

Total: 60 Hrs**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
3. Howard M. Traminen, “The Audio Encyclopedia”. Howard W. Sam’s & Co. 2nd edition 1969
4. Don Davis and Carolyn Davis, “Sound System Engineering” Focal Press; 3 editions 2006

COLOUR THEORY

3 0 0 3

Course objective: To develop a working understanding of the essential traits of color. Establish and demonstrate practicable strategies for selecting color palettes and concept-driven color harmonies using principles, theories and systems of color design and experience. Establish and demonstrate skills in color mixing and color-discernment. Be familiar with contemporary color specification systems such as Pantone (PMS), RGB, CMYK, CIE. To familiarize students with the history of human exploration of and use of color.

Course Outcome:

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

CO1: have a very good knowledge of color and history of color and primary color theory.

CO2: gain knowledge about color characteristic and its pay in daily life

CO3: understand of colors Relationships, Harmonies, Monochromatic, and Analogous.

CO4: understand the color psychology subjective use of color.

CO5: have a thorough knowledge of color unity and creating art object using these practices.

UNIT I HISTORY OF COLORS

10

Brief History of colors, Color fundamentals, what is colour, Primary Colours, Secondary Colours, Tertiary Colors, Properties of colour, HueValue, Tints and Shades, Saturation, Tones, neutral Colours, Theories of Colors.

UNIT II COLOUR CHARECTERISTICS

10

Physics of Colour, Colour Temperature: Warm Colours, Cool Colours, Theory, Colour Systems, Colour Wheel, Munsell, Goethe theory, Runge theory Itten theory, color mixing and color-discernment, colour effects: Subtractive Colour, Additive Colour,

UNIT III COLOUR HARMONIES

10

Relationships / Harmonies, Monochromatic, Analogous, DiadTriad Tetrad Complementary, Split Complementary, Achromatic and Polychromatic, chemistry of color, Contrast of hue Light-dark contrast Cold, warm contrast, Complementary contrast, Simultaneous contrast Contrast of saturation, Contrast of extension,

UNIT IV COLOUR PSYCHOLOGY

10

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

UNIT V COLOUR UNITY

5

Theories of Successive and Simultaneous Contrast, Additive and Subtractive colours, Expressive Perceptual Colour, Colour Unity, Disunity, Twelve steps gray and do only primaries, red, yellow, blue, Additive and subtractive principles of color theory

Total: 45 Hrs

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.

REFERENCE BOOKS:

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.

MEDIA STUDIES

3 0 0 3

Course objective: To know how different types of media evolved from the ancient period and to know the facts, history, developments about important media like print, radio, TV and new media. And to understand the importance of the mass media in our society.

Course Outcome:

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

CO1: have a very good knowledge of traditional media and the history.

CO2: gain knowledge about print media and its advantages

CO3: understand the function and development of radio.

CO4: understand the function and development of television.

CO5: have a thorough knowledge of new media using these practices.

UNIT I TRADITIONAL MEDIA 10

Definitions of Media and Mass Media; Traditional Forms of Media – signs, wood carving, Sound, drawings, sculptures; Folk Media – Songs, Drama, Puppet Shows, Story Telling etc.

UNIT II PRINT MEDIA 10

History of the print media and evolution and development of printing technology in India and World; various types of print media, nature, concepts, scope; Content making for print media, Print planning.

UNIT III RADIO 10

Invention and Development of Radio medium, Radio Broadcasting since its inception in world and India, Establishment of radio stations, growth and development of the medium, AM and FM transmission, Satellite Radio, Audience and reach, role in the development., Radio Planning.

UNIT IV TELEVISION 10

Television-origin and development, nature, scope, audience, genre, functions of television; Ownership pattern, debate on autonomy; BBC model of ownership, control and programming, commercial and public service, state and private sectors' expansion; potential for future development, Prasar Bharati Broadcasting Corporation; Satellite television, DTH, Video on Demand, latest developments.

UNIT V NEWMEDIA 5

New Media – origin and development of Internet and web, Growth and development of Internet communication, Nature and Scope of the new media, content generation, reach, online journalism, web TV, Podcasting, e - Publishing.

Total: 45 Hrs

TEXT BOOKS:

1. R.K. Ravindran, "Media in Development Arena", Indian Pub.&Distributors ,2000.
2. Straubhar, Larose, "Media Now", Thomson Wordsworth, 4th Edition, 2004.
3. Keval J. Kumar, "Mass Communication in India", Jaico Publishing Co.2003.

REFERENCE BOOKS:

1. J.K. Sharma, "Print Media and Electronic Media – Implications for the future", Authors Press, 2003.
2. M.S. Sharma, "Hand Book of Journalism", Mohit Publications, 2002.
3. Barun Roy, "Modern Student Journalism", Pointer Publishers, 2004.

Course Objective: Students will acquire a theoretical, historical, conceptual and critical understanding of television production. They will learn the basic terminology and concepts of television production and will understand the theory of television production as it applies to the interplay of visual and auditory elements within the television studio.

Course Outcome:

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

CO1: Know about the difference between the TV medium and Film medium.

CO2: Acquire the significant knowledge about the various types of video formats and television production methods.

CO3: Understand the grammar of studio production and the key roles of production team.

CO4: Understand the Production & Post production process in detail.

CO5: Acquire an in-depth knowledge about the techniques to handle and manage the problems in each phase of production.

UNIT I: INTRODUCTION OF TELEVISION PRODUCTION AND ITS METHODS

12

Understanding TV medium and its difference from the film medium. Various types of video formats and the approach of TV and video Production in studio and outdoor. Television Production methods using single camera and multiple camera set-up.

UNIT II: GRAMMAR AND MAKING OF TELEVISION SHOWS

12

Learning the grammar of studio production set design and the different types of camera movements with the importance of production team. Different Genre in studio production like television interviews, Educational Shows, Drama, Public service advertisement, Game shows etc. and the role of anchor and news reader in these studio productions. And learning the grammar of outdoor location production and the method of natural lighting.

UNIT III: STUDIO PRODUCTION TECHNIQUES

12

The techniques of natural and artificial lighting in terms with dramatic effect and special effect. Key Lighting methods like three-point, high key and low-key lighting and the basics of sound recording using microphones and sound manipulation.

UNIT IV: POST PRODUCTION METHODS

12

Editing Techniques with the grammar of editing in cutting techniques like match cut, flash cut, subliminal cut, cross cut and its styles like discontinuity editing, elliptical editing, jump cut, invisible editing, overlapping editing, line cut, split editing and its transitions. Editing synchronization with the visual and the sound track.

UNIT V: TROUBLESHOOTING PRODUCTION PROBLEMS

12

Facing production problems and the three phases of production. The problems in each phase of production and their solution in scheduling, budgeting, breakdown of scripts, contracts and legal issues. The importance of team work and ethics.

Total: 60 Hrs**TEXT BOOKS:**

1. Herbert Zettl, "The Television Production Handbook", Cengage Publisher, Edition 2011.
2. Patricia Holland, "The Television Handbook", Routledge publisher, Edition 1997.

REFERENCE BOOKS:

1. Millerson, G. H, "Effective TV Production, Focal Press Publisher, Edition 1993.
2. P. Javis, "Shooting on Location", BBC Television Training, Borchamwood, 1986.

Course objective: To learn the techniques and understand the various methods, develop skills and techniques to create special effects. And to know the interface used in creating visual effects.

Course Outcome:

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

CO 1. Understand the importance of effects in film making process

CO 2. Create effects from Maya particles

CO 3. Create a fire, water, clouds and smoke effects for VFX

CO 4. Create a rigid body simulation from different objects

CO 5. Create an environment design from paint effects.

UNIT I PAINT EFFECTS 13

Introduction to visor, Designing Paint Effects, coloring paints, Designing Trees and green effects, Designing Weather and seasons, Effects on seasons, Designing Glass image, Designing, Different glass reflection, Designing Glow Effects, Liquid Effects and reflection design

UNIT II PARTICLES AND FIELDS 17

Introduction to dynamics and explaining how it uses the rule of physics to simulate natural forces, overview of particles such as dots, streaks, spheres, blobby surfaces and other item, animating particle by using different types of fields, using different types of emitters to create effects such as steam, rain, fire, snow, cloud, smoke and explosion.

UNIT III SOFT BODIES AND RIGID BODIES 12

Understanding the behavior of soft body and rigid body, Rigid body Constraints of like nail, pin, hinge, barrier and spring. Painting the soft body weights tool, Change or turning off the constrain type, Convert rigid body animation to keys.

UNIT IV FLUID EFFECTS 18

Introduction to Fluid Effects, Coloring the fluids, Designing Clouds Background, Designing Fog Effects, Explosion Effects and Fire Effects with flames, Space Effects and designs, Designing Thick Smoke, Water effects with fluids, Fluid stimulation for special effects.

UNIT V SPECIAL EFFECTS 15

Designing Special Effects, designing effects of Fur and shape, Designing Fur Effects, Designing Cloth & Clothes and effects, Fire effects, Lighting, Shatter, Curve flow, Surface flow, Basics of ndynamics and ncloth, Special effects rendering techniques.

Total: 75 Hrs

TEXT BOOKS:

1. Doug Kelly, "Digital Compositing in Depth", Carioles Publication, 2003.
2. Angie Taylor, "Creative After Effects 5.0", Focal Press, 2002.

REFERENCES BOOKS:

1. Ron Brinkman, "The Art and Science of Digital Compositing: Techniques for Visual Effects, Animation and Motion Graphics", Morgan Kaufmann Publishers, Second Edition, 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.

LIGHTING AND RENDERING

0042

Course objective: In this paper students will learn how to use lights in the 3D. They will take the preferred output from the software for the other works like gaming, film and education.

Course Outcome:

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

CO 1. Understand the importance of lighting for getting Photorealistic out

CO 2. Lighting the 3D environment for different design layout

CO 3. Learn different type lightings and light moods

CO 4. Learn the light raytracing technic inside 3D environment

CO 5. Learn the process of illumination and shaders that are involved in the rendering.

UNIT I UNDERSTANDING THE BASIC OF LIGHTING 12

Understanding the Art of Lighting. Understanding the color and composition, Understanding Lighting with the basic of Color and composition. 3d Lighting, Omni, spot light, direct light. Introducing Modifiers and Using the Modifier Stack. Drawing and Editing 2D Splines and Shapes - Modeling with Polygon.

UNIT II KNOWING THE DIFFERENT TYPES OF LIGHTING AND OBJECT TRANSFORMING 12

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. Creating and Editing Primitive Objects and Selecting Objects. Setting Object Properties, Using Layers and the Scene Explorer and Transforming Objects. Adjusting Pivoting and Aligning and Snapping, Cloning Objects and Creating Object Arrays

UNIT III OTHER TYPE OF LIGHTS ADJUSTMENT FOR RIGGING. 12

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. Working with the Schematic View, Using Animation Layers and the Motion Mixer to Understanding Rigging and Working with Bones

UNIT IV RAYTRACING WITH MENTAL RAY 12

Raytracing with 3D Software and Mental Ray, Raytracing with Mental Ray - Reproducing water- Reproducing Glass- Reproducing Marble floor - Working with HDRI, Image based lighting, Physical sunlight.

UNIT V ABOUT ILLUMINATION AND SHADERS

12

Working with global illumination. Final gather and mental ray shaders, Understanding indirect Illumination. Applying Caustics and Applying Mental Ray Shaders. Using Final Gather and Fine-Tuning Mental Ray Shaders.

Total: 60 Hrs

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.

PRE-PRODUCTION CONCEPTS

4004

Course objective: Pre-production is like a blue-print for a building. It is very important to have a detailed planning for the production to achieve high standard, which is covered in this paper. Students will get a clear knowledge about how various steps involved in pre-production are carried out.

Course Outcome:

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

CO 1. Understand the importance of Script and budget preparation.

CO 2. Story discussion with director and producer.

CO 3. Learn and design the visual effects shots based on film budget

CO 4. Learn the visual effects technic from various departments

CO 5. Learn the process of CG, Game, previz, projection for movie making.

UNIT I BREAKING DOWN A SCRIPT- BUDGETING

13

Ballpark budget, more detailed budgets, Biding, Plate photography, Temp screenings, reviewing bids, Contracts, rebidding during shooting, rebidding in post, Monitoring the budget and schedule, Keeping the budget down.

UNIT II WORKING WITH DIRECTOR, PRODUCER, PRODUCTION DEPT

11

Demo reel, the meeting, Moving forward, Production design, Camera, Special effects, Stunts, Wardrobe, Makeup, Production, Visual effects, Editorials, Locations, Production meeting.

UNIT III DESIGNING VISUAL EFFECTS SHOTS

12

Guidelines for directors, Storyboards, Previz, Objective of the shot, Concept art, Continuity, Photorealism, Original concepts, Budget, Reality and magic, Camera angles, Framing, Scale, Detail, Speed, Scaled images, Depth of field, Sequence of shots, Camera motion, Action pacing, CG characters, Creatures and character design.

UNIT IV VISUAL EFFECTS TECHNIQUES

12

Development of previz techniques using 3d applications, The application of previz, Postviz, The perils of previz, The role of the VFX supervisor in previz.

UNIT V THE FUTURE OF PREVIS: ADVANCED TECHNIQUES

12

Environment input, Character input, Gaming techniques, On set previz, Lighting previz, 3D stereo previz, Virtual production, Camera angle projection, Advanced tips and techniques for previz.

Total: 60 Hrs

TEXT BOOKS:

1. Ranjit Singh, "The Art of Animation Production Management", MacMillan India, First Edition, 2013.
3. Williams, R, "The Animator's Survival Kit", Faber and Faber Ltd, First Edition, 2001.

For a period of two months (150 Hours of Work Experience), students will be attached to the media industry on an Internship basis, with the objective to expose them to actual situations and day to day functioning of the media industry. The interns will be exposed to the particular area of specialization already chosen. The faculty of the department in coordination will closely monitor progress of the interns with the guides in the media industry.

A report and a viva voce will be complete the process of evaluation.

Project reviews will be conducted during the internship project on regular intervals which would consist of.

- Weekly Report
- Presentation
- Final Report
- Submission of the presentation and final Report Presentation with the Aids and with works of the students.

Viva through the presentation and subject knowledge.

POST PRODUCTION CONCEPTS

4004

Course objective: This course explores the whole production process techniques. After taking this course, the students will be able to attain skills in managing animation project. They will get a clear idea about the pre-production, production and post-production.

Course Outcome:

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

CO 1. Understand the Pipeline function for each department

CO 2. Gain the knowledge and importance of work approval with team leader and supervisor

CO 3. Learn and process of 2D and 3D design process to avoid the project risk.

CO 4. Identification of various artifacts in the various production processes in the different types of animation

CO 5. Learn, how things should move and what the importance of each of the events is in the process.

UNIT I PIPELINE

13

This unit deals with the concept of pipeline and different stages of graphics pipeline. This will start them on the process of working in an environment with other team members. It includes pre-production, production and post-production.

UNIT II INTERACTIONS

11

This unit deals with the interactions between various teams in a project, the significance of communication and an introduction into the approval methodologies. Team members interact their leader or supervisor.

UNIT III DEPENDANCIES

12

This unit deals with the dependencies between the teams in projects varying from simple 2D animations to complex film production in 3D. During this unit, they will know how the risks affect project success and the pitfalls that need to be avoided.

UNIT IV ARTIFACTS

12

This unit deals with the identification of various artifacts in the various production processes in the different types of animation. This will help them organize their work better in order to be an effective project team member.

UNIT V PROCESS**12**

This unit deals with the overall process and explains how things should move and what the importance of each of the events is in the process. This also deals with the case study in any one of the production processes.

Total: 60 Hrs**TEXT BOOKS:**

1. Ranjit Singh, "The Art of Animation Production Management", MacMillan India, First Edition, 2013.
2. Williams, R, "The Animator's Survival Kit", Faber and Faber Ltd, First Edition, 2001.

REFERENCE BOOKS:

1. Kupeeberg, M, "A Guide to Computer Animation", Focal Press, First Edition, 2002.
2. Scott, J, "How to write for Animation", The Overlook Press, First Edition, 2002.

SHOOTING TECHNIQUES & SPECIAL EFFECTS

0 0 4 2

Course objective: The objective of this course is to gain the complete domain knowledge on visual effects work and to analyze the level of the work involved.

UNIT I: DIGITAL MATTING METHODS AND TOOLS 10

Green vs Blue screen, Difference matte vs Chroma key, light evolution, shadow catcher, light reflectors, hardware matte compositors and chroma keyers, compositing software and plugins, introduction to live Chroma keying.

UNIT II: TRACK POINTS AND ITS USES 15

Track points preparations, placing the track points, distance maintains, points distance calculation, log sheet for track points, calculating from different focal length, testing the track points with camera movements.

UNIT III: SPECIAL MAKEUP 15

In this unit, student will learn what is tracking point and why it is used for shooting the visual effects shots. Blood splattering, damage face, damage body, hair makeup, fire with body, old age look, flush creation.

UNIT IV: SPECIAL EFFECTS 15

In this unit, student will explore the difference between Visual Effects and Special Effects; also we teach how to shoot the most commonly used special effects like bullet hits, Practical explosions, rain, Fire, Car gags of all sorts, flying rigs, dust etc.

UNIT V: COMPOSITING THE FOOTAGE 5

Getting a great matte, color balancing, fixing problem on the shot, working with virtual sets, motion tracking and matchmoving, removing track points, fill holes, shadow matching, rough composite, complex composites.

Total: 60 Hrs

TEXT BOOKS:

1. L.B. Abbott, "Special Effects: Wire Tape and Rubber Band Styles", ASC Holding Corp, 1984.
2. Jeff Foster, "The Green Screen Handbook" Focal Press, Second Edition, 2014.

REFERENCE BOOKS:

1. Raymond Fielding, "Techniques of Special Effects of Cinematography", Focal Press, Fourth Sub edition, 1985.
2. Richard Rickitt, "Special Effects" Virgin Books, 2000.

Course objective: Students will understand the importance of new media technology and learn about the production of effective educational and entertainment programs for different fields.

Course Outcome:

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

CO1: understand the essential relationship media shares with educational system in India.

CO2: acquire a significant knowledge of various types of Educational programmes produced by media and its role and usage in education system.

CO3: bring out the various nuances of web media and technologies and their use in Education.

CO4: have an in-depth knowledge about the technical aspects of television and satellites.

CO5: able to understand the use of television and satellite for providing education through projects like SITE, Gyandarshaan, Vyas, and Ekalvya.

CO6: a thorough knowledge of communication through mobile, by understanding the mobile communication pattern, various technologies in mobile, and mobile applications.

CO7: have a clear understanding of the elements of Broadcasting technology along with its process and other emerging technologies

UNIT I: EDUCATION FOR MEDIA 12

Education - Importance of Education, Indian Education System, Teaching - Learning Process; Formal/Non - formal education, Regular, Distance/Open Education, Social Education, Modes of Education delivery, Synchronous and Asynchronous Learning. Usage of Media in Education, Role and Importance of Media, Personalized and Mass Media for Education.

UNIT II: INTERNET AND WEB FOR EDUCATION 12

Internet and Web media for Education, Technologies, Connectivity, ERNET, Web Content Production, VOIP, Webinars, Interactivity, Internet TV, Video conferencing, Web - based Instruction, Social Web. Cable Communication, Cable casting, OFC, Cable telecommunication, cable internet service.

UNIT III: TELEVISION AND SATELLITES FOR EDUCATION 12

Experiments in TV, International and Indian Experiences, Projects, SITE, Gyandarshan, Vyas, Ekalvya, Video Programs for Education, Video/TV Program Production - Planning, Scripting, Production, Execution, Feedback, Video - Conferencing, Multicast, Simulcast,

Video streaming, Video on Demand. Various Satellite used for Education, Indian and International Issues, EDUSAT - Network configuration - space and ground segments, Implementation, EDUSAT Usage in Educational Institutes and Universities.

UNIT IV: MOBILE COMMUNICATIONS **12**

Mobile communication, CDMA, GSM technology, mobile communication pattern, satellite telephony, 3G and 4G technology in mobile, Smartphone video telephony, mobile application.

UNIT V: BROADCASTING TECHNOLOGY **12**

Broadcasting technology, master control room, production control room, OB Van, OB Trucks, transmission technology, computer assisted communication and other emerging technologies.

Total: 60 Hrs.

TEXT BOOKS:

1. Anton et.al, "Using Quark Xpress 4", Indianapolis: Que Publication, 2007.
2. Bangia & Ramash, "Learning Corel Draw 12", Kanna Book Publ.Co. Pvt Ltd, 2008.
3. Nick & Heap Ray & Thomas Geoff, "Information technology & society", Sage Publications, 2007.

REFERENCE BOOK:

1. Snell Ned, Temple Bob & Clork T.Michoel, "Internet and web basics all in one", Indianapolis: Pearson Educations, 2003.

Course objective: To make the students to prepare show reel for producing in industry and for interview purposes.

Students are expected to submit the projects on any one of the following

1. VFX
 - a) Matte painting (Set extension)
 - b) Match move and 3D Compositing
 - c) Title/Logo Animation
- OR
2. VFX BASED SHORT FILM (minimum 3 minutes).

Course Outcome:

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

CO 1. Understand the importance of DEMO REEL

CO 2. Planning the demo reel based of VFX technical works

CO 3. Preparing the ideas using storyboard or concept art

CO 4. Edit the shot after shooting and adding VFX works

CO 5. Finalizing the shots with correction and make demo reel

UNIT I CONCEPT FOR THE FILM

15

Students are expected to come with a concept that will be employing all the modern techniques and tools, that they have studied. It will be important to make a meaningful and interesting concept, even if the duration of the film is few minutes.

UNIT II STORY BOARDING and PRE-PRODUCTION

15

The Story line is briefed in the paper as drawing with the shorts and scenes. Each shot should have description of camera angles and assets. Storyboard should be according to the story.

UNIT III SHOOT PLANNING

Students will discuss with the team that will consists of camera man, VFX experts and a shooting coordinator to finalize the location of the shoot, artists, equipment needs, permissions etc.

UNIT IV POST_PRODUCTION

15

Once the shoot is over, the footage is captured and edited. Then VFX is executed as per the story board, with multiple iterations till the final output is achieved. The VFX footage is integrated along with the rest of the footage. The audio in the form of Dubbing, Sound Effects and Music is added and mixed to give the final shape to the film.

UNIT V FINAL FILM

15

The final version of the film is rendered in the format that will be delivered to the studios in the form of Internet-Portal uploads (YouTube, Vimeo), and also stored in pen-drive / DVD to be sent along with the resume.

Total: 60 Hrs

For a period of two months (150 Hours of Work Experience), students will be attached to the media industry on an Internship basis, with the objective to expose them to actual situations and day to day functioning of the media industry. The interns will be exposed to the particular area of specialization already chosen. The faculty of the department in coordination will closely monitor progress of the interns with the guides in the media industry.

A report and a viva voce will be complete the process of evaluation. Project reviews will be conducted during the internship project on regular intervals which would consist of.

- Weekly Report
- Presentation
- Final Report
- Submission of the presentation and final Report Presentation with the Aids and with works of the students.

Viva through the presentation and subject knowledge.

SYLLABUS
DISCIPLINE SPECIFIC ELECTIVE
COURSES

Course objective: The aim of this course is to provide students with an introduction to the history, social and cultural impact, and aesthetic nature of film. Emphasizing how films produce meanings for viewers, this course will examine the ways that editing, mise-en-scene, sound, color, shot composition, and camera movement, along with such elements as performance, directorial style, and genre, shape our experience of seeing movies. Along with an attention to film language and narrative, this course will also look at key periods and events in film history.

Course Outcome:

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

CO 1. Understand the Film art and real functioning

CO 2. Gain the knowledge of Film music, Film art, Film painting, Film photography

CO 3. Learn and process Story telling

CO 4. Gain the knowledge of Historical and Cultural Study of Indian Cinema

CO 5. Learn, How to Analyzing the Film with various factor.

UNIT I AN OVERVIEW

10

Introduction to film as an art and the nature of art, the spectrum of abstraction and the modes of discourse. The “Rapports de production “where the totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness and Films as Mass Communication.

UNIT II FILM RELATION WITH OTHER ARTS

10

This unit describes the relationship of Film and the other Arts in related to Film photography and painting, Film and the Novel, Film and theater, Film and Music, Film and environment Arts, Films and folk media.

UNIT III HISTORICAL, THEORETICAL AND CRITICAL APPROACH TO FILM

15

History of World Cinema in a Narrative Form of both Linear Perspective and Non-Linear perspective. And Formation of Genres in association with Melodrama, Family and Gender. Standardization of Film Practices and its basic Techniques. Semiotic Analysis of its Codes. Factors Motivating such Standardization. Mode of production in the Studio System and also the evolution of the Hollywood Film Paradigm.

UNIT IV HISTORICAL AND CULTURAL STUDY OF INDIAN CINEMA

15

The study of history of Indian Cinema covering the whole Indian and Regional Cinema with its history and development. Next the unit discusses the Cinema movements like Phalke and the Swadeshi enterprise and the mythological factors connected with the early genres like social, historical, stunt film and the Saint Films.

UNIT V FILM ANALYSIS**10**

The student is taught to know about the Language of film and its tools, its Signs and the physiology of film perception in terms of denotative and connotative meaning with Syntax, Codes, mis-en scene, the framed image, the diachronic shot, sound, image, Elements of Films, Visual Language, Structure and content. And a brief study of Time components of film with spatial components, Creative choices, Macro and micro elements of film language.

Total: 60 Hrs**TEXT BOOKS:**

5. Keval J. Kumar, "Mass Communication in India", Jaico Publishing, 2000.
6. Denis McQuail "Mass Communication Theory", Vistaar Publications, 2005

REFERENCE BOOKS:

1. Barry Keith Grant, "The Film Studies Dictionary", Dum Publications, Edition III, Year 2008
2. Emmons, "Film and television: a guide to the reference literature", R, ACEL Release, First Edition, Year 2009, ISBN: 1563089149

2D TO 3D CONVERSION

0 0 4 2

Course objective: This course introduces the Students into the craft and art of Acting & Direction for Animation followed by Hollywood paradigms and cutting-edge concepts so that the student can begin conceptualizing a full-length Animated movie. The Students are trained to develop the skills of critical analysis story, skills needed to pitch a treatment and work collaboratively and most importantly the skills that awaken imagination, originality and inventiveness in the dramatic medium to helps them to direct the characterizations of animation

Course Outcome:

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

CO 1. Understand the concept of stereoscopic and stereoscopic vision

CO 2. Learn the process disparity and convergence

CO 3. Learn the stereoscopic 3d rigs and 3d visual effects, 2d to 3d conversion

CO 4. Understand 3d Viewing principles and 3d theatrical projection

CO 5. Make 3D filmmaking and sound design

UNIT I CREATING FAUX 3D

10

Concept overview, Image extraction, Preparing the background and setting its stereo depth, selecting a background image, the foreground image, Matching the image sizes, Installing the foreground image, Moving the foreground images into place, Multiple layers, Combining 2d and 3D images

UNIT II 2D TO 3D CONVERSION

15

Choosing a suitable image resolution, Preparing the image, Creating the copy, Setting up the work window, Choosing the viewing method and work image, Setting up the two views, Visualizing the 3d conversion process, Selecting and shifting, Shifting the selected area, Shifting thin objects, Isolated objects, Shifting vertical objects and planes, Camera tilted down or up, Object at an angle and camera tilted, Working with sets, Viewing your progress, Saving selection lines, Locking layers together.

UNIT III SPHERICAL CONVERSION

10

Spheres and cylinders, placing a selection line around a circular object, the theory and method, applying the calculated shift radius, Contraction calculator.

UNIT IV DISPLACEMENT MAPPING 2D TO 3D ANAGLYPH

15

Using photoshop displacement mapping, choosing an appropriate image, Selecting the layers, Building the displacement map, Creating the displacement map file, Softening the depth map, Making the anaglyph 3D, Setting the stereo window, Parallel or cross view pairs, using photoshop displacement mapping, the point of departure, Making the stereo pairs, Setting the stereo window, Setup for direct anaglyphic conversion, Selecting and shifting.

UNIT V EXTRACTING 3D OBJECT FROM ITS BACKGROUND 10

The setup, Comparing edges, Magic wand extractions, Edge glow. Reducing hard edges, the monocular edge zone, avoiding fish scale, Visual confusion, finishing the stereo, Masking, Final alignment, Final trimming.

Total: 60 Hrs.

TEXT BOOKS:

1. Mastering 2d to 3d Conversion by Michael Beech

REFERENCE BOOK:

1. Digital 3D Stereo Guide by Michael Beech

STREAMING MEDIA

4004

Course objective: This course is designed to give good exposure to the process of video and audio streaming. As streaming, has become mainstream distribution channel, and will remain so in the future, students will benefit from this course, as it will be a backbone for any TV Channel, Movie distribution companies, and even regular companies who have communication channels with their customers.

Course Outcome:

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

CO 1. Understand the process of media streaming

CO 2. Understand the process of audio and video formats, compression

CO 3. Understand the process of media encoding technic

CO 4. Learn the process stream serving and webcasting

CO 5. Learn the process associated technologies and applications

UNIT I: STREAMING INTRODUCTION 12

Streaming Introduction, Convergence, Applications, Network layers, Telecommunications, Web graphics, Proprietary tools, Web Servers.

UNIT II: VIDEO AUDIO FORMATS AND COMPRESSION 12

Scanning, Color Space Conversion, Digital component coding, videotape formats, time code, Interconnection standards, High definition, compression basics, compression algorithms, discrete cosine transform, compression codecs, MPEG compression, proprietary architectures, Audio compression, Digital audio, ear and psychoacoustics, human voice, lossy compression, audio codecs, codec standards, proprietary codecs, open source codecs.

UNIT III: STREAMING MEDIA AND ENCODING 12

Introduction, the applications of streaming, the streaming architecture, bandwidth, bits & bytes, proprietary codec architectures, video capture, compression, encoding enhancements, encoding products, limits of file sizes, audio formats, audio capture, audio encoding, file formats, video processing, and audio processing.

UNIT IV: STREAM SERVING AND WEBCASTING**12**

Streaming, webcasting, on-demand serving, inserting advertisements, playlists, logging and statistics, proprietary server architectures, server deployment, planning a webcast, video capture, graphics, audio capture, encoding, media players, portals, players and plug-ins, digital rights management

UNIT V: ASSOCIATED TECHNOLOGIES AND APPLICATIONS**12**

The value chain, right management parties, system integration, encryption, watermarking, security, XrML, DRM products. MPEG-4, content delivery networks, corporate intranets, improving the QoS, satellite delivery, applications for streaming media.

Total: 60 hrs.**TEXT BOOKS:**

1. David Austerberry:” The Technology of Video and Audio Streaming” Second Edition

ADVANCED ROTOSCOPY

0 0 4 2

Course Objective: The objective of the course is to learn the tools and techniques for doing Rotoscopy in the VFX projects. Considering the separation of various layers in the footage, that will be important for compositing, 2D to 3D conversion, students will be learning how to achieve good Rotoscopes such that the advanced VFX artists will be able to complete the work based on this stage.

Course Outcome:

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

CO 1. Understand the importance of rotoscopy.

CO 2. Understand the process are involved in the rotoscopy

CO 3. Learn the technical part of easy rotoscoping

CO 4. Learn how to put a rotoscoping for human, hair details, and cloth movements

UNIT I ROTOSCOPY BASICS 12

Roto tools, Keyboard shortcuts, establish specifics, Edge and shape, Positive space, Motion paths, Keying, Timeline keyframing, Motion based roto, Approaching the shot, creating splines, Edge consistency, Object mode transforms, Interpolation and linear movement, Motion blur, Transition between shapes with motion blur, Checking your matte(Jitter).

UNIT II TRACKING AND ROTO 12

Tracking and scale, Tracking and rotation, multiple transforms, Corner pinning, Averaging tracks, stabilizing footage, planar tracking, smoothing a key frame, reverse matchmove, linking splines, fine tuning shapes.

UNIT III ROTO AND THE HUMAN FIGURE 12

Isolating extremities, Hands, Overlap, Fixer shapes, Faces and heads, identify the new shapes, calculating the frames, cut the old the shapes, in-between the shapes, split up the splines, using planar tracking conforming the roto.

UNIT IV HAIR 12

Base shapes, Standouts, Minimum level of detail, Motion paths and motion blur, edge deduction, edge calculation, matte extraction, Photoshop cleanup, spill suppression, manual tracing, luma keying.

UNIT V HUMAN MOVEMENT AND CLOTHING 12

Big human movements, subtle human movement, Tracking and the human figure, Shape breakdown, Consistent point placement, Secondary motion, in-between the shapes, split up the splines, using planar tracking conforming the roto.

Total: 60 Hrs

TEXT BOOKS:

1. Rotoscoping: Techniques and Tools by Benjamin Bratt

REFERENCE BOOKS:

2. The Art of Roto: 2011 By Mike Seymour.

THEORY FOR FX

4004

Course Objective: To learn the basics of dynamics of real world through simulation. Various parameters such as gravity, forces such as wind, air along with other phenomena such as friction and collision. Students will be able to apply these learnings to simulation and animation software, to get realistic simulations.

Course Outcome:

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

CO 1. Understand the physics fundamentals and its uses

CO 2. Understand the particle mathematical function for various uses.

CO 3. Learn the fluid physics system from various simulations.

CO 4. Learn the rigid body function

CO 5. Defining the physics by means object collision, friction for various simulations

UNIT I PARTICLE PHYSICS

12

Introduction to physics, Kinematics, Force, Gravitation, Momentum, Angular momentum, Velocity, Speed, Acceleration, The mathematics of particles, the laws of motion, and the particle physics engine.

UNIT II ELEMENTARY MECHANICS

12

Dynamics, Coordinates, Newton's laws, Motion in one dimension, Motion in two dimensions, Circular motions, Adding general forces, springs and spring like things, hard constraints, the mass aggregate physics engine.

UNIT III RIGID BODY PHYSICS

12

The mathematics of rotations, Laws of motion of rigid bodies, the rigid body physics engine. Friction, Drag forces, Torque, Rotational coordinates in one dimension, the moment of inertia, Center of gravity.

UNIT IV VECTOR TORQUE AND ANGULAR MOMENTUM

12

Vector torque, Total torque, The angular momentum of a symmetric rotating rigid object, Angular momentum conservation, Angular momentum of an asymmetric rotating rigid object.

UNIT V FLUID PHYSICS

12

Characteristic of a fluid, Density, Specific gravity, specific volume, Viscosity, surface tension, compressibility, characteristic of a perfect gas, Fluid statics, Pressure, Fundamentals of laws, Steady flow and unsteady flow, Laminar flow and turbulent flow.

Total: 60 Hrs

TEXT BOOKS:

- 1.Game Physics Engine Development (Second Edition) by Ian Millington.
- 2.Physics for Game Developers, 2nd Edition by David M Bourg, Bryan Bywalec

REFERENCE BOOKS:

- 1.Physics for Game Programmers by Grant Palmer

ADVANCED MATCHMOVE

0 0 4 2

Course objective: Compositing is the combining of visual elements from separate sources into single images, often to create the illusion that all those elements are parts of the same scene. Digital compositing is an essential part of visual effects that are everywhere in the entertainment industry today.

Course Outcome:

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

CO 1. Understand the importance of match move in the VFX industry

CO 2. Learn the data collection process for VFX

CO 3. Learn the process are involved in the tracking

CO 4. Learn the process of how the 3D camera are fitting the scene

CO 5. Difference ate the process object tracking vs camera tracking.

UNIT I BASICS OF MATCHMOVING

10

Understanding the matchmoving process, Evaluating the footage, applying information, Defining the camera, Fitting the set, Testing the matchmove, Delivering the scene, Matchmoving in the production pipeline, Gathering the data, setting up the camera, adding rough geometry and refining the camera, Creating camera rig.

UNIT II 2D TRACKING, 3D CALIBRATION, AUTOMATIC TRACKING

15

Understanding the 2D tracking process, Exploring the anatomy of 2d track, Track placement, Sample the 3d space, Optimizing the plate for 2D tracking, Making the first track in syntheyes.

UNIT III CAMERA, SET FITTING

15

Lenses, Focal length, Focus, Nodality, Film backs, CMOS, CCD, and rolling shutter, Lens distortion, Anamorphic distortion, Capture and digitization, Fitting the camera, Checking the matchmove, Fitting the set, Moving the camera, Scaling the camera, creating camera rigs, Getting camera information, Tracking markers on green screen, Tracking markers on set pieces, Tracking markers on green screen

UNIT IV MATCHAMATION, TROUBLESHOOTINGS

15

Understanding the basic technique, Setting the initial pose, Using nonlinear animation technique. Analyzing the movement, Making the first pass, making additional passes and tweaks, making model changes, working with imperfect data, performing effective troubleshooting, Check the camera motion, Check set placement and fitting, Check for plate issues, Diagnosing the problem, using advanced 2d tracking, Using constraints.

UNIT V OBJECT TRACKING**5**

The object tracking process, tracking workflow, converting a camera track to an object track, 2D tracking problems, Difficult object motion, Tracking human faces, Geometry tracking, Advanced object tracking.

Total: 60 Hhrs**TEXT BOOKS:**

1. Matchmoving: The Invisible Art of Camera Trac by Tim Dobbert.
2. Steve Wright, "Composting Visual Effects", Focal Press; Second Edition, 2011

REFERENCE BOOKS:

1. Steve Wright "Digital Compositing for Film and Video", Focal Press; Third Edition, 2010
2. Ron Brinkmann, "The Art and Science of Digital Compositing", Morgan Kaufmann Publishers In; Second Revised Edition, 2008

COLOR GRADING

0042

Course objective: Digital Intermediate (DI) is one of today's most exciting and fastest growing technologies in digital postproduction of motion picture films.

Course Outcome:

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

CO1: Understanding the various types of projection and its technology used in theatres

CO2: Students explore how the Primary and Secondary color correction affects the whole image intensities of film

CO3: Explore the color of Bit Depth with Look Up Table (LUT).

CO4: Explore other techniques like rotoscopy and keying methods to enhance the color grading in films.

CO5: Understanding the complete methodology of post-production and color grading process.

UNIT I TELECINE COLORING WORKS 10

In this unit we teach about Cathode-ray tube (CRT) system, an electron beam is projected at a phosphor-coated envelope, producing a spot of light the size of a single pixel.

UNIT II PRIMARY AND SECONDARY COLOR CORRECTIONS 15

In this unit, Students explore how the Primary and Secondary color correction affects the whole image intensities of RGB and highlights of the entire frame, with these we teach the advanced techniques of color correction and well established digital painting techniques in the era of digital cinematography.

UNIT III MASK, MATTE, TRACK 15

In this unit, student will learn the evolution of digital color correction tools with advanced technique of using point shapes to isolate color adjustment in the specific area of the image. We also teach color keying to isolate the colors in the image. We teach special training for automation on tracking the image in term of color to save the time in the production process.

UNIT IV DIGITAL INTERMEDIATE PROCESS 10

In this unit, student will explore the color of Bit Depth with Look Up Table (LUT). We teach about the Color grading is the process of altering and enhancing the color of a motion picture, video image, or still images either electronically, photo-chemically or digitally.

UNIT V PRESERVING THE QUALITY OF THE IMAGE 10

After learning this program, students will gain knowledge about the DI importance and the scope of work. They will be expert in color grading.

Total: 60 Hrs

TEXT BOOK:

1. Steve Hullfish, “the Art and Technique of Digital Color Correction”, 1st Edition

REFERENCE BOOKS:

1. Jack James, “Digital Intermediates for Film and Video”, Kindle Edition
2. Alexis Van Hurkman, “Creative Grading Techniques for Film and Video”, Kindle Edition.

UNIT V SCRIPT FORMATS**12**

This unit provides an understanding on various types of script formats and the techniques involved in developing scripts. Students can follow existing scripts to get the better output.

Total: 60 Hrs**TEXT BOOKS:**

1. Cooper, pat, and ken dancyger, “writing the short film”,USA: focal press”, second edition, 2000.
2. Phillips, William “Writing short scripts”.USA: Syracuse university press. Second edition, 1999.

REFERENCE BOOK:

1. Zettle, Herbert, “TelevisionProduction Handbook”, USA: words worth, Tenth Edition, 2010.

LIVE CAMERA OPERATION

4004

Course objective: Live camera operation is becoming more and more affordable and accessible to more people. This course is aimed at making students with various basic technologies that are essential to know in this operation, various type signals and standards, hardware used, various creative and aesthetics involved the live production are covered.

Course Outcome:

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

CO 1. Learn the basic of camera and its shooting resolutions.

CO 2. Learn the digital video standards and file formats

CO 3. Learn the types of camera and its benefits

CO 4. Learn the different type of camera switcher and its operations workflow

CO 5. Handling the multi camera workflow

CO 6. Learn the camera recording and streaming methods

UNIT I: INTRODUCTION TO CAMERA SIGNALS

12

Introduction to SD, HD, UHD, 4K & 8K Video formats, component and composite video in NTSC and PAL, digital video interfaces, analog SDTV sync, genlock, JPEG and M-JPEG compression, DV and MPEG-2 compression

UNIT II: CAMERA TYPES

12

Case study of 4K Professional cameras, HD Professional cameras, DSLR cameras, Aerial Filming cameras, lens characteristics, camera controls, camera mounting and movement, field of view, picture composition.

UNIT III: VIDEO SWITCHERS

12

Switcher basics, fundamentals of switcher design, operational techniques for video switcher, advanced switcher function.

UNIT IV: CAMERA SWITCHING AND MONITORING

12

Switching takes or cuts, mixing video signals, from mixes to special effects, key effects, Complex effects and transitions, digital video effects generators

UNIT V: VIDEO RECORDING AND PLAYBACK

12

Video recording technologies, videotape recording, videotape formats, video recording devices, tapeless storage technologies, video servers, preparing video for different uses

Total: 60 hrs

TEXT BOOK:

1. Ronald J. Compesi, Jaime S. Gomez, "Introduction to video Production: Studio, Field, and Beyond"
2. Charles poynton, "Digital Video and HD Algorithms and Interfaces"
3. James C Foust, "Video Production: Disciplines and Techniques" 11th Edition
4. Leonard C. Shyles, "The Art of Video Production"

SYLLABUS
ABILITY ENHANCEMENT
COMPULSORY COURSES

Course objective: To train the students in 3d Animation using advanced software's and plug-ins. And to train the students to meet the needs of the industry.

UNIT I INTRODUCTION TO ANIMATION 12

History of animation, Animation principle, Introduction of animation, Line art sketching, Shading, Human anatomy, character model sheet, Breakdown character, Perspective drawings, Clay modeling, Cell animation, color theory, Painting, Story board, Concept art sketching, Storytelling, Acting and Direction, Cinematography, Character design and development,

UNIT II 2D GRAPHIC AND ANIMATION 12

Advance graphic design, web designing, Boucher, Logo designing. visiting card design, T-shirt design, Manipulation, Digital drawing, Concept art, bouncing ball, walk cycle, run cycle, Tweening, Animation banner, Basic actionscript, 2d animation show reel.

UNIT III 3D ANIMATION 12

Nurbs Modeling, Polygon Modeling, Animation, Rigging, Texturing, Lightning, rendering, Lightning Animation, Dynamics, Camera, Camera Animation, Text Animation, Mel and Python basic script, Sculpting, UV mapping, 3D Animation short film. 3d show reel

UNIT IV EDITING AND ACTING 10

History of editing, Linear and non-Linear, Montage, Clapboard, Crosscut, Editing techniques, Parallel cut, Offline editing, Online editing, EDL Out, Effects, Title design. Sound editing, Audio video synchronization, Render output, acting and facial exposition

UNIT V COMPOSITING 14

Rotoscopy, Retouching, Chroma keying, Crowd replace, Camera mapping, Fluid dynamics, Sky replacement, 2D tracking, 3D tracking, Telecine, Color sampling, Color grade, Matching, Lighting, Keying, Shadow extraction, 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.

Total: 60 Hrs

TEXT BOOKS:

1. Kupeeberg, M, "A Guide to Computer Animation", Focal Press, First Edition, 2002.
2. Williams, R, "The Animator's Survival Kit", Faber and Faber Ltd, First Edition, 2001.

REFERENCE BOOKS:

1. Scott, J, "How to write for Animation", The Overlook Press, First Edition, 2002.
2. Ranjit Singh, "The Art of Animation Production Management", MacMillan India, First Edition, 2013.

ENVIRONMENTAL STUDIES PAPER I

2002

Course Objective: This course provides knowledge on various environmental resources and issues facing the world. It deals with natural resources, eco system, biodiversity and environmental pollution.

UNIT I INTRODUCTION 06
The multidisciplinary nature of Environment of studies – Definition - Scope and Importance - Need for Public Awareness.

UNIT II NATURAL RESOURCES 06
Natural resources and associated problem - Renewable and Non- Renewable resources: - Forest Resources-Mineral Resources-Food Resources, Energy Resources. Land Resources; Role of an individual in conservation of natural resources- Equitable use of resources of sustainable lifestyles.

UNIT III ECO SYSTEM 06
Concepts of an Ecosystem - Structure and Functions of an Ecosystem - Procedures, Consumers and Decomposers - Energy flow in the ecosystem - Food chains, Food webs and ecological pyramids - Introduction, types, Characteristics features - Structures and functions of the following ecosystem: Forest ecosystem, Grass land ecosystem, Desert ecosystem, Aquatic ecosystem.

UNIT IV Biodiversity and Its Conservation 06
Introduction - Definition, genetic, species and ecosystem diversity - Bio-geographical classification of India - Value of Bio-diversity - Bio-diversity at global, National and Local levels - India s a mega-diversity nation - Hot-Spots of diversity - Threats to diversity: Habitats loss, poaching of Wild life, man wild life conflicts - Endangered and Endemic species of India In-Situ conservation of Bio-diversity.

UNIT V Environmental Pollution and Human Rights 06
Definition - Causes, effects and control measures of : Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear pollution - Soil pollution management: Causes, effects and control measures of urban and industrial wastes - Role of an individual in prevention of pollution - Pollution – Case studies -Disaster Management – Flood, earthquakes, cyclone of landslides Environment and human health - Human rights - Value education - HIV/AIDS - Women and child welfare - Role of information technology in Environment and Human health - Case study

Total: 30 Hrs

TEXT BOOK:

1. Environmental studies by Dr. Shradha sinha, Dr.Manisha shukula, Dr. Ranjana Shukla

REFERENCE BOOK:

1. Environmental studies by Dr. N. Arumugam, Prof.V. Kumaresan, Thangamani & Shyamala Thangamani.

SYLLABUS
GENERIC ELECTIVE COURSES

E- COMMERCE

2002

Course Objective: On successful completion of the course, the students should have:

1. Learnt to analyze the business model of firm, and determine the role that the internet (and related technologies) can play to support or even enable this model
2. Understand the key issues involved in managing electronic commerce initiatives
3. Utilize the internet to collect information to conduct research.

UNIT I TELECOMMUNICATION NETWORKS 06

Introduction- LAN-WAN- internet- what is electronic commerce- brief history of electronic commerce- advantages and limitations of electronic commerce- types of electronic commerce- integrating electronic commerce key questions for management.

UNIT II THE INTERNET AND THE WORLD WIDE WEB 06

The internet today- history of the web- unique benefits of the internet- internet architecture – world wide web concepts and technology- creating web pages- launching a business on the internet.

UNIT III ELECTRONIC PAYMENT SYSTEMS 06

Overview of the electronic payment technology- requirements for internet based payments – electronic payment medias- electronic commerce and banking.

UNIT IV E-SECURITY 06

Security in the cyberspace- designing for security- virus- security protection and recovery encryption- the basin algorithm system- authentication and trust- key management internet security protocols and standard- other encryption issues.

UNIT V WEB BASED BUSINESS 06

Business-to-business electronic commerce- intranets and extranets- intranets and supply chain management- legal and ethical issues- case studies.

Total: 30 Hrs

TEXT BOOK:

1. Elias.m. Awad, "Electronic Commerce" prentice- hall of India Pvt Ltd, 2002.

REFERENCE BOOK:

1. Ravi kalakota, andrew b. Whinston, "Electronic Commerce – a managers guid", Addison - wesley, 2000.

INTERNET BASICS

2002

Course objective:

- To make the student understands the overall view of internet.
- To inculcate the students about the various facilities available in internet.
- To gain practical knowledge about internet.

UNIT I INTRODUCTION 06

Internet and its history, defining and describing the Internet, Brief history, discussing the future of the Internet, Internet Resources. Describe the important features of the Web and Web browser software, Evaluate e-mail software and Web-based e-mail services

UNIT II EMAIL 06

Email, Parts of email, Email software, Web based email, Email address, List servers, Newsgroups, Newsgroups names, Newsgroups readers, Chat rooms, Conferencing.

UNIT III INTERNET RESOURCES 06

Internet Resources, Games, File transfer protocol, Telnet, World Wide Web, Behavior on the Internet, Accessing the Internet, Types of access, Online services, Internet services providers, How and where to look for the service Browsing the Web, Browsing the Web.

UNIT IV FTP 06

Use FTP and other services to transfer and store data, Demonstrate the use of real-time chat and briefly describe the history of the wireless Internet. Use mailing lists, newsgroups, and newsfeeds, Create HTML documents and enhance them with browser extensions

UNIT V APPLICATIONS 06

Applications of Internet- education, business, government, Communication, Job searches, Health and medicine, Travel, Entertainment, Shopping, Stock market updates, Research.

Total: 30 Hrs

TEXT BOOKS:

1. Rohit Khurana, "COMPUTER FUNDAMENTALS and INTERNET BASICS", Aph Publishing Corporation, 2010
2. Margaret Levine young, Douglas Muder, David C. Kay, Alison Barrows and Kathy Warfel, "Internet" : The Complete Reference, 2nd Edition 1999.
3. Jasson Whittaker, "The Internet: The Basics", Routledge, 2002.

REFERENCE BOOK:

1. Schneider and Evans, "New Perspectives on the Internet", Comprehensive, Sixth Edition, 2007.

Objective:

- To know the common applications available for office work.
- To learn how to work in MS-OFFICE.
- To learn how to work in MS-EXCEL and POWERPOINT.

UNIT I MSWORD**6**

Text Manipulations- font size, style, color. Alignment- left, right and justify, paragraph alignment, Usage of Numbering, Bullets, Footer and Headers, Usage of Spell check, and Find & Replace, Text Formatting, Picture insertion and alignment.

UNIT II MSWORD**6**

Insertion – Table, chart, clip art, shapes, borders. Creation of documents, saving of documents, using templates, Creation templates, Mail Merge Concepts, Copying Text & Pictures from Excel.

UNIT III MS – EXCEL**6**

Creating of Excel sheet, Cell Editing, Usage of Formulae and Built-in Functions, File Manipulations, Data Sorting (both number and alphabets), Worksheet Preparation, Drawing Graphs, Usage of Auto Formatting.

UNIT IV POWER POINT**6**

Start power point, create blank presentation, selecting slide layout, insert new slide, editing presentation, Designing and formatting presentation, Change font, font color, size, style of text, Bullet and numbering, Slide design, layout, change background, preparing slide show presentation.

UNIT V POWER POINT**6**

Inserting Clip arts and Pictures, Frame movements of the above, Insertion of new slides. Preparation of Organization Charts, Presentation using Wizards, Usage of design templates, working with tables, graphics and animation, working with graphs and organization charts.

Total: 30 Hrs**TEXT BOOK:**

- 1) Joyce Cox, Joan Lambert and Curtis Fryc, “Step by Step Microsoft Office Professional 2010”, Microsoft press,2011 edition.

Course objective:

- To make the student understand the special concepts in MS EXCEL.
- To practice the students how to work in list, data forms and records.
- To understand the concepts of filtering data.

UNIT I ADVANCED EXCEL FORMULAS**6**

Uses of Advance Excel Formulas -VLOOKUP, HLOOKUP, SUMIF, SUMIFS, SUMPRODUCT, DSUM, COUNTIF, COUNTIFS, IF, IFERROR, ISERROR, ISNA, ISNUMBER, ISNONTEXT, OR, AND, SEARCH, INDEX, MATCH etc

UNIT II IF CONDITIONS**6**

Various Methods and Uses of IF Conditions, when should use the "IF" Conditions? Creation of Multiple IF Conditions in One Cell, Use the IF Conditions with the Other Advance Functions, how to use nested IF statements in Excel with AND, OR Functions. Sorting, Data Forms, Adding Data Using the Data Form, Finding Records Using Criteria

UNIT III FILTERING AND SORTING**6**

Filtering Data, AutoFilter, Totals and Subtotals Total, Row, Various Methods of Filter and Advance Filter options, Creating and Updating Subtotals, Various Method of Sorting Data, Creating, Formatting and Modifying Chart.

UNIT IV DATA VALIDATION AND GOAL SEEK**6**

Uses of Goal Seek and Scenarios Manager, Data Validation, creating drop down lists, using different data sources, Linking Workbooks and Uses of Edit Link options, Excel Options, Customizing the Quick Access Tool Bar, Managing Windows, Multiple Windows, Splitting Windows.

UNIT V PIVOT TABLES**6**

Various Methods and Options of Pivot Table, Using the Pivot Table Wizard, Changing the Pivot Table Layout, Subtotal and Grand Total Options, Formatting, and Grouping items Inserting calculated fields, Pivot Table Options, Display and hide data in fields Select, Move & Clear Pivot data, Creating and Modifying a PivotChart

Total: 30 Hrs**TEXT BOOK:**

1. Jordan Goldmeller, "Advanced Excel Essentials", APRESS, 2015 edition.

TOURISM MANAGEMENT

2002

Course objective: To understand its constituents, forms and types, purpose of tourism and travel motivators, tourism infrastructure. Types and functions of travel agent and tour operators, tourism organizations, international and national. Tourism regulation and impacts of tourism, economics, socio cultural, environmental and political impacts.

UNIT I INTRODUCTION TO TRAVEL AND TOURISM 10

Tourism- meaning and definition, Significance of tourism, Tourism Industry-constituents, five 'A' of tourism, forms and types, purpose of tourism and travel motivators Definition-Accommodation, food and beverage, Attractions, Telecommunications, Essential services, Transport –air-road-rail- water, air transport in India, Security of aircraft and passengers, International Air Travel Classes, Transport as an attraction

UNIT II THE TRAVEL AGENTS, TOUR OPERATORS AND TOURIST ORGANIZATIONS 10

The Travel Agent, Travel Agencies-Types-Functions-source of income, setting -up a Travel Agency. The Tour Operator-Types, Package Tours-Types Guides and Escorts Tourist Organization-Need for Tourism Organizations, International Organization, Government Organizations in India, Private Organizations, Non-Governmental Organizations

UNIT III TOURISM-REGULATIONS AND IMPACT OF TOURISM 10

Passport, VISA, Health Regulations for International Travel, Special Permits for Restricted Areas Customs Regulations, Emigrations and Immigrations, Taxes Paid by Travelers, Travel Insurances. Economic Impacts, the Multiplier Effect, Environmental Impact, Socio-cultural Impact, Demonstration Effect, Political Impact of tourism.

Total: 30 Hrs

REFERENCE BOOKS:

1. Tourism operations and management-Oxford higher education-sunetra roday, archana biwal, vandana joshi
2. Tourism management - steven page - el sevier

SYLLABUS

**SKILL ENHANCEMENT ELECTIVE
COURSES**

PERSONALITY DEVELOPMENT

2002

Course Objective: To Make Aware About the Importance of Personality and Development in The Business World. To Make the Students Follow the Good Personality and Create a Good Relationship with Others.

UNIT I PERSONALITY DEVELOPMENT - INTRODUCTION 6

The Concept Personality - Dimensions of Personality - Term Personality Development - Significance. The Concept of Success and Failure What Is Success? - Hurdles in Achieving Success - Overcoming Hurdles - Factors Responsible for Success – What Is Failure - Causes of Failure - Do's and Don'ts Regarding Success and Failure.

UNIT II ATTITUDES AND VALUES 6

Attitude - Concept - Significance - Factors Affecting Attitudes - Positive Attitude - Advantages -Negative Attitude - Disadvantages - Ways to Develop Positive Attitude – Difference between Personalities Having Positive and Negative Attitude.

UNIT III MOTIVATION 6

Concept of Motivation - Significance - Internal and External Motives - Importance of Self-Motivation- Factors Leading to Demotivation -Theories to Motivation

UNIT IV SELF ESTEEM AND SMART 6

Term Self-Esteem - Symptoms - Advantages - Do's and Don'ts to Develop Positive Self-Esteem – Low Self-Esteem - Symptoms - Personality Having Low Self Esteem - Positive and Negative Self-Esteem. Interpersonal Relationships - Teaming - Developing Positive Personality - Analysis of Strengths and Weaknesses. Concept of Goal-Setting - Importance of Goals - Dream Vs Goal - Why Goal-Setting Fails? – Smart (Specific, Measurable, Achievable, Realistic, Time-Bound) Goals - Art of Prioritization - Do's and Don'ts About Goals.

UNIT V BODY LANGUAGE, STRESS MANAGEMENT & TIME MANAGEMENT 6

Body Language - Assertiveness - Problem-Solving - Conflict and Stress Management - Decision-Making Skills - Positive and Creative Thinking - Leadership and Qualities of a Successful Leader - Character-Building - Team-Work - Lateral Thinking - Time Management - Work Ethics – Management of Change - Good Manners and Etiquettes (Concept, Significance and Skills to Achieve Should Be Studied.)

Topics Prescribed for Workshop/Skill Lab: 12

- A) Group Discussion
- B) Presentation Skill
- C) Problem-Solving
- D) Decision-Making
- E) Creativity
- F) Leadership
- G) Time Management
- H) Body Language

Total: 30 Hrs

TEXT BOOKS:

1. Organizational Behavior - S. P. Robbins - Prentice-Hall of India Pvt. Ltd., New Delhi-15th edition,2013
2. Communicate to Win - Richard Denny - Kogan Page India Private Limited, New Delhi-2009
3. Essentials of Business Communication - Rajendra Pal and J. S. Korlhalli - Sultan Chand & Sons, New Delhi,1st edition,2012

REFERENCE BOOKS:

- 1) Business Communication - K. K. Sinha - Galgotia Publishing Company, New Delhi.-4th edition,2012
- 2) Media And Communication Management - C. S. Rayudu - Himalaya Publishing House,Bombay.2011
- 3) Business Communication - Dr. S.V. Kadvekar, Prin. Dr. C. N. Rawal And Prof. Ravindra Kothavade - Diamond Publications, Pune.2009
- 4) You Can Win - Shiv Khera - Macmillan India Limited.2012
- 5) Group Discussion And Public Speaking - K. Sankaran And Mahendra Kumar - M.I. Publications, Agra .2000
- 6) Basic Managerial Skills For All - Prentice-Hall Of India Pvt. Ltd., New Delhi-2011-E.H.mcgrath
- 7) 8 Habits - Stephen Covey-simon&schusker publisher-2007 edition.
- 8) Management Thoughts - Pramod Batra-HPB publisher-1st edition-2006
- 9) Produced By Prof. Rooshikumar Pandya - Creative Communication And Management Center, Bombay-R&E publisher kindle edition-2012.
- A) Assertive Training: Four Cassettes-hannah Richards-2012
- B) Self Hypnosis For Goal Achievement: Four Cassettes-kindle edition-ryan cooper-2012

Course objective: In this course, students will be provided knowledge and skills in dealing with environmental issues, disaster management, project cycle management and so on.

UNIT I ENVIRONMENT ISSUES 12

Environment conservation, enrichment and Sustainability - Climate change - Waste management - Natural resource management - (Rain water harvesting, energy conservation, waste land development, soil conservations and afforestation).

UNIT II DISASTER MANAGEMENT 12

Introduction to Disaster Management, classification of disasters - Role of youth in Disaster Management, hazards and disasters, dimension and typology of disasters, public health and disasters.

UNIT III PROJECT CYCLE MANAGEMENT 12

Project planning - Project implementation - Project monitoring - Project evaluation: impact assessment.

UNIT IV DOCUMENTATION AND REPORTING 12

Collection and analysis of data - Preparation of documentation/reports - Dissemination of documents/reports.

UNIT V PROJECT WORK/ PRACTICAL 12

Workshops/seminars on personality development and improvement of communication skills.

Total: 60 Hrs