DIVISION OF MEDIA

LIST OF NEW COURSES

Sl. No	Course Code	Course Title	L	T	P	Credits
1	23MP2004	Screenplay and Direction	3	0	0	3
2	23MP2005	Color Theory and Lighting Techniques	2	1	0	3
3	23MP2006	Principles of Advertising	3	0	0	3
4	23MP2007	Media Laws, Policy and Ethics	3	0	0	3
5	23MP2009	Digital Video Production	3	0	2	5
6	23MP2010	Video Post-Production Techniques	2	1	0	3
7	23MP2011	Visual Effects and Compositing	2	1	0	3
8	23MP2012	Computer Animation	2	1	0	3
9	23MP2013	Audio Production Technique	3	0	0	3
10	23MP2016	Video Post Production Lab	0	0	2	2
11	23MP2017	Visual Effects and Compositing Lab	0	0	2	2
12	23MP2018	Audio Production Lab	0	0	2	2
13	23MP2019	Color Corrections and Grading Lab	0	0	2	2
14	23MP2020	Computer Animation Lab	0	0	2	2
15	23MP2023	Operating Systems	3	0	0	3
16	23MP2024	Storage and Database	3	0	0	3
17	23MP2025	Computer Networks and Broadcast Technologies	3	0	0	3
18	23MP2026	Software Engineering	3	0	0	3
19	23MP2027	UI/UX Design	2	1	0	3
20	23MP2028	Web Design and Development	3	0	0	3
21	23MP2029	Foundations of Data Science	3	0	0	3
22	23MP2030	Artificial Intelligence for Media	3	0	0	3
23	23MP2033	Web Design and Development Lab	0	0	2	2
24	23MP2034	Computer Networks and Broadcast Technologies Lab	0	0	2	2
25	24MP2001	Python for Media	3	0	0	3
26	24MP2002	Python for Media Laboratory	0	0	2	2
27	24MP2003	Gaming for Transmedia	3	0	0	3
28	24MP2004	Audio Visual Studios	3	0	0	3
29	24MP2005	Film Studies	3	0	0	3
30	24MP2006	Digital Marketing and Communication	3	0	0	3
31	24MP2007	Film Making Lab	0	0	2	2

Course Code	SCREENPLAY AND DIRECTION	L	T	P	C
23MP2004		3	0	0	3

Course Objectives:

Enable the students to:
Identify the importance of writing for different genre of films.
Explore the nuances of writing for films.
Gain exposure to the professional techniques of Direction

Course Outcomes:

The students will be able to:
Understand the role and responsibility of direction.
Learn the skills and approaches of direction as a profession.
Generate creative ideas for writing for films.
Reconstruct the writing based on the demand of the script.
Experiment writing for different genres of films.
Assess the various types of directors and their styles.

Module: 1	Plot and Story Writing	9 Hours

Understanding story and plot - Theme - Conflict and Tension - Building and Releasing Tension - Endings and Beginnings - Setting Up the Story - Two Incidents - Plot Points - Main plot - Sub-plots - Five great plots to study - The Scene - The Sequence - Building the Storyline - Three Act Structure.		
Module: 2	**Screenplay Writing**	**9 Hours**
What is a Screenplay? - Act I is the Setup - Act II is Confrontation - Act III is Resolution - The Subject - The Creation of Character - The Puppet Master - Giving Characters Life - Protagonist and Antagonist - Insiders - Outsiders -Action is Character - Building a Character.		
Module: 3	**Screenplay Format**	**9 Hours**
Screenplay Form - Expectations - Title Page - Layout - Screenplay terms - Writing the Screenplay - Adaptation - Problems of Semantics - Outlines - Treatments - Drafts - First Draft - Counterfeit - Copyright - Rewriting - Second Opinions - Final Polish - Self Diagnosis - Script Appraisals - Ten Common Problems - Ten Handy Hints.		
Module: 4	**Direction**	**9 Hours**
Direction - action techniques - elements of direction - Principles of direction - Planning and performance - Roles and responsibilities of direction - skills and techniques related to performance and direction rehearsal.		
Module: 5	**Direction Styles**	**9 Hours**
Location scouting - evaluation of different styles of direction - Ethics and moral responsibility in direction - Artistic identity and drama - What Do Directors Direct? - How to Direct the Eyes? - How to Convey and Suggest Meaning.		
Total Lectures		**45 Hours**
Text Books		
1.	Rijo, S. (2023). *How to write a screenplay: A writer's guide to Scriptwriting*. SERGIO RIJO.	
2.	Katz, S. D. (2019). *Film directing: Shot by shot - 25th anniversary edition: Visualizing from concept to screen*.	
Reference Books		
1.	Humphries, J. D. (2022). *The ultimate course book on how to write a screenplay: Screenwriting Bible 101 on the foundations of screenwriting basics, page screenwriting & editing, writer career advice book & more...* JNR via PublishDrive.	
2.	Bang, J. (2022). *Script analysis: Deconstructing screenplay fundamentals*. Taylor & Francis.	
3.	Markham, P. (2020). *What's the story? The director meets their screenplay: An essential guide for directors and writer-directors*. Routledge.	
4.	DeKoven, L. (2018). *Changing direction: A practical approach to directing actors in film and theatre: Foreword by Ang Lee*. Routledge.	
5.	Proferes, N. T. (2017). *Film directing fundamentals: See your film before shooting*. Taylor & Francis.	
Recommended by Board of Studies	**18.04.2024**	
Approved by Academic Council	**11.05.2024**	

Course Code	**COLOR THEORY AND LIGHTING TECHNIQUES**	**L**	**T**	**P**	**C**
23MP2005		**2**	**1**	**0**	**3**
Course Objectives:					
Enable the students to: Gain comprehensive understanding of color theory principles and lighting techniques. Develop the knowledge and skills necessary to analyze and manipulate color effectively. Analyze and apply color theory concepts in various contexts.					
Course Outcomes:					
The students will be able to: Understand the fundamental concepts of color theory. Apply color theory principles in project design. Analyze the different lighting techniques. Enhance the visual impact of their creative projects.					

Evaluate color and lighting choices in existing artworks, designs, and media productions. Apply their knowledge and skills to create cohesive lighting designs.		
Module: 1	**Fundamentals of Color Theory**	**9 Hours**
Understanding color perception - The physics and psychology of color - Light and the Electromagnetic Spectrum - Historical overview of color theory: From Aristotle to modern theories - Importance of color in visual communication and aesthetics - Overview of the color wheel: Primary, secondary and tertiary colors - Understanding color properties: Hue, saturation and brightness - Exploring color harmony and relationships - Complementary, analogous and triadic color schemes.		
Module: 2	**Color Models and Systems**	**9 Hours**
Explanation of color models - RGB (Red, Green, Blue) - CMYK (Cyan, Magenta, Yellow, Black) and others - Understanding color spaces: RGB, CMYK, HSB, LAB and their applications in different media - Color Gamuts - Introduction to color management: Calibration, profiling and maintaining color consistency across devices - Practical applications of color models in digital imaging, printing and web design.		
Module: 3	**Psychological Aspects of Color**	**9 Hours**
Introduction to Color Psychology - Exploring the psychological effects of color - Cultural influences, symbolism and emotional responses - Color Perception and Cognition - Emotions and Mood Effects of Color - Color in Marketing and Branding - Impact on consumer behavior and brand perception - Case studies and practical applications - Analyzing the use of color in art, design, and advertising.		
Module: 4	**Introduction to Lighting Principles**	**9 Hours**
Understanding the basics of lighting - Sources, properties, and characteristics of light - Overview of natural vs. artificial light sources - Explanation of lighting terminology - Intensity - color temperature - diffusion - directionality - Introduction to the inverse square law and its application in lighting - Principles of lighting design - Balance - emphasis - visual hierarchy - Using lighting to create depth and dimension in visual compositions.		
Module: 5	**Lighting Techniques and Styles**	**9 Hours**
Exploring lighting techniques for different purposes - Portrait lighting - product lighting - architectural lighting - Understanding lighting styles - High key - low key - chiaroscuro lighting - Creating mood and atmosphere through lighting - Dramatic vs naturalistic lighting - Understanding the psychology of light - Emotional impact and storytelling through lighting - Case studies and analysis of lighting in famous artworks, films and photographs.		
Total Lectures		**45 Hours**

Text Books	
1	Hornung, D. (2012). *Color: A workshop for artists and designers (A practical guide on color application for artists and designers)* (2nd ed.). Laurence King Publishing.
2	Landau, D. (2014). *Lighting for cinematography: A practical guide to the art and craft of lighting for the moving image*. Bloomsbury Publishing USA.
Reference Books	
1	Albers, J. (2013). *Interaction of color: 50th anniversary edition*. Yale University Press.
2	Hornung, D. (2005). *Colour: A workshop for artists and designers*. Laurence King Publishing.
3	Birren, F. (2016). *Color psychology and color therapy; A factual study of the influence of color on human life*. Pickle Partners Publishing.
4	Hunter, F., Biver, S., & Fuqua, P. (2015). *Light science & magic: An introduction to photographic lighting*. CRC Press.
5	Brown, B. (2023). *Motion picture and video lighting*. Taylor & Francis.

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	**PRINCIPLES OF ADVERTISING**	**L**	**T**	**P**	**C**
23MP2006		**3**	**0**	**0**	**3**
Course Objectives:					
Enable the students to: Acquire a solid foundation in the key principles, theories, and models of advertising.					

2.Develop skills in strategic planning for advertising campaigns 3.Explore the principles and practices of digital advertising and emerging technologies		
Course Outcomes: The students will be able to: Learn integrate digital advertising approaches with traditional advertising methods. Understand the advertising strategies and apply these concepts in real-world scenarios. Develop advanced skills in strategic planning for advertising campaigns. Analyze target audiences for advertising campaigns. Gain a deep understanding of the principles and practices of digital advertising. Understand the role of advertising within the broader context of IMC.		
Module: 1	**Introduction to Advertising and its Evolution**	**9 Hours**
Foundations of Advertising - Advertising methods -Types of Advertising - Principles of advertising - Rise of Mass media advertising - Birth of Branding: Logos and Slogans - The Power of Storytelling in Advertising - Emerging Technologies in Advertising.		
Module: 2	**Consumer Behaviour and Advertising Psychology**	**9 Hours**
Understanding the Basics of Advertising Psychology - Key Theories in Consumer Behaviour - Consumer Decision-Making Models - Visual and Cognitive Aspects of Perception - Psychological Impact of Emotional Advertising - Word-of-Mouth and Social Proof in Consumer Behaviour - Integrating Consumer Psychology in Advertising Campaigns.		
Module: 3	**Strategic Planning in Advertising Campaigns**	**9 Hours**
Strategies in the Advertising Process - Market Analysis: SWOT and PESTLE Analysis - Identifying Target Audience Insights - Media Channels and Their Impact - Cross-cultural Considerations in Advertising - Pre-testing and Post-testing Strategies - Case Studies: Examples of Successful Advertising Campaigns		
Module: 4	**Media Planning and Buying Strategies**	**9 Hours**
The Role of Media in the Advertising Process - Traditional Media Channels - Digital Media Platforms - Social Media Display Advertising - Emerging Trends in Media Consumption - Media Mix Strategies - CPC- CPM - Real-time Analytics and Adjusting Media Plans		
Module: 5	**Digital Advertising: Trends and Techniques**	**9 Hours**
Defining Digital Advertising and its Evolution - Content Creation and Curation - SEM - SEO - Google Ads - In-App Advertising and Location-based Targeting - Voice Search and Smart Speaker Integration - Augmented Reality and Virtual Reality in Advertising - Big data and AI in advertising.		
Total Lectures		**45 Hours**
Text Books		
1	Dyck, F. V. (2014). *Advertising transformed: The new rules for the digital age*. Kogan Page Publishers.	
2	Barry, P. S. (2016). *The advertising concept book: Think now, design later : a complete guide to creative ideas, strategies and campaigns*.	
Reference Books		
1	Sullivan, L. (2016). *Hey, Whipple, squeeze this: The classic guide to creating great ads*. John Wiley & Sons.	
2	Fennis, B. M., & Stroebe, W. (2020). *The psychology of advertising*.	
3	Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation & practice*. Pearson UK.	
4	Solomon, M. R. (2019). *Consumer behavior: Buying, having, and being*. Pearson Higher Ed.	
5	Surmanek, J. (1996). *Media planning: A practical guide* (3rd ed.). McGraw Hill Professional.	
Recommended by Board of Studies	**18.04.2024**	
Approved by Academic Council	**11.05.2024**	

Course Code	**MEDIA LAWS, POLICY AND ETHICS**	**L**	**T**	**P**	**C**
23MP2007		**3**	**0**	**0**	**3**
Course Objectives:					
Enable the students to:					

Define and relate to the basics of Media Laws, Policy and Ethics. Apply varied aspects of Media Laws, Policy and Ethics. Examine and analyze ethical components of contemporary media.		
Course Outcomes:		
The students will be able to: Develop skills in identifying, analyzing and articulating instances of media regulation and Indian constitution. Evaluate laws with particular attention to media law and the issues related to guaranteeing fundamental freedoms within civil society. Gain knowledge in identifying kinds of cybercrimes and their legal implications. Learn the ethical issues of media with case studies. Demonstrate an understanding of the nature of media laws, policies , ethics and morality in journalism. Gain deep understanding with how policy is developed within media institutions.		
Module: 1	**Indian Constitution and Mass Media**	**9 Hours**
The Indian Constitution - Directive Principles - Fundamental Rights - Speech and Expression - Press Regulations Board. Role and responsibilities of the Press - Press and Democracy - Powers and privileges of the press - Freedom of the Press - Constitutional provisions - Reasonable restrictions - Press and the public opinion.		
Module: 2	**Right to Information and its Limitations**	**9 Hours**
IPR - Copyright - Defamation - Libel & Slander - Contempt of Court - Official Secrets Act (1923). Emergency 1975 - Media Conglomerates - Press Commissions - Right to Information Act - Case Studies.		
Module: 3	**Press Commissions and Threat to Democracy**	**9 Hours**
Press Commissions - Abrogation of Article 370 - Internet and Democracy in the developing countries. Film Censorship - Film Censor Board - Code of Ethics - Radio - Television - Duties of a Journalist- Press Code of Ethics - Advertising Standard Council.		
Module: 4	**IT and Cyber Crimes**	**9 Hours**
Information Technology Act (2000) - Information Technology Amendment Rules of 2023 - Cyber Crimes - Phishing - Cyber Stalking - Online Identity Theft - Online Deception - Cyber Cell - Cybercrimes. (Case Studies)		
Module: 5	**Regulations in Mass Media**	**9 Hours**
Prevention of Insults to National Honor Act - The Cable Television Networks (Regulation) Act - Social media regulation amendment (2023) - Digital Media Content Regulatory Council (DMCRC) - SRB for OTT Platforms - Journalist and Media Association Grievances Council (JMAGC) - Misinformation / Fake news - Influence of mass media in attaining Sustainable development Goals.		
Total Lectures		**45 Hours**
Text Books		
1	Neelamalar, M. (2012). *Media law and ethics*.	
2	Horner, D. S. (2015). *Understanding media ethics*.	
Reference Books		
1	Ekstrand, V. S., Carlson, C. R., Coyle, E., Ross, S. D., & Reynolds, A. (2023). *Trager's the law of journalism and mass communication*. SAGE Publications.	
2	Patching, R., & Hirst, M. (2021). *Journalism ethics at the crossroads: Democracy, fake news, and the news crisis*. Routledge.	
3	Bhushan, M. S. (2014). *Development of media and media law*.	
4	Babcock, W. A., & Freivogel, W. H. (2015). *The SAGE guide to key issues in mass media ethics and law*. SAGE Publications.	
5	Paul, Sebastian, (2015) *Ethics and The Media*, Lexis Nexis.	

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	**DIGITAL VIDEO PRODUCTION**	**L**	**T**	**P**	**C**
23MP2009		**3**	**0**	**2**	**5**

Course Objectives:

Enable the students to:
Learn the basics of cinematography.
Explore the aesthetics of video production.
Gain exposure to the professional techniques of video production.

Course Outcomes:

The students will be able to:
Understand the concept of applying cinematography in their production techniques.
Learn the basic elements of video production.
Generate creative ideas to produce video with aesthetics and semiotic understanding.
Reconstruct the productions based on the industry standards..
Experiment latest techniques in digital video production.
Assess the elements of digital video production.

Module: 1	**Working of a Digital Video Camera**	**9 Hours**

Components and Controls of Video Camera - Parts of a video camera - Different controls on video camera - Power switch – preheat - gen-lock - white balance – gain – iris - pedestal - Zoom control: servo – manual – remote - zoom extenders - Focus control: auto – manual – remote - back focus - macro focus - Camera view finders (B/W and colour). Video camera lenses - Types of lens - Tripods - types of camera mounts other accessories.

Module: 2	**Types of Digital Video Cameras**	**9 Hours**

Different Types of Television Cameras - NG camera - EFP camera - Studio cameras - Special cameras: action camera - underwater camera - endoscopic camera - nano cameras - tube cameras - Aerial photography camera - remote control camera - high-speed video cameras.

Module: 3	**Aesthetics of Digital Video**	**9 Hours**

Different types of Camera movements - types & use - Scene requirements - continuity - Cinematic time and space - scene direction - types of action - composition - rules- balance - unity and emphasis.
Video and Film as an Art: Theme and Focus - Fictional and Dramatic elements - Elements of Video - Visual Design - Mise-en-Scene - Montage - Decoupage.

Module: 4	**Video Production for Social Media**	**9 Hours**

Video Resolution - Aspect ratio - Video formats - Frame rate - File size - Video formats - YouTube - Instagram - Facebook - Target Audience - Storytelling - Choose the Right Social Media Platform - Optimization of the Content for the Selected Platform.

Module: 5	**Virtual Production**	**9 Hours**

Virtual Production - Virtual Production Process - Simulation - CGI - VFX - Compositing - Current trends in Virtual Production - Future of Virtual Production.

Total Lectures	**45 Hours**

Text Books

1. Owens, J. (2017). *Video production handbook*. Taylor & Francis.
2. Mollison, M. (2020). *Producing videos: A complete guide*. Routledge.

Reference Books

1. Mark Sawicki, Juniko Moody, “Filming the Fantastic with Virtual Technology”, 1st Edition, Focal Press, 2020.
2. Sawicki, M., & Moody, J. (2020). *Filming the fantastic with virtual technology: Filmmaking on the digital Backlot*. Routledge.
3. Foust, J., Fink, E. J., & Gross, L. (2017). *Video production: Disciplines and techniques*. Taylor & Francis.

4.	Gras, P. (2019). *The art of video storytelling*.
5.	Williams, E. R., Love, C., & Love, M. (2021). *Virtual reality cinema: Narrative tips and techniques*. Routledge.
Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	**VIDEO POST-PRODUCTION TECHNIQUES**	**L**	**T**	**P**	**C**
23MP2010		**2**	**1**	**0**	**3**

Course Objectives:

Enable the students to:
Learn the basics of video and film editing.
Emphasis the importance of editing and how it helps in narration.
Gain exposure to the professional techniques of post-production.

Course Outcomes:

The students will be able to:
Understand the concept of applying the techniques of video and film editing.
Learn the basic elements of post-production.
Generate creative ideas to expertise in narration of the film.
Reconstruct the sound knowledge in video editing.
Experiment the recent trends and technology in video post-production.
Assess the elements of video editing in a film.

Module: 1	**Fundamentals of Post Production**	**9 Hours**

Concepts of video editing - Principles and process of editing - Elements of video editing - Capturing - timeline - trimming - sequencing. Types of Editing – Linear vs Non- Linear Editing - Offline and On-line editing - Formats - Aspect Ratios - Frame Rates.

Module: 2	**Video Editing Styles**	**9 Hours**

Introduction to the styles in Video editing - Changes in pace - Editing for narrative clarity - Editing for dramatic emphasis - Editing for Subtext - aesthetics and genre - B-roll - Montage - Continuity.

Module: 3	**Color Correction**	**9 Hours**

Introduction to colour correction - Primary and Secondary Colour Correction - Common terminology - Color grading: Curves - White balance - Color match - Brightness and Contrast - Colour monitors and tools - Common colour errors and techniques.

Module: 4	**Video Effects**	**9 Hours**

Introduction to transitions - Creating visual transitions - Digital video effects - Assessing effects - Chroma keying - Titling - Export settings - Video file formats - Applications.

Module: 5	**AI in Video Editing**	**9 Hours**

Introduction to AI in video editing - Shot segmentation - Auto Reframe - AI Portrait - Auto Normalization - AR Stickers - AI video editing tools - Current trends in AI based video editing.

Total Lectures	**45 Hours**

Text Books

1.	Frierson, M. (2018). *Film and video editing theory: How editing creates meaning*. Taylor & Francis.
2.	Goold, A. (2021). *The video editing handbook: For beginners.*

Reference Books

1.	Haine, C. (2019). *Color grading 101: Getting started color grading for editors, cinematographers, directors, and aspiring colorists*. Routledge.
2.	Compesi, R. J. (2019). *Video Field production and editing*. Routledge.
3.	Hurkman, A. V. (2013). *Color correction handbook: Professional techniques for video and cinema*. Peachpit Press.
4.	CLARK, N. (2018). *Ultimate guide to Adobe premiere pro cc*. Independently Published.
5.	Phillips, L., & Marangoni, S. (2023). *Video editing made easy with DaVinci resolve 18: Create quick video content for your business, the web, or social media*. Packt Publishing.
Recommended by Board of Studies	**18.04.2024**

Approved by Academic Council	**11.05.2024**

Course Code	**VISUAL EFFECTS AND COMPOSITING**	**L**	**T**	**P**	**C**
23MP2011		**2**	**1**	**0**	**3**

Course Objectives:

Enable the students to:
Develop student's aesthetic, intellectual & technological abilities through programs that integrate theory & practical
Sharpen the skills in the latest animation/ multimedia software/ tools.
Create high-quality visual effects (VFX) for films, TV, advertisements & games

Course Outcomes:

The students will be able to:
Gain Comprehensive knowledge of key concepts such as keying, tracking, rotoscoping, and CGI integration.
Create and manipulate digital assets, including 3D models, textures, and animations.
Understand the industry standards, best practices, and ethical considerations in visual effects
Create competence in matching digital elements with live-action footage.
Develop creative solutions to achieve desired visual effects.
Explore the nuances of the different types of VFX techniques

Module: 1	**VFX Pipeline**	**9 Hours**

Pre-Production – Conceptualization - Pre-Visualization - Production - On-Set Supervision - Data Acquisition - Post-Production Planning - Shot Selection - Asset Planning - Data Processing - Data Ingestion - 3D Asset Creation – Animation - Mastering.

Module: 2	**Image Generation**	**9 Hours**

Digital representation of visual information - Image Generation - Pixels – Components – Channels - Spatial Resolution - Colour Manipulations & Matching - Matte Removal.

Module: 3	**Compositing Techniques**	**9 Hours**

Video Effects - Blending Modes - Transition effects - 2D & 3D Compositing - Integrate visual elements into live-action footage.

Module: 4	**Lighting & Rendering**	**9 Hours**

Lighting Setup - Matching Live-Action Lighting - Virtual Light Sources - Shadows - Global Illumination - Rendering - Rendering Engine - Camera Settings - Compositing Passes - Optimization -Reflections and Refractions - Depth of Field - Motion Blur - Digital video formats.

Module: 5	**Nuances of Layer Based and Node Based**	**9 Hours**

After effects - 2D Visual Effects - Special effects in video editing – Masking - Making an edit invisible, Motivation for every edit geometric transformations - Expression Language - Filtering - image tracking and stabilization - Film formats - Node Based Animation - Transform Nodes - Deformation Node - Material Nodes - Particle Nodes.

Total Lectures	**45 Hours**

Text Books

1. Brinkmann, R. (2008). The art and science of digital compositing: Techniques for visual effects, animation and motion graphics. Morgan Kaufmann.
2. Lanier, L. (2012). Digital compositing with nuke. Focal Press.

Reference Books

1. Winder, C., & Dowlatabadi, Z. (2013). Producing animation. CRC Press.
2. Rickitt, R. (2007). Special effects: The history and technique.
3. Morris, P. (2012). Nonlinear editing. CRC Press.
4. Wright, S. (2013). Digital compositing for film and video. Taylor & Francis.
5. Dinur, E. (2021). The complete guide to photorealism for visual effects, visualization and games. Routledge.

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	COMPUTER ANIMATION	L	T	P	C
23MP2012		2	1	0	3

Course Objectives:

Enable the students to:
Understand the History and Concepts of 2D & 3D Computer Animation
Gain comprehensive understanding of both traditional and AI-driven techniques in computer animation.
Develop the knowledge and skills necessary to create compelling 2D and 3D animations using both traditional animation principles and cutting-edge AI technologies.

Course Outcomes:

The students will be able to:
Understand the principles of 2D and 3D animation.
Develop practical skills in creating animations.
Learn about lighting, texturing, and rendering techniques in 3D animation
Evaluate the use of AI in animation.
Create a professional animation portfolio showcasing their skills and creativity.
Experiment with hybrid approaches that combine traditional animation techniques

Module: 1	**INTRODUCTION TO ANIMATION**	**9 Hours**

History of animation - Types of Animation - Storyboards - Principles of Animation - Leica Reel (Animatic) - Pencil Tests (Animation) - Choice of character - Character design.

Module: 2	**2D ANIMATION**	**9 Hours**

Creating character rigs and assets for animation - Understanding the timeline - keyframe animation - Exploring basic motion techniques - Introduction to easing and timing curves for smoother animation - Introduction to character animation - Walk cycles - facial expressions - lip-syncing - Exploring camera movement - scene composition in 2D animation.

Module: 3	**3D ANIMATION**	**9 Hours**

Modeling basics - coordinate systems - Geometric primitives - Transformations - hierarchies - Booleans - Polygon Modeling - NURBS - Creating shapes - Interpolation - Kinematics – Keyframing.

Module: 4	**TEXTURING, LIGHTS AND CAMERA FOR 3D**	**9 Hours**

Virtual Lighting - Types of Lights in 3D - Virtual Camera - Camera Movements and Animation - Shading and Applying Textures - Materials and its properties - Shading Algorithms - Rendering Algorithms - Surface Characteristics - Deformation - Virtual Sculpting – Compositing.

Module: 5	**APPLICATIONS AND AI FOR ANIMATION**	**9 Hours**

Applications of Animation - Entertainment Industry - Educational Animation - Marketing and Advertising - Healthcare and Medical Animation - Architecture and Visualization - Gaming and Interactive Media - Artificial Intelligence and its applications in animation - AI-driven techniques in character animation, motion capture, and procedural content generation - Case studies of AI-driven character animation.

Total Lectures	**45 Hours**

Text Books

1	Richard Williams,"The Animator's Survival Kit",Faber & Faber Publication,2021
2	Michael O'Rourke, "Principles of Three-Dimensional Computer Animation, Third Edition, 2003

Reference Books

1	Frank Thomas and Ollie Johnston, "The Illusion of Life: Disney Animation", Walt Disney, 1981.
2	Tom Bancroft, "Creating Characters with Personality: For Film, TV, Animation, Video Games, and Graphic Novels", Watson-Guptill, First Edition, 2016.
3	Richard Williams, "The Animator's Survival Kit: A Manual of Methods, Principles, and Formulas for Classical, Computer, Games, Stop Motion, and Internet Animators", Faber & Faber, Main, 2021.
4	Jeremy Birn, "Digital Lighting & Rendering", Pearson, 2013
5	J.P. Telotte, "Animating Space: From Mickey to WALL-E", The University Press of Kentucky, First Edition, 2010

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	AUDIO PRODUCTION TECHNIQUES	L	T	P	C
23MP2013		3	0	0	3

Course Objectives:

Enable the students to:
Define and understand the nature of sound and its elements and process
Translate skills in audio productions and programs
Design and evaluate quality digital audio program output.

Course Outcomes:

The students will be able to:
Gain a solid understanding of the fundamental principles of sound and acoustics
Understand the audio signal flow principles and routing
Explore their creativity and develop their unique artistic voice through audio production projects.
Be Proficient in using various audio equipment and recording software.
Create audio production projects.
Analyse the various elements in audio technologies and productions

Module: 1	**Fundamentals of Audio**	**9 Hours**

Fundamentals of Sound Elements: Digital audio - Audio equipment - Microphones - Microphone types - Amplifier technologies - Output transducer technologies - Cables and Connectors.

Module: 2	**Understanding of Acoustics**	**9 Hours**

Acoustics – Reverberation - Calibration of Sound - Different types of materials - Optimization of Recording spaces - Acoustic treatments - Means of control.

Module: 3	**Recording Mixing &Editing**	**9 Hours**

The production chain and responsibilities - Recording sessions – Mono - Stereo Track Recording - Studio Communications - Noise - pitch reduction - pitch correction - Digital Recording and Authoring - conversion - sampling - Equalizer and application.

Module: 4	**Computers and Audio**	**9 Hours**

Computers in Music Technology - Digital mixers and audio workstation - Musical instruments and Recording - MIDI applications
DAW's Software - Tools and Application - Latest audio production software tools and applications - Problems with sound quality - Lip-sync - edit and mix - Voice-over recording - Dialog replacement - working with sound effects - Digital audio interfaces.

Module: 5	**Techniques of Industry Standards and Practices**	**9 Hours**

Audio Dubbing and Synchronization - producing audio clips and sample programs for various skills – workstations - Audio studio - Signal flow and routing - Live sound reinforcement - plugins and virtual instruments commonly used in the industry - AI in Audio.

Total Lectures	**45 Hours**

Text Books

1	McCarthy, B. (2016). Sound systems: Design and optimization: Modern techniques and tools for sound system design and alignment. CRC Press.
2	White, P. (2010). Basic live sound. SMT.

Reference Books

1	Rumsey, F. (2021). Sound and recording: Applications and theory. Routledge.
2	Middleton, P., & Gurevitz, S. (2013). Music technology workbook: Key concepts and practical projects. Taylor & Francis
3	Moylan, W. (2014). Understanding and crafting the mix: The art of recording. CRC Press.
4	Simons, D. (2006). Analog recording: Using analog gear in today's home studio. Hal Leonard Corporation.
5	The desktop studio: A guide to computer-based audio production. (2002). Hal Leonard Corporation.

Recommended by the Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	VIDEO POST-PRODUCTION LAB	L	T	P	C

23MP2016		0	0	2	2

Course Objectives:

Enable the students to:

1. Learn the basics of video and film editing.
2. Emphasis the importance of editing and how it helps in narration.
3. Gain exposure to the professional techniques of post production.

Course Outcomes:

The students will be able to:

1. Understand the concept of applying the techniques of video and film editing.
2. Learn the basic elements of post production.
3. Generate creative ideas to expert in narration of the film.
4. Reconstruct the sound knowledge in video editing.
5. Experiment the recent trends and technology in video post production.
6. Assess the elements of video editing in a film.

List of Experiments

Exercise 1 - Da vinci resolve interface
Exercise 2 - Primary Features -Importing files and arranging of shots, cut, trim
Exercise 3 - Working with transitions
Exercise 4 - Working with Effects
Exercise 5 - Primary & Secondary Colour correction
Exercise 6 - Background Replacement using Chroma Key
Exercise 7 - Titling using Key frame Animation
Exercise 8 - Recreate a scene with Dialogues
Exercise 9 - Recreate an Action sequence
Exercise 10 - Edit a Cultural/Event show using multicamera technique

Recommended by Board of Studies	18.04.2024
Approved by Academic Council	11.05.2024

Course Code	VISUAL EFFECTS AND COMPOSITING LAB	L	T	P	C
23MP2017		0	0	2	2

Course Objectives:

Enable the students to:

1. Make students specialize in creating 2D/3D computer-animated elements for digital visual effects.
2. Enrich students' skills with the latest animation/ multimedia software/ tools.
3. Make students give output in high-quality visual effects (VFX) for films, TV, advertisements & games

Course Outcomes:

The students will be able to:

1. Gain Comprehensive knowledge of key concepts such as keying, tracking, rotoscoping, and CGI integration.
2. Create and manipulate digital assets, including 3D models, textures, and animations.
3. Understand the industry standards, best practices, and ethical considerations in visual effects
4. Create competence in matching digital elements with live-action footage.
5. Develop creative solutions to achieve desired visual effects.
6. Explore the nuances of the different types of VFX techniques

Experiments

The faculty conducting the laboratory will prepare a list of 10 experiments get the approval of the HoD/Director and notify it at the beginning of each semester.

Recommended by the Board of Studies	18.04.2024
Approved by Academic Council	11.05.2024

COURSE CODE	AUDIO PRODUCTION LAB	L	T	P	C

23MP2018		0	0	2	2

Course Objectives:

Enable the students to:

1. This lab will teach you how to prepare for filming a movie.
2. It will educate how to collect digital Audio, upload digital Audio to a computer
3. Learn the art of embedding audio and video into a visual production

Course Outcomes:

The students will be able to:

1. Gain a solid understanding of the fundamental principles of sound.
2. Understand signal flow principles.
3. Explore their creativity and develop their unique artistic voice through audio production projects.
4. Use various audio equipment, including microphones, audio interfaces, mixers, and recording software.
5. Gain experience in managing audio production projects.
6. Analyse the various elements in audio technologies and productions.

Experiments

The faculty conducting the laboratory will prepare a list of 10 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester

Recommended by the Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	COLOR CORRECTIONS AND GRADING LAB	L	T	P	C
23MP2019		0	0	2	2

Course Objectives:

Enable the students to:

1. Develop the technical skills required to effectively utilize industry-standard color correction and grading software tools.
2. Apply principles of color theory to achieve desired aesthetic outcomes.
3. Gain hands-on experience through practical exercises and real-world projects.

Course Outcomes:

The students will be able to

1. Understand the fundamental principles of color theory.
2. Gain knowledge about software tools commonly used in color correction and grading.
3. Develop an eye for aesthetically pleasing color grading that suits the mood and theme of the project.
4. Evaluate the requirements of the directors and cinematographers to understand their vision and translate it into color grading choices.
5. Troubleshoot common issues encountered during color correction and grading.
6. Create a portfolio showcasing a range of color correction and grading projects.

LIST OF EXERCISE

1. Understanding Color & Color Psychology
2. White Balance
3. Introduction to Adobe Lightroom
4. Lightroom Curves VS HSL
5. Exporting images
6. Basic Color wheel Adjustments
7. Masking and Adjustment layer
8. Basic Color correction workflow in Davinci Resolve
9. Creative Color Grading Techniques in Davinci Resolve
10. Project work

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	COMPUTER ANIMATION LAB	L	T	P	C
23MP2020		0	0	2	2

Course Objectives

Enable the students to:

1. Gain a deep understanding of fundamental animation principles.
2. Develop proficiency in using industry-standard 2D and 3D animation software tools.
3. Acquire hands-on, project-based learning experiences.

Course Outcomes:

The students will be able to

1. Gain a comprehensive understanding of the principles of animation.
2. Develop proficiency in using industry-standard animation software tools.
3. Learn the process of creating storyboards and previsualization (previs) for animation projects.
4. Acquire the skills to animate characters convincingly.
5. Gain experience in 3D modeling, texturing, lighting, and rendering.
6. Collaborate with peers in multidisciplinary teams to develop animated shorts or sequences.

LIST OF EXERCISE

1. Introduction to Adobe Animate
2. Storyboarding for Animation
3. Basic Frame by Frame Animation
4. Tweening and Transitions
5. Camera Movements and Exporting
6. Introduction to Autodesk Maya
7. Polygon Modeling
8. Spline modeling
9. Materials, Lighting and Camera
10. Rendering Output

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	OPERATING SYSTEMS	L	T	P	C
23MP2023		3	0	0	3

Course Objectives

Enable the students to:

1. Understand the fundamental concepts and components of operating systems
2. Identify the challenges of concurrent execution in operating systems
3. Learn the concepts of virtual memory, memory allocation, and memory protection, and to teach students about the techniques and algorithms used by operating systems

Course Outcomes:

The students will be able to:

1. Understand the fundamental operating system concepts.
2. Design and implement basic operating system components.
3. Learn various memory management techniques used by operating systems.
4. Explore the structure and organization of file systems and be able to perform basic file system operations.
5. Develop programming skills in languages commonly used for operating system development.
6. Analyse the various elements in operating systems development.

Module: 1	**Introduction to Operating Systems**	**9 Hours**
Fundamentals of Operating systems - Windows - Mac OS - Linux - OS in Media		
Module: 2	**File Systems and Storage Management**	**9 Hours**

File systems: FAT, NTFS, HFS+, ext4, etc - File management techniques for media files - Memory hierarchy: RAM, cache, virtual memory - Memory management techniques and optimization - Performance monitoring and troubleshooting -		
Module: 3	**Networking and Media Sharing**	**9 Hours**
Networking for media professionals - Network protocols and communication - Media sharing and collaboration tools - OS security features		
Module: 4	**Operating Systems for Specialized Media Platforms**	**9 Hours**
Introduction to specialized OS for media servers - editing workstations - Embedded operating systems for media appliances - Custom OS configurations for media production		
Module: 5	**Case Studies and Industry Applications**	**9 Hours**
Chatbots and Conversational Agents for Customer Engagement - AI-powered Storytelling and Interactive Narratives - Augmented-Reality (AR) and Virtual Reality (VR) Experiences - Case Study of Different OS.		
Total Lectures		**45 Hours**
Text Books		
1	Silberschatz, A., Galvin, P. B., & Gagne, G. (2018). Operating system concepts, 10e abridged print companion. John Wiley & Sons.	
2	Tanenbaum, A. S., & Bos, H. (2015). Modern operating systems. Pearson Higher Ed.	
Reference Books		
1	McHoes, A. M., & Flynn, I. M. (2017). Understanding operating systems. Course Technology.	
2	Silberschatz, A., Galvin, P. B., & Gagne, G. (2020). Silberschatz's operating system concepts. Wiley Global Education.	
3	LISTER, A. (2013). Fundamentals of operating systems. Springer.	
4	Meike, G. B., & Schiefer, L. (2021). Inside the Android OS: Building, customizing, managing and operating Android system services. Addison-Wesley Professional.	
5	Botwright, R. (2024). Operating systems 101: Windows, Linux, UNIX, IOS and Android.	
Recommended by the Board of Studies	**18.04.2024**	
Approved by Academic Council	**11.05.2024**	

COURSE CODE	**STORAGE AND DATABASE**	**L**	**T**	**P**	**C**
23MP2024		**3**	**0**	**0**	**3**

Course Objectives:

Enable the students to:

1. Understand the principles underlying storage systems.
2. Explore and gain comprehensive understanding of database fundamentals and their applications.
3. Develop Practical Skills through Hands-on Projects and Case Studies in applying storage and database concepts to real-world scenarios.

Course Outcomes:

The students will be able to:

1. Gain Knowledge on various storage technologies.
2. Design and implement database solutions tailored to the unique requirements of media contents.
3. Analyze the performance and scalability of media storage systems and apply optimization techniques.
4. Develop mechanisms for efficient content retrieval and distribution.
5. Gain expertise in managing media assets within database systems.
6. Experiment with advanced technologies and emerging trends in media storage and database systems.

Module: 1	**Introduction to Storage Systems for Media**	**9 Hours**
Overview of storage technologies - HDDs - SSDs - tapes - cloud storage - Storage architectures - Direct-attached storage (DAS) - network-attached storage (NAS) - storage area networks (SAN) - Media-specific considerations - File formats - codecs - resolution - bitrates and their impact on storage requirements - Case studies - Real-world examples of storage systems used in media production and broadcasting.		
Module: 2	**Database Fundamentals for Media**	**9 Hours**

Introduction to databases: Relational vs. non-relational databases - Data modeling for media - Structuring data for efficient storage and retrieval - Query languages: SQL basics and extensions for multimedia data - Database management systems (DBMS) - Overview of popular systems and their suitability for media applications - Case studies - Database applications in media management - content distribution - audience analytics.		
Module: 3	**Media Storage Architectures and Technologies**	**9 Hours**
Storage optimization techniques - Compression - deduplication - tiered storage - Scalability and performance considerations for media storage - Content delivery networks (CDNs) and edge caching for media distribution - Cloud storage solutions for media: Architecture, security, and cost considerations - Hands-on exercises - Setting up media storage systems - optimizing performance for different types of media content.		
Module: 4	**Database Management for Media Assets**	**9 Hours**
Metadata management for media assets - Standards (e.g., IPTC, EXIF) and best practices - Content indexing and search - Full-text search - similarity search - content-based retrieval - Digital rights management (DRM) in database systems - Versioning and revision control for media assets - Project: Designing and implementing a database system for a media production company or digital media library.		
Module: 5	**Advanced Topics in Media Storage and Database Systems**	**9 Hours**
Big data analytics for media - Processing and analyzing large volumes of multimedia data - Distributed storage and database architectures for global media distribution - Machine learning applications in media content analysis and recommendation systems - Blockchain technologies for media asset management and copyright protection - Emerging trends and future directions in media storage and database technologies.		
Total Lectures		**45 Hours**
Text Books		
1	Korst, J., & Pronk, V. (2005). *Multimedia storage and retrieval: An algorithmic approach*. John Wiley & Sons.	
2	Prabhakaran, B. (2012). *Multimedia database management systems*. Springer Science & Business Media.	
Reference Books		
1	Troppens, U., Erkens, R., Muller-Friedt, W., Wolafka, R., & Haustein, N. (2011). *Storage networks explained: Basics and application of fibre channel SAN, NAS, iSCSI, InfiniBand and FCoE*. John Wiley & Sons.	
2	Garcia-Molina, H., Ullman, J. D., & Widom, J. (2009). *Database systems: The complete book*. Pearson.	
3	Clark, T. (2003). *Designing storage area networks: A practical reference for implementing fibre channel and IP SANs*. Addison-Wesley Professional.	
4	Jensen, C. S., Lim, E., Yang, D., Lee, W., Tseng, V. S., Kalogeraki, V., Huang, J., & Shen, C. (2021). *Database systems for advanced applications: 26th International Conference, DASFAA 2021, Taipei, Taiwan, April 11–14, 2021, proceedings, part II*. Springer Nature.	
5	Hsu, H., Chang, C., & Hsu, C. (2017). *Big data analytics for sensor-network collected intelligence*. Morgan Kaufmann.	
Recommended by Board of Studies		**18.04.2024**
Approved by Academic Council		**11.05.2024**

Course Code	**COMPUTER NETWORKS AND BROADCAST TECHNOLOGIES**	**L**	**T**	**P**	**C**
23MP2025		**3**	**0**	**0**	**3**

Course Objectives

Enable the students to:

1. Gain comprehensive understanding of computer networking principles and their applications in broadcast technologies.
2. Acquire the knowledge and skills necessary to effectively plan, produce, and distribute broadcast content across various Digital Media platforms.
3. Develop the knowledge and skills necessary to design, implement, and manage computer networks specifically tailored for broadcast environments.

Course Outcomes:

The students will be able to:

1. Acquire a solid understanding of fundamental concepts in computer networking.
2. Learn about broadcast signal transmission, modulation techniques, broadcast standards, and regulatory frameworks.
3. Develop practical skills in designing and implementing computer networks.
4. Gain knowledge and skills in network management, maintenance tasks.
5. Explore emerging technologies and trends in computer networking.
6. Develop and produce a broadcast project.

Module: 1	**Fundamentals of Computer Networks**	**9 Hours**
Introduction to computer networks - Definitions - components - types (LAN, WAN, MAN) - OSI model and TCP/IP model - Understanding network layers and protocols - Network devices: Routers - switches - hubs - modems - Network addressing: IPv4, IPv6 - subnetting - DHCP - Integration of AI in network management for optimized routing and resource allocation.		
Module: 2	**Network Security and Management**	**9 Hours**
Overview of network security concepts - Confidentiality - integrity - availability - Common network security threats - Malware - phishing - DoS attacks - Security measures: Firewalls - encryption - authentication - access control - AI-driven network intrusion detection and prevention systems - Network management protocols - SNMP - NetFlow - syslog enhanced with AI analytics.		
Module: 3	**Wireless and Mobile Networks**	**9 Hours**
Introduction to wireless communication technologies - Wi-Fi - Bluetooth - cellular networks - Wireless network architectures and protocols - IEEE 802.11 - 3G - 4G - 5G - AI-based optimization of wireless network performance - spectrum management - Mobile IP and Mobile Ad hoc Networks (MANETs) with AI-driven routing algorithms - Challenges and solutions in wireless network security and management augmented by AI.		
Module: 4	**Broadcast Technologies**	**9 Hours**
Overview of broadcast technologies - Analog vs. digital broadcasting - Television broadcasting standards - NTSC - PAL - SECAM - Digital television (DTV) standards: ATSC, DVB, and ISDB - AI applications in content recommendation systems and personalized broadcasting - Enhancing broadcast production with AI-driven content analysis - editing tools - Hardwares for Broadcasting.		
Module: 5	**Multimedia Streaming and Content Delivery Networks (CDNs)**	**9 Hours**
Introduction to multimedia streaming - Streaming protocols and codecs - Content Delivery Networks (CDNs): Architecture - caching - load balancing - AI-powered adaptive bitrate streaming for optimized user experience - Leveraging AI in real-time video analytics for quality assurance - content moderation - AI-driven CDN resource allocation - dynamic content caching strategies.		
Total Lectures		**45 Hours**

Text Books	
1	James F. Kurose and Keith W. Ross "Computer Networking: A Top-Down Approach", Pearson, Seventh Edition, 2017.
2	Walter Fischer "Digital Video and Audio Broadcasting Technology: A Practical Engineering Guide", Springer, Fourth Edition, 2020.
Reference Books	
1	
2	William Stallings, "Network Security Essentials: Applications and Standards", Pearson, Sixth Edition, 2016
3	William Stallings "Wireless Communications & Networks", Pearson, Second Edition, 2004
4	Yvonne Cappé, "Broadcast Basics: A Beginner's Guide to Television News Reporting and Production", Marion Street Press, 2006
5	Ilya Grigorik, "High-Performance Browser Networking", O'Reilly Media, Inc., 2014

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	SOFTWARE ENGINEERING	L	T	P	C
23MP2026		3	0	0	3

Course Objectives:

Enable the students to:
Learn the software life cycle models.
Emphasis the importance of the software development process.
Gain exposure to test and analyze the software products.

Course Outcomes:

The students will be able to:
Understand the principles of various software process models widely used in software construction.
Acquire knowledge about how to analyze, design and develop a software application.
Create effective project management plans, manage time and physical resources.
Generate test cases and effective testing procedures.
Design and develop human-computer interfaces.
Assess the cost, quality and management issues involved in software application.

Module: 1	Fundamentals of Software	9 Hours

Software Characteristics - Components & Applications - Software Engineering - A Layered Technology - Software Process Models: Linear Sequential Mode - Prototype & Rad Model - Evolutionary Software Process Model - Incremental Model - Spiral Model.

Module: 2	Software Project Management	9 Hours

Project Management Concepts People Problem and Process /W Process and Project Metrics: Metrics in The Process and Project Domains. Software Measurement - Size Oriented, Function Oriented Metrics, Extended Function.

Module: 3	Design Concepts	9 Hours

The Design Process - The Design Concepts - The Design Model. Architectural Design: Software Architecture - Architectural Styles - Architectural Design - Component Level Design: What is a Component? - Designing Class-Based Components.

Module: 4	User Interface Design	9 Hours

The Golden Rules - User Interface Analysis and Design - Interface Design Steps - Software Quality - Achieving Software Quality - Review Techniques: Informal Reviews - Formal Technical Reviews.

Module: 5	Software Testing Strategies	9 Hours

A Strategic Approach to Software Testing - Test Strategies for Conventional Software - Validation Testing - System Testing - Estimation for Software Projects: The Project Planning Process – Resources - Decomposition Tech.

Total Lectures	45 Hours

Text Books

1. Pressman, R. S., & Maxim, B. R. (2019). *Software engineering: A practitioner's approach*.
2. Gill, N. S. (2018). *Software engineering*. KHANNA PUBLISHING HOUSE.

Reference Books

1. Hitesh, M. (2020). *Fundamentals of software engineering.* BPB Publications.
2. Prasad, . R., & Verma, G. (2016). *Software engineering*. KHANNA PUBLISHING.
3. Sommerville, I. (2015). *Software engineering*.
4. MALL, R. (2018). *Fundamentals of software engineering* (5th ed.). PHI Learning Pvt.
5. Changder, N. (2024). *Software engineering*. CHANGDER OUTLINE.

Recommended by Board of Studies	18.04.2024
Approved by Academic Council	11.05.2024

Course Code	UI/UX DESIGN	L	T	P	C
23MP2027		2	1	0	3

Course Objectives:

Enable the students to:
1. Create visually appealing and cohesive user interfaces.

2. Gain proficiency in industry-standard UI design tools to create high-fidelity interface designs.
3. Understand principles of interaction design and engaging user interactions in digital interfaces

Course Outcomes:

The students will be able to:

1. Develop user-centered designs that prioritize the needs, preferences, and behaviors of target users.
2. Gain proficiency in industry-standard UI design tools such as Sketch, Figma, Adobe XD etc.
3. Ability to create wireframes and prototypes to visualize and test interface designs.
4. Plan and conduct user research activities
5. Aware of ethical considerations in UI/UX design.
6. Create high quality professional documents and artifacts related to the design process.

Module: 1	**Introduction to UI/UX design**	**9 Hours**
Introduction to UI and UX design - Importance of user-centered design - Ideation techniques: brainstorming, sketching - Influence of technological advancements on design practices - Analyzing real-world examples of successful UI/UX designs - Exploring different roles within UI/UX design		
Module: 2	**User Research and Analysis**	**9 Hours**
Defining user research and its importance in the design process - User research in informing design decisions and improving user experiences - Identifying target audience demographics and characteristics - Introduction to usability testing and its importance in evaluating designs - Creating user flows to visualize user interactions with digital products.		
Module: 3	**UI Design Fundamentals**	**9 Hours**
Introduction to visual design principles (typography, color theory, layout) - Applying visual hierarchy in UI design - Introduction to design tools - UI Elements - Designing responsive layouts - prototyping - Role of UI design in user experience (UX) - Tools and techniques for prototyping		
Module: 4	**Interaction Design and Prototyping**	**9 Hours**
Human-computer interaction (HCI) principles Affordances, signifiers, and feedback loops - Cognitive psychology principles in interaction design - Introduction to wireframes and their purpose - Low-fidelity vs. high-fidelity wireframes - Sketching and paper prototyping - Digital wireframing tools and software.		
Module: 5	**UI Implementation and Design Systems**	**9 Hours**
Understanding front-end development basics (HTML, CSS, JavaScript) - Translating designs into code - Introduction to design systems and component libraries - Collaborating with developers and stakeholders - Best practices for maintaining consistency and scalability in UI design projects.		
Total Lectures		**45 Hours**

Text Books

1. Hartson, R., & Pyla, P. S. (2012). *The UX book: Process and guidelines for ensuring a quality user experience*. Elsevier.
2. Duyne, D. K., Landay, J. A., & Hong, J. I. (2007). *The design of sites: Patterns for creating winning web sites*. Prentice Hall Professional.

Reference Books

1. Wathan, A., & Schoger, S. (2019). *Refactoring UI*.
2. Kuang, C., & Fabricant, R. (2019). *User friendly: How the hidden rules of design are changing the way we live, work & play*. Random House.
3. Whalen, J. (2019). *Design for how people think: Using brain science to build better products*. O'Reilly Media.
4. Kholmatova, A. (2017). *Design systems: A practical guide to creating design languages for digital products*.
5. Edition, S. (2021). *Summary - The best interface is no interface: The simple path to brilliant technology by golden Krishna*. Shortcut Edition.

Recommended by Board of Studies	**18.04.2024**

Approved by Academic Council	11.05.2024

Course Code	WEB DESIGN AND DEVELOPMENT	L	T	P	C
23MP2028		3	0	0	3

Course Objectives:

Enable the students to:

1. Integrate various media types in various websites.
2. Understand the importance of accessibility and usability in web design and development
3. Learn design principles specific to digital media, including layout, typography, color theory, and visual hierarchy.

Course Outcomes:

The students will be able to:

1. Gain proficiency in HTML, CSS, JavaScript, and other relevant web technologies.
2. Develop the ability to create websites that respond effectively to various screen sizes and devices, ensuring a seamless user experience across platforms.
3. Integrate various media types, including images, videos, and audio, into web projects effectively
4. Gain proficiency in version control systems like Git and learn collaborative development workflows for web projects.
5. Understand legal and ethical considerations in web design and development
6. Explore the various techniques for creating accessible and user-friendly websites.

Module: 1	Introduction to Web Technologies	9 Hours

Understanding the World Wide Web - history and evolution of the World Wide Web - client-server architecture - HTTP protocol - URL - Creating websites that adapt to various screen sizes and devices - Overview of web standards and specifications - Basics of version control systems and Git - Web Hosting and Domain Management.

Module: 2	Content Management Systems (CMS)	9 Hours

Popular CMS Platforms - Installing and Configuring a CMS -Navigating the CMS Dashboard - Content Creation and Management - Customizing Themes and Templates - Plugins and Extensions - User Management and Permissions - Search Engine Optimization (SEO) for CMS - Responsive Design and Mobile Optimization - Case Study - E-commerce and Online Stores.

Module: 3	Frontend Development Frameworks	9 Hours

HTML Fundamentals - CSS Fundamentals - CSS Frameworks - Web Typography - CSS Preprocessors - Browser Developer Tools - Cross-Browser Compatibility.

Module: 4	Backend Development	9 Hours

Server-Side Programming Languages - Python Django - PHP - database management systems (DBMS) - Creating and Managing Databases - Server Configuration and Environment Setup - Web Servers - Handling HTTP Requests and Responses - Authentication and Authorization - Handling File Uploads and Downloads - Caching and Performance Optimization -Deployment and Continuous Integration and Deployment.

Module: 5	Web Analytics	9 Hours

Search Engine Optimisation - Key Performance Indicators (KPIs) - Web Analytics Tools Overview: Google Analytic - Adobe analytics - Setting Up Web Analytics -Traffic Sources Analysis - Conversion Rate Optimization (CRO) - Segmentation and Targeting - E-commerce Analytics - Mobile Analytics - Reporting and Data Visualization.

Total Lectures	45 Hours

Text Books

1. Duckett, J. (2014). Web design with HTML, CSS, JavaScript and jQuery set. Wiley.
2. Marcotte, E. (2011). Responsive web design. Zebra Press.

Reference Books

1. Robbins, J. (2018). Learning web design: A beginner's guide to HTML, CSS, JavaScript, and web graphics. O'Reilly Media.
2. Beaird, J., Walker, A., & George, J. (2020). The principles of beautiful web design. SitePoint Pty.

3	Mauryavanshi, A., & Maurya, A. (2021). A complete overview on: Web-development. Ayush Mauryavanshi.
4	Hawramani, I. (2018). HTML, CSS and JavaScript for complete beginners: A step by step guide to learning HTML5, CSS3 and the JavaScript programming language.
5	Grannell, C., Sumner, V., & Synodinos, D. (2012). The essential guide to HTML5 and CSS3 web design. Apress.

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	**FOUNDATIONS OF DATA SCIENCE**	**L**	**T**	**P**	**C**
23MP2029		**3**	**0**	**0**	**3**

Course Objectives:

Enable the students to:

1. Gain a solid understanding of the foundational concepts of data science in the media industry.
2. Develop proficiency in collecting, preprocessing, and cleaning various types of media.
3. Apply data science techniques to real-world media datasets through hands-on projects.

Course Outcomes:

The students will be able to:

1. Collect, preprocess, and clean various types of media data from different sources
2. Apply statistical analysis techniques to interpret and draw insights from media data
3. Visualize data-driven insights to stakeholders through visualizations.
4. Demonstrate critical thinking and problem-solving skills through the analysis of case studies
5. Develop a mindset of continuous learning and adaptation to new tools.
6. Understand the foundational concepts of data science and its applications in media industry.

Module: 1	**Introduction to Data Science and Media**	**9 Hours**

Overview of data science - definition - importance and applications in media industry - Understanding the role of data in media - audience analysis - content optimization - advertising targeting - Ethical considerations in data - driven media - privacy - bias and transparency.

Module: 2	**Data Collection and Preprocessing**	**9 Hour**

Data sources in media - social media - web analytics - audience surveys - Data scraping techniques and APIs for media content analysis - Data cleaning and preprocessing - handling missing values - outliers - and data normalization techniques - Introduction to data visualization – charts – graphs - dashboards for media data representation.

Module: 3	**Statistical Analysis for Media Data**	**9 Hours**

Descriptive statistics - measures of central tendency - dispersion and frequency distributions - Inferential statistics - hypothesis testing - confidence intervals and significance testing - Correlation analysis for understanding relationships between media variables - Introduction to regression analysis for predicting media outcomes.

Module: 4	**Machine Learning for Media**	**9 Hours**

Overview of machine learning algorithms - supervised and unsupervised learning - Classification algorithms for media application - sentiment analysis - content categorization and recommendation systems - Clustering techniques for audience segmentation and content grouping - Introduction to natural language processing for media text analysis.

Module: 5	**Applied Data Science Projects in Media**	**9 Hours**

Practical applications of data science in media projects - Group projects - students work in teams to analyse real-world media datasets - Case studies - examining successful data-driven media campaigns and strategies - Presentation and communication of findings: conveying insights effectively to stakeholders.

Total Lectures	**45 Hours**

Text Books

1.	Blum, A., Hopcroft, J., & Kannan, R. (2020). *Foundations of data science*. Cambridge University Press.
2.	Provost, F., & Fawcett, T. (2013). *Data science for business: What you need to know about data mining and data-analytic thinking*. O'Reilly Media.

Reference Books	
1.	Mayer-Schönberger, V., & Cukier, K. (2013). *Big data: A revolution that will transform how we live, work, and think*. Houghton Mifflin Harcourt.
2.	Pierson, L. (2017). *Data science for dummies*. John Wiley & Sons.
3.	Grus, J. (2019). *Data science from scratch: First principles with Python*. O'Reilly Media.
4.	McKinney, W. (2017). *Python for data analysis: Data wrangling with pandas, NumPy, and IPython*. O'Reilly Media.
5.	Cady, F. (2017). *The data science handbook*. John Wiley & Sons.
Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	ARTIFICIAL INTELLIGENCE FOR MEDIA	L	T	P	C
23MP2030		3	0	0	3

Course Objectives:

Enable the studenst to:

1. Understand the fundamental concepts and principles of artificial intelligence (AI) as they apply to various aspects of media industries
2. Analyze case studies and real-world examples to evaluate the impact of AI on media content
3. Develop practical skills in applying AI techniques to media-related tasks.

Course Outcomes:

The student will be able to:

1. Understand the fundamental concepts and principles of artificial intelligence (AI) and its applications in various domains of media,
2. Evaluate the effectiveness, ethical implications, and societal impact of AI solutions implemented in media
3. Implement AI-driven projects and experiments in media contexts, demonstrating creativity, technical proficiency, and problem-solving skills.
4. Explore the emerging trends, technologies in the field of AI and media.
5. Design and implement AI-driven projects and experiments in media contexts.
6. Apply selected basic AI techniques; judge applicability of more advanced techniques.

Module: 1	**Introduction to Artificial Intelligence in Media**	**9 Hours**

Overview of Artificial Intelligence - Evolution and Impact of AI in Media Industries - Key Concepts in AI for Media: Machine Learning - Natural Language Processing - Computer Vision - Applications of AI in Media Production - Distribution and Consumption - Case Studies: AI Success Stories in Media.

Module: 2	**AI Tools and Technologies for Media**	**9 Hours**

Introduction to AI Development Environments: TensorFlow - PyTorch - Image and Video Processing with OpenCV - Natural Language Processing with NLTK - Cloud-based AI Services: Google Cloud AI - AWS AI/ML - Azure Cognitive Services - Practical Workshop: Hands-on Experience with AI Tools in Media Projects.

Module: 3	**AI in Content Creation and Production**	**9 Hours**

Automated Writing and Journalism: Generating News Articles and sports Reports - AI-driven Video Editing and Post-production Techniques - Virtual Assistants for Creative Workflows - Ethical Considerations in AI-driven Content Creation - Project Showcase: AI Applications in Content Creation and Production.

Module: 4	**AI in Content Analysis and Recommendation**	**9 Hours**

Content Analysis and Classification with AI - Sentiment Analysis and Opinion Mining in Social media and News - Recommender Systems for Personalized Content Delivery - User Behavior Analysis through AI-driven Analytics - Regulatory Compliance and Privacy Concerns in AI-driven Content Analysis

Module: 5	**AI in Audience Engagement and Interactive Media**	**9 Hours**

Augmented - Reality (AR) and Virtual Reality (VR) Experiences Enhanced by AI -Design Principles for Engaging AI-driven Media Experiences - Creating Innovative AI-driven Media Experiences.

Total Lectures	**45 Hours**

Text Books

1	Don Sumner, (2023). AI in Entertainment and Media., Amazon Publication.
2	Connock, A. (2022). Media management and artificial intelligence: Understanding media business models in the digital age. Taylor & Francis.
Reference Books	
1	Simon, E. (2019). A.I. Hacked: A practical guide to the future with artificial intelligence. Archway Publishing.
2	Breau, W. (2023). Content generation unleashed: Mastering AI for engaging and Impactful writing. Independently Published.
3	Sautoy, M. D. (2020). The creativity code: Art and innovation in the age of AI. Harvard University Press.
4	Patel, D. (2023). AI and the news industry: Challenges and opportunities for journalism. Independently Published.
5	Pihlajarinne, T., & Alén-Savikko, A. (2022). Artificial intelligence and the media: Reconsidering rights and responsibilities. Edward Elgar Publishing.

Recommended by the Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	**WEB DESIGN AND DEVELOPMENT LAB**	**L**	**T**	**P**	**C**
23MP2033		**0**	**0**	**2**	**2**

Course Objectives

Enable the students to:

1. Learn how to integrate various media types.
2. Understand the importance of accessibility and usability in web design and development and learn techniques for creating accessible and user-friendly websites.
3. Learn design principles specific to digital media, including layout, typography, color theory, and visual hierarchy.

Course Outcomes:

The student will be able to:

1. Gain proficiency in HTML, CSS, JavaScript, and other relevant web technologies.
2. Develop the ability to create websites.
3. To integrate various media types, including images, videos, and audio, into web projects effectively.
4. Gain proficiency in version control systems like Git and learn collaborative development workflows for web projects.
5. Understand legal and ethical considerations in web design and development.
6. Explore the various techniques for creating accessible and user-friendly websites.

Experiments

The faculty conducting the laboratory will prepare a list of 10 experiments get the approval of the HoD/Director and notify it at the beginning of each semester.

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

COURSE CODE	**COMPUTER NETWORKS AND BROADCAST TECHNOLOGIES LAB**	**L**	**T**	**P**	**C**
23MP2034		**0**	**0**	**2**	**2**

Course Objectives:

Enable the students to:

1. Gain practical experience in configuring, administering, and troubleshooting computer networks.
2. Understand the principles and operation of broadcast technologies.
3. Apply theoretical concepts to real-world scenarios, allowing students to develop practical skills in network design, implementation, optimization and management.

Course Outcomes:

The students will be able to

1. Gain a comprehensive understanding of the principles and concepts of computer networks.
2. Develop practical skills in configuring, managing, and troubleshooting networking equipment.

3. Acquire the knowledge and skills necessary to design and implement small to medium-sized computer networks.
4. Gain proficiency in broadcast technologies.
5. Learn about multimedia streaming protocols and techniques.
6. Develop skills in diagnosing and resolving common network issues.

LIST OF EXERCISE

1. Network Device Configuration
2. Vlan Setup
3. Network Troubleshooting
4. Wireless Network Setup
5. Broadcast Standards And Formats
6. Introduction To Obs
7. Introduction To Vmix
8. Video Streaming Optimization
9. AI Integration For Broadcasting
10. Project Work

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

COURSE CODE	PYTHON FOR MEDIA	L	T	P	C
24MP2001		3	0	0	3

Course Objectives:

Enable the student to:

1. Understand basic concepts related to multimedia
2. Explore Python libraries for applications like audio filtering, equalization, feature extraction, and synthesis.
3. Integrate Python applications with multimedia APIs and services, such as multimedia content platforms

Course Outcomes:

The student will be able to:

1. Demonstrate a solid understanding of fundamental Python programming concepts
2. Be proficient in using Python libraries and tools for multimedia processing, including image manipulation, audio processing, and video editing.
3. Apply Python programming techniques to perform various tasks
4. Be proficient in using Python libraries for audio processing.
5. Use Python libraries for video processing tasks such as video capture, editing, transcoding, and analysis.
6. Be proficient in using Python libraries for Animation and Effects.

Module: 1	**Python and Programming**	**9 Hours**

A Simple Python Program - Literal Constants - Variables and Identifiers - Data Types - Input Operation - Comments - Reserved Words - Indentation - Operators and - Expressions - Expressions in Python - Operations on Strings - Other Data Types - Type Conversion - Introduction to Decision Control Statements - Selection - Conditional Branching Statements - Basic Loop Structures - Iterative Statements - Nested Loops - break and continue Statements - Pass Statement - Else with Loops.

Module: 2	**Functions**	**9 Hours**

Need for Functions - Function Definition - Function Call - Variable Scope and Lifetime - Return Statement - Function Arguments - Lambda Functions or Anonymous Functions - Recursive Functions - Lists - Tuples - Sets - Dictionaries.

Module: 3	**Video Processing and Python**	**9 Hours**

Working with Videos: Installation prerequisites - Playing a video Time for action - video player - Video format conversion Time for action - video format converter - Video manipulations and effects Time for action - resize a video Time for action - crop a video - Adding text and time on a video stream Time for action - overlay text on a video track - Separating audio and video tracks Time for action - audio and video

tracks Mixing audio and video tracks Time for action - audio video track mixer Saving video frames as images.		
Module: 4	**Fun With Animations**	**9 Hours**
Fun with Animations Installation prerequisites - A primer on Pyglet - Animations with Pyglet Time for action - viewing an existing animation Time for action - animation using a sequence of images Time for action - bouncing ball animation Time for action - a simple bowling animation Time for action - raindrops animation Project: drive on a rainy day.		
Module: 5	**Python and Audio**	**9 Hours**
Working with Audios Installation prerequisites A primer on GStreamer Playing music Time for action - playing an audio: method Time for action - playing an audio: Converting audio file format Time for action - audio file format converter Extracting part of an audio Time for action - MP3 cutter - Recording - Audio Controls and Effects Controlling playback Time for action - pause and resume a playing audio stream Time for action - MP3 cutter from basic principles Adjusting volume Time for action - adjusting volume Audio effects Time for action - fading effects Time for action - adding echo effect Project: combining audio clips Time for action - creating custom audio by combining clips Audio mixing Time for action - mixing audio tracks Visualizing an audio track.		
Total Lectures		**45 Hours**

Text Books

1	Thareja, R. (2019). Python programming: Using problem solving approach. Oxford University Press, USA.
2	Sathaye, N. (2010). Python multimedia. Packt Publishing.
3	Solem, J. E. (2012). Programming computer vision with Python: Tools and algorithms for analyzing images. O'Reilly Media.

Reference Books

1	Matthes, E. (2019). Python crash course: A hands-on, project-based introduction to programming (2nd ed.). No Starch Press.
2	Siahaan, V., & Sianipar, R. H. (2024). Digital video processing projects using Python and tkinter. BALIGE PUBLISHING.
3	Phillips, D., Giridhar, C., & Kasampalis, S. (2016). Python: Master the art of design patterns. Packt Publishing.
4	Marchi, L. D., & Mitchell, L. (2019). Hands-on neural networks: Learn how to build and train your first neural network model using Python. Packt Publishing.
5	Pierson, L. (2017). Data science for dummies. John Wiley & Sons.

Recommended by the Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

COURSE CODE	**PYTHON FOR MEDIA LABORATORY**	**L**	**T**	**P**	**C**
24MP2002		**0**	**0**	**2**	**2**

Course Objectives

Enable the student to:

1. Understand basic concepts related to multimedia.
2. Explore Python libraries like PyDub, MoviePy and Librosa..
3. Integrate Python applications with multimedia APIs and services.

Course Outcomes:

The student will be able to:

1. Demonstrate a solid understanding of fundamental Python programming concepts
2. Be proficient in using Python libraries and tools for multimedia processing.
3. Apply Python programming techniques to perform various tasks
4. Be proficient in using Python libraries for audio processing.
5. Use Python libraries for video processing tasks.
6. Be proficient in using Python libraries for Animation and Effects.

Experiments

Experiment 1: Load a video file using Python and play it frame by frame.

Experiment 2: Extract frames from a video and save them as images.

Experiment 3: Apply basic video processing operations such as resizing, cropping, and rotating frames. Experiment 4: Create a video montage by combining multiple video clips and adding transitions Experiment 5: Load an audio file using Python and play it using a library like librosa or PyDub. Experiment 6: Visualize audio data using waveform and spectrogram plots. Experiment 7: Apply basic audio processing operations such as trimming, mixing, and volume adjustment. Experiment 8: Extract features from audio signals such as pitch, tempo, and MFCCs (Mel-Frequency Cepstral Coefficients). Experiment 9: Apply basic image manipulation operations such as resizing, cropping, rotating, and flipping. Experiment 10: Apply image filters such as grayscale conversion, edge detection, and blur.

Recommended by the Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	**GAMING FOR TRANSMEDIA**	**L**	**T**	**P**	**C**
24MP2003		**3**	**0**	**0**	**3**

Course Objectives:

Enable the studentS to:
1. Explore the impact of transmedia on audience behavior and media culture.
2. Use media metrics to assess the impact of transmedia stories
3. Demonstrate the application of physics in game environment towards achieving realism

Course Outcomes:

The student will be able to:
1. Gain a comprehensive understanding of transmedia storytelling principles and their application in the gaming industry
2. Explore game design, narrative structures, and interactive media.
3. Understand how game mechanics scaffold storytelling and vice versa;
4. Analyze the social impact of transmedia gaming experiences
5. Contribute to the gaming and entertainment industry
6. Develop games with industry led practices and techniques

Module: 1	**Think and Plan Transmedia**	**9 Hours**
Fundamentals of Transmedia - Culture of Transmedia - definition - modeling transmedia projects - point and line to plane - Questions of timing - Transmedia communication systems.		
Module: 2	**Imagine Transmedia**	**9 Hours**
Nuclear power of story - Importance of the emotional competence - creating complex imaginative universals - to perceive and to imagine - The affinity of transmedia universe- transformational arc of the character - Twelve stations paradigm -Transmedia Heros Journey.		
Module: 3	**Gaming Mechanics**	**9 Hours**
Game AI - Model of Game - AI Algorithms - Data Structures and Representations - Kinds of AI in Games, Speed and Memory-Processor issues, Memory concerns, PC & console constraints, The AI Engine-Structure of AI Engine,		
Module: 4	**Fun With Animations**	**9 Hours**
Basics of Movement Algorithm - Two-dimensional movement - Statics - Kinematics - Steering Behaviors - Variable Matching - Tool chain concerns - Path following - Collision avoidance - Predicting physics - Jumping & Motor Control - Movement in 3rd Dimension.		
Module: 5	**Gaming and Coding**	**9 Hours**
Decision Trees - Problem - algorithm - Pseudo code - Implementation - State Machines - Behavior trees - Fuzzy Logic - Markov Systems - Goal Oriented - Rule based system - Scripting - Board Game Theory - Mini maxing - Transposition tables and memory - Turn based strategy in board games.		
Total Lectures		**45 Hours**

Text Books	
1	Giovagnoli, M. (2011). Transmedia storytelling: Imagery, shapes and techniques. Lulu.com.
2	Millington, I. (2021). AI for games. CRC Press.
Reference Books	

1	Rogers, S. (2010). Level up!: The guide to great video game design. John Wiley & Sons.
2	Cossu, S. M. (2019). Game development with GameMaker studio 2: Make your own games with GameMaker language. Apress.
3	Gilbert, S. (2015). Designing Gamified systems: Meaningful play in interactive entertainment, marketing and education. CRC Press.
4	Schell, J. (2019). The art of game design: A book of lenses (3rd ed.). CRC Press.
5	Swink, S. (2008). Game feel: A game designer's guide to virtual sensation. CRC Press.

Recommended by the Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	AUDIO VISUAL STUDIOS	L	T	P	C
24MP2004		3	0	0	3

Course Objectives:

Enable the student to:

1. Gain a comprehensive understanding of the fundamental principles of audio-visual studio design.
2. Develop proficiency in soundproofing techniques, noise control, and acoustic treatment methods essential for creating acoustically optimized studio spaces.
3. Acquire practical skills in studio construction, including HVAC integration, infrastructure design, and safety regulations compliance.

Course Outcomes:

The student will be able to:

1. Understand the fundamental principles underlying audio-visual studio design.
2. Acquire knowledge and skills in soundproofing techniques, noise control, and acoustic treatment methods essential for creating acoustically optimized studio spaces.
3. Develop proficiency in lighting design principles and techniques relevant to audio-visual studio environments.
4. Gain an understanding of how to integrate environmental control systems into studio design.
5. Design studio infrastructures that meet technical specifications and safety standards, ensuring efficient and safe studio operations.
6. Develop skills in integrating audio-visual equipment into studio design and implementing control systems for studio automation and monitoring.

Module: 1	**Introduction to Audio Visual Studio Design**	**9 Hours**

Overview of audio-visual studio design - Studio Design principles - Understanding studio requirements - acoustics - lighting - ventilation - space utilization - Introduction to studio layout - workflow considerations - Equipment selection and integration.

Module: 2	**Acoustics and Soundproofing in Studio Design**	**9 Hours**

Fundamentals of room acoustics - sound propagation - Techniques for sound isolation and noise control - Designing for optimal sound reflection, diffusion, and absorption - Introduction to acoustic treatment materials and their applications.

Module: 3	**Lighting Design for Audio Visual Studios**	**9 Hours**

Principles of lighting design - color temperature - intensity - directionality - Types of lighting fixtures and their applications - Studio lighting setups for different types of productions - interviews - talk shows - film shoots - Considerations for green screen and chroma key lighting.

Module: 4	**Environmental Control Systems and Infrastructure**	**9 Hours**

HVAC (Heating, Ventilation, and Air Conditioning) considerations for studio environments - Electrical requirements and power distribution within the studio - Cable management and infrastructure design - Safety regulations and compliance.

Module: 5	**Studio Integration and Technology Considerations**	**9 Hours**

Integrating audio-visual equipment into the studio design - Network infrastructure and connectivity considerations - Control systems for studio automation and monitoring - Future-proofing the studio for technological advancements.

Total Lectures	**45 Hours**

Text Books

1	William J. Cavanaugh, Joseph A. Wilkes, “Architectural Acoustics: Principles and Practice”, John Wiley & Sons, 1999.
2	F. Alton Everest, “Sound Studio Construction on a Budget”, McGraw-Hill Education TAB, 1996.
Reference Books	
1	Ken Pohlmann, "Handbook of Sound Studio Construction: Rooms for Recording and Listening", McGraw-Hill Education TAB, 2013.
2	F. Alton Everest and Ken C. Pohlmann, "Master Handbook of Acoustics", McGraw-Hill Education TAB, Sixth Edition, 2015.
3	Harry Box, "Set Lighting Technician's Handbook: Film Lighting Equipment, Practice, and Electrical Distribution", Routledge, Fourth Edition, 2010.
4	Sunderesh S. Heragu, "Facilities Design", CRC Press, Fourth Edition, 2016.
5	Christopher Jaffe, "Principles of Architectural Acoustics", Thesis, 1998.
Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	**FILM STUDIES**	**L**	**T**	**P**	**C**
24MP2005		**3**	**0**	**0**	**3**

Course Objectives:

Enable the students to:

1. Identify the various modes of discourse in film.
2. Imbue insights on analyzing different genres of films.
3. Practice the art of culling out films and appreciating the various aspects of it.

Course Outcomes:

The studenst will be able to:

1. Understand the structure of film narration.
2. Learn the skills and knowledge on the narrative aspects of film.
3. Analyze the psychology of the films.
4. Demonstrate the art of appreciating and analyzing films.
5. Experiment reading for different genre of films.
6. Assess the various types of film theories.

Module: 1	**History of Cinema**	**9 Hours**

Early Cinema (1893-1903), Development of classical Hollywood cinema (1903-1927), German expression (1919- 1924),French Impression and Surrealism(1917-1930),Soviet Montage(1924-1930),The Classical Hollywood Cinema after the coming of sound, Italian neo-realism(1942-1951),The French New Wave (1959-1964), Japanese cinema, Cinema in the third world, Indian (Hindi, Tamil & other languages), Contemporary trends.

Module: 2	**Visual Narrative**	**9 Hours**

Mise-en-scene, the power of mise-en-scene, aspects of mise-en-scene, Space and time, narrative functions of mise-en-scene, Cinematographer properties-the photographic image, framing, duration of the image, montage and long take.

Module: 3	**Postproduction for Films**	**9 Hours**

Editing-dimensions of film editing, continuity editing, alternative to continuity editing, Sound –the powers of sound, fundamentals of film sound, dimensions of film sound, functions of film sound, theatrical sound formats.

Module: 4	**Film Text**	**9 Hours**

Approaches to studying film, Narrative and Non Narrative films, Structure of a narrative film, Cinematic codes, The concept of form in films, principles of film, narrative form, non-narrative films, dividing a feature film into parts and Genres (language, style, grammar, syntax), Documentary genres.

Module: 5	**Film Review**	**9 Hours**

Study of Great Indian and International filmmakers like D.W. Griffith, Charlie Chaplin, Alfred Hitchcock, Akira Kurusowa, Ingmar Bergman, Satyajit Ray, Adoor Gopalakrishnan and others. Film Appreciation – Learning film appreciation formulas – Review of popular films.

Total Lectures	**45 Hours**

Text Books	
1.	Bordwell, D., Thompson, K., & Smith, J. (2016). *Film art: An introduction*.
2.	Edgar, R., Marland, J., & Rawle, S. (2015). *The language of film*. Bloomsbury Publishing.
Reference Books	
1.	Monaco, J. (2013). *How to read a film: Technology: Image & sound: Enhanced and expanded*. UNET 2 Corporation.
2.	Fischer, L. (2023). *Emotion pictures: Movies and feelings*.
3.	Hven, S. (2022). *Enacting the worlds of cinema*. Oxford University Press.
4.	Novak, P. (2020). *Interpretation and film studies: Movie made meanings*. Springer Nature.
5.	Kuhn, A., & Westwell, G. (2012). *A dictionary of film studies*. Oxford University Press.
Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	DIGITAL MARKETING AND COMMUNICATION	L	T	P	C
24MP2006		3	0	0	3

Course Objectives:

Enable the studentss to:

1. Understand the principles, concepts, and terminology of digital marketing and communication.
2. Conduct market research and audience analysis to identify target audiences
3. Explore the evolution of digital media and its impact on traditional marketing channels.

Course Outcomes:

The students will be able to:

1. Learn the fundamental concepts of digital marketing and communication.
2. Formulate strategic plans for digital marketing and communication.
3. Attain expertise in crafting compelling and pertinent content tailored for digital platforms.
4. Gain insight into various strategies and methods employed in social media marketing.
5. Showcase proficiency in the implementation of on-page and off-page SEO strategies.
6. Develop adeptness in utilizing digital analytics tools to monitor and evaluate the effectiveness of digital marketing campaigns.

Module: 1	**Foundations of Digital Marketing and Communication**	**9 Hours**

Introduction to digital marketing - communication principles - understanding the role of digital media in marketing - Key concepts and terminologies in digital marketing - Evolution of digital media and its impact on traditional marketing channels - Case studies.

Module: 2	**Digital Marketing Strategy Development**	**9 Hours**

Setting objectives and goals for digital marketing and communication - Conducting market research - audience analysis - Comprehensive digital marketing - communication strategies - IMC across digital platforms - Evaluating and measuring the effectiveness of digital marketing strategies.

Module: 3	**Content Creation and Distribution**	**9 Hours**

Importance of Content in digital marketing and communication - Strategies for creating engaging and relevant content for digital platforms - Content distribution tactics across different digital channels - Leveraging user - generated content and influencer partnerships - Analyzing content performance metrics and optimizing content strategies.

Module: 4	**Social Media Marketing**	**9 Hours**

Utilizing social media platforms for brand building - Social media marketing strategies and best practices - Social media advertising campaigns - Community management - Monitoring and analyzing social media metrics for performance optimization

Module: 5	**Search Engine Optimization (SEO) and Digital Analytics**	**9 Hours**

Introduction to SEO principles and techniques - On-page and off - page SEO strategies for improving website visibility and ranking - Implementing digital analytics tools for tracking and measuring digital marketing performance - Analyzing website traffic - user behavior and conversion rates - Using data-driven insights to optimize digital marketing and communication strategies

Total Lectures	**45 Hours**

Text Books	
1.	Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation & practice*. Pearson UK.
2.	Zahay, D., Roberts, M. L., Barker, D. I., Barker, M., & Bormann, N. F. (2021). *Social media marketing: A strategic approach*.
Reference Books	
1.	Halvorson, K., & Rach, M. (2012). *Content strategy for the web*. New Riders.
2.	Cialdini, R. B. (2021). *Influence, new and expanded: The psychology of persuasion*. Harper Business.
3.	Eric Enge. Stephan Spencer. Jessie Stricchiola, Enge, E., & Spencer, S. M. (2015). *The art of SEO: Mastering search engine optimization*.
4.	Pulizzi, J. (2013). *Epic content marketing: How to tell a different story, break through the clutter, and win more customers by marketing less*. McGraw Hill Professional.
5.	Feroz, A. K., Khan, G. F., & Sponder, M. (2024). *Digital analytics for marketing*. Taylor & Francis.
Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

Course Code	FILM MAKING LAB	L	T	P	C
24MP2007		0	0	2	2

Course Objectives:

Enable the student to:

1. Impart the knowledge of filmmaking process.
2. Develop skills on film language.
3. Gain exposure to the technical process of filmmaking.

Course Outcomes:

The student will be able to:

1. Understand the practical knowledge on writing for films.
2. Learn the different stages of filmmaking.
3. Generate creative ideas to expert in analysis of the films.
4. Reconstruct the sound knowledge in film editing techniques.
5. Experiment various production methods in filmmaking.
6. Produce films of different content and genres.

List of Experiments

Exercise 1 – Concept and Scripting
Exercise 2 – Storyboard
Exercise 3 – Mise-en-Scene
Exercise 4 – Continuity
Exercise 5 – Monatage
Exercise 6 – Produce a One-Shot Video
Exercise 7 – Produce an Emotional Scene
Exercise 8 – Create Tension in a Scene
Exercise 9 – Produce an Ad film
Exercise 10 – Produce a Shortfilm

Recommended by Board of Studies	**18.04.2024**
Approved by Academic Council	**11.05.2024**

DIVISION OF MEDIA

LIST OF NEW COURSES

Sl. No.	Course Code	Course Title	Credits			
			L	T	P	C
1	23MP2001	Foundations of Media Studies	3	0	0	3
2	23MP2002	Visualization	3	0	0	3
3	23MP2003	Creative Writing	3	0	0	3
4	23MP2008	Digital Photography	3	0	2	5
5	23MP2014	Sketching and Visual Arts Lab	0	0	2	2
6	23MP2015	Graphic Design Lab	0	0	2	2
7	23MP2021	Introduction to Programming and Data Structures	3	0	0	3
8	23MP2022	Object Oriented Programing	3	0	0	3
9	23MP2031	Programming and Data Structures Lab	0	0	2	2
10	23MP2032	Object Oriented Programing Lab	0	0	2	2
11	23MP2035	Film Pre Production	0	0	5	5
12	23MP2036	Lighting Techniques and Color Theory	0	0	5	5
13	23MP2037	Digital Photography Techniques	0	0	2	2
14	23MP2038	Film Direction	0	0	5	5
15	23MP2039	Video Post Production Techniques	0	0	5	5
16	23MP2040	Color Theory and Color Grading	0	0	5	5
17	23MP2041	Adobe Photoshop Lab	0	0	2	2
18	23MP2042	Editing Software and Tools	0	0	5	5
19	23MP2043	Film Editing	0	0	5	5
20	23MP2044	Studio Acoustics and Routing	0	0	5	5
21	23MP2045	Recording, Arranging and Live Sound	0	0	5	5
22	23MP2046	Sound Design - Ambience, SFX and Foley	0	0	5	5
23	23MP2047	Mixing and Mastering	0	0	2	2
24	23MP2048	Audio Networking and Streaming	0	0	5	5

Course Code	Foundation of Media Studies	L	T	P	C
23MP2001		3	0	0	3

Course Objectives

Enable the student to:

1. Acquire adequate knowledge on media related production and post-production activities.
2. Evaluate the different forms of media communication and its impact amongst the target audience.
3. Explore the trends and opportunities in the new media age.

Course Outcomes

The student will be able to:

1. Identify sources for learning perspectives and developing stories.
2. Categorize different forms of mass media based on trends.
3. Analyze the nature and characteristics of media production.
4. Evaluate the latest development in media related research and practice.
5. Explore the fundamentals of marketing in the digital era.
6. Examine the importance of research in a new media environment.

Module: 1	**History of Storytelling**	**9 Hours**
Types, sources and research for story**,** subjectivity in story telling-story basics- Dramatic story-telling- Documentary story – Evaluating Story ideas – Developing the story. Perspectives On Storytelling Across Industries - Storytelling In Film - Storytelling In Art/Illustration - Storytelling In Writing - Understanding The Audience		
Module: 2	**Mediums of Media**	**9 Hours**
Print media-Newspapers - Magazines, Books, Journals – Characteristics – Types – Audiences. **Broadcast Media** - Radio – Characteristics of Radio as an Audio Medium – AM and FM – web radio Audiences - Television- Cable, Satellite television – IPTV - Films – Motion pictures - **Computer-Mediated Communication** - scope and nature - New Media - audiences – technological changes- ICT/Media Technologies – trends - Social Media – YouTube - Blogs – Podcasts – Facebook –Twitter - WhatsApp- Instagram.		
Module: 3	**Execution stages in Media**	**9 Hours**
Pre-production-Concept/Story development, Scripting/Screenplay writing, Budgeting, Casting, Locations, Financing, Production-Shooting, Direction and Cinematography, Post production- Editing, Sound recording, Dubbing ,Special effects, Graphics and Final mixing, Distribution and Exhibition.		
Module: 4	**Research and Development (R&D), Practice and Development (P&D)**	**9 Hours**
Research Methods-basic parameters of media related studies- Scope, Importance and Limitations of media research- Modern trends in media research **-media's** impact on social, physical, and psychological aspects of people's lives. Case studies.		
Module: 5	**Marketing and Sales**	**9 Hours**
Marketing management- Marketing environment – Marketing mix – Understanding the Consumer - Marketing segmentation – Targeting – Positioning - Promotion -Fundamentals of Social marketing and business - Social marketing and social change tools -Advertising- Publicity- Edutainment. Pilot campaign evaluation.		
Total Lectures		**45 Hours**
Text Books		
1	Griffey, J. V. Introduction to Interactive Digital Media: Concept and Practice. Routledge Recommend, 2020.	
2	Kumar, K. J Mass communication in India. 5th Edition, 2020.	
Reference Books		
1	Dominick, J. R. The dynamics of mass communication: Media in the digital age. Tata McGraw Hill Education, 2005.	
2	Roger D Wimmer, Joseph R. Dominick, Mass Media Research. 9th Edition 2000.	
3	Hilliard, R. L. Writing for Television, Radio, and New media. Cengage Learning, 2014.	
4	Tamar Weinberg, O Reilly Media, The New Community Rules: Marketing on the Social Web, 2009.	

5	Paul Martin Lester, Thomson Wadsworth, Visual Communication: Images with Messages, 2012.
Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**VISUALIZATION**	**L**	**T**	**P**	**C**
23MP2002		3	0	0	3

Course Objectives

Enable the student to:

1. Acquaint with the best practices for creating clear, concise, and aesthetically pleasing visuals.
2. Apply the principles of color theory and layout to enhance the impact of visuals.
3. Evaluate the impact of visualization techniques on creative expressions.

Course Outcomes

The student will be able to:

1. Identify diverse visual styles for generating creative ideas to curate visuals.
2. Apply AI design tools for creative sketching.
3. Create powerful and interactive presentations for effective marketing.
4. Implement Design-Research for Design-Decisions
5. Employ user-centric approaches in visuals to ensure audience satisfaction
6. Apply appropriate software functionalities and features to customize and enhance visuals.

Module: 1	**Keywords and Mood Boards**	**9 Hours**

Understanding the role of keywords in design-Creating effective mood boards-Techniques for curating images, colors, and visual elements to convey specific design themes and emotions-Exploring visual styles: Analyzing and comparing different visual styles to inspire creative ideas-create mood boards for various design projects to develop their visual ideation skills.

Module: 2	**Scribble and Rough Sketching, Using AI**	**9 Hours**

Importance of sketching in the design process-Understanding how rough sketching aids idea generation and problem-solving-Techniques for manual sketching-Introduction to AI-powered design tools-Integrating AI into the design workflow-Hands-on practice: Students will engage in both manual sketching and AI-assisted design exercises to strengthen their design fluency.

Module: 3	**The Art of Presentation**	**9 Hours**

Effective visual storytelling: Learning how to craft compelling narratives to present design concepts and ideas-Utilizing presentation software: Techniques for creating engaging slide decks and interactive presentations-Designing for impact-Understanding the use of visuals, typography, and layout to create powerful presentation materials.

Module: 4	**Possibility Check and R&D**	**9 Hours**

Evaluating design feasibility: Understanding the technical and practical constraints that may impact design implementation-Research and Development (R&D) methods: Conducting design research to gather insights and arrive at design decisions-Prototyping and iterative design: Utilizing rapid prototyping to test ideas and refine designs based on feedback.

Module: 5	**Execution and Refinement**	**9 Hours**

Transitioning from concept to execution-Attention to detail and polish-Usability testing and user feedback-Incorporating user-centric approaches to ensure designs meet user needs and expectations.	
Total Lectures	**45 Hours**
Text Books	
1	Donald D. Hoffman, "Visual Intelligence: How We Create What We See", 2000.
2	Albert P. Udaya Sankar and S. Balasubramanian, "AI for Artists: Artificial Intelligence and the Creative Process" 2022.
Reference Books	
1	Kevin Mullet and Darrell Sano, "Designing Visual Interfaces: Communication Oriented Techniques", 1994.
2	William Lidwell, Kritina Holden, and Jill Butler, "Universal Principles of Design", 2010.
3	Nancy Duarte, "Slide:ology: The Art and Science of Creating Great Presentations", 2008.
4	Austin Kleon, "Steal Like an Artist: 10 Things Nobody Told You About Being Creative", 2012.
5	Anna Wray, "Mood boards: Design and Make Your Own".
Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**CREATIVE WRITING**	**L**	**T**	**P**	**C**
23MP2003		3	0	0	3
Course Objectives					
Enable the student to: 1) Acquire skills to elevate the art of writing for media. 2) Apply appropriate writing techniques for different mediums. 3) Assess case studies and incorporate suitable writing techniques based on industry needs.					
Course Outcomes					
The student will be able to: 1) Gain comprehensive skills to build and implement the ideas. 2) Identify AI tools that help in writing novel content with accuracy. 3) Create effective scripts adhering the film paradigm to engage the audience. 4) Implement copywriting methods for Social Media and Infomercials. 5) Explore the writing techniques for visual mediums. 6) Examine the importance of case studies in the field of creative writing.					
Module:1	**Ideation and Inspiration**				**9 Hours**
Identifying the problem -Idea Generation- idea mapping - Clustering – Brainstorming-Scamper : (S) Substitute, (C) Combine, (A) Adapt, (M) Modify, (P) Put to another use, (E) Eliminate and (R) Reverse - Memory –Recall-episodic memory-semantic memory- Linking Known to Unknown-. Reading-Divergent Thinking- Research-Collaboration. To develop divergent thinking, identifying problems and tools for implementing the ideas among students.					
Module: 2	**Manipulation and Usage of AI tools**				**9 Hours**
AI Tools-Chat GPT, Simplified, Rytr, ClickUps.-AI Applications- Content Writing-Copywriting-research writing -generating awareness- Ethical Concerns-Plagiarism and Copyright Infringement-Data Privacy –Accuracy-Case Studies.To Keep abreast with latest industrial trends.					

Module: 3	**The Art of writing Script and its types**	**9 Hours**
Script Writing –Concept –Research-The Story- The Plot-The Three Act Structure-The Characters- The Audience- Storyboarding- The Story-Master Script- Screenplay-Stand alone-Shooting Script. To conceptualize and write scripts.		
Module: 4	**Copywriting and Technical Writing**	**9 Hours**
What is a copy? Headline and text. Sub head. Print , Television and Films. Complementing Visuals with copy. Infomercials. Social Media Writing. Baseline, Puffery, Visual and Text. Semiotics. Academic writing .Writing a manual.		
Module: 5	**Execution and Refinement**	**9 Hours**
Practical Exercises. Case Studies**.** Writing for the web, Print and Television . Developing a Script. Audience Studies and Feedback.Workshops and guest lectures.		
Total Lectures		**45 Hours**

Text B	
1	Anjana Neira Dev, Anuradha Marwah, Swati Pal, Creative Writing : A Beginner's Manual, 2008.
2	June A Valladares, The Craft of Copywriting, Sage Publications, 2000.
Reference Books	
1	Sunny Thomas, Writing For the Media – Vision Books, 1997.
2	The Cambridge introduction to Creative Writing : Cambridge, 2007.
3	Stany Fernando, Screen Writing – A Beginner's Guide, 2009.
4	Dr Michael Dean Clark, Creative writing in the digital age: theory, practice, and pedagogy, 2015.
5	Robert W. Bly, The Copywriter's handbook, 1985.
Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**DIGITAL PHOTOGRAPHY**	**L**	**T**	**P**	**C**
23MP2008		3	0	2	5

Course Objectives

Enable the student to:

1. Acquire adequate knowledge about analog and digital photography.
2. Explore lights, cameras and lenses for practicing different photography techniques.
3. Create digital images using modern AI techniques for capturing and processing.

Course Outcomes

The student will be able to:

1. Identify the essential photography tools for freezing moments.
2. Gain knowledge on various lighting & camera techniques for taking best photographs.
3. Apply the essential elements of Composition for perfect framing.
4. Implement the principles of color theory for production and post production of images.
5. Explore AI techniques for Digital Image creation and manipulation.
6. Evaluate Advanced techniques for capturing and processing images.

Module: 1	**Introduction**	**9 Hours**
History of Photography- Human eye – Camera: overview on photography – types of camera - shutter – aperture – depth of field – major type of camera - purpose and control over aperture- aperture – shutter speed – Depth of Field and factors that affect it - Lens – Types of lenses - focal length – wide angle, normal, and long focal length lenses.		
Scope of this course		
Module: 2	**Lighting Techniques**	**9 Hours**
Digital Photography lighting techniques - Exposure and image making techniques: how an exposure meter works – ambient light meters – flash meter readings - built in meter – external light meter – metering techniques –incident light metering – reflective light metering - spot metering.		
Module: 3	**Composition**	**9 Hours**
Elements of composition in photography - Shots - Different sizes of shots - Camera Angles and its types - Framing rules: Head room - Nose room - Leading space - Symmetry rule - Leading lines - Depth - Rule of thirds.		
Module: 4	**Production and AI tools**	**9 Hours**
Types of Photography : Portrait - Landscape - Product - Fashion - Food - Travel - Wildlife - Photo Documentary Action - Perspective - Integrated AI in Cameras: Facial recognition - Red eye fix - Subject Recognition - Zoom and Enhance.		
Module: 5	**Post Production and AI tools for processing**	**9 Hours**
Basics of Image editing - Editing RAW files - Colour Correction - Retouching - Masking - Advanced techniques: Layers and Masking - AI Tools for Photographers: AI Image generation - AI Image Upscaler - Autoenhance.ai - Pixlr - ChatGPT or Bard.		
Total Lectures		**45 Hours**

Text Books	
1	Angel Efrain Mendez Salvador, The Ultimate Digital Photography Guide for Beginners Basic Camera Rules and Essential Settings On The Art Of Image Composition, 2022.
2	Robin Nichols, Mastering Adobe Photoshop Elements 2022: Boost your image-editing skills using the latest Adobe Photoshop Elements tools and techniques, Edition 4. Packt Publishing Ltd, 2021.
Reference Books	
1	1.MukeshSrivatsa, Digital Photography, Unicorn books, 2012.
2	Jeff Carlson, The Photographer's Guide to Luminar AI· Rocky Nook, Inc, May 2021.
3	Scott Kalby, Digital Photography. Peachpit Press. 2010.
4	Bruce Barnbaum. The Art of Photography. Rocky Nook. 2010.
5	Henri Maître, Aesthetics in Digital Photography, John Wiley and Sons, Jul 2023.

List of Experiments

Exercise 1 - Presentation

Exercise 2 - Lighting Techniques

Exercise 3 - Styling

Exercise 4 - Composition Exercise 5 - Camera and Settings Exercise 6 - Posing and Direction Exercise 7 - Temperature and Tint Exercise 8 - Data Transfer and Culling Exercise 9 - Color Correction and Grading Exercise 10 - Image Retouching

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**SKETCHING AND VISUAL ARTS LAB**	**L**	**T**	**P**	**C**
23MP2014		0	0	2	2

Course Objectives

Enable the student to:

1. Develop Skills required for professional Sketching.
2. Apply the Principles of Color for Digital Art.
3. 3. Create modern sketches using AI tools.

Course Outcomes

The student will be able to:

1. Gain knowledge on visual perspective to create the illusion of depth using lights and shadows.
2. Develop 2-Dimensional and 3-Dimensional sketches using Shading techniques.
3. Apply the color theory to convey emotional appeal and to create visual impact.
4. Analyze vector and raster graphics and their applications in digital art.
5. Explore tools for digitizing the sketches for digital manipulation.
6. Discover Generative AI tools to elevate Artistic perspective.

List of Experiments

Exercise 1 - Perspective
Exercise 2 - Lighting and Shadow
Exercise 3 - Shapes
Exercise 4 - Shades and Textures
Exercise 5 - Mediums and Basic Color Theory
Exercise 6 - Scribble and Practice
Exercise 7 - Scanning and Tracing
Exercise 8 - Vectors and Pixels
Exercise 9 - Digital Painting
Exercise 10 - Composition and Using AI for Art

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**GRAPHICS DESIGNING LAB**	**L**	**T**	**P**	**C**
23MP2015		0	0	2	2

Course Objectives

Enable the student to:

1. Develop Digital Graphics implementing principles of design.
2. Apply design techniques for Web, Raster and Vector graphics.
3. Create Unique and Appealing UI/UX designs based on the market trends.

Course Outcomes

The student will be able to:

1. Gain fundamental knowledge on design principles
2. Identify the needs of target audience to create impressive designs
3. Develop moodboards and rough sketches to pitch the concept
4. Apply design methodologies to tackle design problems for developing better creatives.
5. Explore Digital design tools suitable for Raster, Vector and Web mediums to master design
6. Create Designs to build consistent and cohesive brand identity.

List of Experiments:

Exercise 1 - Principles of Design
Exercise 2 - Understanding the Target Audience
Exercise 3 - Preparation for Design (Keywords and moodboards)
Exercise 4 - Scribble and rough Sketch
Exercise 5 - Pixels Design - Photoshop
Exercise 6 - Vector Design - Illustrator
Exercise 7 - Layout Design - InDesign
Exercise 8 - UI/UX Design - Figma
Exercise 9 - Using Pentab
Exercise 10 - Final Mockup and Presentation

Recommended by Board of Studies	***3 August 2023***
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Course Code	**INTRODUCTION TO PROGRAMMING**	**L**	**T**	**P**	**C**
23MP2021	**AND DATA STRUCTURES**	3	0	0	3

Course Objectives:

Enable the student to:

1. Illustrate an algorithmic approach for solving problems.
2. Choose appropriate programming constructs.
3. Identify the need for data structures in problem solving.

Course Outcomes:

The student will be able to:

1. Solve problems with a systematic algorithmic approach.
2. Develop simple programs using programming constructs.
3. Demonstrate the need for modular programming.
4. Implement modular programming for solving problems.
5. Illustrate string manipulation using string operations.
6. Apply data structures for effective handling of data.

Unit: 1	**Algorithmic Problem Solving**	**Hours: 7**

Introduction to Algorithms – Building Blocks of Algorithms – Algorithmic Problem Solving Steps – Simple Strategies and Notations for developing Algorithms – Illustrative Problems – Computer

Programming and Programming Languages – Generations of Programming Languages – Programming Paradigms – Features of Python – History of Python – The Future of Python.		
Unit: 2	**Basics of Programming**	**Hours: 15**
A Simple Python Program – Literal Constants – Variables and Identifiers – Data Types – Input Operation – Comments – Reserved Words – Indentation – Operators and Expressions – Expressions in Python – Operations on Strings – Other Data Types – Type Conversion – Introduction to Decision Control Statements – Selection/Conditional Branching Statements – Basic Loop Structures/Iterative Statements – Nested Loops – break and continue Statements – Pass Statement – Else with Loops.		
Unit: 3	**Modular Programming and Strings**	**Hours: 8**
Need for Functions – Function Definition – Function Call – Variable Scope and Lifetime – Return Statement – Function Arguments – Lambda Functions or Anonymous Functions – Documentation Strings – Recursive Functions - Python Strings – String Characteristics and Operations – Built-in String Methods and Functions – Slice Operation – ord(), chr(), in and not in Operations – Comparing Strings – Iterating Strings – The String Module.		
Unit: 4	**Data Structures**	**Hours: 7**
Sequence – Lists – Functional Programming – Tuples – Sets – Dictionaries.		
Unit : 5	**Processing Multimedia Data**	**Hours: 8**
Multimedia – Multimedia Processing – Image Processing – Audio and Video Processing – Compression – Mixing – Editing – Animations – Python Built-in Modules for Media Support – Reading and Writing Images.		
Total Lectures		**45 Hours**

Text Books

1.	Reema Thareja, Problem Solving and Programming with Python, 2018, Oxford University Press, ISBN-13: 978-0-19-948949-7.
2.	Ninad Sathaye, Python Multimedia Beginner's Guide, Packt Publications Ltd., 2010, ISBN: 9781849510165.

Reference Books

1.	David Amos, Dan Bader, Joanna Jablonski, Fletcher Heisler, Python Basics: A Practical Introduction to Python 3, Real Python, 2021, ISBN: 9781775093329.
2.	Meenu Kohli, Basic Core Python Programming, BPB Publications, 2021, ISBN: 9789390684953.
3.	T.R. Padmanaban, Programming with Python, Springer Nature, 2017, ISBN: 9789811032776.
4.	Yashavant Kanetkar, Aditya Kanetkar, Let us Python, 2019, BPB Publications, ISBN: 9789389845006.
5.	Martic C. Brown, Python: the Complete Reference, 2018, McGraw Hill Education, ISBN: 978-9387572942.

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	Programming and Data Structures Lab	L	T	P	C
23MP2031		0	0	2	2

Course Objectives:

Enable the student to:

1. Develop practical skills to solve real-time problems using programming.
2. Choose suitable programming constructs for solving problems.
3. Identify appropriate data structures for handling data.

Course Outcomes:

The student will be able to:

1. Illustrate algorithmic problem-solving.
2. Identify suitable control statements for problem-solving.
3. Apply modular programming principles to develop effective programs.
4. Identify problems that can be solved using recursion.
5. Identify the need for data structures.
6. Illustrate the usage of data structures in data handling.

Lab Exercises

Software requirement: Raptor, Python

1. Developing an algorithm to solve problems on decision-making and Iteration.
2. Representing algorithms using Flowcharts.
3. Illustration of Operators.
4. Implementation of conditional control statements.
5. Implementation of Iteration Control Statements.
6. Implementation of Recursive Functions.
7. Implementation of Modular Programming using Functions.
8. String Manipulation.
9. Implementation of Lists.
10. Implementation of Tuples.
11. Implementation of Sets.
12. Implementation of Dictionaries.

Course Code	OBJECT ORIENTED PROGRAMMING	L	T	P	C
23MP2022		3	0	0	3

Course Objectives:

Enable the student to:

1. To illustrate fundamental object-oriented programming principles and C++ language constructs.
2. To solve problems using modular programming concepts.
3. To apply object-oriented programming principles to identify solutions to problems.

Course Outcomes:

The student will be able to:

1. Recall the basic principles of programming to develop simple programs.
2. Illustrate the importance of modular programming and data structures in problem solving.
3. Identify the use of user-defined data types and pointers in programming.
4. Implement object-oriented design principles to develop programs.
5. Develop programs using object-oriented techniques.
6. Illustrate the advanced concepts of object-oriented programming.

Unit: 1	Basic Programming Principles	Hours: 7
Introduction – Basic Program Construction – Input and Output – Directives – Comments – Data Types – Variables – Manipulators – Type Conversion – Arithmetic Operators – Library Functions – Relational Operators – Logical Operators - Decisions – Loops – Operator Precedence – Other Control Statements.		
Unit: 2	**Modular Programming and Arrays**	**Hours: 10**
Introduction – Simple Functions – Passing Arguments and Returning Values – Reference Arguments – Overloaded Functions – Recursion – Inline Functions – Scope and Storage Class – Array Fundamentals – C++ String Class.		
Unit: 3	**Structures and Pointers**	**Hours: 10**
Structures – Defining the Structure – Accessing Structure Members – Other Structure Features – Address and Pointers – Address-of Operator – Pointers and Arrays – Pointers to Objects – Pointers to Pointers.		
Unit: 4	**Object Oriented Programming**	**Hours: 10**
Need for Object Oriented Programming – Characteristics of Object Oriented Programming – The Unified Modeling Language - UML State Diagrams – UML Class Diagrams - Objects and Classes: A Simple Class – C++ Objects as Physical Objects – C++ Objects as Datatypes – Constructors – Objects as Function Arguments and Return type – The Default Copy Constructor – Structures and Classes – Classes, Objects and Memory – Static Class Data.		
Unit : 5	**Inheritance and Polymorphism**	**Hours: 8**
Derived Class and Base Class - Derived Class Constructors - Overriding Member Functions - Inheritance Example - Class Hierarchies - Inheritance and Graphics Shapes - Public and Private Inheritance - Levels of Inheritance - Multiple Inheritance - Aggregation: Classes Within Classes – Overloading Unary Operators – Overloading Binary Operators – Virtual Functions – Friend Functions.		
Total Lectures		**45 Hours**
Text Books		
1. Robert Lafore, Object Oriented Programming in C++, Sams Publishing, 2002, ISBN: 0-672-32308-7. 2. Reema Thareja, Object Oriented Programming with C++, Oxford University Press, 2015, ISBN: 978-0199459636.		
Reference Books		
1. K.R. Venugopal, Rajkumar, T Ravishankar, Mastering C++, Tata McGrawHill, 2017, ISBN: 9781259029943.		
2. E. Balagurusamy, Object-Oriented Programming with C++, McGraw-Hill Education, 2020, ISBN: 978-9353164827.		
3. Behrouz A. Forouzan, Richard F. Gilberg, C++ Programming: An Object-oriented Approach, McGraw Hill, 2022, ISBN: 978-9355321305.		
4. Stanley B. Lippman, Josée Lajoie, and Barbara E. Moo, C++ Primer, Addison-Wesley Professional, 2013 ISBN: 978-0321714114.		
5. Yashavant Kanetkar, Let us C++, BPB Publications, 2020, ISBN: 978-9388176644.		
Recommended by Board of Studies	***3 August 2023***	
Approved by Academic Council	25 Aug 2023	

Course Code	Object-Oriented Programming Lab	L	T	P	C
23MP2032		0	0	2	2

Course Objectives:

Enable the student to:

1. Develop practical skills to solve real-time problems using programming.
2. Create object-oriented programs in C++ to illustrate proficiency in problem-solving, code organization, and design principles.
3. Evaluate the effectiveness and reliability of biometric security systems.

Course Outcomes:

The student will be able to:

1. Identify suitable control statements for problem-solving.
2. Apply modular programming principles to develop effective programs.
3. Illustrate the usage of arrays in data handling.
4. Identify the need for user-defined data types.
5. Experiment with the features of Object-oriented programming.
6. Evaluate the effectiveness of object-oriented programming.

Lab Exercises

Software requirement: C++

1. Implementation of Conditional Control Statements.
2. Implementation of Loop Control Statements.
3. Modular Programming using Functions.
4. Simple Array of Operations.
5. String Manipulation.
6. Implementation of Structures.
7. Creating Classes and Objects.
8. Implementation of Constructors.
9. Implementation of Single Inheritance.
10. Implementation of Multiple Inheritance.
11. Implementation of Binary Operator Overloading.
12. Implementation of Virtual Functions.

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Certification in Film Direction
List of Courses

Sl. No	Course Code	Course Title	Credits			
			L	T	P	C
1	23EN2005	Technical Writing English	3	0	0	3
2	23MP2035	Film Pre Production	0	0	5	5
3	23MP2036	Lighting Techniques and Color Theory	0	0	5	5
4	23MP2037	Digital Photography Techniques	0	0	2	2
5	23MP2038	Film Direction	0	0	5	5
6	23MP2039	Video Post Production Techniques	0	0	5	5

Certification in Film Direction
SEMESTER-WISE CURRICULUM

Semester I						
Sl. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
1	23EN2005	Technical Writing English	3	0	0	3
2	23MP2035	Film Pre Production	0	0	5	5
3	23MP2036	Lighting Techniques and Color Theory	0	0	5	5
4	23MP2037	Digital Photography Techniques	0	0	2	2
5	23MP2038	Film Direction	0	0	5	5
		Total	**3**		**17**	**20**
Semester II						
Sl. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
1	23MP2039	Video Post Production Techniques	0	0	5	5
2	PSP2998	Part Semester Project	0	0	12	12
		Total	**0**	**0**	**17**	**17**

Course Code	**Film Production**	**L**	**T**	**P**	**C**
23MP2035		0	0	5	5

Course Objectives:

Enable the student to:

1. Learn various modes of discourse in film
2. Obtain insights on analyzing different genres of films
3. Practice the art of culling out films and appreciating the various aspects of it.

Course Outcomes:

The student will be able to:

1. Develop an overall understanding on the structure of film
2. Analyze the stages of film production
3. Evaluate the films psychologically
4. Illustrate the art of writing for a film
5. Evaluate various genres of films
6. Apply his/her skill on directing a film.

List of Exercises

1. Inspiration/idea gathering
2. Plot building / Story development
3. Possibilities check / Production and post production team GD
4. Scripting (screenplay, shooting script, etc.)
5. Dialogue writing
6. Character sketching
7. Audition / Screen testing
8. Contract / Model release / Call sheet preparation

9. Storyboard 10. Pitching the film to the producer 11. location reche 12. Costume design ideas and plan 13. Art Direction idea and Plan 14. Hospitality and logistics plan 15. Budgeting 16. Production management plan 17. Staging and blocking 18. Rehearsal 19. Marketing plan 20. Publishing Plan	
Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**Lighting Techniques and Color Theory**	**L**	**T**	**P**	**C**
23MP2036		0	0	5	5

Course Objectives:

Enable the student to:

1. Understand the importance of light and color theories.
2. Choose and apply the right color and light for different media.
3. Understand the color usage for different genres of films.

Course Outcomes:

The student will be able to:

1. Learn the fundamentals of lighting for commercial and film purposes..
2. Apply various mood lighting techniques for the filming.
3. Apply different lighting techniques to produce quality films.
4. Gain the theoretical base for practicing preparation of color images.
5. Evaluate the correlation between color and mood in films.
6. Apply color theory principles to create visually appealing visualizations that convey meaning and aid comprehension.

List of Exercises

1. Natural Light and Artificial Light
2. Indoor and Outdoor Lighting
3. Three principles of light (Direction, Intensity, Softness or hardness)
4. Point Lighting (three, two and one point lighting)
5. Side Lighting and Practical Light
6. Hard Lighting and Soft Lighting
7. Bounce Lighting, High Key and Low Key
8. Motivated Lighting and Ambient Light
9. Project
10. Hue, Saturation, Brightness or Value
11. Primary Colors, Secondary Colors, Tertiary Colors
12. Monochromatic color palette
13. Analogous Color Palette

14. Complementary Color Palette 15. Triadic Color Palette 16. Tetradic Color Palette 17. Discordant Color 18. Associative Color 19. Transitional Color 20. Color Theory In Storytelling

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**Digital Photography**	**L**	**T**	**P**	**C**
23MP2037		0	0	2	2

Course Objectives:

Enable the student to:

1. Identify basic concepts of photography
2. Explore different kinds of camera techniques.
3. Gain exposure to AI technologies in digital photography.

Course Outcomes:

The student will be able to:

1. Identify the basics concept of photography.
2. Learn different kinds of camera techniques.
3. Demonstrate camera handling techniques.
4. Independently handle AI integrated cameras.
5. Learn the basic concepts of image editing.
6. Experiment with different AI based software for post processing of photographs.

List of Exercises

1. Presentation
2. Lighting
3. Styling
4. Composition
5. Camera and Settings
6. Posing and Direction
7. Temperature and Tint
8. Data Transfer and Culling
9. Color Correction and Grading
10. Image Retouching

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**Film Direction**	**L**	**T**	**P**	**C**
23MP2038		0	0	5	5

Course Objectives:

Enable the student to:

1. Understand the role and responsibilities of a film director.
2. Develop artistic vision and directorial style.

3. Explore the pre-production phase of filmmaking, and effectively prepare for production.

Course Outcomes:

The student will be able to:

1. Evaluate the role and responsibilities of a film director in the context of the filmmaking process.
2. Apply foundational knowledge of cinematic language to effectively convey storytelling elements.
3. Analyze and interpret scripts from a directorial perspective, identifying key narrative elements, character motivations, and thematic depth.
4. Recognize and apply genre-specific conventions and techniques to storytelling.
5. Plan and execute pre-production processes such as casting, location scouting, production design, costume selection, and storyboarding.
6. Reflect on personal growth and development as a director, identifying areas of improvement and potential pathways for continued growth in the field.

List of Exercises

1. Basics of Film History
2. Film Theory
3. Safe Setup, Operation and Control of the production atmosphere
4. Film Crew: Roles and Responsibilities
5. Basics of Mise-en-Scène Studies
6. Mood Board execution
7. Principles of Directing Actors
8. Lighting in Cinematography: Creating a Visual Language
9. Approaches to different Lighting
10. Principles of Camera and Lens Use in Cinematography
11. Working with Cinematographers Compositional Theory of Cinematography
12. Basics of Line-Producing
13. Introduction to the Business of Film
14. Different types of Pitching
15. Project Planning
16. Casting
17. Finding judging and organizing the crew
18. Project
19. Project
20. Directing a High Production Value Film

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	Video Post Production Techniques	L	T	P	C
23MP2039		0	0	5	5

Course Objectives:

Enable the student to:

1. Understand the basics of video and film editing
2. Analyze the importance of editing and how it helps in narration
3. Gain practical knowledge to become professional editors

Course Outcomes:

The student will be able to: 1. Identify different types of editing techniques. 2. List out different forms of cuts for different mediums. 3. Analyze the nature of film and the type of editing required. 4. Evaluate the latest transitions used for different mediums. 5. Learn the fundamentals of sound design for post production. 6. Analyze the importance of emotions and color in video.
List of Exercises 1. Types of Shots 2. Timing and Pace 3. Editing for Different Genres 4. Emotional Curve of the Scene 5. Editing Techniques for Different Production Contexts 6. linear editing and non-linear editing 7. Post-production of Sound 8. Eyeline match 9. The 180-degree rule and The 30-degree rule 10. Matching on action 11. Discontinuity editing 12. Cross-cutting or parallel editing 13. Cuts (J-Cuts, L-Cuts, Cutaway, Interest Shots) 14. Transitions 15. Introduction to Premiere Pro and Davinci resolve 16. Introduction to After Effects 17. Creating Proxy 18. Colour Correction and Colour Grading 19. Sound Design 20. Project

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Certification in Film Editing and Color Grading

List of Courses

Sl. No	Course Code	Course Title	L	T	P	Credits
1	23EN2005	Technical Writing English	3	0	0	3
2	23MP2040	Color Theory and Color Grading	0	0	5	5
3	23MP2041	Adobe Photoshop Lab	0	0	2	2
4	23MP2039	Video Post Production Techniques	0	0	5	5
5	23MP2042	Editing Software and Tools	0	0	5	5
6	23MP2043	Film Editing	0	0	5	5

Certification in Film Editing and Color Grading
SEMESTER-WISE CURRICULUM

Semester I						
Sl. No	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
1	23EN2005	Technical Writing English	3	0	0	3
2	23MP2040	Color Theory and Color Grading	0	0	5	5
3	23MP2041	Adobe Photoshop Lab	0	0	2	2
4	23MP2039	Video Post Production Techniques	0	0	5	5
5	23MP2042	Editing Software and Tools	0	0	5	5
		Total	**3**	**0**	**17**	**20**
Semester II						
Sl. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
1	23MP2043	Film Editing	0	0	5	5
2	PSP2998	Part Semester Project	0	0	12	12
		Total			**17**	**17**

Course Code	**Color Theory and Color Grading**	**L**	**T**	**P**	**C**
23MP2040		0	0	5	5

Course Objectives:

Enable the student to:

1. Gain solid understanding of color theory, principles of color, color models, harmonies, contrast, and emotional impact of color.
2. Explore the various color grading controls in DaVinci Resolve.
3. Understand color grading techniques for both High Dynamic Range (HDR) and Standard Dynamic Range (SDR) content.

Course Outcomes:

The student will be able to:

1. Perform basic color correction tasks, including adjusting exposure, white balance, and color balance to achieve natural-looking visuals.
2. Apply the various color grading techniques in DaVinci Resolve, such as primary and secondary color corrections, curves, color wheels, and nodes.
3. Analyze specific visual moods and atmospheres through color grading, aligning the color palette with the narrative tone.
4. Evaluate technical considerations when exporting color-graded content for different distribution platforms, ensuring optimal visual quality.
5. Analyze their color grading choices and receive constructive feedback to refine their skills.
6. Discuss the role of colorists in the industry, emphasizing effective communication, collaboration, and ethical considerations.

List of Exercises

1. Introduction to color theory
2. Difference Between Color Correction and Color Grading
3. Colour Tones and Tints

4. Hue, Saturation and Value (Luminance)
5. Black balance, shadows, highlights, and exposure
6. Still Photography, Films and Videos
7. Monochromatic
8. Complementary
9. Analogous
10. Triadic
11. Emotions of Colour
12. Understanding the Photo and Video Formats
13. Lumetri color panel (Premier Pro) (Project 1)
14. Introduction to Luts
15. Introduction to Davinci Resolve for Color Grading
16. Color Correction
17. Color Grading
18. Color Wheel and Shot Matching
19. Match Skin Tones
20. Final Color Grading (Project 2)

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**Adobe Photoshop Lab**	**L**	**T**	**P**	**C**
23MP2041		0	0	2	2

Course Objectives:

Enable the student to:

1. Understand complete usage of Adobe Photoshop
2. Explore different kinds of image manipulation techniques.
3. Gain exposure to Image Retouching.

Course Outcomes:

The student will be able to:

1. Identify the basics tools in Adobe Photoshop.
2. Learn Typography techniques.
3. Illustrate the uses of Layers and Adjustment Layers.
4. Independently manipulate images using Adobe Photoshop.
5. Learn the basic concepts of image retouching.
6. Experiment with different AI tools in photoshop for post processing of photographs.

List of Exercises

1. Knowing the Workspace
2. Photoshop Layers
3. Color and Adjustment Layers
4. Text
5. Layer Styles
6. Cropping and Resizing
7. Pentool, Selections and Masking
8. Smart Objects
9. Transform and Warp

10. Retouching and Exporting	
Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**Editing Softwares and Tools**	**L**	**T**	**P**	**C**
23MP2042		0	0	5	5

Course Objectives:

Enable the student to:

1. Explore various editing softwares used for film post production.
2. Understand the usage of various tools in post production softwares.
3. Learn the art of using the right tool for film editing.

Course Outcomes:

The student will be able to:

1. Identify the basics tools in various post production softwares.
2. Learn basics of format and codecs.
3. Illustrate the uses of proxy.
4. Independently edit visuals using post production software.
5. Learn the basic concepts of titles and typography.
6. Experiment with XML file for cross platform editing.

List of Exercises

1. Introduction to Adobe premiere pro
2. Introduction to Adobe After Effects
3. Introduction to Davinci Resolve for Video Editing and Sound Design
4. Preparing Proxy
5. Cuts (J-Cuts, L-Cuts, Cutaway, Interest Shots)
6. Slice, Trim, Move and Delete
7. Aspect Ratio and Frame Rate
8. Sequence and node
9. Speed Ramp and Slow Motion
10. Stabilization
11. Solids, Letter box
12. Titles and Text
13. KeyFrame And Digital Movement
14. Dynamic Link Premiere and After Effects
15. Introduction to Puppet Animation
16. Usage of Video Templates and Luts
17. Sound design and working with audio
18. Working with XML and preparing for Export
19. Adobe Media Encoder
20. Export Settings for Different Mediums

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	Film Editing	L	T	P	C
23MP2039		0	0	5	5

Course Objectives:

Enable the student to:

1. Explore various editing methods used for film.
2. Understand the usage of various cuts and its link to genres.
3. Learn the art of using the right color for the right genres.

Course Outcomes:

The student will be able to:

1. Gain knowledge about the basics of film editing.
2. Learn the importance of various rules in editing.
3. Apply Audio sweetening and mixing.
4. Independently edit film using post production software.
5. Learn the difference between Film, Documentary and Short Film Editing.
6. Experiment with trailer and teaser editing for films.

List of Exercises

1. Action Continuity (PERSEVERANCE, INTUITION, FEAR, FAILURE)
2. The Rule of 6 - Rhythm, Pace, Timing and Emotion, Eye Trace, Two-Dimensional Plane of Screen, Three-Dimensional Space
3. Scene Construction (Time, Space and Coverage)
4. linear editing and non-linear editing
5. EDL (Edit Decision List)
6. Logging and First Assembly
7. Rough Cut and Variations
8. First Cut, Second Cut and Fine Cut
9. Feedback sessions and Final Cut
10. sound editing and sound mixing
11. color correction, Grading and digitizing.
12. working with with B-Roll
13. Documentary / Discontinuity editing
14. Parallel Editing, Temporal Ellipsis and Temporal Expansion.
15. The 180-degree rule and The 30-degree rule
16. Music Video (Project 1)
17. Post-production of Sound
18. Working with XML and EXPORT
19. Trailer (CONSTRUCTING DESIRE and SCULPTING IN TIME)
20. Short film with Trailer and Teaser (Project 2)

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Certification in Audio Engineering and Sound Design

List of Courses

Sl. No	Course Code	Course Title	L	T	P	Credits
1	23EN2005	Technical Writing English	3	0	0	3
2	23MP2044	Studio Acoustics and Routing	0	0	5	5
3	23MP2045	Recording, Arranging and Live Sound	0	0	5	5
4	23MP2046	Sound Design - Ambience, SFX and Foley	0	0	5	5
5	23MP2047	Mixing and Mastering	0	0	2	2
6	23MP2048	Audio Networking and Streaming	0	0	5	5

Certification in Audio Engineering and Sound Design
SEMESTER-WISE CURRICULUM

Semester I						
Sl. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
1	23EN2005	Technical Writing English	3	0	0	3
2	23MP2044	Studio Acoustics and Routing	0	0	5	5
3	23MP2045	Recording, Arranging and Live Sound	0	0	5	5
4	23MP2046	Sound Design - Ambience, SFX and Foley	0	0	5	5
5	23MP2047	Mixing and Mastering	0	0	2	2
		Total	**3**	**0**	**17**	**20**

Semester II						
Sl. No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
1	23MP2048	Audio Networking and Streaming	0	0	5	5
2	PSP2998	Part Semester Project	0	0	12	12
		Total	**0**	**0**	**17**	**17**

Course Code	**Studio Acoustics and Routing**	**L**	**T**	**P**	**C**
23MP2044		0	0	5	5

Course Objectives:

Enable the student to:

1. Understand the fundamentals of Architectural design
2. Design acoustics with critical listening and analysis
3. Explore the principle of acoustics and sound behavior.

Course Outcomes:

The student will be able to:

1. Analyze how sound interacts with physical environment
2. Analyze and optimize room acoustics for recording, mixing and Theaters

3. Explore various acoustic treatments products and solutions
4. Identify speaker selection,placement and calibration
5. Evaluate the routing concepts in venues and studios
6. Evaluate the architecture and routing of analog and digital Mixing Consoles.

List of Exercises

1. Introduction to Sound and Acoustics
2. Wave propagation in Solids
3. Harmonics and Modes
4. Behavior of Sound
5. The Ear and Hearing
6. Decibels and Octaves
7. Sound Level Measurement
8. Barriers of Sound
9. Vibrations and Waves
10. Room Acoustics and Sound Absorption
11. Basics of Sound Insulation
12. Improving Sound Insulation
13. Studio Design
14. Small room Acoustics
15. Industrial Acoustics
16. Acoustics Software
17. Calibration of Sound -Studio
18. Calibration of Sound -Indoor
19. Calibration of Sound -Outdoor
20. HVAC Noise

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	Recording, Arranging and Live Sound	L	T	P	C
23MP2045		0	0	5	5

Course Objectives:

Enable the student to:

1. Understand the fundamentals of sound design
2. Design audio files with critical listening and analysis
3. Explore the use of sound libraries and Sampling

Course Outcomes:

The student will be able to:

1. Apply Recording and Arranging techniques
2. Analyze the Audio Signals
3. Evaluate popular DAW's
4. To work and process with different audio Mixing tools
5. Work with automations
6. Integrate the mixing workflows with realtime productions.

List of Exercises

1. Characteristics of Sound
2. Sampling Theorem and Audio Conversions

3. Connectors and Cables
4. Microphones
5. Loudspeakers and their types
6. Pre- Amps and Amplifiers
7. Analog console
8. Digital Console and Stage Boxes
9. Digital Audio Workstations
10. Audio Interface
11. Basics of Audio Signal Processing
12. Basics of Studio Recording
13. Miking Techniques
14. Headphones and Cue Mix
15. Personal Monitoring Systems
16. Spatial Audio
17. Crossovers and Bass Management
18. Delay Compensation for Live PA
19. Cable Management
20. Live Scenario and Stage Management

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**Sound Design - Ambience, SFX and Foley**	**L**	**T**	**P**	**C**
23MP2046		0	0	5	5

Course Objectives:

Enable the student to:

1. Understand the fundamentals of sound design
2. Design audio files with critical listening and analysis
3. Explore the use of sound libraries and Sampling

Course Outcomes:

The student will be able to:

1. Analyze the characteristics of Sound Design
2. Explore by creation and manipulation of ambient sound
3. Enhance the realism and depth in the art of audio visual storytelling
4. Work with automations
5. Integrate the mixing workflows with realtime productions
6. Build immersive soundscapes by layering SFX, Ambience and foley

List of Exercises

1. Introduction to Foley Sound
2. Difference between Foley and Sound Design
3. Recording Techniques for Foley
4. Materials Used for Foley Sounds
5. Envelope and Transient Shaping
6. Sound Design for Movies
7. Sound Design for Games
8. Sound Design for UI/UX

9. Types of SFX 10. Effects used for Sound Design 11. Layers of Sound 12. Vocoders 13. Capturing Nature Sound 14. Microphones for Ambient Sounds 15. Additive Synthesizers 16. Subtractive Synthesisers 17. FM Synthesisers 18. Wavetable Synthesizers 19. Reverbs and Delays 20. Plugins used for Sound Design

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	**Mixing and Mastering**	**L**	**T**	**P**	**C**
23MP2047		0	0	2	2

Course Objectives:

Enable the student to:

1. Understand the fundamentals of Mixing and Mastering
2. Design audio files with critical listening and analysis
3. Learn ethical consideration in audio processing

Course Outcomes:

The student will be able to:

1. Evaluate the Mixing and Mastering techniques
2. Analyse the Audio Signals
3. Familiarize with popular DAW's
4. To work and process with different audio Mixing tools
5. Work with automations
6. Integrate the mixing workflows with realtime productions

List of Exercises

1. Preparation of Stems for Mixing
2. Working on Project Templates
3. Internal Routing
4. Gain Staging
5. Leveling and Panning
6. Compression
7. Equalization
8. Imaging and Metering
9. Analogue Processing Vs Digital Emulations
10. Loudness Metering for Various Platforms

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

Course Code	Audio Networking and Live Streaming	L	T	P	C
23MP2048		0	0	5	5

Course Objectives:

Enable the student to:

1. Understand the fundamentals of Audio networking
2. Design audio networking topologies
3. Integration of audio networking and streaming into media production

Course Outcomes:

The student will be able to:

1. Configure Audio network devices
2. Troubleshoot and maintain audio networks and streaming
3. Integrate with media production
4. Manage latency and synchronization
5. Learn Industry trends and Developments
6. Stream Audio over networks

List of Exercises

1. Digital Audio Basics
2. Networking Fundamentals
3. Audio Networking Protocols
4. Hardware Interfaces
5. Audio Compression Codecs
6. Routing capabilities in Dante
7. Audio-over-IP in Recording Studios
8. Audio-over-IP in Live Venue
9. Audio-over-IP for Radio Broadcasting
10. Audio Networking for Home Automation and Smart Environments
11. Network Redundancy and Failover in Audio Systems
12. AES 67
13. MADI Protocols
14. Live Streaming Platforms
15. Audio Networking Consoles
16. Audio Synchronization and Latency
17. Audio Stream Management and Monitoring Tools
18. Multi Track Audio Streaming
19. Audio Networking for Live Sports
20. Real-Time Audio Streaming Challenges and Solutions

Recommended by Board of Studies	***3 August 2023***
Approved by Academic Council	25 Aug 2023

MEDIA AND COMMUNICATION

LIST OF NEW COURSES

Sl. No.	Course Code	Course Title	Credits
1.	21VC2001	Introduction to Media	3:0:0
2.	21VC2002	Writing for Media	3:0:0
3.	21VC2003	Photography	3:0:0
4.	21VC2004	Photography Lab	0:0:2
5.	21VC2005	Visual Arts Lab	0:0:4
6.	21VC2006	Advertising	3:0:0
7.	21VC2007	Basics of Multimedia	3:0:0
8.	21VC2008	Communication Theories	3:0:0
9.	21VC2009	Visual Design Lab	0:0:2
10.	17EN2005	Communication Skills Lab	0:0:2
11.	21VC2010	Audio Production	3:0:0
12.	21VC2011	Video & Post Production Techniques	3:0:0
13.	21VC2012	2D & 3D Animation	3:0:0
14.	21VC2013	Film Studies	3:0:0
15.	21VC2014	Story Boarding & Animation	3:0:0
16.	21VC2015	Audio Production Lab	0:0:4
17.	21VC2016	Video & Post Production Techniques Lab	0:0:2
18.	21VC2017	2D Animation Lab	0:0:4
19.	21VC2018	Web Designing	3:0:0
20.	21VC2019	Fundamentals of Gaming	3:0:0
21.	21VC2020	Data Journalism & Info Graphics	3:0:0
22.	21VC2021	Media Law & Ethics	3:0:0
23.	21VC2022	Virtual Reality	3:0:0
24.	21VC2023	Web Designing Lab	0:0:4
25.	21VC2024	News production lab	0:0:4
26.	21VC2025	Virtual reality Lab	0:0:2
27.	21VC2026	Modeling & Texturing	3:0:0
28.	21VC2027	Visual Effects	3:0:0
29.	21VC2028	New media Studies	3:0:0
30.	21VC2029	Media Research & Techniques	2:0:0
31.	21VC2030	Visual Effects Lab	0:0:4
32.	21VC2031	Film Making Lab	0:0:4
33.	21VC2032	3D animation Lab	0:0:4
34.	21VC2033	Media Agencies	3:0:0
35.	21VC2034	Portfolio Lab	0:0:4

21VC2001	INTRODUCTION TO MEDIA	L	T	P	C
		3	0	0	3

Course Objectives

1. To define and relate to basics of all forms of media.
2. To identify varied forms of new media communication.
3. To recognize new media as a way of life.

Course Outcomes

Students will be able to

1. define and relate to basics of New Media.
2. identify varied forms of New Media.
3. recognize new media as a way of life
4. define and list elements of mass media
5. identify and define media convergence.

6. analyze the importance of traditional and new media communications.

MODULE I

Media - The Media Industry: Political Economy, Organization and Culture - Global media – Media and Information – Demassification of Media.

MODULE II

Newspapers and the rise of Journalism - Magazines, Books, Journals – Characteristics – Types – Audiences. Broadcast Communication - Radio – Characteristics of Radio as an Audio Medium – AM and FM – Audiences - Visual Communication – Television- Cable, Satellite television – IPTV - Films – Motion pictures - characteristics of visual media – elements – media functions – visual perception and aesthetics.

MODULE III

Computer-Mediated Communication - scope and nature - New Media - audiences – technological changes- ICT/Media Technologies – trends - Social Media – YouTube - Blogs – Podcasts – Facebook –Twitter - WhatsApp- Instagram – latest new media platforms - internet advertising-Audiences – mobile communications - Problems and Prospects for the Future of Media - issues and ethics.

MODULE IV

Communication – Definitions – Elements of Communication – Communication Act – Sender – Message – Channel – Receiver – Effects – Feedback – Communication Process – Communis –types of communication - intrapersonal- interpersonal- transpersonal – Group Communication and Mass Communication - Typology of Audience – Bauer's Concept - McLuhan's Global Village Concept – Global Culture.

MODULE V

Speech Communication – Psychology and Sociology Aspects – Cognition – Selective Perception – Selective Retention – Selective Expression – Socio – Cultural Norms and Cognition – Attitudes

MODULE VI

Human Communication – Characteristics – Contents – Language – Meanings – Talent – Manifest – Contextual Structural Meanings - Verbal and Non Verbal Communication – Signs – Codes – Proxemics – Kinesics.

Text Books

1. Interactive Media and Society by NeerajKathri, 2013.
2. Internet Society: The Internet in everyday life by Maria Bakardjieva, 2005.
3. Mass Media in India. Keval J kumar. 2014.
4. Essentials of Human Communication: Joseph A De Vito Boston, MA : Pearson/Allyn and Bacon, 2006.
5. Mass Communication: Keval J Kumar. Jaico Publications 2005
6. Media Communication: an Introduction to theory and process. James Watson Palgrave and Mc Millan 2005

References

1. Dynamics of Mass Communication: Media in the Digital age by Joseph.R.Dominic, 2004.
2. Media and society: Critical Perspective by Graeme Burton, Rawat Publications.
3. Communication theories in action : an introduction Julia T Wood Belmont, CA : Wadsworth, 2004
4. Visual Communication: Images with Messages. Paul Martin Lester. Thomson Wadsworth, 2006

21VC2002	WRITING FOR MEDIA	L	T	P	C
		3	0	0	3

Course Objectives

1. To understand the characteristics of print and electronic media.
2. To help them analyze and create content for new media.
3. To impart effective writing skills

Course Outcomes

Students will be able to

1. summarize the nature and characteristics of print media
2. analyze the characteristics of electronic media.
3. analyze the global media content
4. evaluate the basic characteristics of Radio and Television in content generation.
5. create media content in the field of Education and Entertainment.
6. Demonstrate creative writing skills.

MODULE I

Nature and characteristics of a Newspaper- Readers‟ perception – Information medium – Deadline – content variety – general and specialized newspapers – Editorial policy and style – language – inverted pyramid – source attribution - writing features and articles- Comparative analysis of Tamil and English dailies – Freelancing

MODULE II

The ABCD of Media Writing: Accuracy, Brevity, Clarity & Discernment. General and specialized magazines – contents – target readers – language – writing style – pictures and illustrations – features and special articles – Tamil Magazines vs English magazines: a comparative analysis.

MODULE III

Nature and characteristics of Radio – Radio for information, education and entertainment. Time and deadline factor – News headlines and highlights – News features – talk shows – interviews – Radio audiences – audience participation –language and style – New wave FM Radio – Radio Jockeying – target audience – content variety and style – music-competition – technological factors in writing for electronic media.

MODULE IV

Television Writing Techniques and Skills - Nature and characteristics of television -Writing for TV news – Writing for soap operas – Writing for Talk Shows - Writing for Tele film - Writing for Analytical Story-Writing for Short Talks – TV Interviewing - Writing for chat show- Television Advertisement Writing - Television PSA Writing - Writing for Documentary – writing for Commentary.

MODULE V

Writing for web: basics of writing for web- content creation-Development - Technical writing - Writing for news portals. Writing for social media: basics of writing for social networking sites (SNSs): blogging, twitter, word press etc, - New technologies and their impact on media.

MODULE VI

Expert lectures, seminars – webinars

Text Book(s)

1. Mencher, Melvin. “News Reporting and Writing”. New York. McGraw Hill Pub. 2003.
2. Navin Chandra &Chaughan, “Journalism Today”, New Delhi. Kanishka Pub. 1997
3. Shrivastava, K.M, “Radio and TV Journalism”. New Delhi. Sterling Publishers, 1989

Reference Books

1. Hilliart, Robert. “Writing for Television, radio and New media” (8th ed.). Belmont.Wadsworth Pub. 2004.
2. White, Ted. “Broadcast news writing”, Reporting and Producing‟(4th ed.).Oxford. Focal Press. 2006.

21VC2003	PHOTOGRAPHY	L	T	P	C
		3	0	0	3

Course Objectives

1. To identify basic concepts of photography
2. To explore different kinds of camera techniques.
3. To explore outdoor and indoor photography.

Course Outcomes

Students will be able to

1. identify the basics concept of photography.
2. Summarize the different kinds of camera techniques.
3. demonstrate camera handling techniques.
4. Create independently outdoor and indoor shots
5. experiment with different types of lighting.
6. create product, industrial, fashion photography

MODULE I

History of Photography- Human eye – simplicity vs. complexity – visualization – photographic realism, abstraction and art – creativity – intuition - Camera: overview on photography – types of camera - shutter – aperture – depth of field – major type of camera - purpose and control over aperture- aperture – shutter speed – factors that affect D.O.F.

MODULE II

Lens – Types of lenses - focal length – wide angle, normal, and long focal length lenses – focus and depth of field-hyperfocal distance – determining – Film: selecting and using film –tungsten film & daylight films – black and white

films – monochrome films – infrared films and other special effects films-different formats-35m-120 mm – 220mm – 4 x 5 film -Film speed – How film responds to light-film grain – sensitivity – structure of film – light vs film

MODULE III

Photography lighting techniques - Exposure and image making techniques: how an exposure meter works –ambient light meters –flash meter readings- built in meter – external light meter – metering techniques –incident light metering – reflective light metering - spot metering – gray scale- framing- perspective- texture - pattern – composition and design

MODULE IV

Black and White photography: Black and white film – Black and white filters – Developing – developing tank – structure of B/W film- Printing.-making a mask – photograms- push processing – pull processing – masters of B/W photography – Ansel Adams – identifying the various zones – sets and costume for photography – tools and techniques.

MODULE V

Making a career in photography – categories of photography - Photo journalism – nature, scope, coverage of spot news – photo essay, feature and documentary– Overview and components of Travel and outdoor Photography, portraits, macro photography, fashion photography, ad photography, action, architectural, forensic and medical, wildlife, underwater, food etc.

MODULE VI

Photo compositing - photo editing, Image manipulation – ways to market photography - trends in photography.

Text Books

1. MukeshSrivatsa, Digital Photography, Unicorn books, 2012.
2. Scott Kalby. Digital Photography. Peachpit Press. 2010.
3. Kenneth kobre, Photo Journalism – The Professional's approach, Focal Press. 2003.
4. Paul Harcourt Davies. A complete guide to close up and Macro Photography. David Charles, 2001.

References

1. John Hedgecoe, The Book of Photography, Dorling Kindersley, 2005
2. Micheal Langford. Advanced Photography. Focal Press, 7th Edition, 2008.
3. Bruce Barnbaum. The Art of Photography. Rockynook. 2010.

21VC2004	PHOTOGRAPHY LAB	L	T	P	C
		0	0	2	2

Course Objectives

1. To make students understand the various forms of capturing photographs creatively
2. To enrich the aspects of composing the subjects creatively.
3. To kindle the creative instincts among students.

Course Outcomes

Students will be able to

1. capture creative photographs
2. obtain an in-depth cognition on framing divergent images.
3. demonstrate confidence in handling DSLR for basic photo assignments.
4. create and edit the photos for desired applications.
5. select right lenses and filters for better photography.
6. select varied fields in photography.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

21VC2005	VISUAL ARTS LAB	L	T	P	C
		0	0	4	4

Course Objectives

1. To discuss the different needs of graphics in our daily life such as preparing a presentation, editing our phone photos, etc.
2. To illustrate how to meet these simple graphical needs.

3. To evaluate the degree of creativity in achieving the desired design work.

Course Outcomes

Students will be able to

1. design a logo for a given purpose/theme.
2. create a design work from scratch for their daily needs such as their own assignment cover page,
3. create PowerPoint backgrounds, banners for their own websites and many more.
4. demonstrate how to organize the hierarchy of software array used for different graphical needs.
5. display creative visual designs for all media communication.
6. produce custom based templates for related media subjects.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester

21VC2006	ADVERTISING	L	T	P	C
		3	0	0	3

Course Objectives

1. To define and understand principles of advertising
2. To translate skills making advertisements and Branding
3. To design and evaluate quality advertising output.

Course Outcomes

Students will be able to

1. summarize professional knowledge on advertising
2. illustrate the skills in designing advertising campaigns
3. evaluate and judge Advertising programs
4. explore evolution of advertising
5. list and demonstrate ability to understand varied nuances of advertising
6. demonstrate ability to transform into a advertising professional.

MODULE I

Definition and types of Advertising -Advertising Industry- Advertising Media - Types of advertisements- Indoor and Outdoor Advertising.

MODULE II

Advertising Agency-Planning-Advertising departments-Agency/client relations- Advertising Research

MODULE III

Creative Strategy-Advertising budget-Branding-Pretest and posttest- Advertising Campaign.

MODULE IV

Sponsorship and Publicity – Advertising concept-Media relations Techniques- social media and advertising- Public Opinion- propaganda- Advertising tools – roles and responsibilities of different creative and production departments -Legal and Voluntary roles- Research in Advertising.

MODULE V

Contemporary trends in Advertising. Case Studies. Roles and responsibilities. Career Opportunities in Advertising.

MODULE VI

Observe and analyze the **c**ontemporary trends in advertising

Text Books

1. David Ogilvy. Ogilvy on Advertising, Vintage Books. 2000
2. Otto Kleppner. Fundamentals of Advertising and Implementation. Prentice Hall of India.

References

1. Malcolm Gladwell. The Tipping Point: How Little Things Can Make a Big Difference
2. Sally Hogshead. Fascinate, Revised and Updated: How to Make Your Brand Impossible to Resist
3. David Meerman Scott. The New Rules of Marketing and Public Relations

21VC2007	BASICS OF MULTIMEDIA	L	T	P	C
		3	0	0	3

Course Objectives

1. To learn the basic tools necessary for designing for print media
2. To apply the necessary tools to learn fundamental & advanced knowledge of multimedia related applications.
3. To be competent in the Multimedia segments and to bring out novel ideas by exploring the multiple solutions for the human-centric problems

Course Outcomes

Students will be able to

1. create, and apply appropriate design techniques.
2. design creative ideas relevant for print medium.
3. work on contemporary multimedia assignments to potential clients.
4. Select and demonstrate general skill sets in the multimedia industry.
5. select multimedia function in different media platforms.
6. eveluate human-centric problems using multimedia.

MODULE I

Evolution of Multimedia – structure and components of multimedia – multimedia platformsapplications of multimedia in education, communication, medication, business, entertainment – video conferencing, web streaming, video streaming, Internet Telephony
– virtual reality – artificial intelligence.

MODULE II

Introduction to authoring – authoring approaches – (programming, screen based, information centered) – features of authoring systems – cross platform systems – cost – technical support – ease of interface design.

MODULE III

Content planning – Prototyping – programming – testing – evaluation - delivery modes and techniques.

MODULE IV

Image processing – special effects – 2D & 3D animation – compositing – rendering and editing – cell & computer animation – model building – key frame animation – dynamic particles – character animation – modeling and animation techniques.

MODULE V

Video basics - Working with video - Video Formats - Video hardware - encoding – decoding – Video editing – non-linear editing – Audio basics – working with audio – audio formats –audio hardware & software.

MODULE VI

Adobe Premiere – tools & features – recording audio & video –types of audio & video – time line – project planning – trimming – motion effects – digital composting.

Text Books

1. The Ultimate Multimedia Handbook, Tata Mc Graw Hill
2. Multimedia at Work, Tata Mc Graw Hill
3. Adobe Photoshop Unleashed, Tata Mc Graw Hill

References

1. Teach yourself Corel Draw, Sams Publishing
2. Flash Mx for Dummies, Pustak Mahal

21VC2008	COMMUNICATION THEORIES	L	T	P	C
		3	0	0	3

Course Objectives

1. To define and relate to basics of communication theories.
2. To develop an insight into analysis.
3. To recognize and interpret theoretical frameworks.

Course Outcomes

Students will be able to

1. describe evolution of communication.
2. identify the theoretical frameworks.

3. understand the importance of communication theories.
4. distinguish between models and theories
5. analyze between models and theories.
6. develop critical theoretical analysis, leading to research orientation

MODULE I

Introduction – What is theory and model - Difference between theories and models - Definition and interpretation - Evolution of Communication Theories in developing countries.

MODULE II

Marshall McLuhan's Theory of Media Classifications Communication Basic Models – SMCR Harold. D. Lasswell, Braddock, Shannon and Weaver, Osgood and Wilbur Schramm, Wilbur Schramm and Hellical Dance Model. Agenda Setting - Knowledge Gap – Cultivation- Cultural Norms Theory – Effects Theory – Normative Theory – Narcotic – Hegemonic Theory.

MODULE III

Monopoly Formation of Public opinion – Propaganda – Agenda Setting Theory – Gate Keeping – Spiral Keeping – Spiral of Silence. Information Seeking – Cultivation Theory, uses and gratification - Structuralism Functionalism – Modernism – Heurmenitics.

MODULE IV

Visual Pedagogy - Sensual Theories - Gestalt, Constructivism, Ecological – Perceptual theories – Semiotics and Cognition, Huxley-Lester Model

MODULE V

Visual Learning theories - Education theory (knowledge visualization, visual metaphors, concept maps and mind maps) - constructivism, social constructivism and connectivism. Information design and Isotypes

MODULE VI

Information Society- Diffusion of Innovation- Development Theories -Contemporary Theories - Electronic Colonialism – IICO & NWICO recommendations - Significations & Effect of New Information Technology -Case Studies.

Text Books

1. Human Communication: Joseph De Vito(2006)
2. Mass Communication : Keval J Kumar.(2005)
3. Media and Communication: James Watson (2001)
4. Communication Theories : Julia T Wood.(2006).

References

1. Demetriou, A. (1998). Cognitive development. In A. Demetriou, W. Doise, K. F. M. van Lieshout (Eds.), Life-span developmental psychology (pp. 179-269). London: Wiley.
2. Demetriou, A., Shayer, M., &Efklides, A. (1992). Neo-Piagetian theories of cognitive development: Implications and applications to education. London: Routledge

21VC2009	VISUAL DESIGN LAB	L	T	P	C
		0	0	2	2

Course Objectives

1. To discuss the different needs of graphics in our daily life such as preparing a presentation, editing our phone photos, etc.
2. To illustrate how to meet these simple graphical needs.
3. To evaluate the degree of creativity in achieving the desired design work.

Course Outcomes

Students will be able to

1. design a logo for a given purpose/theme.
2. construct a design work from scratch for their daily needs such as their own assignment cover page,
3. create PowerPoint backgrounds, banners for their own websites and many more.
4. select the hierarchy of software array used for different graphical needs.
5. demonstrate creative visual designs for all media communication.
6. create custom based templates for related media subjects.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

21VC2010	AUDIO PRODUCTION	L	T	P	C
		3	0	0	3

Course Objectives

1. To define and understand nature of sound and its elements and process
2. To translate skills in audio productions and programs
3. To design and evaluate quality digital audio program output.

Course Outcomes

Students will be able to

1. explore digital audio productions.
2. demonstrate the skills in designing digital audio production and editing.
3. evaluate the standard digital audio productions.
4. explore latest in sound reinforcements.
5. identify audio software.
6. list trends and technologies in audio production.

MODULE I

Fundamentals of Sound Elements- Acoustic treatments- Means of control – Analog and digital sound –Audio equipment.

MODULE II

The production chain and responsibilities – Recording sessions- Mono, Stereo Track Recording- Studio Communications – Noise and pitch reduction/correction – Ambience Dolby- Microphones and applications- Digital Recording and Authoring – conversion, sampling –Equalizer and application – Digital audio interfaces – Amplifier technologies – Output transducer technologies

MODULE III

Computers in Music Technology-Digital mixers and audio workstation- Musical instruments and Recording – MIDI applications-

MODULE IV

Audio Dubbing and Synchronization- producing audio clips and sample programs for various skills learnt – workstations – Audio studio – acoustics.

MODULE V

Daw's Software, Tools and application. Latest audio production software tools and applications – problems with sound quality – Lip-sync – edit and mix – Voice over recording – Dialog replacement – working with sound effects.

MODULE VI

Create an audio book/podcast

Text Books

1. Paul White, Basic Live Sound, Sanctuary Publications 2003.
2. David Simons, Analog Recording, (3rd Ed) Backbeat Books, 2006.
3. Emile D Menache, The Desktop Studio: A guide for computer based Audio production. Hal Leonard Corporation, 2002.

References

1. Francis Rumsey & Tim McCormick, Sound and Recording, Focal Press (5thed), 2005.
2. Steven Gurevitz and Paul Middleton, Music Technology workbook, Focal Press, 2006
3. William Moylan, Understanding and crafting the Mix, Focal press 2006

21VC2011	VIDEO & POST PRODUCTION TECHNIQUES	L	T	P	C
		3	0	0	3

Course Objectives

1. To teach the students with the basics of cinematography.
2. To impart knowledge to the students on the aesthetics of video production.
3. To keep the students updated with the techniques in video production.

Course Outcomes

Students will be able to

1. master the time tested concept of applying cinematography in their production techniques.
2. get trained to industry standards.
3. understand basic elements of video production.
4. exhibit creative ways of camera handling.
5. produce video with aesthetics and semiotic understanding.
6. know the latest in video making process.

MODULE I

Introduction to Video and technology - Picture formation-T.V Scanning: Horizontal & Frame Vertical- & field rate-Resolution video bandwidth, sync. Blanking signals, colour burst, sensitivity, linearity etc.-Television standards: NTSC, PAL, SECAM - Principle of Video Camera Primary & Photo conduction, photo voltaic, photo emissive effect-Working - secondary colours- CCD cameras: Three CCD, single CCD colour camera- principle of video camera-Various sizes of pickup devices.

MODULE II

Components and Controls of Video Camera. Parts of a video camera-Different controls on video camera-Power switch, preheat, genlock, white balance, gain, iris, pedestal etc.-Zoom control: servo, manual, remote, zoom extenders - Focus control: auto, manual, remote, back focus, macro focus.-Camera view finders (B/W and colour). Its indicators and control.

MODULE III

Balancing of Colours of a video camera. Colour temperature-White balance: Process and need.- Camera filters-Camera control unit (CCU)-Waveform monitor for output level of video-Vectorscope – types of camera angles – Scene requirements – continuity – Cinematic time and space – Shots – Types of shots – scene direction – types of action - composition – rules- balance, unity and emphasis.

MODULE IV

Video camera lenses. Perspective-Types and use-normal lens, telephoto lens, wide-angle lens. Zoom lens-Tripod, types of tripod heads, dolly, trolley & other accessories-Different types of camera angles and use- Camera movements – types & use

MODULE V

Different Types of Television Cameras-NG camera - EFP camera – Studio cameras - Special cameras: underwater camera, Endoscopic camera, Aerial photography camera, remote control camera, high-speed video cameras - Types of microphones used on video camera - Types of audio & video connectors. Video Post-Production Technology and techniques of video editing - TV Signals - time code - Digital video and video tape formats - video tape editing - preparing for post-production - offline editing process- online editing Digital video effects - Audio post production for video

MODULE VI

High Definition Post Production Frame recording method - bit depth - chromo sampling, compression - mixing SD and HD - computer file size for high definition video - conversion problems - offline/ online edit system compatibility – shoot - edit and deliver at one frame - LCD monitors - plasma screens - DLP monitors- Color Correction Color theory - Perceptions - Colour monitors and tools - Common colour errors and techniques - Introduction to Advance colour correction.

Text Books

1. Jay Rose, Audio Post Production for Digital Video, CMP Books 2002.
2. Gary H Anderson, Video Editing and post production, A Professional Guide, Focal Press,1999.
3. Tim Amyes, Audio Post production in Video and Film, Focal Press, 2001

References

1. Des Lyver, Basics of the Video Production Diary, Focal Press, 2001.
2. Steven E Browne,High Definition Post Production: Editing and Delivering HD Video, Focal Press 2007.
3. Steven Hullfish-Jaime Fowler, Colour Correction for Digital Video: Using Desk Top Tools to Perfect Your Image, CMP Books, 2003.

21VC2012	2D & 3D ANIMATION	L	T	P	C
		3	0	0	3

Course Objectives

1. To illustrate the different ways and means of achieving a 2D animation.
2. To introduce the world of 3D animation.
3. To experiment different techniques to achieve convincing animation in 3D.

Course Outcomes

The students will be able to

1. list the different methods of animation techniques used until date.
2. set-up their own animation story and represent it using storyboards
3. create animation characters in 2D and bring them to life using animation.
4. illustrate varied animation techniques.
5. develop frame by frame animation
6. create animation special effects.

MODULE I

History of animation – Types of Animation - evolution of animation methods - Storyboards and Animatics – moving picture – Flipbooks. Setting Up Your environment - Plug-ins and Extensions- Frame by Frame Animation-Animating with Tweens Animation Special Effects – Script –Storyboard – Designs - Leica Reel (Animatic) - Pencil Tests (Animation) – Inking – Visual effects – tools and functions. The Principles of Animation and persistence of vision - Squash and Stretch – Kinematics - Choice of character, Character design –Timeline - The walk cycle -Digitizing and compiling the frames – Action Scripts - Embedding video and sound synchronization - Applications 2D animation – Advertising, films etc.

MODULE II

Modeling basics –coordinate systems –viewing windows – Geometric primitives –transformations – common modeling techniques –hierarchies –Booleans and trims - The camera –Lights –Surface characteristics Workspace – creating shapes – learning to navigate the 3D workspace.

MODULE III

Object attributes and settings - how 3D differs from 2D – rotating, scaling and moving objects - Shading and Texturing – different materials – types of textures – tiling textures - 3d animation: Animatics - Character Animation - Game based animation – Clay animation based animation – Animation in motion 3d

MODULE IV

Bump maps in texturing – paint effects - Basic Animation - Walk-through - intro to graph editor - Key framing – interpolations – parameter curve editing – dope sheet editing –kinematics – motion plans – shape deformations

MODULE V

Lighting the scene – types of lights - Render settings – mental ray intro – batch rendering – basic compositing

MODULE VI - camera animation – animating lights and surface properties – pose based animation – Virtual sculpting – hair and fur – texturing polygons – cloth dynamics – facial animation- compositing – Editing.

Text Books

1. Jayne Pilling. Animation and Beyond, Rotovision – 2010.
2. Harold Whitaker, John Halas. Timing for Animation, 2nd edition, Focal Press. 2009.
3. Mark Simon. Producing Independent 2D Character Animation. Focal Press.
4. Chris Webster, “The Animation – the mechanics of motion”, Focal Press, 2005.
5. John Edgar Park, “Understanding 3D animation using Maya”, Springer Science & business Media. Inc, 2005.
6. Marcia Kuperberg, Martin W. Bowman, “Guide To Computer Animation”, Focal press ,2002.

References

1. Character Animation Fundamentals: Developing Skills for 2D and 3D Character by Steve Roberts, 2012
2. The animator's guide to 2d computer animation by Hedley Griffin, 2001
3. Adobe Flash Professional CS6 Essentials by William Heldman, 2012.
4. Sams Teach Yourself Adobe Flash CS4 Professional in 24 Hours. Adobe Reader by Phillip Kerman, Lynn Beighley, 2006
5. Andy Beane, “3D Animation Essentials”, John Wiley & Sons, 2012.

6. Michael O'Rourke, "Principles of Three – Dimensional Computer animation", 3rd edition, W.W. Norton & company, 2003Michael O'Rourke, "Principles of Three – Dimensional Computer animation", 3rd edition, W.W. Norton & company, 2003.
7. John Vince, "Essential Computer Animation", Springer UK ,First Edition 2000.

21VC2013	FILM STUDIES	L	T	P	C
		2	0	0	2

Course Objectives

1. To teach the various modes of discourse in film
2. To imbue insights on analysing different genres of films
3. To practice the art of culling out films and appreciating the various aspects of it

Course Outcomes

Students will be able to

1. develop an overall understanding on the structure of film narration
2. have a thorough knowledge on the narrative aspects of film
3. analyze psychologically with the films
4. demonstrate the art of appreciating and analysing films
5. create and become good learners of films
6. acquire high skill on knowing film theories and the art of watching films

MODULE I

Early Cinema (1893-1903), Development of classical Hollywood cinema (1903-1927), German expression (1919-1924),French Impression and Surrealism(1917-1930),Soviet Montage(1924-1930),The Classical Hollywood Cinema after the coming of sound, Italian neo-realism(1942-1951),The French New Wave (1959-1964), Japanese cinema, Cinema in the third world, Indian (Hindi, Tamil & other languages),Contemporary trends.

MODULE II

Planning, Pre-production-Concept/Story development, Scripting/Screen play writing, Budgeting, Casting, Locations, Financing, Production-Shooting, Direction & Cinematography, Post production- Editing, Sound recording, Dubbing ,Special effects, Graphics and Final mixing, Distribution and Exhibition.

MODULE III

Mise-en-scene, the power of mise-en-scene, aspects of mise-en-scene, Space and time, narrative functions of mise-en-scene, Cinematographer properties-the photographic image, framing, duration of the image, montage and long take.

MODULE IV

Editing-dimensions of film editing, continuity editing, alternative to continuity editing, Sound –the powers of sound, fundamentals of film sound, dimensions of film sound, functions of film sound, theatrical sound formats.

MODULE V

Approaches to studying film, Narrative and Non Narrative films, Structure of a narrative film, Cinematic codes, The concept of form in films, principles of film, narrative form, non-narrative films, dividing a feature film into parts and Genres (language, style, grammar, syntax), Documentary genres.

MODULE VI

Study of Great Indian and International filmmakers like D.W. Griffith, Charlie Chaplin, Alfred Hitchcock, Akira Kurusowa, Ingmar Bergman, Satyajit Ray, Adoor Gopalakrishnan and others. Film Appreciation – Learning film appreciation formulas – Review of popular films.

Text Books

1. David Bordwell& Kristin Thompson, "Film Art An Introduction", 8th edition, McGraw Hill, 2008.
2. Sarah Casey Benyahia, Freddie Gaffney & John White, "As Film Studies The Essential Introduction", Routledge, 2006.
3. James Monaco, "How to read a film", Oxford University Press, 2009.

Reference Books

1. Greg M. Smith, "Film Structure and the Emotion System", Cambridge University Press, 2003.
2. Nitzan Ben Shaul, "Hyper-Narrative Interactive Cinema", Rodopi, 2008.
3. Joseph M. Boggs & Dennis W. Petrie, "The Art of Watching Films", 7th edition, McGraw Hill, 2008.

21VC2014	STORY BOARDING & ANIMATION	L	T	P	C
		3	0	0	3

Course Objective:

1. To impart the techniques of storyboarding.
2. To make the students understand the perspective.
3. To provide hands-on experience in creating a storyboard for animation .

Course Outcome:

1. understand the concept of perspective.
2. work with the tools and the aspects of sketching.
3. produce a story board for their project.
4. understand the concept of 2D animation.
5. work with Flash.
6. become familiar with the concept of Flash animation and special effects.

MODULE I

Overview of Story Boards; Textbooks, & Structure of Class; Basic Perspective
Basic Staging; Characters with Perspective; Storyboard Terminology, Types of Film Shots; Screen Direction; Shot Progression, Film Logic, Composition; Visual Clarity

MODULE II

Equipment of the layout artist. Perspective: one point, two point, three point , forced perspective, aerial – scale in layout – other aspects of perspective– pans- types of pans –composition –thumbnail drawing – conceptual drawings – leading the eye – animating backgrounds- lighting and rendering – staging –character layout– techniques and motifs – scene planning – computers and layout- storyboarding.

MODULE III

Framing Devices, Cinematic Depth Tones; Dramatic Composition, Iconic Shapes; Use of angles, Character Performance, Character Development & Design, Acting, Working with Dialogue, Clarity of Story through Characters, Camera Moves, Assembling BGs & Multiple Levels, Basic Animatic Assembly Animatics, Working with Sound, Compositing in After Effects, Pitch Story

MODULE IV

The Project Plan - Libraries - Storyboards and Animatics - Setting Up Your FLA - Plug-ins and Extensions- Frame by Frame Animation-Animating With Tweens- Animation Special Effects - Why Use After Effects?-After Effects and Camera Mechanics

MODULE V

Making Flash Not Look Like Flash - Script –Storyboard – Designs - Leica Reel (Animatic) - Pencil Tests (Animation) – Inking - The Principles of Animation and persistence of vision - Squash and Stretch – Kinematics - Choice of character - Character design –Timeline - The walk cycle -Digitizing and compiling the frames – Applications 2D animation.

MODULE VI

Work on Final Story Idea, Beat Boards, Work on Finals, **"**The Hero's Journey" & Other Structures.

Text Books

1. Mark T Byrne, "Animation the art of layout and storyboarding", Mark T Byrne publication , 1999.
2. Joseph D Amelio, "Perspective drawing Handbook", Dover publication Inc., 2004.
3. David Louis, "Pencil Drawing Techniques", Watson Guptil publication, 1984.
4. David Howard, "How to build a great screenplay, A Master Class in Storytelling for Film, St. Martin's Press publishers New York, 2004.
5. William H. Phillips, "Writing Short Scripts",2nd edition,2000
6. Laura schellhardt,"Screen writing for dummies", Wiley publishing, 2008

Reference Books

1. Tim Jones Barry J. Kelly Allan S. Rosson David Wolfe, "Foundation Flash Cartoon Animation", Friends O Fed, aprèss company, 2007
2. Richard Williams, " The Animators survival kit", Faber and Faber publications.
3. Chris Webster, "Animation: The Mechanics of Motion", Focal press,2005.
4. Mark T Byrne , "Animation the art of layout and storyboarding", Mark T Byrne publication , 1999.

21VC2015	AUDIO PRODUCTION LAB	L	T	P	C
		0	0	4	4

Course Objectives

1. This lab will instruct how to prepare for making a movie,
2. It will educate how to collect digital video, upload digital video to a computer,
3. It will instruct how to edit the video and audio and then produce a final output.

Course Outcomes

Students will be able to

1. explore basic audio terminologies used in the industry.
2. identify appropriate microphone usage and placement
3. select advanced audio recording and mixing software.
4. create, record and edit single and multiple audio tracks.
5. Students will demonstrate creative and functional application of sound and audio along with visual media.
6. create independent cover songs.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester

21VC2016	VIDEO & POST PRODUCTION TECHNIQUES LAB	L	T	P	C
		0	0	2	2

Course objectives

1. To teach the student the intricate process involved in production of various genres of videos.
2. To enable the student to choose the right type of shots to get the story across to the audience.
3. To make a student understand the problems faced during the creation of a video project and to find solutions.

Course outcomes

Students will be able to

1. develop projects.
2. create the scenes conceived in their mind.
3. demonstrate using the video tools.
4. select the right type of shots to get the story across to the audience.
5. identify the location in the scene with tools.
6. illustrate process involved in production of various genres.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

21VC2017	2D ANIMATION LAB	L	T	P	C
		0	0	4	4

Course Objectives

1. The students will be introduced to the advanced concepts of 2D animation
2. To help students gain knowledge about cartoon animation
3. To train the students in the area of 2D Animation and its software applications.

Course Outcomes

Students will be able to

1. demonstrate hands on experience by undergoing different tools of 2D animation using Flash software
2. create a 2D cartoon animation at the end of the experiments
3. explore computer graphics and animation.
4. identify character and concept designing in 2D animation.
5. demonstrate an expertise in software tool and their interfaces.
6. create real time projects of professional quality.

Experiments

Experiments will include Flash Layout, Motion Tween, Shape tweening, Motion guide using Flash Basic effects in Adobe after effects

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of HoD/Director and notify it at the beginning of each semester.

21VC2018	WEB DESIGNING	L	T	P	C
		3	0	0	3

Course Objectives

1. To explore the different techniques in building a website/webpage.
2. To inculcate the inevitable importance of www and having an identity on Internet.
3. To educate the methods involved in designing for www and hosting a simple site.

Course Outcomes

Students will be able to

1. explain the significance of having their own webpage/website as their identity in the world of Internet.
2. create a website using basic HTML and Web building tools driven by their creativity.
3. create their own website or webpage and test the connectivity and record analytics of their site traffic.
4. select and advanced features in web designing software.
5. create interactive webpages.
6. demonstrate aesthetics and creativity in web designing.

MODULE I

Introduction to WWW – Evolution of Internet – email – FTP – download and upload ratio – peer to peer sharing – file hosting services – ISPs – Functions of MODEM and Routers –saving and retrieving .

MODULE II

HTML - .htm/.html files –Browsers and types – browser add-ons and extensions – web building tools– web creation environment.

MODULE III

Graphics for web – animated graphics – navigational options for web – human computer interaction

MODULE IV

Lnk maps – site maps – website hierarchy - hosting services – domain names – storage space – traffic limits

MODULE V - Free blogs – tracking analytics – Google analytics engine – Ad Sense – downtime and maintenance.

MODULE VI

Create and maintain a blog on the area of your specialization

Text Books

1. David Crowder and Rhona Crowder,"Web Design with HTML/Flash/Java script & Ecommerce BIBLE",WileyDreamTech India Pvt. Ltd,2001
2. Thomas A. Powell, "HTML: The Complete Reference", McGraw Hill, 2001.
3. H.M. Deitel, P.J. Deitel, "Internet & World Wide Web – How to program", 3rd Ed., et al.,Prentice Hall,2003.

References

1. Danny Goodman, Michael Morison, Paul Novitski, "Java Script Bible", Wiley Publication, 7 Edition
2. David Flanagan, "JavaScript: The Definitive Guide", O'Reilly Media, Inc, 7th Edition, 2011.

21VC2019	FUNDAMENTALS OF GAMING	L	T	P	C
		3	0	0	3

Course Objectives

1. To familiarize students with techniques and issues of Artificial Intelligence (AI) for computer games
2. To discuss the nature of path-finding in video games.
3. To demonstrate the application of physics in game environment towards achieving realism

Course Outcomes

Students will be able to

1. identify aspects of computer games, which benefit from artificial intelligence.
2. implement artificial intelligence and machine learning techniques for traditional and modern computer games.
3. define the importance of physics and collision in game creation.
4. create custom navigation using path-finding algorithms.
5. demonstrate their skills in handling game engines for AI tasks.

6. Demonstrate technical expertise

MODULE I

Game AI, Model of Game AI, Algorithms, Data Structures and Representations, Kinds OF AI in Games, Speed and Memory-Processor issues, Memory concerns, PC & console constraints, The AI Engine-Structure of AI Engine, Tool chain concerns

MODULE II

Basics of Movement Algorithm – Two dimensional movement, Statics, Kinematics, Steering Behaviors – Variable matching

MODULE III

Path following, Collision avoidance, Predicting physics, Jumping & Motor Control, Movement in 3rd Dimension.

MODULE IV

Graphs, Weighted Graphs, Cost functions, Path smoothing, Open Goal path finding, Dynamic path finding, Continuous time pathfinding, Movement Planning

MODULE V

Decision Trees – Problem- algorithm - Pseudo code - Implementation, State Machines, Behavior trees – Fuzzy Logic, Markov Systems.

MODULE VI

Goal Oriented, Rule based systems, Scripting, Board Game Theory, Mini maxing, Transposition tables and memory, Turn based strategy in board games.

Text Book(s)

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

21VC2020	DATA JOURNALISM & INFOGRAPHICS	L	T	P	C
		3	0	0	3

Course Objective:

1. To introduce students to basics of Data Journalism and Info graphics
2. To provide students with knowledge of Google Fusion, Google sheets, MS Excel and Interactive Design
3. To hone investigative reporting, statistical knowhow and investigative skills of students

Course Outcome:

Students will be able to

1. summarize the basics of Data Journalism
2. demonstrate visual story telling techniques
3. explore their visualisation skills
4. create analytical news stories
5. identify latest statistical tool sets
6. create live projects.

MODULE 1

Data journalism history and principles –investigative reporting- cyberspace- info graphics.

MODULE 2

Functions of Google Fusion Tables – Google Sheets-Google Drive –Google Slides-Microsoft Excel.

MODULE 3

Visualisation-Divergent Thinking – Visual Story Telling- Visual Ethnography . Interview Techniques.

MODULE 4

Introduction to Python. Python in Journalism. Jupyter Notebooks.

MODULE 5

Data Analysis with Pandas. AR /VR Basics

MODULE 6

Live Projects on Investigative Reporting, Social Media Analysis.

Text Book

1. The Data Journalism Handbook, Jonathan Gray, Liliana Bounegru, Lucy Chambers , O'Reilly Media,2012 ISBN: 9781449330064.

Reference Book

1. Information is Beautiful, David McCandless · Collins. 2012. ISBN 9780007492893, 0007492898.

21VC2021	MEDIA LAW & ETHICS	L	T	P	C
		3	0	0	3

Course Objectives

1. To enable students to define and relate to basics of Media Laws and Ethics.
2. To enable students to apply varied aspects of Media Law and Ethics.
3. To enable students to examine and analyze ethical components of contemporary media.

Course Outcomes

Students will be able to

1. define and relate to basics of Media Laws and Ethics.
2. apply varied aspects of Media Law and Ethics.
3. analyze media research components.
4. identify kinds of cyber crimes
5. analyze IT Act 2000
6. identify Copyright Acts pertaining to their productions

MODULE I

The Indian Constitution-Directive Principles-Fundamental Rights- of Speech and Expression-Press Regulations Board. Freedom

MODULE II

IPR-Copyright-Defamation- Libel & Slander - Contempt of Court –AFSP-Official Secrets Act (1923).

MODULE III

Emergency 1975-Media Conglomerates-Press Commissions – Right to Information Act – Case Studies- Latest issues.

MODULE IV

Film Censorship- Film Censor Board--Code of Ethics- Radio- Television- Duties of a Journalist- Press Code of Ethics. Advertising Standard Council

MODULE V

Information Technology Act (2000) - Cyber Crimes-Phishing- Cyber Stalking – Online Identity Theft- Online Deception-Cyber Cell- Cybercrimes. (Case Studies)

MODULE VI

Study, observe and analyze the list of media laws

Text Books

1. Media Law & Ethics : Neelamalar M.(2008)

References

1. Basu, Dr. Durga Das, Law of The Press, 5th Ed, Lexis Nexis, 2010
2. Bloy, Duncan & Hadwin, Sara, Law and the Media, 2nd Ed., Sweet & Maxwell, 2013
3. Divan, Madhavi Goradia, Facets of Media Law, Eastern Book Company, 2010
4. Paul, Sebastian, Ethics and The Media, 3rd Ed., Lexis Nexis, 2015
5. Prasad, Kiran, Media Law in India, Kluwer Law International, 2011
6. Shukla, V.N., Constitution of India, 11th Ed., Eastern Book Company, 2011
7. Sorabjee, Soli J., "Constitution, Courts and Freedom of the Press and the Media", B.N. Tirpak etal (eds.), Supreme But Not Infallible : Essays In Honour Of The Supreme Court Of India, 2000

21VC2022	VIRTUAL REALITY	L	T	P	C
		3	0	0	3

Course Objectives

1. To learn the concepts and principles of Virtual Reality
2. To learn VR environment and software.
3. To understand the various tools and production techniques

Course Outcomes

Students will be able to

1. understand the behavior of VR environment
2. identify the style, the activities & protocol involved in the process of Virtual Reality
3. assess the Virtual Reality Productions.
4. work in latest virtual reality environments
5. conceive new features for advances in VR solutions
6. explore skills in producing need based VR environments.

MODULE I

Introduction to Virtual Reality, Historical Development,- Navigation and interfaces.- Augmented Reality, –input – Output devices,- immersive /non immersive VR, -VR terminology,

MODULE II

HMD, Modeling in VR- Boom, Cave- Sensual Technology-Trackers, Shared VR environment,- VR tool Kits,- VR applications in Education, Engineering, Design Training, Medical, Military , Gaming and Entertainment.

MODULE III

Virtual environment, virtual presence, VR system, human perception, motor and cognitive -systems, basic applications - Dynamics of Virtual Environment -DOF, translational and rotational transformations, pose and displacement

MODULE IV

Dynamic models of VR- equations of motion, inertia, momentum, collision detection, computation of body - movements. Tracking and Modalities - Pose sensor- mechanical, ultrasonic, optical, video metric, radio frequency and electromagnetic, motion tracking, physical input devices, Modalities- visual, Audio, Haptic.

MODULE V

Interaction with Virtual Environment -Manipulations with virtual environments, navigations in virtual environments, interaction with other users, interactive computer game, Interactive educational methods.

MODULE VI

VR and Unity 3d Starting Unity project, setting up project files for VR integration, creating UI elements for VR interaction, gaze based control, move around, jump, using 360 degrees, physics and environment-FPS

References

1. Grigore C. Burdea and Philippe Coiffet, Virtual Reality Technology, John Wiley and sons Publishers, 2006.
2. Tay Vaughan, Multimedia: Making it work. Tata McGraw Hills 2006
3. John Vince, Introduction to Virtual Reality, Springer, 2004.
4. John Vince, Essential Computer Animation, Springer, 2000

21VC2023	WEB DESIGNING LAB	L	T	P	C
		0	0	3	3

Course Objectives

1. To learn creation of web pages, scripting objects, application and special objects.
2. The students will be trained to programme ASP and XML.
3. Understand the importance of the web as a medium of communication.

Course Outcomes

Students will be able to

1. understand graphic design principles that relate to web design and learn how to implement these theories into practice.
2. develop skills in analyzing the usability of a web site.
3. apply the language of the web: HTML and CSS.
4. develop skills in using WYSIWYG web development software
5. develop skills in digital imaging (Adobe Photoshop.)
6. implement and understand how to interpret basic web analytics.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

21VC2024	NEWS PRODUCTION LAB	L	T	P	C
		0	0	3	3

Course Objectives

1. Students will learn to write, report and produce a five-minute radio newscast covering local, regional, national and international news.
2. To achieve professional-standard writing skills writing that is clear, concise, accurate and conversational.
3. Strong writing ability is just as essential to broadcast journalism as it is to its print and online counterparts.

Course Outcomes

1. Students will display professional reporting skills ready to fit in the news industry.
2. Students will recognize the elements of broadcast scriptwriting and adapt print news stories for presentation in a news broadcast.
3. Students will produce news-based video segments ready for broadcast/webcast
4. Students will apply the concepts of non-linear audio and video editing to news segments for broadcast/web.
5. Students will identify the major components needed to produce a news production for broadcast/new media
6. Students will be able to compare the relative merits of telling the same story in various traditional and new media.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester

21VC2025	VIRTUAL REALITY LAB	L	T	P	C
		0	0	2	2

Course Objectives

1. To make students know the basic concept and framework of virtual reality.
2. To teach students the principles and multidisciplinary features of virtual reality.
3. To teach students the technology for multimodal user interaction and perception in VR, in particular the visual, audial and haptic interface and behavior.

Course Outcomes

1. Students will identify and describe technical implications of virtual reality.
2. Students will design and construct a simple virtual environment.
3. Students will apply current virtual reality hardware and software.
4. Students will apply the technology for managing large scale VR environment in real time.
5. Students will use VR for solving evolving human-centric problems.
6. Students will design advanced VR using new creative templates.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

21VC2026	MODELLING & TEXTURING	L	T	P	C
		3	0	0	3

Course Objective:

1. To learn the animation techniques.
2. To introduce Modeling techniques and the technologies involved
3. To introduce shading and image mapping

Course Outcome:

Students will be able to

1. apply modelling techniques.
2. understand latest Modeling techniques will be known to students
3. understand the Application of models to texturing will be clearly understand.
4. apply the correct material and texturing
5. create interfaces
6. develop modeling & texturing techniques

MODULE I
Introduction to Digital Modeling – Understanding a Modeler's Role – Preparing for Modeling – Four Fundamentals of a Digital Model
MODULE II
Digital Modeling methods – Professional Modeling practices – Polygon Modeling – Subdivision Surface Modeling
MODULE III
Modeling a stylized character – Modeling for print graphics – Digital Sculpting – Game Modeling
MODULE IV
Materials – Shaders – Material creation Interfaces – Image Maps and Procedural Maps - Light Surfaces – Complex Materials
MODULE V
Mapping and Unwrapping – Rendering – Applying the correct Material and 2D texture – Applying 3D textures and Projections
MODULE VI
Creating custom connections and Applying color utilities- Automating a scene with sampler notes.
Text Books:

1. William Vaughan, Digital Modeling, New Riders, 2011.
2. Nikos Sarris, Michael G. Strintzis, 3D Modeling and Animation: Synthesis and Analysis Techniques for the Human Body, Idea Group Inc (IGI), 2005.
3. Ami Chopine, 3D Art Essentials: The Fundamentals of 3D Modeling, Texturing, and Animation, Taylor & Francis, 2011.

Reference Books:

1. Dennis Summers, Texturing: Concepts and Techniques, Cengage Learning, 2004.
2. Bill Fleming, Mastering 3d Texturing, Elsevier Science & Technology Books, 2006.
3. Lee Lanier, "Advanced Maya Texturing and Lighting, John Wiley & Sons, 2011.

21VC2027	VISUAL EFFECTS	L	T	P	C
		3	0	0	3

Course Objectives
1. To develop student's aesthetic, intellectual &technological abilities through programs that integrates theory & practical.
2. To sharpen the skills in the latest animation/ multimedia software/ tools.
3. To create high-quality visual effects (VFX) for films, TV, advertisements & games

Course Outcomes
Students will be able to
1. gain skills at advance level of designing.
2. create Special Effects.
3. select latest animation/ multimedia software/ tools.
4. create animation thereby making industry-ready professionals.
5. gain specialist knowledge in developing visual effects.
6. develop produce high-quality visual effects (VFX) for films, TV, advertisements & games.

MODULE I
Digital representation of visual information - Image Generation, Pixels, Components, Channels, Spatial Resolution, Color Manipulations, Creating Title animation – Info graphics – Lower third – Color grading – Matte Removal
MODULE II
Video Effects - transition effects – 3D Compositing – Important concept and scripting - Digital video formats
MODULE III
Special effects in video editing - Masking- Making an edit invisible, Motivation for every edit geometric transformations, Expression Language, Filtering - image tracking and stabilization - Film formats
MODULE IV
Delivering a message - Bearing audio in mind, editing is creating - creating elements and integration techniques Lighting - Interactive Color and lighting - light wrapping - Shadows

MODULE V

Control of Overuse technique or Visual effects - digital colour matching - spill suppression – Atmosphere - camera characteristics.

MODULE VI

Day to Night conversion, Digita Make Up, Advanced Visual Effects Technique: AVATAR.

Text Books

1. Nonlinear Editing: Media Mannel; Morris, Patrick, Published 1999 Focal Press.
2. Dough Kelly, "Digital Composting in-Depth", Coriolis, 2000.
3. Lee Lanier, "Digital Compositing with Nuke", Focal Press, 2012

References:

1. Richard Rickitt, "Special Effects: The History and Technique", 2nd edition, Billboard Books, 2007
2. Ron Brinkmann, The Art and Science of Digital Compositing, second edition, Morgan Kaufmann, 2008.
3. Steve Wright, Digital Compositing for Film and Video, Focal Press, 2006

21VC2028	NEW MEDIA STUDIES	L	T	P	C
		3	0	0	3

Course Objectives

1. To introduce new media and the use of its applications in the media industry.
2. To make the students understand the relationship between new media technologies and society.

Course Outcome

1. To remember policies pertaining to new media.
2. To Create cross cultural invasion impacted by new media technologies
3. To Understand new media theories.
4. To Apply Knowledge on cyber crimes and issues connected therewith in India.
5. To Develop an idea about new age communication tools.
6. To analyze new media trends.

MODULE I

New media: Introduction, Definition, Characteristics – New media technology – Communicationrevolution – new media versus old media – differences between media – Digital divide: E-Governance – Process, Social and legal frameworks – Policy initiatives. New Media: Conceptual understanding; Media diversification and convergence; The present scenario.

MODULE II

New media and mass communication – Theme of new media theory – applying medium theory to new media – new patterns of information traffic – computer –mediated community formation – political formation – new media and democracy – technologies of freedom – new equalizer or driver - Theories of information society – technological determinism – concept of modernism and post modernism

MODULE III

Global media communication: origin – driving forces – global media structure – International media dependency – Global trade in media culture - hegemony – cultural invasion – cross cultural impact.

MODULE IV

Media structure and governance: Principles and accountability – Mass media governance – The regulations of mass media – media convergence – Diffusion of innovation.

MODULE V

Mobile phones as new media of interpersonal and group communication; Smart mobile phone features; iPhones, iPods and iPads; Satellite radio and television

MODULE VI

Competition wars between mobile phone manufacturers. Cyber world – IT act – RTI – media self regulation and control – Commodification of news and other media

TEXT BOOKS:

1. Denis Mcquail, Mass Communication Theory (by, Sage south Asia Edition, 6th edn) New Delhi (2010).
2. Subhash Bhatnagar and Robert Schwann, Information and Communication Technology in Development: Cases from India Sage Publications, New Delhi, 2000.
3. Clint C., F.Gutierrez, Lena M. Chao - Racism, Sexism and the Media – Sage Publications 2012

REFERENCE BOOKS:

1. Mark Hukill Electronic Communication Convergence: Policy challenges in Asia,Sage publications, New Delhi, 2000.
2. Barrie Oxford & Richard Huggins, New media and Politics, Sage Publications, New Delhi, 2001
3. Alaine Modouz , World Communication Report: The media and the challenge of the new technologies , UNESCO Publishing 1997.
4. Paschel Preston,Reshaping Communications: Technology, Information and Social change – By Sage Publications, New Delhi, 2000.
5. John DH Downing, Internationalizing media theory: Transition, Power, Culture, Sage Publications, New York 1997.

21VC2029	MEDIA RESEARCH & TECHNIQUES	L	T	P	C
		3	0	0	3

Course Objectives

1. To introduce students to the arena of communication research
2. To inculcate research awareness
3. To apply epistemology to day to day activities.

Course Outcomes

Students will be able to

1. gain an insight into research.
2. analyze media related issues
3. find solutions to social problems
4. collaborate and work towards interdisciplinary research.
5. visually analyze issues and lifestyles
6. contribute to the growing body of research

MODULE I

Introduction - Pure and applied research. Social Science Research Definition of Communication Research. What are Communication Research Methods - Media Research Methods. Research and Theory.

MODULE II

Qualitative and Quantitative Research - In depth Interviews - Field observations-Focus groups- Content analysis-Quantitative methods- Survey- Questionnaire – Research Questions- Hypotheses- Uses limitations- Qualitative and Quantitative Methods- Reliability, Validity.

MODULE III

Types of Research - Descriptive Research- Ethnographic Research -.Virtual and Digital Ethnography- Action Research- Historical-Evaluative - Experiment- Quasi experiment – Case Study- Qualitative-Quantitative

MODULE IV

Sampling - Basic difference between qualitative and quantitative sampling. Types of sampling techniques. Random and non-random sampling- Purposive sampling- Snowball Sampling-Convenience Sampling.

MODULE V

Qualitative and Quantitative Analysis - Content Analysis- Theoretic Analysis- Basic SPSS- Chi- Square – Likert Scales--the t-test-Analysis of variance- -Correlation. Computer Mediated Communication.

MODULE VI

Writing a Research Report – Case studies.

Text Book

1. Roger D Wimmer,Joesph R.Dominick, Mass Media Research ,Wardsworth Publishing Company,2000.

References

1. Ajai S.Gaur, Sanjaya S.Gaur Statistical Methods for Practice and Research, Sage Publications, 2006.
2. Thomas R. Lindlof, Bryan C. Taylor Qualitative Communication Research Methods. Sage Publications 2005.

21VC2030	VISUAL EFFECTS LAB	L	T	P	C
		0	0	4	4

Course Objectives

1. To make students to specialize in the creation of 2D/3D computer animated elements for digital visual effects.

2. To enrich the skills of students to latest animation/ multimedia software/ tools.
3. To make students to give output in high-quality visual effects (VFX) for films, TV, advertisements & games.

Course Outcomes

Students will be able to

1. create 2D computer animated elements for digital visual effects.
2. create 3D computer animated elements for digital visual effects.
3. create their own concepts in animation.
4. create animation in the industry standard.
5. select the latest animation/ multimedia software/ tools.
6. create output in the high-quality visual effects (VFX) for films, TV, advertisements & games.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester

21VC2031	FILM MAKING LAB	L	T	P	C
		0	0	4	4

Course Objectives

1. To impart the knowledge of filmmaking process
2. To enrich the students with various terms and variables related to filmmaking
3. To train the students in the technical departments of filmmaking process

Course Outcomes

Students will be able to

1. apply all the knowledge garnered theoretically
2. select breakdown the works pertinent to different stages of filmmaking
3. demonstrate different filmmaking techniques learnt
4. identify flaws in the filmmaking process
5. select and rearrange things in case of any mishaps during filmmaking process
6. demonstrate their skills on coordinating with artists of different departments

Experiments

The Experiments for the lab includes various parameters and techniques of filmmaking starting from scripting, storyboarding, cinematography, editing and dubbing.

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of HoD/Director and notify it at the beginning of each semester.

21VC2032	3D ANIMATION LAB	L	T	P	C
		0	0	4	4

Course objectives

1. To train the students in the area of 3D Animation and its software application.
2. To make the students understand the process of 3D animation production in studios.
3. To train the students the area of character designing and concept designing in animation.

Course outcomes

Students will be able to

1. identify all the basic animation concepts practically which helps them in doing character modelling, lighting, texturing and animations.
2. apply 3D animation production in studios.
3. list 3D Animation and its software application.
4. demonstrate their skill character designing.
5. design concept designing in 3D animation.
6. create and design their own object and environment.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

21VC2033	MEDIA AGENCIES	L	T	P	C
		3	0	0	3

Course Objectives

1. To provide students with an insight into varied forms of media organisations
2. To enable students to understand career opportunities in varied media.
3. To enable students to distinguish between workflow in varied organisations.

Course Outcomes

Students will be able to

1. gain knowledge into varied forms of media organisations
2. identify career opportunities in varied media.
3. distinguish between workflow in varied organisations.
4. analyze their aptitudes in the given area.
5. gain knowledge of all media agencies.
6. better equipped to make career choices

MODULE I

Print Media Organisations- newspaper organization- magazine -structure-departments-nature of work-career opportunities-case studies of selected organisations.

MODULE II

Advertising Agencies – nature of work –career opportunities- newspaper advertisements-space selling – visualizing-graphic designing- visual media- television and films. Case Studies of Advertising Agencies.

MODULE III

Social media organisations –structure – functions- career opportunities- skill sets. Case studies of Google, Facebook, word press, instagram.

MODULE IV

Television Networks- Organizations – Career Opportunities- skill sets. Case studies of selected Television Organisations

MODULE V

Films as a corporate entity- structure –functions-career opportunities- skill sets **MODULE VI -** Case studies of selected film corporations and companies.

Reference

1. Social Media Bible: The Social Media Bible: Tactics, Tools, and Strategies for Business Success by Lon Safko Wiley Publishers 2016.

21VC2034	PORTFOLIO LAB	L	T	P	C
		0	0	4	4

Course objectives

1. To help students learn and develop their own portfolios.
2. To help students present their portfolio in proper/required formats.
3. To help students to learn new ways to showcase their portfolio.

Course outcomes

Students will be able to

1. select media platforms to showcase their portfolio.
2. demonstrate their portfolios in new media formats.
3. create their portfolios to using convergent media platforms.
4. create portfolio covering a variety of media.
5. illustrate framing portfolios for different media agencies.
6. select and produce portfolio for various genres.

Experiments

The students will have to compile all the laboratory works carried out in the first three years of their study and submit as their portfolio.

DEPT. OF MEDIA AND COMMUNICATION

LIST OF NEW COURSES

Course Code	Name of the Course	Hours Per Week			Credits
		L	T	P	
18MT2012	Media Laws and Ethics	3	0	0	3
18MT2013	Networks for Streaming	3	0	0	3
18MT2014	Computer Based Music Production	3	0	0	3
18MT2015	Artificial Intelligence for Games	3	0	0	3
18MT2016	Augmented and Virtual Reality	3	0	0	3
18MT2017	Animatronics	3	0	0	3
18MT2018	Audio Signal Processing	3	0	0	3
18MT2019	Computer Animation Algorithms and Techniques	3	0	0	3
18MT2020	Motion Capture	3	0	0	3
18MT2021	Studio Construction and Acoustics	3	0	0	3
18MT2022	Electronic Media Management	3	0	0	3
18MT2023	Cinematography	3	0	0	3
18MT2024	Fundamentals of Advertising	3	0	0	3
18MT2025	Fundamentals of Audio	3	0	0	3
18MT2026	Mobile Application Development	3	0	0	3
18MT2027	Mobile Application Development Lab	0	0	2	1
18MT2028	Film Appreciation	3	0	0	3
18MT2029	Sociology, Society & Culture	3	0	0	3
19MT1001	Essentials of Studio	3	0	0	3
19MT2001	Technology of Digital Photography	2	0	2	3
19MT2002	Visual Design Laboratory	0	0	2	1
19MT2003	Technical Video Production	2	0	2	3
19MT2004	Audio Engineering	2	0	2	3
19MT2005	3D Animation	2	0	2	3
19MT2006	Visual Effects and Compositing	2	0	2	3
19MT2007	Game Design	2	0	2	3
19MT2008	Graphics and Animation	2	0	2	3
19MT2009	Post Production Techniques Lab	0	0	4	2
19MT2010	Fundamentals of Python for Media	2	0	2	3
19MT2011	Advertising	3	0	0	3
19MT2012	Film Appreciation	3	0	0	3
19MT2013	Digital Television Engineering	2	0	2	3
19MT2014	Web Designing	2	0	2	3
19MT2015	Fundamentals Of Advertising	4	0	0	4

18MT2012	MEDIA LAWS AND ETHICS	L	T	P	C
		3	0	0	3

Course Objective:

1. To enable students to define and relate to basics of Media Laws and Ethics.
2. To enable students to apply varied aspects of Media Law and Ethics.
3. To enable students to examine and analyze ethical components of contemporary media

Course Outcome:

1. Students will learn to define and relate to basics of Media Laws and Ethics.
2. Students will identify kinds of cyber crimes
3. Students will learn to analyze media research components.
4. Students will apply varied aspects of Media Law and Ethics.
5. Students will describe IT Act 2000 and analyze case studies

6. Students will identify Copyright Acts pertaining to their productions

Module 1/Unit 1

The Indian Constitution-Directive Principles-Fundamental Rights- of Speech and Expression-Press Regulations Board.

Module 2/Unit 2

Six Freedoms- Defamation- Libel & Slander - Contempt of Court –AFSP-Official Secrets Act (1923).

Module 3/Unit 3

Emergency 1975-Media Conglomerates-Press Commissions – Right to Information Act - Case Studies-Latest issues.

Module 4/Unit 4

Film Censorship- Film Censor Board--Code of Ethics- Radio- Television- Duties of a Journalist-Press Code of Ethics. Advertising Standard Council

Module 5/Unit 5

Information Technology Act (2000) - Cyber Crimes-Phishing- Cyber Stalking – Online Identity Theft-Online Deception-Cyber Cell- Cybercrimes. (Case Studies

Module 6/Unit 6

IPR-Copyright- Violations – Case Studies

Text Books – Book name, Author, Publisher, Year with ISBN number

1. Media Law & Ethics: Neelamalar M.(2008). ISBN 9788120339743

Reference Books – Book name, Author, Publisher, Year with ISBN number

1. Basu, Dr. Durga Das, Law of The Press, 5th Ed, Lexis- Nexis, 2010ISBN 9788180386220

18MT2013	NETWORKS FOR STREAMING	L	T	P	C
		3	0	0	0

Course Objectives:

1. To overview the latest updates in the video streaming.
2. To understand the various architectures in video streaming.
3. To apply the concepts in designing video distribution networks.

Course Outcomes:

The students will learn to:

1. Observe the principles in video streaming systems.
2. Review the functional requirements in video streaming systems.
3. Discover the new advancements in video streaming systems.
4. Compare and contrast various types of video streaming systems.
5. Find a robust broadcast system video streaming system.
6. Evaluate the system based on standard parameters.

Module 1: Video Distribution Networks

Introduction, High-Level Architecture, Basic Operations, Video Distribution Networks, Low-Layer Network, Non-Cloud-Based Architecture, Edge Cloud Based Architecture, SDN/NFV Based Architecture, Content Distribution Network, Video Distribution Network [8 Lectures]

Module 2: Digital Video Delivery

Broadband TV Landscape, Internet TV Delivery Platforms, Second Screen Device Adoption, Screen and Video Resolution, Stereoscopic 3D TV, Video Coding Standards, Video Streaming Protocols, TV Interfaces and Navigation [8 Lectures]

Module 3: Video Coding Fundamentals

Sampling Formats of Raw Videos, Impact of Video Compression, General Video Codec Operations, Transform Coding, Entropy Coding, MPEG (H.26x) Standards, Group of Pictures, Motion Estimation and Compensation, Non-MPEG Video Coding, Constant and Variable Bit-Rate Videos, Advanced Audio Coding, Video Containers. [8 Lectures]

Module 4: H.264/AVC Standard

Overview of H.264, H.264 Syntax and Semantics, H.264 Encoder, Rate Distortion Optimization, Video Coding and Network Abstraction Layers, Error Resilience, Transform Coding, Entropy Coding, Motion Vector Search, Multiple Reference Slices, Scalable Video Coding. [8 Lectures]

Module 5: Assessing and Enhancing Video Quality
Introduction, Distortion Measure, Peak Signal to Noise Ratio, Structural Similarity Index, Observable Versus Perceptual Visual Artifacts, Error Concealment, Color Science. [8 Lectures]
Module 6: Video Distribution and Streaming
Adaptive Video Streaming, Video Quality and Chunk Efficiency, Apple HLS, HLS Over 4G and 802.11, Impact of Varying Chunk Duration, Microsoft Silverlight Smooth Streaming, Traffic Rate Shaping, Adobe HTTP Dynamic Streaming, MPEG-DASH (ISO/IEC 23009), Aggregate Adaptive Stream Bandwidth Prediction. [8 Lectures]

Text Book
1. H.M. Deitel, P.J. Deitel, "Internet & World Wide Web – How to program", 3rd Ed. Prentice Hall, 2003.Author, "Book", Publisher, Year of Publishing
2. Thomas A. Powell, "HTML: The Complete Reference", McGraw Hill, 2001.

Reference Books
1. Danny Goodman, Michael Morison, Paul Novitski, "Java Script Bible", Wiley Publication, 7th Edition Author, "Book", Publisher, Year of Publishing
2. David Crowder and Rhona Crowder,"Web Design with HTML/Flash/Javascript & Ecommerce BIBLE", Wiley DreamTech India Pvt. Ltd,2001
3. Luke welling and Laura Thomson "PHP and MYSQL web development", III Edition, 2005

18MT2014	COMPUTER BASED MUSIC PRODUCTION	L	T	P	C
		3	0	0	3

Pre-requisite: 18MT2004 AUDIO ENGINEERING
Course objective:
1. The students will appreciate the basics in the functioning of digital audio workstation.
2. The students will be exposed to the use MIDI and digital audio tools in music production.
3. To impart knowledge of MIDI based music production

Course outcome: The students will be able to:
1. Creatively aware of the skills in music production.
2. Learn the digital tools used in music production.
3. Explore latest technologies and the digital tools used in music production
4. Understand the various stages of Music Production.
5. Learn various Effects creation process.
6. Use vsti's and vste's.

Module 1 - Introduction to DAW: Hardware and software needed, Mac & PC platform for DAW
Module 2- Hardware and software set up for music production: PCI cards - USB – Fire Wire/ i link - PCMCIA Cards
Module 3- Audio interfaces - MIDI interface types and features – Sound Card Driver installation basics - Surface controller setup
Module 4- MIDI - MIDI implementation charts - Creating a new song/MIDI file - Recording types- Common MIDI Recording Problems and their Solutions - Analog and Digital audio recording
Module 5- Basic track recording - dubbing - Wet vs Dry recording –Virtual MIDI instruments - Preparing tracks for audio editing
Module 6- Mixing, Mastering and Archiving

Text Book
1. Zack Price, "Beginner's guide to computer based music production", Cherry lane music Company, 2004.
2. Martin Russ, "Sound Synthesis and Sampling", Third Edition, Focal Press, 2009

Reference Books
1. Francis Rumsey, Tim McCormick, "Sound and Recording: An Introduction", Fifth edition, Focal Press, 2006
3. Andrea Pejrolo, "Creative sequencing techniques for Music Production", Focal Press, 2005.

4. Emile D Menache “The Desktop Studio: A Guide to Computer-based Audio Production”, Hal Leonard Corporation, 2002.

18MT2015	ARTIFICIAL INTELLIGENCE FOR GAMES	L	T	P	C
		3	0	0	3

Course objective:

- To impart knowledge about the fundamentals of intelligent behavior and decision-making games
- To provide core understanding on fuzzy logic and algorithms
- To cover a wide range of artificial intelligence (AI) techniques to design games.

Course outcome:

The students will be able to:

- Understand the basic concepts of decision making by machines in games apply the AI techniques for designing games
- Experiment and interpret the behavior of game objects having different types of AI on any Game Engine
- Identify and investigate a particular game scenario and integrate AI based on specific game genres.
- Visualize and simulate AI on game engines
- Integrate AI with decision making capabilities for inspecting behavior of kinematic game objects.

Module I Introduction

Artificial Intelligence, Model of game AI, The kind of AI in games, speed and memory,AI engine, using AI in Game Engines, Action combat AI, Motor racing AI

Module II Movement

Basics of movement algorithms, Input Axes in Game Engines, Rigid bodies and their properties , kinetic movement algorithms, steering behaviors.

Module III Prediction

Predicting physics, jumping, coordinating jump activity in Game Engines with gravity, coordinated movement, motor control, movement in third dimension, FPC, TPC

Module IV Path finding

Implementing sensors, Path finding graph, dijkstra, A*, problem, - Algorithm, pseudo-code, data structures and interfaces, avoid obstacles, follow player game object, Navigation Mesh, baking.

Module V Fuzzy Logic

Introduction to fuzzy logic, Fuzzy logic decision making, fuzzy state machines, creating state machine behaviors in Unity3D-setting up player- setting up enemy.

Module VI Applications - 3D games

character controller, character motor, collision detections, enemy AI

Text Book

1. Ian Millington , Artificial Intelligence for Games, Morgan Kaufmann Publishers, 2006.
2. Ray Barrera, Aung Sithu Kyaw, Clifford Peters, Unity AI Game Programming, 2nd Edition Packt Publishing Ltd, 2015

Reference Books

1. Marco Gonzalo, Marco Antonio Gómez-Martín, Artificial Intelligence for Computer Games, Springer Science & Business Media, 2011
2. David M. Bourg, Glenn Seemann , AI for Game Developers, O'Reilly Media, Inc., 2004
3. Guy W. Lecky-Thompson, AI and Artificial Life in Video Games, Cengage Learning, 2008

18MT2016	AUGUMENTED AND VIRTUAL REALITY	L	T	P	C
		3	0	0	3

Course Objective:

1. To introduce the basic human sensory system.
2. To provide an understanding of the systems required to fool the sensory system into immersion.

3. To provide an understanding of the pipe for Mixed reality Content Creation.

Course Outcome:

Upon successful completion the student will be able to,

1. Differentiate between the various types of mixed reality systems.
2. Identify appropriate system components for building a mixed reality system
3. Understand the calibration required to increase immersion
4. Understand the pipeline involved in
5. Understand the challenges and health hazards associated with mixed reality.
6. Predict the approximate future direction of Mixed Reality.

MODULE 1: Mixed Reality

History of Augmented Reality and Virtual Reality, Use Cases, Gaming and Entertainment, Architecture and construction, Science and Engineering, Health and medicine, Education, Mechanics of Sight, Mechanics of Hearing, Mechanics of Feeling.

MODULE 2: Augmented Reality Basics

Tactile and Force Feedback Devices, Display Fundamentals, Augmented Displays (Monocular, Binocular), Types of Displays, Tracking, Sensors for Tracking.

MODULE 3: Augmented Reality Setup

Orientation and Motion, Calibration, Computer Vision, Devices to enable navigation and Interaction.

MODULE 4: Concepts that make VR work

Immersion, Presence, Reality trade-off, Perception Models and Processes.

MODULE 5: Health Issues and Content Creation for mixed reality

Motion Sickness, Eye strain, After effects, Hardware Challenges, Latency, Content Creation, Environment Design, Field of View.

MODULE 6: Future of Augmented Reality and Virtual Reality

Characters, Avatars, Collaboration and Social Networking, Interaction and interaction Design, Input Devices, foveated rendering.

Text Books –

1. D. Schmalstieg and T. Höllerer, *Augmented reality*, 1st ed. Pearson Education, 2016. **ISBN13:** 978-0321883575.
2. S. Aukstakalnis, *Practical augmented reality*, 1st ed. Pearson Education, 2017. **ISBN-13:** 9780134094236.
3. J. Jerald, *The VR Book: Human-Centered Design for Virtual Reality*, 1st ed. 2016.

18MT2017	ANIMATRONICS	L	T	P	C
		3	0	0	3

Course objective:

1. Analyze, design and evaluate electronic components and systems using state-of-the-art tools.
2. Apply modern smart sensor technology to communicate with animation and gaming world.
3. Analyze and design animatronics prototypes.

Course outcome:

The students will be able to:

1. Analyze design and behavior of animatronics characters in movies
2. Classify and identify various kinds of sensors required for controlling an animation.
3. Interpret and compute the sensor data acquisition and interfacing with specific microcontrollers
4. Choose and modify appropriate sensors required for controlling an animation.
5. Estimate the behavior of animated objects using different sensors
6. Create, design and develop an animatronics prototype on smart phone using mobile sensors

Unit 1: Overview

Introduction to Animatronics, Top 7 Animatronics beasties in movies- Jaws, Jurassic Park, Aliens, Terminator, Gremlins, King-Kong and Extra-Terrestrial.

Unit2: Sensors and Actuators

Role of sensors and actuators, human sensory systems, Control System Architecture, Instrumentation process, Data Acquisition hardware, Signal Conditioning and filtering.

Unit3: Microcontroller Interfacing Theoretical Analysis, operating principles, Time to Digital conversion, direct resistive sensor to microcontroller interfaces, direct capacitive sensor to microcontroller interfaces, Design issues of Microcontroller interfacing

Unit 4: Sensor Data Processing

General input-output classification, Microcontroller data processing-Temperature sensor, Pressure Sensors, Flow sensors, potentiometers, electromagnetic sensors, piezo-electric sensors, intelligent sensors, Fiber optics sensors, ultrasonic sensors.

Unit 5 Animation using Electronic sensors

Architecture meets Robotics and gaming, Sensors as input devices- Kinect sensor, Smart phone sensors controlling animation in mobiles- Accelerometer sensor, location sensors, proximity sensors.

Unit 6 Applications

Applications of animatronics

Text Books

1. Clarence W. de Silva, Sensors and Actuators: Engineering System Instrumentation, Second Edition, CRC Press, 2015
2. Gourab Sen Gupta Embedded Microcontroller Interfacing, Springer Science & Business Media, 2010.
3. Ferran Reverter, Ramón Pallás Areny , Direct Sensor-to-microcontroller Interface Circuits: Design and Characterization, Marcombo, 2005
4. Ram n Pall s-Areny, John G. Webster, Sensors and Signal Conditioning, John Wiley & Sons, 2012
5. Greg Milette, Adam Stroud, Professional Android Sensor Programming, John Wiley & Sons, 2012
6. Francisco R. Ortega, Fatemeh Abyarjoo, Armando Barreto, Naphtali Rishe, Malek Adjouadi, Interaction Design for 3D User Interfaces, CRC Press, 2016

Reference Books

1. Christian Berger, Mohammad Reza Mousavi, Rafael Wisniewski, Cyber Physical Systems. Design, Modeling, and Evaluation, Springer, 2017
2. John Vetelino, Aravind Reghu, Introduction to Sensors, Packt Publishing Ltd, 2016.
3. Varun Nagpal, Android Sensor Programming By Example, Packt Publishing Ltd, 2016

18MT2018	AUDIO SIGNAL PROCESSING	L	T	P	C
		3	0	0	3

Pre-requisite: 17MT2003 AUDIO ENGINEERING

Course Objective:

1. To impart basic knowledge about digital signal processing
2. To understand Digital (IIR and FIR) filter design procedures.
3. To know about the finite word length effects and PDSPs

Course Outcome:

1. Outline the audio signal processing concepts.
2. Analyze the quantization techniques
3. Apply various transformations for various signal processors.
4. Relate the signal processing concepts practically with the help of Audio Filters
5. Compare and select the processors suitable for a specific application.
6. Design and develop algorithms for audio signal processing applications.

MODULE 1 - Sampling: Sampling: Sampling theorem, Sampling rate conversion: Up sampling and Anti-imaging Filtering, Down sampling and Anti-aliasing Filtering Contents, Synchronous Conversion, Asynchronous Conversion, Interpolation Methods.

MODULE 2 – Quantization: Quantization: Signal Quantization, Dither, Quantization levels, Spectrum shaping of Quantization, Number Representation.

MODULE 3 - A-D/D-A Conversion: Nyquist Sampling, Oversampling, Delta-Sigma Modulation, Digital Signal Processors, Digital Audio Interfaces: Single-processor Systems, Multi-processor Systems.

MODULE 4 - Equalizers: Recursive Audio Filters: Parametric Filter Structure, Quantization Effects, Non recursive Audio Filters: Basics of Fast Convolution, Fast Convolution of Long Sequences, Filter Design by Frequency Sampling , Multi-complementary Filter Bank

MODULE 5 - Room Simulation: Reverberation, Room Acoustics, Model-based Room Impulse response, Measurement of Room Impulse Response, Simulation of Room Impulse Response, Early Reflections, Subsequent Reverberation, Approximation of Room Impulse Response

MODULE 6 - Dynamic Range Control: Basics, Dynamic Behaviour: Level Measurement, Gain Factor Smoothing, Time Constants Implementation: Limiter, Compressor, Expander, Noise Gate, Combination System Realization Aspects: Sampling rate Reduction, Curve Approximation, Stereo Processing

Text Book

1. 1.Udo Zolzer, "Digital Audio Signal Processing", Second Edition, John Wiley&Sons, Ltd,2008.

Reference Books

1. Emmanuel C. Ifeacher and Barrie W. Jervis, "Digital Signal Processing – A Practical Approach", Wesley Longman Ltd., 2nd Edition, 2004.
2. SanjitK.Mitra, "Digital Signal Processing - A Computer Based Approach", Tata McGraw-Hill,New Delhi, 2nd Edition, 2001
3. Johny R. Johnson, "Introduction to Digital Signal Processing", PHI, 2006
4. S.Salivahanan, A. Vallavaraj, C. Gnanapriya, "Digital Signal Processing", McGraw Hill International, 2007
5. Venkatramani B, M. Bhaskar, 'Digital Signal Processors Architecture, Programming and Applications', Tata McGraw– Hill Publishing Company Limited, New Delhi, 2002.

18MT2019	COMPUTER ANIMATION ALGORITHMS AND TECHNIQUES	L	T	P	C
		3	0	0	3

Course Objective

1. To acquire comprehensive knowledge about Computer Animation.
2. To acquire understanding of Computer Animation Algorithms.
3. To know the working principle of Animation algorithms.

Course Outcome

1. Students would understand the principles of Computer Animation.
2. Students would understand the principles of Modeling.
3. Students will the working principle Computer Animation Algorithms.
4. Students will acquire knowledge about the different Animation algorithms.
5. Students would be able to make a complete animation.
6. Students can create the hair, fur, Clothing for their Models

MODULE 1 Introduction

Motion perception, The heritage of animation, Early devices, The early days of "conventional" animation, Disney, Animation production, Principles of animation, Principles of filmmaking, Sound, Computer animation production, Computer animation production tasks, Digital editing, Digital video, Digital audio, A brief history of computer animation

MODULE 2 Technical Background

Spaces and transformations, the display pipelines, Homogeneous coordinates and the transformation matrix, Concatenating transformations: multiplying transformation matrices, Basic transformations, Extracting transformations from a matrix, Description of transformations in the display pipeline, Error considerations, Orientation representation, Fixed-angle representation, Euler angle representation, Exponential map representation

MODULE 3 Interpolating Values and Interpolation-Based Animation

Interpolation, The appropriate function, Controlling the motion of a point along a curve, Computing arc length, Speed control, Ease-in/ease-out, Working with paths, Path following, Orientation along a path, Smoothing a path, Determining a path along a surface, Path finding, Key-frame systems, Animation languages, Graphical languages, Actor-based animation languages, Deforming objects Picking and

pulling, Deforming an embedding space, Three-dimensional shape interpolation, Matching topology, Morphing (two-dimensional)

MODULE 4 Kinematic Linkages

Hierarchical modeling, Data structure for hierarchical modeling, Local coordinate frames, Forward kinematics, Inverse kinematics, Motion Capture Motion capture technologies, Processing the images, Camera calibration, Three-dimensional position reconstruction, Multiple markers, Multiple cameras, fitting to the skeleton, Output from motion capture systems, manipulating motion capture data, Processing the signals, Retargeting the motion, Combining motions

MODULE 5 Modeling and Animating Human Figures

Overview of virtual human representation, representing body geometry, Geometry data acquisition, Geometry deformation, Layered approach to human figure modeling, Reaching and grasping, coordinated movement, reaching around obstacles, the mechanics of locomotion, the kinematics of the walk, Forward dynamic control,

MODULE 6 Modeling and Animating Human Figures

Coverings, Clothing, Hair, Behavioral Animation, Knowledge of the environment, Expressions and gestures, Implicit surfaces, Collision detection, Deforming the implicit surface as a result of collision, Level set methods

Text Book

1. Rick Parent, "Computer Animation Algorithms and Techniques", Elsevier, 2012.

Reference Books

1. Rick Parent, Morgan Kaufmann, "Computer Animation Algorithms and Techniques", Elsevier, 2007.
2. Garth Gardner , "Computer Graphics and Animation: History, Careers, Experts Advice", Garth Gardner Company, Incorporated (GGC), 2002.
3. Kevin Cunningham, "Computer Graphics: From Concept to Consumer" Scholastic Library Publishing, 2013.
4. Martin J. Davis, "Computer Graphics", Nova Science Publishers, 2011

18MT2020	MOTION CAPTURE	L	T	P	C
		3	0	0	0

Course Objective:

1. To learn the latest technologies in animation
2. To understand the detailed animation scenarios.
3. To introduce the integration of motion capture with animation.

Course Outcome:

1. The students will understand different types of Motion capture applications.
2. The students will be able to create flowcharts and diagrams for motion capture.
3. The students will be able to create their own Mocap projects
4. The students will create animations by integrating with Mocap.
5. The students will practice various skills of working in a motion capture studio.
6. The students will apply their knowledge in motion capture in their production.

Module I : An overview and History of Motion Capture : History of Mocap - Rotoscoping - beginning of digital mocap Types of Mocap – optical mocap systems, Magnetic mocap systems, Mechanical mocap systems – Preproduction: Importance – Precapture planning – script storyboard, shot list, animatic - Preparation of capture: Talent – Marker sets – Capture volume – shot list – Capture schedule – rehearsals – props – Suits and markers.

Module II : Pipeline: Setting up skeleton for 3D- Calibrations – Capture Sessions – Cleaning data – Editing data – Applying Motions to a 3D Character - Rendering – Cleaning and Editing data : Cleaning marker data - Types – labelling – data cleaning methods

Module III : Skeleton Editing: Retarding – Blending motions – Inverse kinematics – Floor Contact – Rigid body – Looping – Poses - Data Application: Stick with two markers – stick with three markers – flexible objects

Module IV: Data Application : Decomposing and composing motions : Mapping multiple motion – Decomposing and composing upper and lower body motion – Synchronizing upper and lower body motion – Balance – Breaking motion apart – Mocap as forward kinematic animation - keyframing – Integrating mocap and keyframe animation

Module V: Hand Motion Capture: Anatomy of Hand- Rig and marker for hands – rigid hand – mitten – independent mitten – stretching mitten – capturing hands. Facial Motion Capture: Anatomy of face – Camera setup and capture – Facial Rig – Discrete joints – muscles – Marker set – Facial data stabilization and editing.

Module VI: Puppetry capture: Background – Benefits – Ideas – Performance – Projects – Methods – Real Time – Mocap data and Math: Optical system – magnetic system – mechanical system – Data types and formats – Coordinates and coordinate systems.

Text Books:

1. Midori Kitagawa, Brian Windsor, MoCap for Artists: Workflow and Techniques for Motion Capture, Taylor & Francis, 2008.
2. Matthew Liverman, The Animator's Motion Capture Guide: Organizing, Managing, and Editing, Charles River Media, 2004.

Reference Books:

1. Alberto Menache**,** Understanding Motion Capture for Computer Animation, Elsevier, 2011. 2014 *Department of Electronics and Media Technology*
2. Aravind Sundaresan, Towards Markerless Motion Capture: Model Estimation, Initialization and Tracking, ProQuest, 2007.
3. Derek Doeffinger, Creative Shutter Speed: Master the Art of Motion Capture, John Wiley & Sons, 2011.

18MT2021	STUDIO CONSTRUCTION AND ACOUSTICS	L	T	P	C
		3	0	0	0

Course objective:

1. To understand the studio construction technique.
2. To learn the acoustic requirement for a studio.
3. To understand the placement of equipments and furniture.

Course outcome:

The students will be able to:

1. **E**valuate the need of acoustics in studio construction.
2. Create a structure of studio with equipments and furniture.
3. Experiment on the effect of acoustics with the addition of equipments.
4. Practice the testing of acoustic parameters in studio.
5. Recognize the design and implement in real time application.
6. Reproduce the unique design problems involved in studio design.

Module 1: Sound Isolation and Room Acoustics

Sound, decibels and hearing; Sound isolation; Room acoustics and means of control; Designing neutral rooms; Rooms with characteristic acoustics; Variable acoustics; Room combinations and operational considerations [7 Lectures]

Module 2: Neutral Acoustic Rooms

Large neutral rooms, Isolation shells towards neutrality, lower frequency control, reflections, reverberations, diffusion, wall treatment, pressure zones, wall losses, micro problem.
[7 Lectures]

Module 3: Studio Environment Ventilation and Air conditioning, Power cabling, Ear thing, Limitations to design Predictions; Loudspeakers in rooms; flattening the room response; Control rooms; the behavior of multiple loudspeakers in rooms [7 Lectures]

Module 4: Consoles and Studio Furniture

Response disturbances due to mixing consoles and studio furniture; Objective measurement and subjective evaluations; Pressure amplitude response, Harmonic distortion, Noise [7 Lectures]

Module 5: Studio Monitoring Systems and Surround Sound
Cables and connectors, Cross over networks, loud speaker driver units, Psychoacoustics of surround sound, Surround loud speakers [7 Lectures]
Module 6: Lighting
Basic Lighting Concepts, Lighting Equipment: Types of Lamps. Common Lighting, Instruments, Light Mounts, Light Modification and Control. Studio Lighting Principles, Field Lighting, Principles, Lighting Safety, Planning. [7 Lectures]

Text Book
1. Philip Newell,Recording Studio Design, Focal Press, 2007

References
1. Ronald J. Compesi, Jaime S. Gomez,Introduction to Video Production: Studio, Field, and Beyond, Pearson, 2006
2. Don Davis, Sound System Engineering, Focal Press, 2007
3. Alton Everest, Master Hand Book of Acoustics, McGraw Hill, 2001 4. Gary Davis, the Sound Reinforcement Hand Book, Hal Leonard Corporation, 1989

18MT2022	ELECTRONIC MEDIA MANAGEMENT	L	T	P	C
		3	0	0	0

Course objective:
1. To learn about the basic principles and practices of Management.
2. To learn the management styles of Media Production Houses.
3. To learn the skills needed for decision Making and Monitoring.

Course outcome:
The students will be able to:
1. To know and learn the concepts and Principles of Management
2. To learn the style, methods of media Human Resource Management.
3. To be able to assess the quality and efficiency of media management.
4. To familiarize with media technology management
5. To learn to compare and evaluate media production management styles.
6. To learn the marketing managerial skills through case studies.

Module 1: Basics of Management: Concept of Management, Principles of Management, Factors influencing Media Management and application of Techniques [7 Lectures]
Module 2: Fundamentals of Media Management: Structure, Organization, Different Departments and functions of Print and Electronic Media. Factors Influencing - Management Dictions; Types, of Media Ownership- Advantages and Disadvantages [7 Lectures]
Module 3: Economics of Newspapers- Advertising V/S. Circulation- Scissors Dance theory- Management Problems of Small- Medium- Large Newspapers; Gathering, Processing, Printing, Circulations, Distribution, Advertising - Professionalism trade Unionism. [7 Lectures]
Module 3: Economics of Electronic Media – Radio station Management, Television Studio Management, Administration higherarchy, Departments.
Module 5: Economies and Administrative concerns of Government owned electronic media - Private channels - market driven media -Social commitment Vs. Profit making [7 Lectures]
Module 6: Economics of film industry - creativity - production - marketing - distribution - exhibition - ownership V/s. piracy - Function - and management of news agencies in India. [7 Lectures]

Text Books
1. C.S.Rayudu, Media and Communication Management, Himalaya Publishing House, 2014
2. B.K Chaturvedi, Media Management, Routledge Publishers, 2009.

Reference Books
1. Dandulop, Social Media Management Handbook, 2010.
2. Angela Wadia, Broadcasting Management in India, Kanishka Publishers, 2007
3. Kundra S, Media Management, Anmol Publications, 2005

18MT2023	CINEMATOGRAPHY	L	T	P	C
		3	0	0	3

Course objective:

1. To make the students about the basics of Cinematography.
2. To impart knowledge to the students on the aesthetics of Cinematography.
3. To keep the students updated with the techniques in cinematography.

Course outcome:

1. The students will master the time-tested concept of applying cinematography in their production techniques.
2. The students will get trained to industry standards.
3. The students can able to understand and work in the field of Cinematography.
4. Students will practice the skills of cinematography
5. Students can able to review the cinematography techniques used in films
6. Students can operate the functions in a camera

Module I - Components and Controls of Video Camera: Parts of a video camera-Different controls on video camera-Power switch, preheat, genlock, white balance, gain, iris, pedestal etc.-Zoom control: servo, manual, remote, zoom extenders - Focus control: auto, manual, remote, back focus, macro focus-Camera view finders (B/W and color). Its indicators and control

Module II - Camera Angle: Introduction – Scene – Shot – Sequence – Types of Camera angles – Subject size – Subject angle – Camera height – Scene Requirements

Module III - Continuity: Cinematic Time and Space – Filming the action – Filming techniques- Triple take technique – Directional continuity – Action Axis – Static screen Direction – Bridging Time and Space – Transitional Devices

Module IV - Cutting: Introduction – Types of Film Editing – Compilation cutting –Cross cutting – how to use cross cutting – cutting on action – cutting and continuity – cutting and composition – loose camera shots – Editorial Requirements

Module V - Close Ups: Close up size – Over the shoulder close ups – types of close ups – how to cut away close ups – close up choice – close up camera angle – close up tempo – close up camera set ups – close ups for sequence opener – close ups for transition

Module VI - Composition: Still vs motion picture – compositional rules – compositional language – balance – types of balance –unity- eye scan – image placement – dynamic composition

Text Book

1. Joseph V. Mascelli, “The 5Cs of Cinematography”, Silman-James Press, 2001.
2. Ivan Cury, “Directing & Producing for Television”, Focal Press, 2007.
4. Peter Ward, Studio and outside broadcast Camera”
5. Bernard Wilkie “Creating special effects for TV & Video”

Reference Books

1. Dan Ablan, “Cinematography and Directing”, New Riders, 2000.
2. “Cinematographer’s Field Guide”, Kodak Entertainment Imaging, 2000.
3. Sonja Schenk & Ben Long, “The Digital Filmmaking Handbook”, Course Technology, 2012.

18MT2024	FUNDAMENTALS OF ADVERTISING	L	T	P	C
		3	0	0	3

Course Objective:

1. To understand the purpose and meaning of advertising
2. To understand advertising as an industry
3. To understand the process of communication in advertising

Course Outcome:

1. Students will be enabled to apply the advertising concepts practically.
2. Students will understand the latest terminologies used in advertising industry.
3. Students will be effective in conducting an PR Campaigns.
4. Students will appreciate how advertisement is essential for market economy.
5. Students will know how an advertising agency works and their creative contributions.

6. Students will learn the procedure of running an advertisement campaign.

Module 1

History of advertising and its role in the market place, advertising industry in India – advertising as a process of communication -Social effects of advertising. The changing world of advertising.

Module 2 Types of advertising: consumer, corporate, industrial, retail, cooperative and Public service advertising. -tone and content; reading the advertisement -review with current ad campaigns.

Module 3

Advertising agency: Structure and functions; Leading agencies in India Diversification and competition – full service agencies – multinational clients – challenges and opportunities. How to choose an advertising agency, agency briefing and evaluating an agency.

Module 4

Media Choice- Media Objectives, strategy and planning –print media – electronic media-Advertising campaign: objectives, creative strategy: message, appeals, target market, level of response, media Planning, advertising budget, pre-testing and post testing.

Module 5

Professional ethics in advertising- cases of ethical violations – Advertising Standards Council – Social and cultural issues – Global regulations and Future trend.

Module 6

Direct marketing and out of home advertising- Putting the campaign together- Sales promotion and supplementary media – public relations and special communications- local advertising –from plan to results: The complete campaign

Text Book

1. Kleppner, Otto; Fundamentals of Advertising; Prentice Hall; New Jersey. 1980.

Reference books:

1. Courtland L. Bovee , Advertising Excellence : McGraw –Hill Inc. Publications, 2001
2. Gupta, Sen; Brand Positioning; Tata McGraw Hill; New Delhi; 1990.
3. Hart, Norman; The practice of advertising; Heinemann Pub.; London. 1990.
4. Mooij,Mariekae de; „AdvertisingWorldwide (2nd edn.); Prentice Hall; UK.1994.
5. Mohan, M; "Advertising management concepts and cases"; Tata McGraw Hill; New Delhi. 1989.
6. Chunnawalla and K.C. Sethia ; "Foundations of Advertising: Theory and practice",

18MT2025	FUNDAMENTALS OF AUDIO	L	T	P	C
		3	0	0	3

Course Objective:

1. To teach the very fundamentals to understand sound
2. To teach in detail the sound reinforcement techniques
3. To introduce to the students the latest trends in Sound reinforcement

Course Outcome:

1. This course will enable the students to become proficient with all the sound engineering concepts.
2. The student will become creative and skillful in handling of all audio equipment's.
3. The student will know the latest trends in sound reinforcement.
4. Students will be adept in the recording process.
5. Students will be proficient with the technical terms and the ethics to be followed in Program production.
6. Student will be able to understand the process and the terminologies used in the audio industry.

Module 1

Sound theory - Sound Waves-Frequency - Wavelength - Amplitude - The velocity of sound waves - Soundwaves and obstacles - Diffraction -Units used in sound - Effect of Boundaries.

Module 2 The response of the ear - Loudness - Fletcher and Munson Curves -Musical pitch - Timbre - The brain's perception of sound - Frequency ranges in music – Basic Acoustics - Reflection - Absorption - Refraction - Diffraction - Acoustic materials

Module 3

Input Transducers - Microphones - Polar responses -Types of Microphones - Production of the different polar responses - Sensitivities of microphones - Phantom power - Balanced wiring - Specific applications of microphones - Reference voltages in audio signals-Metering - Technical monitoring - Aural monitoring -

Module 4

Output Transducers-Loudspeaker – Loudspeaker resonators - Loudspeaker cables - Professional and domestic standards - Stereo - Stereo listening-Stereo loudspeaker matching – Phase - Microphone techniques for stereo - Headphones for stereo monitoring.

Module 5

Mixers - General Maintenance - Routing - Recording -Punching - Auto punch - Editing - Basic Analog Mixing- Two track systems - Multi track systems.

Module 6

Basics of Live Sound Engineering Need for Sound Reinforcement - Technology - Basic PA systems - Full Range sound Reinforcement systems - Choice of Equipment - Signal flow - FOH - MOH - Indoor systems- Outdoor Systems - Applications - Safety - Ear safety - Electrical safety - Mechanical safety- Fire safety.

Text Book

1. Michael Talbot-Smith, Sound Engineering Explained, Focal Press, 2002.

Reference Books

1. F. Alton Everest, Master Handbook of Acoustics, McGraw Hill Publishing,2001.
2. Frederick N Martin, John Greer N Clark, Introduction to Audiology, Pai and Sons,2003.
3. David Simons, Analog Recording, Backbeat Books, 2006.
4. Paul White, Basic Live Sound, Sanctuary Publications, 2003.

18MT2026	MOBILE APPLICATION DEVELOPMENT	L	T	P	C
		3	0	0	3

Course objective:

1. Analyze, design and evaluate design components and app framework using state-of-the-art tools.
2. Apply modern app development technology to design and develop mobile applications
3. Analyze and design mobile applications by embedding third party plugins on various mobile platforms.

Course outcome:

The students will be able to:

1. Analyze design and quality mobile applications
2. Classify and identify various kinds of design and coding techniques required for developing an app.
3. Interpret and compute the tools required for API integrations
4. Choose and modify appropriate development tools required for cross platform designs
5. Estimate the behavior of app features, UI/UX based on multi-level testing.
6. Create, design and develop an app prototypes on all smart phone platforms

Unit 1: Overview

Developing for Android-Native Android SDK, developing for mobile devices, Android Development tools- AVD, SDK manager, Emulator, Creating Applications & Activities-Manifest file Layouts, Drawable, Menus, Resources, Creating Activity and Life of an Activity.

Unit2: User Interfaces & Menus

Views, Layouts- Horizontal, Vertical layouts, using layouts and customizing layouts. Drawable- shapes, colors, gradients, resolution and dependencies. Creating Menus- Options Menu, Context Menu and popup menu.

Unit3: Audio, Video & Camera Playing Audio – Introduction to Media player, preparing audio tracks, packaging audio as application resource, Audio playback. Video- Video view, surfaces for playback, video playback, recording audio and video using Intents. Camera- Intents, controls and Media storage

Unit 4: Telephony & Background Services Telephony- Launching Dialer, accessing phone network status and call manager, Monitoring data activity. Introducing services- creating a service, service interaction & binding, using background threads, Async Task, Notification manager.

Unit 5 Phone Gap – Cross platform development

Introduction to phone gap, phone gap features, Phone gap Architecture, Phone gap and Android integration, creating first phone gap application for Android, updating activity class, Metadata

Unit 6 Phone Gap – UI/UX & Real-time Applications

Creating UI- Buttons, Check box, Radio Buttons, Interfacing Google maps API with phone gap, Camera API integration, Audio Video Live Capture.

Text Books

1. Reto Meier, Professional Android 2 Application Development, Second Edition, John Wiley & Sons, 04-Nov-2010
2. Bintu Harwani, Phone Gap Build: Developing Cross Platform Mobile Applications in the Cloud, CRC Press, Nov-2013
3. By Barry A. Burd, Android Application Development All-in-One For Dummies, John Wiley & Sons, Nov-2011

Reference Books

1. Pawan Lingras, Matt Triff, Rucha Lingras, Building Cross-Platform Mobile and Web Apps for Engineers and Scientists, Cengage Learning, 01-Jan-2016
2. Rohit Ghatol, Yogesh Patel, Beginning Phone Gap: Mobile Web Framework for JavaScript and HTML5, Apress, Feb-2012
3. Varun Nagpal, Android Sensor Programming By Example, Packt Publishing Ltd, 2016

18MT2027	MOBILE APPLICATION DEVELOPMENT LAB	L	T	P	C
		0	0	4	2

Course objectives

1. Identity, analyze and choose tools for Android development including device emulator, profiling tools and IDE
2. Construct user interfaces multi-media android components
3. Create an android based application

Course outcomes

Upon completion of the subject, students will be able to:

1. Demonstrate their understanding of the fundamentals of Android operating systems
2. Demonstrate their ability to develop software with reasonable complexity on mobile platform
3. Demonstrate their ability to deploy software to mobile devices
4. Demonstrate their ability to debug programs running on mobile devices
5. Design and Develop different types of Menus, Layouts and Forms with Material Design for user interaction and user experience
6. Design and develop multimedia applications related mobile apps

List of Exercise

1. Installing Android Studio & Introduction to Layout
2. Introduction to XML, Manifest file & Gradle
3. Creating Splash Screen
4. Adding UI elements and Navigation- Android Activity
1. 5.Camera Interfacing
7. Audio Interfacing
8. Android WebView
9. List View Layout
10. Image Buttons
11. Fragments & Tab Layout

12. Navigation Drawer Layout
13. Creating a form-Material Design

18MT2028	FILM APPRECIATION	L	T	P	C
		3	0	0	3

Course Objectives

1. To know about the different genres of films, its styles and their method of production.
2. To know about the various film styles, its narration and different case studies of film reviews.
3. To practice the art of culling out films and appreciating the various aspects of it.

Course Outcome

1. The student will develop an overall understanding on the structure of film narration.
2. The student will have a thorough knowledge on the narrative aspects of film.
3. The students will be able to connect psychologically with the films.
4. The students will be thorough with the art of appreciating and analysing films.
5. The students will become good learners of films.
6. The students will acquire high skill on knowing film theories and the art of watching films

Module 1 Definition and need for film Appreciation - How to read and understand cinema- Inductive approach and Deductive approach – Social, Political, Economic, Cultural, Technical and Aesthetic aspects of Cinema - A comparative study of Cinema and other aesthetic expressions - The types of films to be appreciated - subject content, structural characteristics –- Factors to be appraised while appreciating films - The narrative and stylistic elements.

Module 2 Appreciation of Neo-realistic films with a detailed analysis of Vittorio-Desica's Bicycle Thieves (1948). The structure of the film - the social criticism - Camera work - Editing style use of nonactors.

Module 3 Appreciation of thrillers with special reference to Alfred Hitchcock's films: Psycho (1960) – its structure - Dramatic development - Psychological thrills - Camera work – Lighting – Editing style - use of sound effects - North by North west (1959) - its structure - Camera work – editing style with emphasis on chase sequences - use of sound effects and music.

Module 4 Analysis of Orson Wells' film "Citizen Kane" – Its structure camera work - The use of long takes and deep focus technique - editing style - use of actors - Art Direction-Appreciation of Epic films of David Lean with special reference to the Bridge on the River Kwai (1959) scripting - study of the characters - The prison commander and the British Colonel – The camera work - Editing style and the creative use of sound.

Module 5 Doctor Zhivago (1966) structure-Visual appeal and Artiste performance - Appreciation of Kriztof Kieslowski films with special reference to the Colour Trilogy - "Blue", "White", "Red" - The dramatic structure - Study of the style - Fragmented narrative - Mobility of camera.

Module 6 Appreciation of Yasujiro Ozu's films with special reference to Tokyo Story (1953) - Study of the style and craft - "Shomingeki" tradition - Depiction of domestic culture - Use of low angles and long takes.

Reference Books:

1. How to read a film - JAMES MONACO, 2009, Oxford University
2. Film as Art, 2006, Deluxe Edition - ERNEST LINDGREN
3. Cinema as Graphic Art Studio Pubication -VLADIMIR WILSEN
4. Art of the Film, 1985, - STEPHENSON AND DEBRIX

18MT2029	SOCIOLOGY, SOCIETY & CULTURE	L	T	P	C
		3	0	0	3

Course Objectives

1. The student will understand the role and impact of different media and culture on society.
2. The student will learn about cultural influences on Social Transformation
3. The student will understand and the cross cultural problems in communication

Course Outcomes

1. The students will be aware of social implications, media exposure, and its use in globalization among media audiences.
2. The students will be skilled in analyzing various cultural elements in media products
3. The students will gain knowledge on global culture and media operations
4. The Students will learn about audiences of different cultures
5. The students will be able to evaluate Cultural media constructions critically.
6. The students will be exposed to mediation and representation skills

Module 1 - An introduction to the media, media industries and audiences - Media is a cultural force and changing paradigm. Basic concepts: Language of persuasion - Media messages - constructing media - Dynamics of modern communication - the shaping and impact of new communication technologies - theories of society, messages and meanings.

Module 2 - Large corporations and control of the communications industries - Negotiation of control in media organization and occupation - Cultural dependency and mass media - The economies of media industry, the global gaps, social class, technology gaps, structure and agency, communication and connectivity – Dynamics of global culture, and migration, cultural melding and mediation, globalization, Diasporas, circular migration - Hegemony - the role of media and popular culture, global capitalist hegemony and Communist hegemony.

Module 3 - Language and social construction of reality, mediation and representation - texts, meanings and audiences. Rules in society, rules and culture, the special authority of electronic media public images and private practices, media and rules.

Module 4 - Defining Ideology and culture, emotions and culture, language and culture, race and culture, social class and culture, habits and popular culture, popular reception - popular emotions, emotional branding – mediated feelings, story, genre, discourse, culture uses of material world.

Module 5 - . Media and cultural imperialism. Media and audience direct effects, limited effects, uses and gratification, the mass audience, the mass society, rethinking the mass audience,

Module 6 - The audience and the technological change, segmentation, polarization, TV as dominant culture.

Text Books

1. Mohammad Ali, International Communication & Globalization, Sage Publications, London, 1997.
2. Dennis McQuail, Mass Communication Theories, Sage Publications, 2000.

References

1. Straubhar, Larose, Media Now, Thomson Wordsworth, 2004
3. Vincent Mosco, the Political Economy of Communication (Media, Culture and Society Series), Thomson Series, 2004

19MT1001	ESSENTIALS OF STUDIO	L	T	P	C
		4	0	0	4

Course Objectives:

1. To learn the various administrative structure of a video production studio
2. To study the standards and protocols in studio administration
3. To learn the essential logistics and safety standards.

Course Outcomes:

The students will be able to:

1. Outline the basic operational structure of a studio
2. Choose the best acoustic design of a studio
3. Estimate the ideal studio furniture and equipment’s needed
4. Categorize digital content and communicate with other employees
5. Formulate strategies for budgeting and staffing
6. Judge the right fire, safety and security issues.

Module 1: Essentials of a Studio
Studio layout, infrastructural requirements of an ideal studio, studio types, performance studios, production studios, postproduction studios, and mobile studios, modelling studios, broadcast & non-broadcast studio, norms for planning power, crafting a shooting floor- stage, set, blue/green screen, & virtual studio, insight into Indian & international studios. [10 Lectures]

Module 2: Studio Acoustics and Design
Primary factors governing studio and control room acoustics, acoustic isolation, walls, floors, risers, ceilings, windows and doors, noise isolation within the control room, frequency balance, room proportions, reverberation time, diffusion noise, studio design procedure, studio features, elements common to all studios, minimizing structure-borne sound, studio frequency managing, limitations to studio design. [10 Lectures]

Module 3: Studio Furniture and Equipment
Audio and video studio equipment, studio lights, lighting equipment, grid, mounts, accessories, light modification and control, lighting safety, planning, studio furniture's, response disturbances due to mixing consoles and studio furniture, data communication, ventilation and air conditioning, power cabling, earthing. [06 Lectures]

Module 4 :Studio Communication
Set etiquettes & studio, procedure, establishing communication & talkback system, studio calls, shooting floor & control, room dialogue, non-verbal cues during shoot, audience management, stagecraft & show control, graphic station, AVG Chain from Studio to Storage, Tape & E-Library, hardware & software for audio & video NLE, basic transmission equipment. [04 Lectures]

Module 5:Budgeting & Staffing
Scope for generating income for a broadcast & non-broadcast studio, cost of operating & maintaining a studio, budgeting for and marketing a TV program / music recording, staff pattern & hierarchy in a mid & large size studio, roles and responsibilities of staff - administrative, technical, supervisory, cast, crew & talents. [04 Lectures]

Module 6 :Fire, Safety, Security & Legal Issues
Work place conditions, fire hazard & risk assessment, prevention of fire, chemical fire, extinguishers & firefighting methods, electrical shock, means to prevent electricity related accidents. [04 Lectures]

Text Books:

1. Philip Newell, *Recording Studio Design*, Focal Press, 2007.
2. Ronald J. Compesi, Jaime S. Gomez, *Introduction to Video Production: Studio, Field, and Beyond*, Pearson, 2006.

Reference Books:

1. Don Davis, *Sound System Engineering*, Focal Press, 2007.
2. Alton Everest, *Master Hand Book of Acoustics*, McGraw Hill, 2001.

19MT2001	Technology of Digital Photography	L	T	P	C
		2	0	2	3

Course Objectives
1. To enrich the students with the technology of Photography
2. To provide knowledge on the recent trends of Digital Photography
3. To impart knowledge on the image processing techniques.

Course Outcome
The students will learn to:
1. Observe the principles in digital photography.
2. Review the technical requirements in capturing photos.
3. Discover the new advancements in digital photography.
4. Compare and contrast various types of photography techniques.
5. Find a feasible lighting design for the requirement.
6. Manipulate the image based on standard parameters.

Module 1: Photography and Cameras
Basics of Photography, Types of DSLR Cameras, Accessories Used. [5 Lectures]

Module 2: Optics In Digital Cameras
The lens designer's problems, checking lens image quality, understanding modulation transfer function, buying lenses, Special lens types, influences on image sharpness, using lenses created for 35 mm systems on DSLRs. [5 Lectures]

Module 3: Color Theory and Its Application
Light and colour, the human visual system, Light sources and their characteristics, Colour temperature, Standard illuminants, Classification of colour, how we see colour. [5 Lectures]

Module 4: Basics of Image Sensors
An introduction to image sensors, Alternative sensor technologies, Image artefacts associated with sensors [5 Lectures]

Module 5: Lighting control
Size of light sources, Direction and angle of light, Distribution of light, Contrast and exposure, Colour and colour temperature, Practical control of colour, Guidelines for lighting, Lighting equipment, Lighting principles in practice. [5 Lectures]

Module 6: Digital image manipulation
Workflow, General considerations in determining workflow, Capture workflow, Digital image files, Choosing file format, Image compression, Properties of common image file formats, Image processing, Image processing workflow, Digital colour [5 Lectures]

Text Books

1. Langford's Advanced Photography 8th Edition, Focal Press, 2011.
2. Image Sensors *and* signal Processing *for* digital Still cameras, Junichi Nakamura, Taylor and Francis 2006.

Reference Books

3. John Hedgecoe, "The Book of Photography", Dorling Kindersley, 2005.
4. John Hedgecoe, "The Art of Digital Photography", Dorling Kindersley, 2006.
5. Michael Langford & Efthimia Bilissi, "Advanced Photography", Focal Press, 7th Edition, 2008.
6. Bruce Barnbaum, "The Art of Photography",Rockynook, 2010.
7. Tomang, "Digital Photography Essentials", Dorling Kindersley, 2011

Lab Outcomes:
The students will learn to:

1. To understand Basics of camera handling.
2. To Practice the lighting techniques.
3. To learn the composition principles.
4. To practice latest Techniques in photography.
5. To Practice Photo Manipulation Techniques.
6. To create new techniques in photography.

Lab List of Exercise:
Tutorial 1: Three-point lighting technique
Lab1: Portrait photography.
Tutorial 2: Rim, Top, Half, Silhouette Lighting techniques.
Lab 2: Creative lighting techniques.
Tutorial 3: Capturing miniatures.
Lab 3: Macro Photography.
Tutorial 4: Long Exposure Technique.
Lab 4: Blurry Effect.
Tutorial 5: High Speed Photography.
Lab 5: Action Photography.
Tutorial 6: Techniques in Motion Blur.
Lab 6: Motion Blur.
Tutorial 7: Composing a Dual tone image.
Lab 7: Black and White Photography.
Tutorial 8: Learning to capture Painting with Lights.

Lab 8: Painting with Lights.
Tutorial 9: Composing reflection or Mirror
Lab 9: Reflection/Mirror.
Tutorial 10: Techniques in Levitation.
Lab 10: Levitation Photography
Tutorial 11 & 12: Capturing and Composing HDR
Lab 12: HDR

Text Books

1. Digital Camera School: The Step-by-Step Guide to Taking Great Pictures, Ben Hawkins, 2017.
2. Creative Lighting: Digital Photography Tips and Techniques , Harold Davis, 2011

Reference Books

1. 40 Digital Photography Techniques, John Kim, Youngjin.com, 2007

19MT2002	VISUAL DESIGN LAB	L	T	P	C
		0	0	2	1

Course Objective:

1. To understand the principles of design.
2. To ensure effective usage of principles of design.
3. To enrich the skill level of graphic design through the topic.

Course outcome:

The students will be able to:

1. Apply principles of design appropriately.
2. Enrich student's creative component.
3. Increase their designing skills
4. understanding of the text forms and the quality of projects will be better
5. Visualize and demonstrate an idea and express it.
6. Demonstrate an understanding of principles of design and colors and apply them effectively to various assignments.

List of Experiments

Tutorial 1: Introduction to Image Editing
Lab1: Familiarization with basic tools
Tutorial 2: Setting up page layout
Lab 2: Creating a themed layout
Tutorial 3: Layers and Image Manipulation
Lab 3: Compositing various images into a single image
Tutorial 4: Filters
Lab 4: Adding filter effects and dimensionality
Tutorial 5: Blending Options and Modes
Lab 5: Blending text and Images
Tutorial 6: 3D visualization & Exporting
Lab 6: Adding a 3D perspective to an image.
Tutorial 7: Introduction to Page Layouts
Lab 7: Creating a page layout for different Mediums
Tutorial 8 : Adding Image and Text Content
Lab 8: Customizing text and images into a layout
Tutorial 9& 10 : Text Manipulation and Editing
Lab 9&10: Creating corporate identities including letter heads, visiting cards, etc
Tutorial 11: Compositing Text for Books and Magazines
Lab 11: Compositing a book, magazine and Newspapers.
Tutorial 12: Exporting to different Mediums
Lab 12: Exporting files based on different file formats.

Text Books

1. "Adobe Photoshop CC Classroom in a Book", Andrew Faulkner, Adobe Press, 2016.
2. "Adobe Indesign CC Classroom in a Book", Adobe Press, 2017.

Reference Books

1. The Adobe Photoshop CC Book for Digital Photographers, Scott Kelby, 2017 release.

19MT2003	Technical Video Production	L	T	P	C
		2	0	2	3

Course Objectives:

1. To enrich the students with the technology of Video Production.
2. To provide knowledge on the recent trends of Cameras and lights.
3. To understand the working of light in different environments.

Course Outcomes:

The students will learn to:

1. Observe the principles in script writing.
2. Review the technical requirements of camera.
3. Discover the new advancements in video production.
4. Compare and contrast various types of visualization.
5. Find a feasible lighting design for the requirement.
6. Manipulate the video based on standard parameters.

Module 1: Script & Screenplay

Brain storming, Concept Development, Script, types of script, Basic shots, Camera Angles & Movements, Mise en scene, Screenplay, Celtex software, Characterization. [6 Lectures]

Module 2: Preproduction

Staging & Blocking, Shooting Script, Script breakdown, Story board, Casting, Location Scouting & scheduling, Set Design & Props. [3 Lectures]

Module 3: Lighting basics

Basic Electrical, Lighting Basics, Light Sources, Light control & uses. (6 Lectures]

Module 4: Lighting Plan & Systems

Lighting Setup, Lighting system (DMX), Stage lighting. [6 Lectures]

Module 5: Basic Camera Mechanism and Functions

Optical System, CCD mechanism, Camera Function, Camera control system,
Color signal forms. [3 Lectures]

Module 6: Advance Camera Techniques

Basis Digital Concepts, Anamorphic Cinematography, 3D Stereoscopic Cinematography
Greenscreen & Bluescreen Cinematography, Photographing Miniatures, Incamera Compositing of miniatures with full scale, digital terminology, Digital Cameras- Arri Alexa, Red weapon, Sony, Latest trends in camera and techniques, Future technology. [6 Lectures]

Text Books

1. Michael Goi,ASC, "American Cinematographer Manual", 10th edition, ASC press, 2013.
2. John Jackman, "Lighting for video & Television", 3rd edition, Focal Press, 2010.
3. Brad Herring, "Sound, Lighting & Video, Focal Press", Focal Press, 2009.
4. Herbert Zetti, "Handbook of Television production", Cengage Learning, 2008.
5. Sydfield, "Screenplay: The Foundations of Screenwriting", Paperback,2005.

Reference Books

1. Blain Brown, "Cinematography: Theory and Practice: Image Making for Cinematographers and Directors: Volume 3" Paperback, 2016.
2. David Landau, "Lighting for Cinematography: A Practical Guide to the Art and Craft of Lighting for the Moving Image (The CineTech Guides to the Film Crafts)", Paperback, 2014.
3. Joseph V. Mascelli, "Five C's of Cinematography: Motion Picture Filming Techniques" Paperback, 1998.

List of Experiments

Tutorial 1: Working of a Video Camera

Tutorial 2: Working of a Video Camera
Tutorial 3: Thematic Production
Tutorial 4: Public Service Advertisements (PSA)
Tutorial 5: News Production
Tutorial 6: Educational Video
Tutorial 7: Profile of an Organization
Tutorial 8: Interview Production
Tutorial 9: Video Production of Opinion Survey
Tutorial 10: Documentary Production
Tutorial 11: Creative Production Indoor
Tutorial 12: Creative Production Outdoor

19MT2004	Audio Engineering	L	T	P	C
		2	0	2	3

Course Objectives:

1. To develop a theoretical and practical understanding of the fundamentals of audio engineering
2. To enhance problem solving skills in the field of audio engineering.
3. To develop practical and creative approaches to setup Live Sound/ Studio Recording.

Course Outcome:

The students will learn to:

1. Identify different audio equipment's in a signal chain.
2. Review audio equipment's available currently.
3. Demonstrate skills to use industry standard audio products.
4. Analyze the specifications of particular audio equipment.
5. Visualize and develop a complete signal chain for a Live Sound Reinforcement/ Studio Production.
6. Estimate the cost incurred in Live Sound/ Studio setup.

Module 1: Fundamentals of Sound and Acoustics

Simple Harmonic Motion and the sine wave, Sound in Media, Wavelength and Frequency, Complex, Waves, Octaves, Spectrum, Electrical, Mechanical and Acoustical Analogs, Sound Levels and the Decibels, Sound in the Free Field, The Perception of Sound, Signals, Speech, Music and Noise. [10 Lectures]

Module :2 Microphones

Microphone Fundamentals, Classification of Microphones, Dynamic Microphones, Condenser Microphones, Special Purpose Microphones, Different Microphones Specifications, Miking Techniques, Application In formation/ Accessories, Microphone Selection. [10 Lectures]

Module 3: Loudspeakers and Power Amplifiers

Methods of Acoustic Transduction, Low frequency drivers and enclosures, High frequency drivers and horns, Crossovers, Loudspeaker Specification, Amplifier Power rating, Frequency response and Power bandwidth Slew rate, THD and Bridged operation, Considerations in choosing an Amplifier, Matching Amplifier and loud speaker [10 Lectures]

Module 4: Mixers and Signal Processors

Split line and Inline Mixers, Mixing Console, Understanding analog console specification, Signal Processors: General Discussion, Dynamic range processors, Equalizers and filters, Application – Mixers, Application – Signal Processors [10 Lectures]

Module 5: Digital Audio Analog and Digital Information, Analog to Digital Conversion, Digital to Analog conversion, Basic MIDI principles, MIDI messages, MIDI control, Networked Audio Protocol: DANTE [10 Lectures]

Module 6: Audio Consultation and Project management

Equipment selection, Live Sound setup, Customer engagement, Complete signal flow preparation, Budget estimation, Installation, Service. [10 Lectures]

Text Books

1. F.Alton Everest, Ken C Pohlmann, "Master Handbook of Acoustics", McGraw Hill, Sixth Edition, 2015.
2. Francis Rumsey, "Sound and Recording", Elseiver, 5th edition, 2006.

Reference Books

1. Stanley R. ALten, Audio in Media, Wadsworth, 2005.
2. Michael Talbot-Smith, Sound Engineering Explained, Focal Press, 2002.
3. IAN R. SINCLAIR, Audio and Hi-Fi Handbook, Newnes, 1998.

List of Exercise

1. Recording Procedure
2. Miking Techniques
3. Recording Setup
4. Recording of Ambient sounds and SFX using Zoom H4
5. Radio Edit
6. Basic Mixing: Levelling, EQ and Pan
7. Cable Handling, Soldering and Winding
8. Multi-track Recording setup
9. Instrument Recording
10. Mastering – Dithering & limiting
11. Project 1
12. Project 2

19MT2005	3D Animation	L	T	P	C
		2	0	2	3

Course Objectives

1. The course provides knowledge and understanding about various three-dimensional animation process
2. This course helps students to understand the concepts of modeling, texturing, lighting and animation
3. The course provides details information about advanced strategies of animating human character.

Course Outcome

The students will learn to:

1. Relate the various 3D software's
2. Identify the efficient modeling techniques
3. Apply lighting to modeled objects
4. Experiment various lighting techniques
5. Develop a plan for architectural modeling
6. Evaluate the rendering process.

Module 1: Pre-Production

Introduction – Principles of Animation - Storyboarding: Preliminary, Presentation and Production – character and model design - sound design –technical tests –Production scheduling [8 Lectures]

Module 2: Modeling Basics

Introduction –polygonal modeling –splines and patches –coordinate systems –viewing windows – Geometric primitives –transformations –common modeling techniques –hierarchies –booleans and trims. [7 Lectures]

Module 3: Rendering Basics

The camera –Lights –Surface characteristics –shading algorithms –rendering algorithms –background images –Surface texture mapping –solid texture mapping –final rendering. [8 Lectures]

Module 4: Animation Basics

Introduction –Key framing –interpolations –parameter curve editing –dope sheet editing –forward kinematics –inverse kinematics –motion plans [8 Lectures]

Module 5: Cameras and Lights

shape deformations –camera animation –animating lights and surface properties –pose based animation.

[7 Lectures]

Module 6: Retouching and Post Production Techniques

Virtual sculpting –hair and fur –texturing polygons –Rendering algorithms –cloth dynamics – Facial animation- compositing –Editing. [7 Lectures]

Text Books

1. Michael O'Rourke, "Principles of Three – Dimensional Computer animation", 3rd edition,W.W. Norton & company, 2003.

Reference Books

2. John Vince, "Essential Computer Animation", Springer UK , FirstEdition 2000.
3. John Edgar Park, "Understanding 3D animation using Maya", Springer Science & business Media. Inc, 2005.
4. Marcia Kuperberg, Martin W. Bowman, "Guide To Computer Animation", Focal press ,2002.

List of Experiments

Tutorial 1: Interface and Basic Interaction

Lab1: Modelling using basic primitives

Tutorial 2: Polygon Modelling and Nurbs Modeling

Lab 2: Creating basic Models using Polygon Modelling and Nurbs Modeling

Tutorial 3: Menu options for Polygon Modelling

Lab 3: Creating Models using Polygon Modelling

Tutorial 4: High and Low poly Modeling Techniques

Lab 4: Creating Organic Models

Tutorial 5: Texturing and Shading

Lab 5: Texturing Models using different Techniques

Tutorial 6: Lighting

Lab 6: Lighting up a modelled scene

Tutorial 7: **Rigging**

Lab 7: Adding Skeleton and Constraints to the Models

Tutorial 8: Cameras and Animation

Lab 8: Adding Interactivity to the scene using keyframing techniques

Tutorial 9: Rendering

Lab 9: Exporting the finished output into different forms

Tutorial 10: CAD Design

Lab 10: Understanding the basics of CAD and layout drawing

Tutorial 11 &12: Planning a 3D Animation in CAD

Lab 11 & 12: Implementing a architectural layout in CAD

Text Books

1. Kelly L. Murdock, "Autodesk Maya 2018, Basics Guide", SDC Publications, 2018.
2. Chris Maraffi, "Maya Character Creation: Modeling and Animation Controls", New Riders Publishing.
3. Lee Lanier, "Maya Professional Tips and Techniques", Autodesk Maya Press

19MT2006	VISUAL EFFECTS AND COMPOSITING	L	T	P	C
		2	0	2	3

Pre-Requisite - 18MT2005 Introduction to 3D Animation

Course Objectives:

1. To understand the basic working of the human perception system and camera parameters to better do compositing.
2. To examine the various tools of compositing and choose the right tool for the application.
3. Help the student visualize and comprehend the current state of the VFX industry.

Course Outcome:

The students will learn to:

1. Make better choices when making technical and creative decisions using the understanding of human perception and camera parameters.

2. Manipulate image data using mathematical formulae to obtain the required result.
3. Compare the feature set available in various software and select the optimal set required.
4. Stabilize and get measureable data from images for use in Post Production.
5. Separate foreground from background and reconstruct the image using another background.
6. Compose a realistic image from various 2D and 3D source elements.

Module 1: Introduction

History and Evolution of VFX and Compositing, Basics of Human perception, Camera Basics, Nodal Pans and Tilts, Camera Array, High Speed Photography, Motion Control, Multi pass Photography, Stereoscopic 3D, Stereo Camera Set up, Miniatures, Stop Motion Characters, Compositing-Optical technique, Matte Painting. [5 Lectures]

Module 2: Data representation

Digital representation of visual information - Image Generation, Pixels, Components, Channels, Spatial Resolution, Resolution and Image Formats, HDRI, Colour Models, Colour Management, Plate Photography, Preproduction, Previs. [5 Lectures]

Module 3: Manipulations

Basic Image Manipulations using single and multi operators, Spatial filters and working, Geometric transformations, Expression Language, Masks, Pre-multiplied images, Morphing, Motion Blur. [5 Lectures]

Module 4: Standards

Film vs Digital, Analog and Digital Film formats – Analog and Digital Television Formats- Aspect Ratio and Format Conversion Pipeline, UI, Dope Sheet, Curve editor [5 Lectures]

Module 5: Compositing Techniques

Rotoscopy, Travelling Matte, Automated keying techniques- Luma, Chroma, Difference keying, Keylight, Primatte, Ultimatte, Matte Backgrounds, Retiming techniques-optical flow analysis - Image tracking and stabilization-Camera Tracking, Scene tracking, Lighting parameters, Camera Parameters.[5 Lectures]

Module 6: Compositing Parameters

Interactive Colour and lighting, Light wrapping, Relighting, Shadows, digital colour matching, spill suppression, Atmosphere, camera characteristics, Digital Intermediary, Matching Film Grain and sensor Noise, Multi-pass Compositing, Deep Compositing, Stereoscopy, Focus, Future, Game engines and VFX. [5 Lectures]

List of Experiments

1 Interface and Key Frame Animation

2 Masking and Tracking
3 Keying and Rotoscoping
4 Creating Null Objects and Camera
5 Time Remapping and Color Grading
6 3D Compositing and Infographics

Pipeline of VFX

7 **Pre-Production –**
8 Concept Art
Pre-Visualization
R&D and testing
9 **Production**
on location reference, plates
10 **Post Production**
Plate prep -Rotoscope, Tracking and matching, Layouts
11 Modeling- Rigging, Animation, Texturing, Effects and Dynamics, Lighting and Rendering
12 Composting- Color correction, color Grading, Export to projection screen

Text Books

1. Ron Brinkmann, The Art and Science of Digital Compositing, second edition, Morgan Kaufmann, 2008.

2. S. Zwerman and J. Okun, The VES Handbook of Visual Effects. Burlington: Focal Press, 2015.

Reference Books

1. Steve Wright, Digital Compositing for Film and Video, Focal Press, 2006.
2. R. Ganbar, Nuke 101: Professional Compositing and Visual Effects, Second Edition, 2nd ed. Peachpit Press, 2014.
3. Dough Kelly, Digital Composting In-Depth, Coriolis, 2000.

19MT2007	GAME DESIGN	L	T	P	C
		2	0	2	3

Course Objectives

1. The course provides knowledge on understanding the aesthetics and pre-requisites required for game designing.
2. This course helps students to understand and utilize physics and mathematical concepts required for game environments and game development.

Course Outcome

The students will be able to:

1. Infer and inherit capability of designing 2D /3Dgames.
2. Apply their skills on concepts like camera movement and dynamics of game designing.
3. Design and develop 2D/3D games on various platforms.
4. Identify and construct design game objects and provide them behavioral characteristics to interact in game environment.
5. Formulate the design of suitable game environment and skyboxes.
6. Design various 3D menu, cut scenes and UI elements

Module 1: Introduction to Game Design

Game play and game data, designers and development process, modeling factor, fudge factor, logic and scripting languages [8 Lectures]

Module 2: Game mechanics design

scale, graphical interfaces, terrain features, movement rates and algorithms, regulating movements, game statistics for movements, Items, characters and combat [7 Lectures]

Module 3: Implementing the Design

storytelling, designing playfields, interface design, dialogues, 2d/3d maps, POV [8 Lectures]

Module 4: 2D Background Design and physics materials

sprite designing, background designing, UI designing, designing and implementing physics for 2d game objects, collisions, threading, scripting [7 Lectures]

Module 5: 3D Game design

3 C's in 3D game designing, designing and importing 3D game object in 3D game engine, designing skyboxes, icon designing, 3D movement, collisions, designing cut scenes, designing for 3D game menu, introduction to 3d UI element designing. [8 Lectures]

Module 6: Game Design projects

Creating a terrain and adding assets , Create a suitable skybox, creating a character motor and adding physics- gravity, kinematics via keyboard, coin pick up, HUD [7 Lectures]

List of Experiments

1. Flowlab.io - Creating Background and character
2. Flowlab.io - Keyboard Interfacing and Jump Behaviours
3. Flowlab.io -Collision detection & HUD
4. Unity 3D: Terrain
5. Unity 3D: Keyboard interfacing techniques
7. Unity 3D: Rigid body
8. Unity 3D: Collision detection & Triggering
9. Unity 3D : Artificial Intelligence -I
10. Unity 3D : Artificial Intelligence -II
11. Unity 3D : NavMesh Agent

12. Unity 3D : Endless Runner I
13. Unity 3D : Endless Runner II

Text Books

1. Michael Moore, Basics of Game Design, CRC Press, 2016
2. Scott Rogers, "Level Up! The Guide to Great Video Game Design", John Wiley Publishers, 2010.

Reference Books

1. Jonathan S. Harbour, "Advanced 2D Game Development", PTR Publishers, 2009.
2. Ernest Adams, "Fundamentals of Game Design", Pearson Education, 2012.
3. Jesse Schell, "The Art of Game Design: A book of lenses", Morgan Kauffman Publishers, 2008.

19MT2008	GRAPHICS AND ANIMATION	L	T	P	C
		2	0	2	3

Pre-Requisite - 19MT2005 Introduction to 3D Animation

Course Objectives

1. 1.To understand the basic working and the technical concepts of the graphical system
2. 2.To examine the various geometrical transformations
3. Help the student visualize and comprehend the graphic tools to create two-dimensional computer animation.

Course Outcome

The students will learn to:

1. Outline the two-dimensional graphic production process
2. Classify the various algorithms for generating graphical components
3. Demonstrate skills to use industry standard graphical productions.
4. Experiment with different light sources based on visible surface determination
5. Setup a graphical production.
6. Discriminate 2D and 3 Dimensional graphical production.

Module 1: Basic Principles of Two Dimension Graphics

Raster versus vector graphics- Basic geometric objects-Geometric transformations-Homogenous coordinates- Applications of transformations-Geometric transformations in java 2D-Animation and movements based on transformations- Interpolators for continuous changes- implementations of interpolators in Java 2D-Single or double precision [7 Lectures]

Module 2: Drawing lines and curves

Lines and pixel graphics-The midpoint algorithm for lines- Structural algorithms-Pixel densities and line styles-Line clipping-Midpoint algorithm for circles- Drawing arbitrary curves- Antialiasing-Drawing thick lines-Filling areas-Buffered images in java 2D-Displaying text-Text in java 2D-Grey images and intensities-Colour Model-Colour Interpolation with java 2D. [8 Lectures]

Module 3: Basic Principles of Three-Dimensional Graphics

Geometric transformations-The scene graph- Elementary geometric objects in java 3D-The scene graph in java 3DAnimations and moving objects- Projections in Java 3D [7 Lectures]

Module 4: Modelling Three-Dimensional Graphics

Modelling Three dimensional objects-Three Dimensional objects and their surfaces-Topological notions-Modelling techniques-Surface Modeling with polygons in java 3D-importing geometric objects in to java3D-Parametric curves and freedom surfaces normal vectors for surfaces [8 Lectures]

Module 5: Visible Surface Determination

Clipping volumes- Algorithms for visible surface determination- Image precision techniques-Priority algorithms- Illumination and shading- Light sources- Light sources in java 3D-Reflection- Shading in java 3D- Shading- Shadows- Transparency- Textures- Textures in java 3D- The radiosity model- Ray tracing. [7 Lectures]

Module 6: Special Effects and Virtual Reality

Fog and particle systems- Fog in Java 3D- Dynamic surfaces- Interaction-Interaction in Java 3D-Collision detection-Collision detention in Java 3DSound effects-Sound effects in Java 3D- stereoscopic viewing [7 Lectures]

List of Experiments

1. OpenGl Basics
2. Vertex Shader
3. Transformations
4. Fragment Shaders [Texture]
5. Filter [Grayscale & Invert]
6. Procedural Terrain
7. Camera
8. Frame Buffer
9. Particles
10. Color Implementation [RGB, HSV]
11. Lights Basics
12. Cube Maps Shaders [Metal, Glass]

Text Books

1. Rick Parent, Computer Animation Algorithms and Techniques, Morgan Kaufmann publishers, 2002.
2. F.S.Hill,jr ,Computer graphics using Open GL,Prentice Hall of India,2006.

Reference Books

1. Peter Shirley, et al, Fundaments of Computer Graphics, AK Peters Ltd, 2005.
2. Issac Victor Kerlow, The Art of 3D Computer Animation and Effects, John Wiley, 2004.

19MT2009	POST PRODUCTION TECHNIQUES LAB	L	T	P	C
		0	0	4	2

Lab objective:

1. To enrich the students with the basics of video and film editing.
2. To emphasize the importance of editing and how it helps in narration.
3. To provide a complete theoretical knowledge for the students to become professional editors.

Course outcome

The students will be able to:

1. Students will get thorough knowledge on the techniques of video and film editing.
2. Students will be expert in editing with the editing techniques.
3. Students will be able to analyze the video editing in a film.
4. Students will be able expert in narration of the film.
5. Students will be professionally sound knowledge editors would be created.
6. Students will get updated till the recent trends and technology in editing.

Tutorial and Lab: (total 4 contact hours per week) (outline of topics) Tutorial 1: Introduction to video editing

Lab1: Familiarization with interface and basic tools in FCP/Adobe Premiere.

Tutorial 2: Video effects and Transitions

Lab 2: Applying video effects and transitions.

Tutorial 3: Titling

Lab 3: Adding titles to the edited video.

Tutorial 4: Audio Editing

Lab 4: Edit the audio

Tutorial 5: Color Correction

Lab 5: Basic color correction.

Tutorial 6: Chroma Keying

Lab 6: Applying chroma keying to the video.

Tutorial 7: Introduction to adobe after effects

Lab 7: Familiarization with interface and basic tools in Motion/Adobe After Effects.

Tutorial 8: Working with Layers

Lab 8: Understanding the working of layers.

Tutorial 9& 10: Animation
Lab 9&10: Working with key frame and 2D animation.
Tutorial 11: Paint, Clone, Rotoscope
Lab 11: Working with paint, clone, rotoscope
Tutorial 12: Student Project
Lab 12: Student has to do a project as an outcome of this lab course.

19MT2010	FUNDAMENTALS OF PYTHON FOR MEDIA	L 2	T 0	P 2	C 3

Course Objective:
1. Build an understanding of the Python Programming.
2. Familiarize with the basic terminology of the Python Programming.
3. To gain expertise in specific areas of Database Support in Python Programming.

Course Outcome:
After completing this Course the student must demonstrate the knowledge and ability to:
1. Understand and explain Python Programming.
2. Apply various string manipulations in python. .
3. Understand the concept of scripting and the contributions of scripting languages
4. Understand the object- oriented concepts of Python
5. Understand of the built- in objects of Python
6. Develop the different applications in Python Programming

Module 2 - Introduction to Python, Data Types, Expressions: Introduction to Python Programming - Running Code in the Interactive Shell, Input, Processing and Output, Editing, Saving and Running a Script - Data Types, String Literals, Escape Sequences, String Concatenation, Variables and the Assignment Statement - Numeric Data Types and Character Sets - Integers and Long Integers, Floating-Point Numbers and Character Sets - Expressions - Arithmetic Expressions and Mixed-Mode Arithmetic and Type Conversions. [6 Lectures]
Module 2 - Functions, Modules and Control Statements: Functions and Modules - Calling Functions, The math Module, The Main Module, Program Format and Structure and Running a Script from a Terminal Command Prompt - Iteration - for loop - Selection - Boolean Type, Comparisons, and Boolean Expressions, if-else Statements, OneWay Selection Statements, Multi-way if Statements, Logical Operators and Compound Boolean Expressions, ShortCircuit Evaluation and Testing Selection Statements - Conditional Iteration - while loop. [5 Lectures]
Module 3 - Strings and Text Files: Strings - Accessing Characters and Substrings in Strings, Data Encryption, Strings and Number Systems and String Methods - Text Files - Text Files and Their Format, Writing Text to a File, Writing Numbers to a File, Reading Text from a File, Reading Numbers from a File and Accessing and Manipulating Files and Directories on Disk. [5 Lectures]
Module 4- Lists Lists - List Literals and Basic Operators, Replacing an Element in a List, List Methods for Inserting and Removing Elements, Searching and Sorting a List, Mutator Methods and the Value None, Aliasing and Side Effects, Equality and Tuples - Defining Simple Functions - Syntax , Parameters and Arguments, return Statement, Boolean Functions and main function [5 Lectures]
Module 5 - DICTIONARIES - Dictionary Literals, Adding Keys and Replacing Values, Accessing Values, Removing Keys and Traversing a Dictionary. [5 Lectures]
Module 6 - Design with Functions and Design with Classes: Design with Functions and Design with Classes - Functions as Abstraction Mechanisms, Problem Solving with Top-Down Design, Design with Recursive Functions and Managing a Program's Namespace - DESIGN WITH CLASSES - Objects and Classes, Data Modeling and Structuring Classes with Inheritance and Polymorphism [5 Lectures]
List of Experiments:
The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of HOD / Director and notify it at the beginning of each semester.

Text Book:
1. Paul Barry, Head First Python 2e, O'Reilly, 2nd Revised edition, 2016, ISBN-13: 978-1491919538.

2. Kenneth A. Lambert, Martin Osborne, Fundamentals of Python: From First Programs Through Data Structures, Course Technology, Cengage Learning, 2010, ISBN-13: 978-1-4239-0218-8.

Reference Books:

1. Zed A. Shaw, Learn Python The Hard Way, Addison-Wesley, Third Edition, 2014, ISBN-13: 978-0-321-88491-6.
3. Dave Kuhlman, A Python Book: Beginning Python, Advanced Python, and Python Exercises, 2013, ISBN:9780984221233.
4. Kent D Lee, Python Programming Fundamentals, Springer-Verlag London Limited, 2011, ISBN 978-1-84996-536-1.

19MT2011	ADVERTISING	L	T	P	C
		3	0	0	3

Course Objectives

1. To define and understand principles of advertising
2. To translate skills making advertisements and Branding
3. To design and evaluate quality advertising output.

Course Outcome

The students will learn to:

1. Student will gain professional knowledge on advertising
2. Student will use the skills in designing advertising campaigns
3. Student will gain insight on the creative aspects of advertising
4. Students will evaluate the relation of public relations in advertising
5. Students will list and demonstrate ability to understand varied nuances of advertising in the industry
6. Students will learn the idea of social advertising

Module 1: Introduction to Advertising

Definition and types of Advertising -Advertising Industry- Advertising Media - Types of advertisements- Indoor and Outdoor Advertising. [8 Lectures]

Module 2: Advertising Campaigns

Multinational campaign strategies and cost considerations - Creativity and content in International advertisements – Creative ad campaigns [8 Lectures]

Module 3: Creativity in Advertising

Creative Strategy-Advertising budget-Branding-Pretest and posttest – Role of creative advertisements in reaching audience. [7 Lectures]

Module 4: Advertising and PR

Sponsorship and Publicity – Advertising concept-Media relations Techniques- social media and advertising- Public Opinion- propaganda- Advertising tools – roles and responsibilities of different creative and production departments -Legal and Voluntary roles- Research in Advertising.[9 Lectures]

Module 5:Role of advertising in the society

Contemporary trends in Advertising. - Case Studies. - Roles and responsibilities - Career Opportunities in Advertising. [6 Lectures]

Module 6: Social Media Advertising

Social media ads – Facebool ads – Online ads – Web ads – Advertising techniques for online ads [6 Lectures]

Text Books

1. Tony Yeshin, “Advertising”, McGraw Hill, Cengage Learning EMEA, 2006.
2. Otto Kleppner, “Fundamentals of Advertising”, Prentice Hall, New Jersey, 2000.

Reference Books

2. Courtland L. Bovee, “Advertising Excellence” McGraw Hill Publications, Delhi, 2001.
3. Sean Brierley, “The Advertising and Hand book”, New York, 2000.
4. McGraw Hill, “Principles of Advertising and IMC”, McGraw Hill, 2000.

19MT2012	FILM APPRECIATION	L	T	P	C
		3	0	0	3

Course Objectives

1. To know about the different genres of films, its styles and their method of production.
2. To know about the various film styles, its narration and different case studies of film reviews.
3. To practice the art of culling out films and appreciating the various aspects of it.

Course Outcome

1. The student will develop an overall understanding on the structure of film narration.
2. The student will have a thorough knowledge on the narrative aspects of film.
3. The students will be able to connect psychologically with the films.
4. The students will be thorough with the art of appreciating and analysing films.
5. The students will become good learners of films.
6. The students will acquire high skill on knowing film theories and the art of watching films

Module 1

Definition and need for film Appreciation - How to read and understand cinema- Inductive approach and Deductive approach – Social, Political, Economic, Cultural, Technical and Aesthetic aspects of Cinema - A comparative study of Cinema and other aesthetic expressions - The types of films to be appreciated - subject content, structural characteristics –- Factors to be appraised while appreciating films - The narrative and stylistic elements.

Module 2

Appreciation of Neo-realistic films with a detailed analysis of Vittorio-Desica's Bicycle Thieves (1948). The structure of the film - the social criticism - Camera work - Editing style use of nonactors.

Module 3

Appreciation of thrillers with special reference to Alfred Hitchcock's films: Psycho (1960) - its structure - Dramatic development - Psychological thrills - Camera work – Lighting - Editing style - use of sound effects - North by North west (1959) - its structure - Camera work -editing style with emphasis on chase sequences - use of sound effects and music.

Module 4

Analysis of Orson Wells' film "Citizen Kane" – Its structure camera work - The use of long takes and deep focus technique - editing style - use of actors - Art Direction-Appreciation of Epic films of David Lean with special reference to the Bridge on the River Kwai (1959) scripting - study of the characters - The prison commander and the British Colonel – The camera work - Editing style and the creative use of sound.

Module 5

Doctor Zhivago (1966) structure-Visual appeal and Artiste performance - Appreciation of Kriztof Kieslowski films with special reference to the Colour Trilogy - "Blue", "White", "Red" - The dramatic structure - Study of the style - Fragmented narrative - Mobility of camera.

Module 6

Appreciation of Yasujiro Ozu's films with special reference to Tokyo Story (1953) - Study of the style and craft - "Shomingeki" tradition - Depiction of domestic culture - Use of low angles and long takes.

Reference Books:

1. How to read a film - JAMES MONACO, 2009, Oxford University
5. Film as Art, 2006, Deluxe Edition - ERNEST LINDGREN
6. Cinema as Graphic Art Studio Pubication -VLADIMIR WILSEN
7. Art of the Film, 1985, - STEPHENSON AND DEBRIX

19MT2013	DIGITAL TELEVISION ENGINEERING	L	T	P	C
		3	0	0	3

Course objective:

1. To overview the current and emerging trends in digital television.
2. To understand the different propagation channels in digital television transmission.
3. To apply the concepts in design of real-time broadcast television setup.

Course outcome:

The students will be able to:

1. Observe the principles in digital television systems.
2. Review the advantages of digital over analogue televisions.
3. Discover the new advancements in digital television broadcast.
4. Compare and contrast various types of television standards.
5. Find a robust prorogation medium for television signals.
6. Evaluate the performance of the optimum medium.

Module 1: Introduction to Digital Television

Shannon's Information Theorem - Digitizing a Video Signal - Measuring and Compressing Digital Video Signals - Digital Video Broadcasting -Picture and Sound Quality - MPEG-4: HDTV Compression [7 Lectures]

Module 2: Digital TV by Satellite

Satellite Positions and Power - Finding the Satellite - Positioning the Dish - Low Noise Block Converters (LNBs) - The Satellite Receiver [7 Lectures]

Module 3: Modulation and Antennas

Modulating Digital Signals -Error Protection and Transmitted Bitrate -Dish Size - Multi-Satellite Antennas -Installing Multi-Focus Antennas - Optimizing Parabolic Antennas [7 Lectures]

Module 4: DIGITAL TV BY CABLE

The Head end: The Heart of the Cable TV Network - Channel Capacity -The MATV (Master Antenna TV) Network - UHF Coaxial Networks - Coaxial Cable TV Networks - Hybrid Fiber Coaxial Networks (HFC) -Digital Cable Television - SMATV, Satellite MATV Systems - Terrestrial Digital TV Signals in Coaxial Cable Systems [8 Lectures]

Module 5: DIGITAL TV BY TERRESTRIAL TRANSMITTERS

Antennas for Terrestrial TV Reception - Digital Terrestrial TV - Multi-Directional Antenna Systems - Indoor Antennas -Digital Terrestrial Receivers -DVB-T Receivers -Terrestrial TV for Mobile Devices; DVB-H [7 Lectures]

Module 6: DIGITAL TV BY BROADBAND

Broadband IPTV –Internet TV - Software Media Player Options - Internet Via Satellite - Digital Receivers - Digital TV with Interactive Services - Digital Receiver Firmware - The Application Interface - The API of the Future - The Media Gateway Dream -The Media Terminal [7 Lectures]

Text Book

1. Lars-Ingemar Lundstrom,"Understanding Digital Television-An Introduction to DVB Systems with Satellie, Cable, Broadband and Terrestrial TV Distribution, Focal Press; 1 edition (august 30, 2006).

Reference Books

1. Michael Robin, Michael Poulin "Digital Television Fundamentals", McGraw Hill 2nd Edition 2000.
2. Gerald W.Collins, "Digital Television Transmission", John Wiley & Sons 2001
3. Marcelo S. Alencar, "Digital television Systems", Cambridge University Press 2009.
4. Walter Fisher. "Digital Video And Audio Broadcasting Technology", Springer 2nd Edition 2008.

19MT2014	WEB DESIGNING	L	T	P	C
		2	0	2	3

Course objective:

1. To understand and use HTML tags for designing web pages.
2. To experiment with various CSS Styles
3. To learn Java-script for developing dynamic pages.

Course outcome:

The students will be able to:

1. **E**valuate the basic and advanced features in Server side scripting.
2. Create a complete webpage with responsive feature

3. Experiment about HTML programming and designing a web page
4. Practice basic web pages using HTML, HTML5 and CSS.
5. Recognize the JavaScript program as an aid for web design.
6. Reproduce the unique design problems involved in web design.

Module 1: Introduction to HTML

HTML: Introduction – Editors – Basic structure – Elements – Attributes – Headings – Paragraphs – Styles – Formatting - Comments – Colors – Links – Images – Tables – Lists –Classes – Iframes – Forms [7 Lectures]

Module 2:HTML 5

HTML 5 & CSS : Introduction – HTML 5 Elements – Semantics – Canvas - HTML Audio – HTML Video – HTML Media – HTML API [7 Lectures]

Module 3: CSS

CSS – Backgrounds – Borders – Margins – Padding – Box Model – CSS responsive – CSS 3 [7 Lectures]

Module 4: BOOTSTRAP

Introduction - Grid Basics- Typography – buttons – pagination – panels – dropdowns – carousel – popover - Tooltip [7 Lectures]

Module 5: JAVASCRIPT

Introduction – keywords – Data types – Variables – Operators – Comments – Arrays – Expressions – Control Structures – Functions (calling a function, returning values, integrating function & HTML) - JSON [7 Lectures]

Module 6: SERVER SIDE SCRIPTING

SQL – SQL database – SQL Functions - PHP – PHP variables – PHP Forms – MySql database - ASP – ASP VB function [7 Lectures]

List of Experiments

Tutorial and Lab: (total 4 contact hours per week) (outline of topics)

Tutorial 1: Introduction to HTML5

Lab1: Review of HTML5 Tags

Tutorial 2: Setting up web layout

Lab 2: HTML5 Semantic Elements and DOM

Tutorial 3: Audio, Video and plugins

Lab 3: HTML5 Multimedia

Tutorial 4: Forms

Lab 4: Customized web forms

Tutorial 5: CSS3

Lab 5: Cascading Style Sheets

Tutorial 6: Advanced Styling

Lab 6: Styling with Advanced CSS3

Tutorial 7: Responsive pages

Lab 7: Responsive web using Bootstrap 4

Tutorial 8 : Javascript

Lab 8: JavaScript basic programs

Tutorial 9& 10 : PHP

Lab 9&10: Interactivity using JavaScript, The Pre-processor Hypertext (PHP)

Tutorial 11: Database

Lab 11: Structured Query Language (SQL)

Tutorial 12: Domains

Lab 12: Website Hosting

Text Book

1. H.M. Deitel, P.J. Deitel, “Internet & World Wide Web – How to program”, 3rd Ed. Prentice Hall, 2003.Author, “Book”, Publisher, Year of Publishing
2. Thomas A. Powell, “HTML: The Complete Reference”, McGraw Hill, 2001.

Reference Books

1. 1. Danny Goodman, Michael Morison, Paul Novitski, "Java Script Bible", Wiley Publication, 7th Edition Author, "Book", Publisher, Year of Publishing
2. David Crowder and Rhona Crowder,"Web Design with HTML/Flash/Javascript & Ecommerce BIBLE", Wiley DreamTech India Pvt. Ltd,2001
3. Luke welling and Laura Thomson "PHP and MYSQL web development", III Edition, 2005

19MT2015	FUNDAMENTALS OF ADVERTISING	L	T	P	C
		4	0	0	4

Course Objective:

1. To understand the purpose and meaning of advertising
2. To understand advertising as an industry
3. To understand the process of communication in advertising

Course Outcome:

1. Students will be enabled to apply the advertising concepts practically.
2. Students will understand the latest terminologies used in advertising industry.
3. Students will be effective in conducting an PR Campaigns.
4. Students will appreciate how advertisement is essential for market economy.
5. Students will know how an advertising agency works and their creative contributions.
6. Students will learn the procedure of running an advertisement campaign.

MODULE 1 History of advertising and its role in the market place, advertising industry in India – advertising as a process of communication -Social effects of advertising. The changing world of advertising.

MODULE 2 Types of advertising: consumer, corporate, industrial, retail, cooperative and Public service advertising. -tone and content; reading the advertisement -review with current ad campaigns.

MODULE 3 Advertising agency: Structure and functions; Leading agencies in India Diversification and competition – full service agencies – multinational clients – challenges and opportunities. How to choose an advertising agency, agency briefing and evaluating an agency.

MODULE 4 Media Choice- Media Objectives, strategy and planning –print media – electronic media- Advertising campaign: objectives, creative strategy: message, appeals, target market, level of response, media Planning, advertising budget, pre-testing and post testing.

MODULE 5 Professional ethics in advertising- cases of ethical violations – Advertising Standards Council – Social and cultural issues – Global regulations and Future trend.

MODULE 6 Direct marketing and out of home advertising- Putting the campaign together- Sales promotion and supplementary media – public relations and special communications- local advertising –from plan to results: The complete campaign - Case studies on Digital Marketing Using YouTube – Instagram – Google Ads - Facebook

Text Book

1. Kleppner, Otto; Fundamentals of Advertising; Prentice Hall; New Jersey. 1980.

Reference books:

1. Courtland L. Bovee , Advertising Excellence : McGraw –Hill Inc. Publications, 2001
2. Gupta, Sen; Brand Positioning; Tata McGraw Hill; New Delhi; 1990.
3. Hart, Norman; The practice of advertising; Heinemann Pub.; London. 1990.
4. Mooij,Mariekae de; „AdvertisingWorldwide (2nd edn.); Prentice Hall; UK.1994.
5. Mohan, M; "Advertising management concepts and cases"; Tata McGraw Hill; New Delhi. 1989.
6. Chunnawalla and K.C. Sethia ; "Foundations of Advertising: Theory and practice",

MEDIA AND COMMUNICATIONS

LIST OF COURSES

Course Code	General – 20 Credits (To be completed in the first 3 years) Name of the Course	Credits
16VC3001	Social Media and Communication	3:0:0
16VC3002	Contemporary Advertising Methods	3:0:0
17MC2001	Visual Arts Lab	0:0:4
17MC2002	Introduction to Media	3:0:0
17MC2003	Media Laws and Ethics	3:0:0
17MC2004	Communication Theories	3:0:0
17MC2005	Media Culture and Communication	3:0:0
17MC2006	Advertising	3:0:0
17MC2007	Visual Design Lab	0:0:2
17MC2008	Print Media	3:0:0
17MC2009	Photography	3:0:0
17MC2010	Photography Lab	0:0:4
17MC2011	Basics of Multimedia	3:0:0
17MC2012	Visualization	3:0:0
17MC2013	2D Animation	3:0:0
17MC2014	2D Animation Lab	0:0:4
17MC2015	Video Production	3:0:0
17MC2016	Audio Production	3:0:0
17MC2017	Video Production Lab	0:0:4
17MC2018	Audio Lab	0:0:4
17MC2019	Web Designing	3:0:0
17MC2020	Web Designing Lab	0:0:4
17MC2021	Post Production Techniques	3:0:0
17MC2022	Visual Effects	3:0:0
17MC2023	Film Studies	3:0:0
17MC2024	Visual Effects Lab	0:0:4
17MC2025	Post Production Lab	0:0:2
17MC2026	Portfolio Lab	0:0:4
17MC2027	Television Program Production	3:0:0
17MC2028	Advertising Lab (Print, Video, Magazine)	0:0:2
17MC2029	Broadcast Journalism	3:0:0
17MC2030	News Production Lab	0:0:2
17MC2031	Media Management	3:0:0
17MC2032	Screenplay	3:0:0
17MC2033	Marketing Communication	3:0:0
17MC2034	Media Agencies	3:0:0
17MC2035	Film Making Lab	0:0:4
17MC2036	Radio Programming	3:0:0
17MC2037	Corporate Communication	3:0:0
17MC3001	Research Methodology	3:0:0
17MC3002	3D Animation	3:0:0
17MC3003	3D Animation Lab	0:0:4
17MC3004	ICT for Development	3:0:0
17MC3005	Report Writing and Publication	3:0:0
17MC3006	Virtual Reality	3:0:0

17MC3007	Media chain production Lab	0:0:4
17MC3008	Research Publication Lab	0:0:2
17MC3009	Virtual Reality Lab	0:0:2
17MC3010	Advanced Animation	3:0:0
17MC3011	Advanced Animation Lab	0:0:4
17MC3012	Sound Effects and Foley lab	0:0:2
17MC3013	Direction	3:0:0
17MC3014	Direction Lab	0:0:4
17MC3015	Social Media	3:0:0
17MC3016	Media Analysis	3:0:0
17MC3017	Social Media Lab	0:0:2
17MC3018	Documentary Production	3:0:0
17MC3019	Visual Merchandising	3:0:0
17MC3020	Development Communication	3:0:0
17MC3021	Documentary Film Lab	0:0:4
17MC3022	Visual Merchandising Lab	0:0:2
17MC3023	International Communication	3:0:0
17MC3024	Media Psychology	3:0:0
17MC3025	Lab Journal	0:0:4
17MC3026	New Age Printing	3:0:0

16VC3001 SOCIAL MEDIA AND COMMUNICATION

Credits : 3:0:0

Course Objective:

- To enable students to understand theoretical concepts related to social media as a form of communication.
- To enable students to gain an analytical insight into research framework in Social Media
- To enable students to understand audiences and usage patterns of social media in communication studies.

Course Outcome:

- Students will comprehend theoretical concepts related to social media as a form of communication.
- Students will apply theoretical concepts into research frame work.
- Students will be able to analyse audience usage patterns of varied social media applications.

Description:

What is Communication? Communication Theories- Computer Mediated Communication- New Media-Internet. Information Society Theories. Social Media Definition. Introduction to: SNS, Face book, Instagram, Pinterest, Twitter, Blogs, You Tube, Watsapp. Chronology of New Media Technological Development.- Social Presence Theory. Media Richness Theory-Social Penetration Theory- Self Presentation Theory-Technological Determinism- Diffusion of Innovation-Technology Acceptance – Social Media Audiences- India- USA- Europe-Asia- Other parts of the world. Audience Profile – Youth, other age groups- Social Media Applications and Usage. Social Media and Marketing , Social Media and Learning. Social Media and Ethics, Social Media and Society.

References:

1. The Social Media Bible by Lon Safko and David Brake 2009, Publisher: John Wiley& Sons.
2. The Big Book of Social Media: Case Studies, Stories, Perspectives by Robert Fine,2010. Publisher :Yorkshire Publishing .
3. Theories of Information Society by Frank Webster,2002, Published by Routledge.
4. Mc Quail's Mass Communication Theory,2010, Published by Sage Publications.

16VC3002 CONTEMPORARY ADVERTISING METHODS

Credits : 3:0:0

Course Objective:

- To enable students to understand theoretical concepts related to contemporary, new media advertising.
- To enable students to gain an analytical insight into research related to contemporary advertising methods.
- To enable students to understand contemporary branding, consumer behaviour, new media advertising applications, B2B and B2C advertising.

Course Outcome:

- Students will comprehend theoretical concepts related to contemporary, new media advertising.
- Students will apply theoretical concepts into research related to new media advertising
- Students will be able to analyse new media consumers and specific forms of B2B and B2C interactions.

Description:

Advertising and its role in Societal Transition– Advertising as a part of Communication. Advertising – a semiotic analysis- Advertising and New Media –Blog ads, Social Media Advertising-B2B and B2C Advertising-Mobile Advertising - Media Framing. Dramaturgical Theory. Symbolic Interactionism.Agenda Setting.Media Conglomerates- Self Regulatory Bodies. Brand . Pre and Post Test .Brand Recall. The DAGMAR Approach - Models of Consumer Behaviour - Factors Influencing Consumer Behavior: Personal, Social ,Cultural, Economic

References:

1. Advertising in Contemporary Society: Perspectives towards Understanding – Kim B. Rotzoll, Steven R.Hall, James E. Haefner. Publisher : University of Illinois Press, 1996
2. Social Communication in Advertising: Consumption in the Marketplace – William Leiss, Stephen Kline, Sut Jhally, Jacqueline Botterill, Publisher :Routledge. 2005
3. Principles of Marketing- Kotler and Armstrong , Publisher : Prentice Hall,2013.
4. Media Effects: Advances in Theory and Research (Routledge Communication Series) 3rd Edition by Jennings Bryant (Editor), Mary Beth Oliver (Editor),Publisher : Taylor and Francis,2009

17MC2001 VISUAL ARTS LAB

Credits: 0:0:4

Course Objectives

- To help the students improve their visual and artistic sense.
- To improve the skills of the students in the field of visual design.
- To introduce the students the world of visual arts.

Course Outcomes

- The artistic sense of the students will improve.
- The students will acquire new visualization tools for basic drawing.
- The students will be able to produce various perspective drawings.
- The students will do creative art independently.
- The students will characterize stereotypical cartoons and caricatures.
- The students will portray all forms of art with calculated measures.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2002 INTRODUCTION TO MEDIA

Credits: 3:0:0

Course Objectives

- To enable students to define and relate to basics of all forms of media.
- To enable students to identify varied forms of new media communication.
- To enable students to recognize new media as a way of life.

Course Outcomes

- Students will learn to define and relate to basics of New Media.
- Students will identify varied forms of New Media.
- Students will recognize new media as a way of life.

- Students will be able to define and list elements of mass media
- Students will identify and define media convergence.
- Students will analyze the importance of traditional and new media communications.

Unit I - Media - The Media Industry: Political Economy, Organization and Culture - Global media – Media and Information – Demassification of Media
Unit II - Newspapers and the rise of Journalism - Magazines, Books, Journals – Characteristics – Types – Audiences. Broadcast Communication - Radio – Characteristics of Radio as an Audio Medium – AM and FM – Audiences - Visual Communication – Television- Cable, Satellite television – IPTV - Films – Motion pictures - characteristics of visual media – elements – media functions – visual perception and aesthetics.
Unit III - Computer Mediated Communication - scope and nature - New Media - audiences - technological changes- ICT/Media Technologies – trends - Social Media – YouTube - Blogs – Podcasts – Facebook –Twitter - WhatsApp- Instagram – latest new media platforms - internet advertising-Audiences - mobile communications - Problems and Prospects for the Future of Media - issues and ethics.
Unit IV - Communication – Definitions – Elements of Communication – Communication Act – Sender – Message – Channel – Receiver – Effects – Feedback – Communication Process – Communis –types of communication - intrapersonal- interpersonal- transpersonal – Group Communication and Mass Communication - Typology of Audience – Bauer's Concept - McLuhan's Global Village Concept – Global Culture.
Unit V - Speech Communication – Psychology and Sociology Aspects – Cognition – Selective Perception – Selective Retention – Selective Expression – Socio – Cultural Norms and Cognition – Attitudes - Human Communication – Characteristics – Contents – Language – Meanings – Talent – Manifest – Contextual Structural Meanings - Verbal and Non Verbal Communication – Signs – Codes – Proxemics – Kinesics.

Text Books

1. Interactive Media and Society by NeerajKathri, 2013.
2. Internet Society: The Internet in everyday life by Maria Bakardjieva, 2005.
3. Mass Media in India. Keval J kumar. 2014.
4. Essentials of Human Communication: Joseph A De Vito Boston, MA : Pearson/Allyn and Bacon, 2006.
5. Mass Communication: Keval J Kumar. Jaico Publications 2005
6. Media Communication: an Introduction to theory and process. James Watson Palgrave and Mc Millan 2005

References

1. Dynamics of Mass Communication: Media in the Digital age by Joseph.R.Dominic, 2004.
2. Media and society: Critical Perspective by Graeme Burton, Rawat Publications.
3. Communication theories in action : an introduction Julia T Wood Belmont, CA : Wadsworth, 2004
4. Visual Communication: Images with Messages. Paul Martin Lester. Thomson Wadsworth, 2006

17MC2003 MEDIA LAW & ETHICS

Credits: 3:0:0

Course Objectives

1. To enable students to define and relate to basics of Media Laws and Ethics.
2. To enable students to apply varied aspects of Media Law and Ethics.
3. To enable students to examine and analyze ethical components of contemporary media.

Course Outcomes

1. Students will learn to define and relate to basics of Media Laws and Ethics.
2. Students will apply varied aspects of Media Law and Ethics.
3. Students will learn to analyze media research components.
4. Students will identify kinds of cyber crimes
5. Students will describe IT Act 2000
6. Students will identify Copyright Acts pertaining to their productions

Unit I - The Indian Constitution-Directive Principles-Fundamental Rights- of Speech and Expression-Press Regulations Board. Freedom
Unit II - IPR-Copyright-Defamation- Libel & Slander - Contempt of Court –AFSP-Official Secrets Act (1923).
Unit III - Emergency 1975-Media Conglomerates-Press Commissions – Right to Information Act - Case

Studies- Latest issues.

Unit IV - Film Censorship- Film Censor Board--Code of Ethics- Radio- Television- Duties of a Journalist- Press Code of Ethics. Advertising Standard Council

Unit V - Information Technology Act (2000) - Cyber Crimes-Phishing- Cyber Stalking – Online Identity Theft- Online Deception-Cyber Cell- Cybercrimes. (Case Studies)

Text Books

1. Media Law & Ethics : Neelamalar M.(2008)

References

1. Basu, Dr. Durga Das, Law of The Press, 5th Ed, Lexis Nexis, 2010
2. Bloy, Duncan & Hadwin, Sara, Law and the Media, 2nd Ed., Sweet & Maxwell, 2013
3. Divan, Madhavi Goradia, Facets of Media Law, Eastern Book Company, 2010
4. Paul, Sebastian, Ethics and The Media, 3rd Ed., Lexis Nexis, 2015
5. Prasad, Kiran, Media Law in India, Kluwer Law International, 2011
6. Shukla, V.N., Constitution of India, 11th Ed., Eastern Book Company, 2011
7. Sorabjee, Soli J., "Constitution, Courts and Freedom of the Press and the Media", B.N. Tirpak etal (eds.), Supreme But Not Infallible : Essays In Honour Of The Supreme Court Of India, 2000

17MC2004 COMMUNICATION THEORIES

Credits 3:0:0

Course Objective

- To enable students to define and relate to basics of communication theories.
- To enable students to develop an insight into analysis.
- To enable students to recognize and interpret theoretical frameworks.

Course Outcomes

- Students will describe evolution of communication.
- Students will identify the theoretical frameworks.
- Students will understand the importance of communication theories.
- Students will distinguish between models and theories
- Students will analyze between models and theories.
- Students will develop critical theoretical analysis, leading to research orientation

Unit I - Introduction – What is theory and model - Difference between theories and models - Definition and interpretation - Evolution of Communication Theories in developing countries.

Unit II - Marshall McLuhan's Theory of Media Classifications Communication Basic Models – SMCR- Harold. D. Lasswell, Braddock, Shannon and Weaver, Osgood and Wilbur Schramm, Wilbur Schramm and Hellical Dance Model. Agenda Setting - Knowledge Gap – Cultivation- Cultural Norms Theory – Effects Theory – Normative Theory – Narcotic –Hegemonic Theory.

Unit III - Monopoly Formation of Public opinion – Propaganda – Agenda Setting Theory – Gate Keeping – Spiral Keeping – Spiral of Silence. Information Seeking – Cultivation Theory, uses and gratification - Structuralism Functionalism – Modernism – Heurmenitics.

Unit IV - Visual Pedagogy - Sensual Theories - Gestalt, Constructivism, Ecological – Perceptual theories – Semiotics and Cognition, Huxley-Lester Model - Visual Learning theories - Education theory (knowledge visualization, visual metaphors, concept maps and mind maps) - constructivism, social constructivism and connectivism. Information design and Isotypes

Unit V - Information Society- Diffusion of Innovation- Development Theories -Contemporary Theories - Electronic Colonialism – IICO & NWICO recommendations - Significations & Effect of New Information Technology -Case Studies.

Text Books

- Human Communication: Joseph De Vito(2006)
- Mass Communication : Keval J Kumar.(2005)
- Media and Communication: James Watson (2001)
- Communication Theories : Julia T Wood.(2006).

References

- Demetriou, A. (1998). Cognitive development. In A. Demetriou, W. Doise, K. F. M. van Lieshout (Eds.), Life-span developmental psychology (pp. 179-269). London: Wiley.
- Demetriou, A., Shayer, M., &Efklides, A. (1992). Neo-Piagetian theories of cognitive development:

Implications and applications to education. London: Routledge

17MC2005 MEDIA CULTURE AND COMMUNICATION

Credits 3:0:0

Course Objectives

- The student will understand the role and impact of different media and culture on society.
- The student will learn about cultural influences on Social Transformation
- The student will understand and the cross cultural problems in communication

Course Outcomes

- The students will be aware of social implications, media exposure, and its use in globalization among media audiences.
- The students will be skilled in analyzing various cultural elements in media products
- The students will gain knowledge on global culture and media operations
- The Students will learn about audiences of different cultures
- The students will be able to evaluate Cultural media constructions critically.
- The students will be exposed to mediation and representation skills

Unit I - An introduction to the media, media industries and audiences - Media is a cultural force and changing paradigm. Basic concepts: Language of persuasion - Media messages - constructing media - Dynamics of modern communication - the shaping and impact of new communication technologies - theories of society, messages and meanings.

Unit II - Large corporations and control of the communications industries - Negotiation of control in media organization and occupation - Cultural dependency and mass media - The economies of media industry, the global gaps, social class, technology gaps, structure and agency, communication and connectivity – Dynamics of global culture, and migration, cultural melding and mediation, globalization, Diasporas, circular migration - Hegemony - the role of media and popular culture, global capitalist hegemony and Communist hegemony.

Unit III - Language and social construction of reality, mediation and representation - texts, meanings and audiences. Rules in society, rules and culture, the special authority of electronic media public images and private practices, media and rules.

Unit IV - Defining Ideology and culture, emotions and culture, language and culture, race and culture, social class and culture, habits and popular culture, popular reception - popular emotions, emotional branding – mediated feelings, story, genre, discourse, culture uses of material world. Media and cultural imperialism.

Unit V - Media and audience direct effects, limited effects, uses and gratification, the mass audience, the mass society, rethinking the mass audience, the audience and the technological change, segmentation, polarization, TV as dominant culture.

Text Books

1. Mohammad Ali, International Communication & Globalization, Sage Publications, London, 1997.
2. Dennis McQuail, Mass Communication Theories, Sage Publications, 2000.

References

1. Straubhar, Larose, Media Now, Thomson Wordsworth, 2004
2. Vincent Mosco, the Political Economy of Communication (Media, Culture and Society Series), Thomson Series, 2004

17MC2006 ADVERTISING

Credits: 3:0:0

Course Objectives

- To define and understand principles of advertising
- To translate skills making advertisements and Branding
- To design and evaluate quality advertising output.

Course Outcomes

- Student will gain professional knowledge on advertising
- Student will use the skills in designing advertising campaigns
- Student will evaluate and judge Advertising programs
- Students will gain insight into evolution of advertising
- Students will list and demonstrate ability to understand varied nuances of advertising
- Students will demonstrate ability to transform into a advertising professional.

Unit I - Definition and types of Advertising -Advertising Industry- Advertising Media - Types of advertisements- Indoor and Outdoor Advertising.
Unit II - Advertising Agency-Planning-Advertising departments-Agency/client relations- Advertising Research
Unit III - Creative Strategy-Advertising budget-Branding-Pretest and posttest- Advertising Campaign.
Unit IV - Sponsorship and Publicity – Advertising concept-Media relations Techniques- social media and advertising- Public Opinion- propaganda- Advertising tools – roles and responsibilities of different creative and production departments -Legal and Voluntary roles- Research in Advertising.
Unit V - Contemporary trends in Advertising. Case Studies. Roles and responsibilities. Career Opportunities in Advertising.

Text Books

1. David Ogilvy. Ogilvy on Advertising, Vintage Books. 2000
2. Otto Kleppner. Fundamentals of Advertising and Implementation. Prentice Hall of India.

References

1. Malcolm Gladwell. The Tipping Point: How Little Things Can Make a Big Difference
2. Sally Hogshead. Fascinate, Revised and Updated: How to Make Your Brand Impossible to Resist David Meerman Scott. The New Rules of Marketing and Public Relations

17MC2007 VISUAL DESIGN LAB

Credits: 0:0:2

Course Objectives

- To discuss the different needs of graphics in our daily life such as preparing a presentation, editing our phone photos, etc.
- To illustrate how to meet these simple graphical needs.
- To evaluate the degree of creativity in achieving the desired design work.

Course Outcomes

- Students will design a logo for a given purpose/theme.
- Students will learn to construct a design work from scratch for their daily needs such as their own assignment cover page,
- Students will learn to do PowerPoint backgrounds, banners for their own websites and many more.
- Students will learn how to organize the hierarchy of software array used for different graphical needs.
- Students will display creative visual designs for all media communication.
- Students will produce custom based templates for related media subjects.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2008 PRINT MEDIA

Credits 3:0:0

Course Objectives

- Students will identify different forms of print media and news reporting.
- Students will learn how to source a news for newspapers, magazines and other print medium.
- Students will explore the basics of types of reporting skills for print journalism.

Course Outcomes

- Students will learn the basics of print journalism.
- Students will display their knowledge on newspaper and magazine structure of presenting news.
- Students will learn to know techniques of news values and placements.
- Students will demonstrate various types of reporting beats.
- Students will know to use various news formats for print journalism.
- Students will learn to develop skills as a reporter.

Unit I - Print Media/Journalism – History - Journalism as Fourth Estate - Who is a Journalist? - Role and responsibilities of a Journalist - What is News - Elements of News - News Values - Types of News - News Sources: types; credibility and protection - News versus Information, Hard vs. Soft News - Difference between article, news, feature, backgrounder, editorial. Newsroom structures of Newspapers, magazines and news agencies - Changing Concepts of News: Factors & Issues
Unit II - Newspapers – Organizing the News - Inverted Pyramid style of news writing-Why & How -

Headlines - Various types of leads/intros – News Feature: Characteristics, Types, Writing Style and Packaging - Style Book – Attribution – Quote- Background – Context - Ensuring Accuracy, Objectivity, Fairness and Balance - Magazines – Types – General and Special – Characteristics – News reporting – Style and formats.

Unit III - News gathering process - News Reporting - Various types of reporting (Objective, Interpretative, Investigative, In-depth, Straight) - Reporting for Newspapers, News Agencies and Magazines - Role and Importance of Sources - Pitfalls and problems in reporting-attribution, off-the-record, embargo.

Unit IV

Reporters: Qualities and Responsibilities - Set up and functions of a city reporting room in a daily and bureau - Reporting staff: News Bureau, Bureau Chief, Chief Reporter, Correspondent, Stringers and freelancer - Reporting for different beats. Cultivating, Verifying and Dealing with Sources of News - Risks of Reporting - Ethical aspects of Sourcing news & Reporting -Different formats of news report - Factual and Routine news - Analytical News - Interpretative News & Descriptive News - Investigative News and research based or in-depth news - Sequential News.

Unit V - News selection and Placement - Newspaper format: Full format, Tabloid and Magazine - Elements of Design: Shape, Colour, Texture - Aesthetics- Balance, Contrast, Rhythm, Unity, Harmony - Typography, Colour and Visual representation - Rules: Column Rule, Cut off Rule, Window - Front Page Design /Functional Design /Horizontal design - Modular design, Total page design /Single-theme design - Preparing Dummy of Newspaper and its different pages - Principles of Graphics and their Importance - Software for Designing: PageMaker, Quark Express, Corel Draw, Photoshop -In-design - Newspaper Printing Methods – Exercises all encompassing.

Text Books

1. Shrivastava, K.M., 'News reporting and editing', Sterling publishers Pvt. Ltd, New Delhi, 2003.
2. Kamath M.V., 'Professional Journalism', Vikas publishing House, New Delhi.1980.
3. Vir Bala Aggarwal, 'Essentials of Practical Journalism', concept publishing
4. Company, New Delhi, 2006.
5. Bruce D. Itule, and Douglas A. Anderson. 'News Writing and Reporting for
6. Today's Media', McGraw Hill, New Delhi, 2003

References

1. Joseph M.K., 'Outline of Reporting', Anmol Publications, News Delhi, 2002.
2. Franklin, et al., 'Key Concepts in Journalism Studies', Vistaar Publications, New Delhi, 2005.
3. Jan R. Hakemulder,'News Reporting and Editing', Anmol Publications, New Delhi, 1998.

17MC2009 PHOTOGRAPHY

Credits: 3:0:0

Course Objectives

- To enable students to identify basic concepts of photography
- To enable students to explore different kinds of camera techniques.
- To enable students to gain exposure to outdoor and indoor photography.

Course Outcomes

- Students will identify the basics concept of photography.
- Students will learn the different kinds of camera techniques.
- Students will demonstrate camera handling techniques.
- Students will independently take outdoor and indoor shots
- Students will experiment with different types of lighting.
- Students will learn product, industrial, fashion photography

Unit I - History of Photography- Human eye – simplicity vs. complexity – visualization – photographic realism, abstraction and art – creativity – intuition - Camera: overview on photography – types of camera - shutter – aperture – depth of field – major type of camera - purpose and control over aperture- aperture – shutter speed – factors that affect D.O.F.

Unit II - Lens – Types of lenses - focal length – wide angle, normal, and long focal length lenses – focus and depth of field-hyperfocal distance – determining – Film: selecting and using film –tungsten film & daylight films – black and white films – monochrome films – infrared films and other special effects films-different formats-35m-120 mm – 220mm – 4 x 5 film -Film speed – How film responds to light-film grain – sensitivity – structure of film – light vs film

Unit III - Photography lighting techniques - Exposure and image making techniques: how an exposure meter works –ambient light meters –flash meter readings- built in meter – external light meter – metering techniques –incident light metering – reflective light metering - spot metering – gray scale- framing- perspective- texture - pattern – composition and design

Unit IV - Black and White photography: Black and white film – Black and white filters – Developing – developing tank – structure of B/W film- Printing.-making a mask – photograms- push processing – pull processing – masters of B/W photography – Ansel Adams – identifying the various zones – sets and costume for photography – tools and techniques.

Unit V - Making a career in photography – categories of photography - Photo journalism – nature, scope, coverage of spot news – photo essay, feature and documentary– Overview and components of Travel and outdoor Photography, portraits, macro photography, fashion photography, ad photography, action, architectural, forensic and medical, wildlife, underwater, food etc. - Photo compositing - photo editing, Image manipulation – ways to market photography - trends in photography.

Text Books

1. MukeshSrivatsa, Digital Photography, Unicorn books, 2012.
2. Scott Kalby. Digital Photography. Peachpit Press. 2010.
3. Kenneth kobre, Photo Journalism – The Professional's approach, Focal Press. 2003.
4. Paul Harcourt Davies. A complete guide to close up and Macro Photography. David Charles, 2001.

References

1. John Hedgecoe, The Book of Photography, Dorling Kindersley, 2005
2. Micheal Langford. Advanced Photography. Focal Press, 7th Edition, 2008.
3. Bruce Barnbaum. The Art of Photography. Rockynook. 2010.

17MC2010 PHOTOGRAPHY LAB

Credits: 0:0:4

Course Objectives

- To make students understand the various forms of capturing photographs creatively
- To enrich the aspects of composing the subjects creatively.
- To kindle the creative instincts among students.

Course Outcomes

1. The students will be good enough to capture creative photographs
2. The students will obtain an in-depth cognition on framing divergent images.
3. The students will gain confidence in handling DSLR for basic photo assignments.
4. The students will know to edit the photos for desired applications.
5. The students will know to choose right lenses and filters for better photography.
6. The students will be able to choose varied fields in photography.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2011 BASICS OF MULTIMEDIA

Credits: 3:0:0

Course Objectives

- To learn the basic tools necessary for designing for print media
- Apply the necessary tools to learn fundamental & advanced knowledge of multimedia related applications.
- To be competent in the Multimedia segments and to bring out novel ideas by exploring the multiple solutions for the human-centric problems

Course Outcomes

- Students will create, and apply appropriate design techniques.
- Students will design creative ideas relevant for print medium.
- Students will be able to work on contemporary multimedia assignments to potential clients.
- Students will know the function of the general skill sets in the multimedia industry.
- Students will work in congruence to make multimedia function in different media platforms.
- Students will be able to solve human-centric problems using multimedia.

Unit I - Evolution of Multimedia – structure and components of multimedia – multimedia platforms- applications of multimedia in education, communication, medication, business, entertainment – video conferencing, web streaming, video streaming, Internet Telephony
– virtual reality – artificial intelligence.

Unit II - Introduction to authoring – authoring approaches – (programming, screen based, information centered) – features of authoring systems – cross platform systems – cost – technical support – ease of interface design.

Unit III - Content planning – Prototyping – programming – testing – evaluation - delivery modes and techniques.

Unit IV - Image processing – special effects – 2D & 3D animation – compositing – rendering and editing – cell & computer animation – model building – key frame animation – dynamic particles – character animation – modeling and animation techniques.

Unit V - Video basics - Working with video - Video Formats - Video hardware - encoding – decoding – Video editing – non-linear editing – Audio basics – working with audio – audio formats –audio hardware & software. Adobe Premiere – tools & features – recording audio & video –types of audio & video – time line – project planning – trimming – motion effects – digital composting.

Text Books

1. The Ultimate Multimedia Handbook, Tata Mc Graw Hill
2. Multimedia at Work, Tata Mc Graw Hill
3. Adobe Photoshop Unleashed, Tata Mc Graw Hill

References

1. Teach yourself Corel Draw, Sams Publishing
2. Flash Mx for Dummies, Pustak Mahal

17MC2012 VISUALIZATION

Credits: 3:0:0

Course Objectives

- This course introduces students to the relationship between theoretical concepts and studio-practice.
- This course seeks to help the student's identification of their audience
- The course enables exploration of the work and discussion of visual literacy with the ability to critique.

Course Outcomes

- Students will learn the art of multi-lateral thinking.
- Students will learn to use semiosis and its elements for creative thinking.
- Students will articulate ideas; both orally and in written form.
- Students will self-evaluate with increased self-confidence.
- Students will learn to employ creative matrix points for visual production.
- Students will demonstrate high levels of visual thinking forms.

Unit I - Dreaming in Different Tongues: Visualizing the unimaginable - The languages and the way we think - Visuals and the Mind - Domination thoughts and feelings - the idea image - state of being obsessed - the act of obsessing – style and expression

Unit II - Taking one image or form - duplicate and manipulate - Mapping of thoughts - forming relationship between the parts of the whole - Finding inspiration for your story

Unit III - Alternative processes, practices and forms: Selecting and investigating a life path – Documenting - Dream diaries - Media for entries - photographs, notes, and drawings - Working with materials and/or processes – Experimenting with other media objects- Appreciating renaissance artwork for inspiration on lighting

Unit IV - Narrative/ Storytelling – self, surrounding, family, special interests using creative media tools – Using Looking Glass self-theory to visualize self - The importance of sub plots - Open and Closed film - The Value of objects

Unit V - Research, collecting and developing Self – Collecting and documenting images, objects and materials relating to self - The final form – Structure - Non-traditional art forms - Lucid Dreaming

Text Books

1. Nancy Margulies, Christine Valenza. Visual Thinking: Tools for Mapping your Ideas. Crown House Publishing Company. 2005.
2. J.Y.F Lau. An Introduction to Critical thinking and creativity: Think More, Think Better. Wiley Publications. 2011
3. Dan Roam. Blah BlahBlah. Portfolio. 2011

References

1. Rudolf Arnheim. Visual Thinking. University of California Press, 2004.

2. Robert H. Mackin. Experiences in Visual Thinking.Brooks/Cole Publishing Company, 1980.
3. Weintraub, L. (2003). In the Making: Creative Options for Contemporary Art. New York: D.A.P./Distributed Art Publishers. Green Library Reserves Desk - 2nd Fl. -- N6512.W3873 2003

17MC2013 2D ANIMATION

Credits: 3:0:0

Course Objectives

- To introduce the different animation techniques used in earlier days.
- To illustrate the different ways and means of achieving a 2D animation.
- To demonstrate the methods of digital 2D animation.

Course Outcomes

The students will be able

- To list the different methods of animation techniques used until date.
- To set-up their own animation story and represent it using storyboards
- To create animation characters in 2D and bring them to life using animation.
- To illustrate varied animation techniques.
- To learn frame by frame animation
- To learn animation special effects.

Unit I - The Project Plan - Libraries – History of animation – Types of Animation - evolution of animation methods - Storyboards and Animatics – moving picture – Flipbooks.
Unit II - Setting Up Your environment - Plug-ins and Extensions- Frame by Frame Animation-Animating with Tweens
Unit III - Animation Special Effects – Script –Storyboard – Designs - Leica Reel (Animatic) - Pencil Tests (Animation) – Inking – Visual effects – tools and functions.
Unit IV - The Principles of Animation and persistence of vision - Squash and Stretch – Kinematics - Choice of character.
Unit V - Character design –Timeline - The walk cycle -Digitizing and compiling the frames – Action Scripts – Embedding video and sound synchronization - Applications 2D animation – Advertising, films etc.

Text Books

1. Jayne Pilling. Animation and Beyond, Rotovision – 2010.
2. Harold Whitaker, John Halas. Timing for Animation, 2nd edition, Focal Press. 2009.
3. Mark Simon. Producing Independent 2D Character Animation. Focal Press.

References

1. Character Animation Fundamentals: Developing Skills for 2D and 3D Character by Steve Roberts, 2012
2. The animator's guide to 2d computer animation by Hedley Griffin, 2001
3. Adobe Flash Professional CS6 Essentials by William Heldman, 2012.
4. Sams Teach Yourself Adobe Flash CS4 Professional in 24 Hours. Adobe Reader by Phillip Kerman, Lynn Beighley, 2006

17MC2014 2D ANIMATION LAB

Credits 0:0:4

Course Objective

- The students will be introduced to the advanced concepts of 2D animation
- To help students gain knowledge about cartoon animation
- To train the students in the area of 2D Animation and its software applications.

Course Outcome

- The students will gain hands on experience by undergoing different tools of 2D animation using Flash software
- They will be able to create a 2D cartoon animation at the end of the experiments
- Students will gain the knowledge in computer graphics and animation.
- The students will be trained in the area of character and concept designing in 2D animation.
- This lab will enable students to gain an expertise in software tool and their interfaces.
- This lab will enable students to work upon real time projects of professional quality.

Experiments

Experiments will include Flash Layout, Motion Tween, Shape tweening, Motion guide using Flash Basic effects in Adobe after effects

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of HoD/Director and notify it at the beginning of each semester.

17MC2015 VIDEO PRODUCTION

Credits: 3:0:0

Course Objectives

- To teach the students with the basics of cinematography.
- To import knowledge to the students on the aesthetics of video production.
- To keep the students updated with the techniques in video production.

Course Outcomes

- The students will master the time tested concept of applying cinematography in their production techniques.
- The students will get trained to industry standards.
- The students can be able to understand basic elements of video production.
- The students will exhibit creative ways of camera handling.
- The students will produce video with aesthetics and semiotic understanding.
- The students will know the latest in video making process.

Unit I - Video and Film as an Art - Theme and Focus - Fictional and Dramatic elements - Elements of Video - Visual Design - Mise-en-Scene, Montage, Decoupage – Cinematography – The Director's style.

Unit II - Introduction to Video and technology - Picture formation-T.V Scanning: Horizontal & Frame Vertical- & field rate-Resolution video bandwidth, sync. Blanking signals, colour burst, sensitivity, linearity etc.-Television standards: NTSC, PAL, SECAM - Principle of Video Camera Primary & Photo conduction, photo voltaic, photo emissive effect-Working secondary colours- CCD cameras: Three CCD, single CCD colour camera- principle of video camera- Various sizes of pickup devices

Unit III - Components and Controls of Video Camera. Parts of a video camera-Different controls on video camera-Power switch, preheat, genlock, white balance, gain, iris, pedestal etc.-Zoom control: servo, manual, remote, zoom extenders - Focus control: auto, manual, remote, back focus, macro focus.-Camera view finders (B/W and colour). Its indicators and control.

Unit IV - Balancing of Colours of a video camera. Colour temperature-White balance: Process and need.-Camera filters-Camera control unit (CCU)-Waveform monitor for output level of video-Vectorscope - types of camera angles – Scene requirements – continuity – Cinematic time and space – Shots – Types of shots – scene direction – types of action - composition – rules- balance, unity and emphasis.

Unit V - Video camera lenses. Perspective-Types and use-normal lens, telephoto lens, wide-angle lens. Zoom lens-Tripod, types of tripod heads, dolly, trolley & other accessories-Different types of camera angles and use-Camera movements – types & use - Different Types of Television Cameras-NG camera - EFP camera - Studio cameras - Special cameras: underwater camera, Endoscopic camera, Aerial photography camera, remote control camera, high-speed video cameras - Types of microphones used on video camera - Types of audio & video connectors.

Text Books

1. Peter ward "Studio and outside broadcast Camera"
2. BernardWilkie "Creating special effects for TV & Video"

References

1. Roy Thomson "Grammar of the shot"
2. Der Lyur & Graham "Basics of Video Production"

17MC2016 AUDIO PRODUCTION

Credits: 3:0:0

Course Objectives

- To define and understand nature of sound and its elements and process
- To translate skills in audio productions and programs
- To design and evaluate quality digital audio program output.

Course Outcomes

- The students will gain professional knowledge on digital audio productions.
- The students will use the skills in designing digital audio production and editing.
- The students will evaluate the standard digital audio productions.
- The students will gain latest in sound reinforcements.
- The students will master in audio software.
- The students will learn trends and technologies in audio production.

Unit I - Fundamentals of Sound Elements- Acoustic treatments- Means of control – Analog and digital sound –Audio equipment.
Unit II - The production chain and responsibilities – Recording sessions- Mono, Stereo Track Recording- Studio Communications – Noise and pitch reduction/correction – Ambience Dolby- Microphones and applications- Digital Recording and Authoring – conversion, sampling –Equalizer and application – Digital audio interfaces – Amplifier technologies – Output transducer technologies
Unit III - Computers in Music Technology-Digital mixers and audio workstation- Musical instruments and Recording – MIDI applications-
Unit IV - Audio Dubbing and Synchronization- producing audio clips and sample programs for various skills learnt –workstations – Audio studio – acoustics.
Unit V - Daw' s Software, Tools and application. Latest audio production software tools and applications – problems with sound quality – Lipsync – edit and mix – Voice over recording – Dialog replacement – working with sound effects.

Text Books

1. Paul White, Basic Live Sound, Sanctuary Publications 2003.
2. David Simons, Analog Recording, (3rd Ed) Backbeat Books, 2006.
3. Emile D Menache, The Desktop Studio: A guide for computer based Audio production. Hal Leonard Corporation, 2002.

References

1. Francis Rumsey & Tim McCormick, Sound and Recording, Focal Press (5thed), 2005.
2. Steven Gurevitz and Paul Middleton, Music Technology workbook, Focal Press, 2006
3. William Moylan, Understanding and crafting the Mix, Focal press 2006

17MC2017 VIDEO PRODUCTION LAB

Credits: 0:0:4

Course objectives

- To teach the student the intricate process involved in production of various genres of videos.
- To enable the student to choose the right type of shots to get the story across to the audience.
- To make a student understand the problems faced during the creation of a video project and to find solutions.

Course outcomes

- Students will be able to deliver better projects.
- Students will be able to portray the scenes conceived in their mind.
- Students will be able to give solutions using the video tools.
- Student will be able to choose the right type of shots to get the story across to the audience.
- Students will be able to emphasize the location in the scene with tools.
- Students will be expert in process involved in production of various genres.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2018 AUDIO LAB

Credits: 0:0:4

Course Objectives

- This lab will instruct how to prepare for making a movie,
- It will educate how to collect digital video, upload digital video to a computer,
- It will instruct how to edit the video and audio and then produce a final output.

Course Outcomes

- Students will be able to do recording in studio environment.
- Students will know the basic audio terminologies used in the industry.
- Students will be able to work with appropriate microphone usage and placement
- Students will work with advanced audio recording and mixing software.
- Students will record and edit single and multiple audio tracks.
- Students will demonstrate creative and functional application of sound and audio along with visual media.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2019 WEB DESIGNING

Credits: 3:0:0

Course Objectives

1. To explore the different techniques in building a website/webpage.
2. To inculcate the inevitable importance of www and having an identity on Internet.
3. To educate the methods involved in designing for www and hosting a simple site.

Course Outcomes

- The students will be able to explain the significance of having their own webpage/website as their identity in the world of Internet.
- The students will be able to construct a website using basic HTML and Web building tools driven by their creativity.
- The students will be able to host their own website or webpage and test the connectivity and record analytics of their site traffic.
- The students will be able to learn the basic and advanced features in web designing software.
- The students will be enables to create interactive webpages.
- The students will learn aesthetics and creativity in web designing.

Unit I - Introduction to WWW – Evolution of Internet – email – FTP – download and upload ratio – peer to peer sharing – file hosting services – ISPs – Functions of MODEM and Routers –saving and retrieving .
Unit II - HTML - .htm/.html files –Browsers and types – browser add-ons and extensions – web building tools – web creation environment.
Unit III - Graphics for web – animated graphics – navigational options for web – human computer interaction
Unit IV - Lnk maps – site maps – website hierarchy - hosting services – domain names – storage space – traffic limits
Unit V - Free blogs – tracking analytics – Google analytics engine – AdSense – downtime and maintenance.

Text Books

1. David Crowder and RhonaCrowder,"Web Design with HTML/Flash/Javascript& Ecommerce BIBLE",WileyDreamTech India Pvt. Ltd,2001
2. Thomas A. Powell, "HTML: The Complete Reference", McGraw Hill, 2001.
3. H.M. Deitel, P.J. Deitel, "Internet & World Wide Web – How to program", 3rd Ed., et al.,Prentice Hall,2003.

References

1. Danny Goodman, Michael Morison, Paul Novitski, "Java Script Bible", Wiley Publication, 7 Edition
2. David Flanagan, "JavaScript: The Definitive Guide", O'Reilly Media, Inc, 7th Edition, 2011.

17MC2020 WEB DESIGNING LAB

Credits: 0:0:4

Course Objectives

- To learn creation of web pages, scripting objects, application and special objects.
- The students will be trained to programme ASP and XML.
- Understand the importance of the web as a medium of communication.

Couse Outcomes

- Students will become familiar with graphic design principles that relate to web design and learn how to implement these theories into practice.
- Students will develop skills in analyzing the usability of a web site.

- Students will learn the language of the web: HTML and CSS.
- Students will develop skills in using WYSIWYG web development software
- Students will develop skills in digital imaging (Adobe Photoshop.)
- Students will implement and understand how to interpret basic web analytics.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2021 POST PRODUCTION TECHNIQUES

Credits: 3:0:0

Course Objectives

- To enrich the students with the basics of video and film editing.
- To emphasise the importance of editing and how it helps in narration.
- To provide a complete theoretical knowledge for the students to become professional editors.

Course Outcomes

- Students will get thorough knowledge on the techniques of video and film editing.
- Students will be expert in editing with the editing techniques.
- Students will be able to analyse the video editing in a film.
- Students will be able expert in narration of the film.
- Students will be professionally sound knowledge editors would be created.
- Students will get updated till the recent trends and technology in editing.

Unit I - Editing Systems Audio post production equipment - mixing consoles and audio processing equipment - studio recording - mikes and microphones - Transmission and reproduction of audio post production materials - Synchronizing and controllers - sound effects - Audio workstations- stereo – music - monitoring and the environment

Unit II - Audio Editing Recording Digital Audio - Recording audio for post-production - Editing software's - Pre production for post-production - Track planning and Post Production sequences - Digital Audio Transfers and Recording - Voice over perspectives

Unit III - Video Post-Production Technology and techniques of video editing - TV Signals - time code - Digital video and video tape formats - video tape editing - preparing for post-production - offline editing process- online editing Digital video effects - Audio post production for video

Unit IV - High Definition Post Production Frame recording method - bit depth - chromo sampling, compression - mixing SD and HD - computer file size for high definition video - conversion problems - off-line/online edit system compatibility – shoot - edit and deliver at one frame - LCD monitors - plasma screens - DLP monitors

Unit V - Color Correction Color theory - Perceptions - Colour monitors and tools - Common colour errors and techniques - Introduction to Advance colour correction

Text Books

1. Jay Rose, Audio Post Production for Digital Video, CMP Books 2002.
2. Gary H Anderson, Video Editing and post production, A Professional Guide, Focal Press,1999.
3. Tim Amyes, Audio Post production in Video and Film, Focal Press, 2001

References

1. Des Lyver, Basics of the Video Production Diary, Focal Press, 2001.
2. Steven E Browne,High Definition Post Production: Editing and Delivering HD Video, Focal Press 2007.
3. Steven Hullfish-Jaime Fowler, Colour Correction for Digital Video: Using Desk Top Tools to Perfect Your Image, CMP Books, 2003.

17MC2022 VISUAL EFFECTS

Credits: 3:0:0

Course Objectives

1. To develop student's aesthetic, intellectual &technological abilities through programs that integrates theory & practical.
2. To sharpen the skills in the latest animation/ multimedia software/ tools.
3. To create high-quality visual effects (VFX) for films, TV, advertisements & games

Course Outcomes

- Students will gain skills at advance level of designing.
- Students will be expert in doing the Special Effects.
- Students will expert in latest animation/ multimedia software/ tools.
- Animation thereby making industry-ready professionals.
- Students will gain specialist knowledge in developing visual effects.
- Students will be able to produce high-quality visual effects (VFX) for films, TV, advertisements & games.

Unit I - Digital representation of visual information - Image Generation, Pixels, Components, Channels, Spatial Resolution, Color Manipulations, Creating Title animation – Info graphics – Lower third - Color grading – Matte Removal

Unit II - Video Effects - transition effects – 3D Compositing – Important concept and scripting - Digital video formats

Unit III - Special effects in video editing - Masking- Making an edit invisible, Motivation for every edit- geometric transformations, Expression Language, Filtering - image tracking and stabilization - Film formats

Unit IV - Delivering a message - Bearing audio in mind, editing is creating - creating elements and integration techniques Lighting - Interactive Color and lighting - light wrapping - Shadows

Unit V - Control of Overuse technique or Visual effects - digital colour matching - spill suppression – Atmosphere - camera characteristics.

Text Books

1. Nonlinear Editing: Media Mannel; Morris, Patrick, Published 1999 Focal Press.
2. Dough Kelly, "Digital Composting in-Depth", Coriolis, 2000.
3. Lee Lanier, "Digital Compositing with Nuke", Focal Press, 2012

References:

1. Richard Rickitt, "Special Effects: The History and Technique", 2nd edition, Billboard Books, 2007
2. Ron Brinkmann, The Art and Science of Digital Compositing, second edition, Morgan Kaufmann, 2008.
3. Steve Wright, Digital Compositing for Film and Video, Focal Press, 2006

17MC2023 FILM STUDIES

Credits 3:0:0

Course Objectives

- To teach the various modes of discourse in film
- To imbue insights on analysing different genres of films
- To practice the art of culling out films and appreciating the various aspects of it

Course Outcomes

- The student will develop an overall understanding on the structure of film narration
- The student will have a thorough knowledge on the narrative aspects of film
- The students will be able to connect psychologically with the films
- The students will be thorough with the art of appreciating and analysing films
- The students will become good learners of films
- The students will acquire high skill on knowing film theories and the art of watching films

Unit I - Early Cinema (1893-1903), Development of classical Hollywood cinema (1903-1927), German expression (1919-1924),French Impression and Surrealism(1917-1930),Soviet Montage(1924-1930),The Classical Hollywood Cinema after the coming of sound, Italian neo-realism(1942-1951),The French New Wave (1959-1964), Japanese cinema, Cinema in the third world, Indian (Hindi, Tamil & other languages),Contemporary trends.

Unit II - Planning, Pre-production-Concept/Story development, Scripting/Screen play writing, Budgeting, Casting, Locations, Financing, Production-Shooting, Direction & Cinematography, Post production- Editing, Sound recording, Dubbing ,Special effects, Graphics and Final mixing, Distribution and Exhibition.

Unit III - Mise-en-scene, the power of mise-en-scene, aspects of mise-en-scene, Space and time, narrative functions of mise-en-scene, Cinematographer properties-the photographic image, framing, duration of the image, montage and long take. Editing-dimensions of film editing, continuity editing, alternative to continuity editing, Sound –the powers of sound, fundamentals of film sound, dimensions of film sound, functions of film sound, theatrical sound formats.

Unit IV - Approaches to studying film, Narrative and Non Narrative films, Structure of a narrative film, Cinematic codes, The concept of form in films, principles of film, narrative form, non-narrative films, dividing a feature film into parts and Genres (language, style, grammar, syntax), Documentary genres.
Unit V - Study of Great Indian and International filmmakers like D.W. Griffith, Charlie Chaplin, Alfred Hitchcock, Akira Kurusowa, Ingmar Bergman, Satyajit Ray, Adoor Gopalakrishnan and others. Film Appreciation – Learning film appreciation formulas – Review of popular films.

Text Books

1. David Bordwell& Kristin Thompson, "Film Art An Introduction", 8th edition, McGraw Hill, 2008.
2. Sarah Casey Benyahia, Freddie Gaffney & John White, "As Film Studies The Essential Introduction", Routledge, 2006.
3. James Monaco, "How to read a film", Oxford University Press, 2009.

Reference Books

1. Greg M. Smith, "Film Structure and the Emotion System", Cambridge University Press, 2003.
2. Nitzan Ben Shaul, "Hyper-Narrative Interactive Cinema", Rodopi, 2008.
3. Joseph M. Boggs & Dennis W. Petrie, "The Art of Watching Films", 7th edition, McGraw Hill, 2008.

17MC2024 VISUAL EFFECTS LAB

Credits: 0:0:4

Course Objectives

- To make students to specialize in the creation of 2D/3D computer animated elements for digital visual effects.
- To enrich the skills of students to latest animation/ multimedia software/ tools.
- To make students to give output in high-quality visual effects (VFX) for films, TV, advertisements & games.

Course Outcomes

- Students will be able do the creation of 2Dcomputer animated elements for digital visual effects.
- Students will be able do the creation of 3Dcomputer animated elements for digital visual effects.
- Students will be able to create their own concepts in animation.
- Students will be able to create animation in the industry standard.
- Students will be able to portray the latest animation/ multimedia software/ tools.
- Students will be trained to give output in the high-quality visual effects (VFX) for films, TV, advertisements & games.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2025 POST-PRODUCTION LAB

Credits: 0:0:2

Course objectives

- To help students learn and develop the editing sense required to create good projects.
- To help students identify and rectify problems in the footage.
- To help students to learn basic tricks of the edit.

Course outcomes

- The editing sense of the student will improve, as they would have edited hours of footage.
- Students would be able to make use of the software in a professional manner.
- Students will be expert sense of choosing the right transitions would be better.
- Students will do the titling of a film with special effects
- Students will be expert in color correction.
- Students will be able to identify and rectify problems in the footage.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2026 PORTFOLIO LAB

Credits: 0:0:4

Course objectives

- To help students learn and develop their own portfolios.
- To help students present their portfolio in proper/required formats.
- To help students to learn new ways to showcase their portfolio.

Course outcomes

- The students will use media platforms to showcase their portfolio.
- The students will be able to present their portfolios in new media formats.
- The students will be able to produce their portfolios to using convergent media platforms.
- The students will do the portfolio covering a variety of media.
- The students will be expert in framing portfolios for different media agencies.
- The students will be able to produce portfolio for various genres.

Experiments

The students will have to compile all the laboratory works carried out in the first three years of their study and submit as their portfolio.

17MC2027 TELEVISION PROGRAM PRODUCTION

Credits: 3:0:0

Course Objectives

- In this course students will experience television studio production including technical operations, production roles and the production processes required to work in a multi-camera studio environment.
- Students will learn about television as a broadcast medium, explore different television program formats and their requirements
- Students will have the opportunity to work as part of a crew in a variety of roles to produce a series of television studio productions.

Course Outcomes

- Students will learn to write scripts for TV Program Production.
- Students will learn creative ways to plan TV programs.
- Students will learn the economics behind new programme making.
- Students will learn to use camera, its technicalities while program production.
- Students will learn the art of program making.
- Students will demonstrate myriad TV production genres.

Unit I - TV Medium – TV as a cultural form - Audiences – Infotainment - Television Program formats, Research, Visualizing ideas and Story board

Unit II - News - Visual Language - Basic styles - rdr, fsgfx, vo. PTC, Stand-up etc. - Guidelines for News Scripts - ENG & EFP – News Debates – Visualities

Unit III - TV Genres -Conception, Intention, Characterization and Structure of TV Episodes – Drama – Telefilm – Soaps – Reality Shows – Talk Shows – Live shows - Showrunners

Unit IV - TV programs for special audiences – Men, women, children, Professional bodies, Agri and Industry, Science and Arts, Technology – Culture - Social Development.

Unit V - Study of Popular TV programs - Analysis – Report

Text Books

1. Henry Jenkins, “Worshipping at the Altar of Convergence”
2. JosteinGripsrud, “Broadcast Television: The Chances of Its Survival in a
3. Digital Age”
4. Jeffrey Sconce, Introduction to Haunted Media
5. John Caldwell, “Convergence Television: Aggregating Form and Repurposing
6. Content in the Culture of Conglomeration” Screening: McLuhan’s Wake (Kevin McMahon, 2002), 94 min.

References

1. Christopher Anderson, “Television Networks and the Uses of Drama”
2. Richard Butsch, “Five Decades and Three Hundred Sitcoms about Class and
3. Gender”

4. Ellen Seiter and Mary Jeanne Wilson, "Soap Opera Survival Tactics"
5. Jeffrey P. Jones, "Cable's Impact on the Talk Show"
6. Jason Mittell, "A Cultural Approach to Television Genre Theory"

17MC2028 ADVERTISING LAB (PRINT, VIDEO, MAGAZINE)

Credits: 0:0:2

Course Objectives

- This lab will enable students to critically think about making ads in real-world communication.
- Develop an advertising display using various media tools like print, broadcast and new media.
- Execute an applied learning supported by research methods and other diversity issues in advertising.

Course Outcomes

- Students will be able to demonstrate and create innovative thinking in advertisements.
- Students will be able to distinguish advertising techniques of all media forms.
- Students will produce feasible ads for all consumer durables, ideas and services.
- Students will apply Advertising concepts in commercials.
- Students will learn to write and produce for Public Service Advertisements.
- Students will understand unique editing techniques used in commercials.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2029 BROADCAST JOURNALISM

Credits: 3:0:0

Course Objectives

- To learn about the basics of Radio and TV Broadcasting
- To learn how to manage the Broadcast Environment.
- To learn the skills to evaluate the contents of Broadcast Journalism.

Course Outcomes

- To know about the concepts and basics of Journalism
- To familiarize the operation of broadcast Industry.
- To learn about the Radio and Television News Programs styles.
- To learn the style, the activities & logistics involved in the process of Broadcast Journalism.
- To be able to assess the Broadcast News content.
- To familiarize with Broadcast program and evaluation methods

Unit I - Introduction to Broadcast Journalism – Qualities of a Journalist –Freelancing & Training - What is news – Source of News – Getting the Story.
Unit II - Radio News Room Structure – News Writing – News Bulletin – News Presentation - Interviews – News desk & News room Management —Programme production – Specialized programmes.
Unit III - Electronic News Gathering – Camera Shots – TV Script Writing –Compiling the Report- Editing the Image & Visuals used
Unit IV - Power, Freedom & responsibilities – Censorship in developing nations – Objectivity & Impartiality – Responsible reporting – Internal pressure on .reporting – Journalist code of Professional Conduct – Legalities
Unit V - The News Studio Set & Control room – Video Journalism - Research– News online –3 Qualities of an online journalist - Teletext – Satellite Images for news -Computerized News room.

Text Books

1. Broadcast Journalism by Andrew Boyd. Vth Edition Focal Press 2007
2. Basic Radio Journalism by Paul Chantler & Peter Stewart. Focal Press 2007
3. Aditya Sengupta: Electronic Journalism – Principles & Practices: Authors' Press, New Delhi Ist PB Edition 2006.

References

1. Keval J. Kumar, Mass Communication in India, Jaico Publications, 2011.
2. Ravindran R.K,Handbook of Radio,TV and Broadcast Journalism, Anmol publications,2005.
3. Lynette Sheridan Burns, Understanding Journalism, Vistaar Publications, 2002.

17MC2030 NEWS PRODUCTION LAB

Credits: 0:0:2

Course Objectives

1. Students will learn to write, report and produce a five-minute radio newscast covering local, regional, national and international news.
2. To achieve professional-standard writing skills writing that is clear, concise, accurate and conversational.
3. Strong writing ability is just as essential to broadcast journalism as it is to its print and online counterparts.

Course Outcomes

- Students will display professional reporting skills ready to fit in the news industry.
- Students will recognize the elements of broadcast scriptwriting and adapt print news stories for presentation in a news broadcast.
- Students will produce news-based video segments ready for broadcast/webcast
- Students will apply the concepts of non-linear audio and video editing to news segments for broadcast/web.
- Students will identify the major components needed to produce a news production for broadcast/new media
- Students will be able to compare the relative merits of telling the same story in various traditional and new media.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC2031 MEDIA MANAGEMENT

Credits: 3:0:0

Course Objectives

- To learn about the basic principles and practices of Management.
- To learn the management styles of Media Production Houses.
- To learn the skills needed for decision Making and Monitoring.

Course Outcomes

- To know and learn the concepts and Principles of Management
- To learn the style, methods of media Human Resource Management.
- To be able to assess the quality and efficiency of media management.
- To familiarize with media technology management
- To learn to compare and evaluate media production management styles.
- To learn the marketing managerial skills through case studies.

Unit I - Basics of Management: Concept of Management, Principles of Management, Factors influencing Media Management and application of Techniques.

Unit II - Fundamentals of Media Management: Structure, Organization, Different Departments and functions of Print and Electronic Media. Factors Influencing - Management Dictions; Types, of Media Ownership-Advantages and Disadvantages.

Unit III - Economics of Newspapers- Advertising V/S. Circulation- Scissors Dance theory-Management Problems of Small- Medium- Large Newspapers; Gathering, Processing, Printing, Circulations, Distribution, Advertising - Professionalism trade Unionism.

Unit IV - Economies and Administrative concerns of Government owned electronic media - Private channels - market driven media -Social commitment Vs. Profit making

Unit V - Economics of film industry - creativity - production - marketing - distribution - exhibition - ownership V/s. piracy - Function - and management of news agencies in India.

Text Books

1. C.S.Rayudu, Media and Communication Management, Himalaya Publishing House, 2014
1. B.K Chaturvedi, Media Management, Routledge Publishers, 2009.

Reference Books

1. Dandulop, Social Media Management Handbook, 2010.
2. Angela Wadia, Broadcasting Management in India, Kanishka Publishers, 2007

3. Kundra S, Media Management, Anmol Publications, 2005

17MC2032 SCREENPLAY

Credits 3:0:0

Course Objectives

- To train the student sin the art of writing
- To explain the importance of writing for different genre of films
- To teach the nuances of writing for films

Course Outcomes

- Students will generate creative ideas for writing for films
- Students can reconstruct the writing based on the demand of the script
- Students can experiment writing for different genre of films

Unit I - What is a Screenplay? – Act I is the Setup – Act II is Confrontation – Act III is Resolution – The Subject – The Creation of Character – The Puppet Master – Giving Characters Life – Protagonist and Antagonist – Insiders – Outsiders –Action is Character – Building a Character
Unit II - Story and Character – Understanding story and plot – Theme – Conflict and Tension – Building and Releasing Tension – Reversing Expectation – Ellipsis – Endings and Beginnings – Setting Up the Story – Two Incidents
Unit III - Plot Points – Cut and Paste – Main plot – Sub-plots – Five great plots to study – The Scene – The Sequence – Building the Story Line – Classic Hollywood Narrative System – Art-Film Narrative – Three Act Structure
Unit IV - Screenplay Form – Expectations – Title Page – Layout – Screenplay terms – Writing the Screenplay – Adaptation
Unit V - Problems of Semantics – Outlines – Treatments – Drafts – First Draft – Counterfeit – Copyright – Rewriting – Second Opinions – Final Polish – Self Diagnosis – Script Appraisals – Ten Common Problems – Ten Handy Hints

Text Books

1. Syd Field, "Screenplay: The foundations of Screenwriting", Delta Trade Paperbacks, 2005.
2. John Costello, "Writing a Screenplay", Pocket Essentials, 2004.

References

1. Patrick Cooper & Ken Dancyger, "Writing The Short Film", 3rd Edition, Elsevier, 2005.

17VC2033 MARKETING COMMUNICATION

Credits 3:0:0

Course Objectives

- To enable students to gain knowledge about latest trends in Digital Communication
- To give students the impetus to experiment with online advertising and marketing communication.
- To enable students to work on live digital communication projects.

Course Outcomes

- Students will learn about latest trends in digital communication
- Students will understand search engine optimization and social media optimization
- Students will understand blogging as a tool of advertising and marketing.
- Students will learn about e-mail marketing communication
- Students will identify the most effective online media for digital communication
- Students will demonstrate ability to work on live projects

Unit I - Introduction - communication and virtual worlds, key word based branding and communication, online advertising, blogs and wikis, website planning and structure- search engine optimization.
Unit II - Synchronous and asynchronous communication – email based advertising and marketing- reach and effectiveness. Case study presentations
Unit III - Facebook Communication, Online Communities, Instagram and Whatsapp. - Google ad words and advertising –YouTube and video for organizational and business communication.
Unit IV - Micro blogging - twitter, copy writing for the web, social media & mobile communication, citizen journalism and mobile learning.

Unit V - The Selfie generation and selfie culture- advantages and disadvantages. Web Marketing, mastering google (ad words advertising, analytics & applications), social media communication and marketing (Facebook &Linkedin)

Text Books

1. The social media bible: tactics, tools, and strategies for business success by Lon Safko, David K. Brake . Published by John Wiley & Sons, 2009.
2. Social media marketing: mn hour a day by dave evans, susan bratton. Published by John Wiley & Sons, 2008.

References

1. The social media marketing book by Dan Zarrella .O Reilly Media, 2009.
2. The New community Rules: Marketing on the Social Web by Tamar Weinberg . O Reilly Media, 2009
3. The Zen of Social Media Marketing: An Easier Way to Build Credibility, Generate Buzz, and Increase Revenue Shama Kabani, Chris Bogan. Published by Ben Bella Books 2010.

17MC2034 MEDIA AGENCIES

Credits: 3:0:0

Course Objectives

- To provide students with an insight into varied forms of media organisations
- To enable students to understand career opportunities in varied media.
- To enable students to distinguish between workflow in varied organisations.

Course Outcomes

- Students will gain an insight into varied forms of media organisations
- Students will explore career opportunities in varied media.
- Students will be able to distinguish between workflow in varied organisations.
- Students will analyze their aptitudes in the given area.
- Students will gain knowledge of all media agencies.
- Students will be better equipped to make career choices

Unit I - Print Media Organisations- newspaper organization- magazine -structure-departments-nature of work-career opportunities-case studies of selected organisations.

Unit II - Advertising Agencies – nature of work –career opportunities- newspaper advertisements-space selling – visualizing- graphic designing- visual media- television and films. Case Studies of Advertising Agencies.

Unit III - Social media organisations –structure – functions- career opportunities- skill sets. Case studies of Google, Facebook, word press, instagram.

Unit IV - Television Networks- Organizations – Career Opportunities- skill sets. Case studies of selected Television Organisations

Unit V - Films as a corporate entity- structure –functions-career opportunities- skill sets .Case studies of selected film corporations and companies.

References

Social Media Bible: The Social Media Bible: Tactics, Tools, and Strategies for Business Success by Lon Safko Wiley Publishers 2016.

17MC2035 FILM MAKING LAB

Credits 0:0:4

Course Objectives

- To impart the knowledge of filmmaking process
- To enrich the students with various terms and variables related to filmmaking
- To train the students in the technical departments of filmmaking process

Course Outcomes

- The students will apply all the knowledge garnered theoretically
- The students will learn to breakdown the works pertinent to different stages of filmmaking
- The students will experiment the different filmmaking techniques learnt
- Students will know to pin point the flaws in the filmmaking process
- Students will master on quickly rearranging things in case of any mishaps during filmmaking process
- Students will show their skills on coordinating with artists of different departments

Experiments

The Experiments for the lab includes various parameters and techniques of filmmaking starting from scripting, storyboarding, cinematography, editing and dubbing.

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of HoD/Director and notify it at the beginning of each semester.

17MC2036 RADIO PROGRAMMING

Credits 3:0:0

Course Objectives

- To provide an understanding of radio programming
- To learn about the radio programme formats and types of programs
- To equip the students to apply these in regular programs.

Course Outcomes

- The learners will be taught the growth of radio industry in India and abroad.
- They will understand the various activities of creating and broadcasting a radio program
- To know the elements of Radio program production
- To know how to evaluate various Radio Programs.
- To become skilled in Radio Jacky.
- To learn about Radio studio program styles

Unit I - All India radio – its growth & reach / Broadcast management – Public & Private Radio Stations / Laws & regulations / Community Radio / Audience research

Unit II - Writing for Radio – News gathering and reporting skills -other genre of radio programs

Unit III - Effective speaking skills – announcements – newsreading / Interview skills / Voice culture.

Unit IV - Nature of sound / Sound recording techniques –indoor & outdoor / Post-production techniques – voice, music and special effect.

Unit V - Broadcast Equipments / Studio operations / OB operations - Workshops on Voice Culture, Recording techniques etc and Radio - Station visits. Evaluation will be based on theoretical knowledge as well as production of radio content.

Text Books

1. H.R.Luthura, Indian Broadcasting Review, Ministry of I & B Government of India 2001
2. Srivatsava, Broadcasting, Vigyan Publication, New Delhi, 2006

References

1. Mencher. M., Basic NewsWriting, Sharma Books, 2001
2. Lesiler &Flat lay, Basic Business communication. Tata Mc Graw Hill.2006.

17MC2037 CORPORATE COMMUNICATION

Credits 3:0:0

Course Objective:

- The course focuses on the roles and responsibilities of the corporate communication function with all of the company's stakeholders.
- The course will examine the strategic communication demands placed on the corporation by a variety of stakeholders: employees, customers, shareholders, the local community, and society at large represented by the media.
- Managing relationships with stakeholders and building the image of the organization through communications on an ongoing basis is the primary agenda of a Corporate Communications function.

Course Outcome:

- Students recognize and respond to the communication expectations of various corporate stakeholders.
- Students will be able to create and implement a strategic corporate communications plan.
- Students will learn to utilize a variety of communication tools and techniques.
- Students will apply the learning into a real workplace situation for image building of the organization during normal and crisis situations.

Unit I – Introduction: Definition and meaning of corporate communication – Evolution of corporate communications- stakeholder theory- Corporate Identity- Image Building – Reputation Management

Unit II - Strategic Corporate Communications: Identifying Targets audience - Cost effective communication tactics - Developing Strategic Communication plan - Execution of the plan- Evaluating program effectiveness - Calculating ROI

Unit III - Media Relations: Types of Media – Journalist – Press release - Spokesperson - News flow – Corporate Vs Media House – Editorial –Advertorial- Corporate Advertisements and its effects on Media Houses – Media coverage on corporate reputation – Impact of corporate Social Responsibility on Community and Media.

Unit IV - Mergers, Acquisitions and Crisis Communication: Definition and Meaning of Merger, Acquisitions and Crisis communication - Difference between Issue and crisis - Perception of Corporate by common man – Stages of Crisis- Internal and External Communications during crisis- New Media and Crisis communications-

Unit V - Case Study: There are group case studies in this course their purpose is to create real-life scenarios for the students to experience. Students will be mainly assigned to work in groups to solve the challenge of the case. They will present their summary actions to the rest of the class via posting their case to a discussion. They will receive peer feedback as well as feedback (in the full-class boards) from the instructor.

Text Book:

1. Cornelissen, J.P "Corporate Communications" 4th edition Sage Publication 2014
2. Clarke.L Caywood "The Handbook of Strategic Public Relations and Integrated
3. Communications", Mcgrew-Hill 1997
4. Dr. Joseph ParackalPRAs Persons In Relation: A Personalistic Approach to the Study and Practice of Public Relations. eBooks2go.2016.

Reference Book:

1. Joep Cornelissen "Corporate communication: theory and practice" SAGE, 2004
2. Brad Fitch, Mike McCurry"Media relations handbook for agencies, associations,
3. Nonprofits, and Congress: The Capitol Net Inc, 2004.

17MC3001 RESEARCH METHODOLOGY

Credits: 3:0:0

Course Objectives

- To introduce students to the arena of communication research
- To inculcate research awareness
- To apply epistemology to day to day activities.

Course Outcomes

- Students will be able to gain an insight into research.
- Students will be able to analyze media related issues
- Students will find solutions to social problems
- Students will collaborate and work towards interdisciplinary research.
- Students will be able to visually analyze issues and lifestyles
- Students will contribute to the growing body of research.

Unit I - Introduction - Pure and applied research. Social Science Research Definition of Communication Research. What are Communication Research Methods - Media Research Methods. Research and Theory.

Unit II - Qualitative and Quantitative Research - In depth Interviews - Field observations-Focus groups-Content analysis- Quantitative methods- Survey- Questionnaire – Research Questions- Hypotheses- Uses-limitations-Qualitative and Quantitative Methods- Reliability, Validity.

Unit III - Types of Research - Descriptive Research- Ethnographic Research -.Virtual and Digital Ethnography- Action Research- Historical-Evaluative - Experiment- Quasi experiment – Case Study-Qualitative-Quantitative

Unit IV - Sampling - Basic difference between qualitative and quantitative sampling. Types of sampling techniques. Random and non-random sampling- Purposive sampling- Snowball Sampling-Convenience Sampling.

Unit V - Qualitative and Quantitative Analysis - Content Analysis- Theoretic Analysis- Basic SPSS- Chi-Square – Likert Scales--the t-test-Analysis of variance- -Correlation. Computer Mediated Communication.

Text Books

1. Roger D Wimmer,Joesph R.Dominick, Mass Media Research ,Wardsworth Publishing Company,2000.

References

2. Ajai S.Gaur, Sanjaya S.Gaur Statistical Methods for Practice and Research, Sage Publications, 2006.

3. Thomas R. Lindlof, Bryan C. Taylor Qualitative Communication Research Methods. Sage Publications 2005.

17MC3002 3D ANIMATION

Credits: 3:0:0

Course Objectives

- To introduce the world of 3D animation.
- To experiment different techniques to achieve convincing animation in 3D.
- To explain the pipeline of a complete 3D production.

Course Outcome

- Students will understand 3D animation.
- Students will be able to create their own concept in 3D animation.
- Students will be expert in doing all types and styles of animation.
- Students will demonstrate different techniques in animation.
- Students will demonstrate their skills in modeling 3D shapes and objects.
- Students will produce creative 3D projects.

Unit I - History of Animation: Legends of animation productions - Evolution of animation – Types and Styles of animation an overview –Difference between animation and video - Pre Production process – Production scheduling

Unit II - Modeling basics –coordinate systems –viewing windows – Geometric primitives –transformations – common modeling techniques –hierarchies –Booleans and trims - The camera –Lights –Surface characteristics Workspace – creating shapes – learning to navigate the 3D workspace.

Unit III - Object attributes and settings - how 3D differs from 2D – rotating, scaling and moving objects - Shading and Texturing – different materials – types of textures – tiling textures - 3d animation: Animatics - Character Animation - Game based animation – Clay animation based animation – Animation in motion 3d

Unit IV - Bump maps in texturing – paint effects - Basic Animation - Walk-through - intro to graph editor - Key framing – interpolations – parameter curve editing – dope sheet editing –kinematics – motion plans – shape deformations

Unit V - Lighting the scene – types of lights - Render settings – mental ray intro – batch rendering – basic compositing. — camera animation – animating lights and surface properties – pose based animation - Virtual sculpting – hair and fur – texturing polygons – cloth dynamics – facial animation- compositing – Editing.

Text Books

- Chris Webster, "The Animation – the mechanics of motion", Focal Press, 2005.
- John Edgar Park, "Understanding 3D animation using Maya", Springer Science & business Media. Inc, 2005.
- Marcia Kuperberg, Martin W. Bowman, "Guide To Computer Animation", Focal press ,2002.

References

- Andy Beane, "3D Animation Essentials", John Wiley & Sons, 2012.
- Michael O'Rourke, "Principles of Three – Dimensional Computer animation", 3rd edition, W.W. Norton & company, 2003Michael O'Rourke, "Principles of Three – Dimensional Computer animation", 3rd edition, W.W. Norton & company, 2003.
- John Vince, "Essential Computer Animation", Springer UK ,FirstEdition 2000.

17MC3003 3D ANIMATION LAB

Credits: 0:0:4

Course objectives

- To train the students in the area of 3D Animation and its software application.
- To make the students understand the process of 3D animation production in studios.
- To train the students the area of character designing and concept designing in animation.

Course outcomes

1. Students will be well equipped with all the basic animation concepts practically which helps them in doing character modelling, lighting, texturing and animations.
2. Students will do the process of 3D animation production in studios.
3. Students will be expert in the area of 3D Animation and its software application.
4. Students will emphasize their skill character designing.

5. Students will be expert in concept designing in 3D animation.
6. Students will be able to model and design their own object and environment.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC3004 ICT FOR DEVELOPMENT

Credits: 3:0:0

Course Objectives

- The course will introduce mobile application for audio-visual communication.
- It will teach students about basic design principles for using as a communication medium.
- It will enable students to understand and create new communication for all development communication.

Course Outcome

- The students will understand the application for novel mobile apps.
- The students will know the fundamental elements of mobile app usage in daily lives.
- The students will learn to prepare and evaluate different types of using Mobile Apps for various media environments.
- The students will produce innovative script designs for app development.
- The students will be adept with current market trends for mobile audio-video applications.

Unit I - Communication Technology Overview, ICT and development, Digital Divide, Hamelink's development Perspectives, Networking and development, Alternative Media for Development. Sustainable Development Goals and implementation.

Unit II – ICT for education- Interactive Radio Instruction- Televised Learning-UGC Countrywide Class –Audio and Visual Aids- Collaborative and Networked Learning- Communities of Learning – Virtual Classrooms-informal and formal learning- Online vs. Face to Face Learning –Mobile Learning- Case Studies – Ning and Elggi.

Unit III - E- Governance- Model of Digital Governance: Mobilization and Lobbying Model, Interactive-service Model/Government-to-Citizen-to-Government Model (G2C2G). E Governance in Tamil Nadu, Karnataka, Andhra Pradesh. Case studies in India, China, Brazil, Srilanka

Unit IV - ICT for Healthcare delivery (e-Health) - Role of ICT in Disease surveillance, Prevention, Diagnosis, Treatment/Therapy, Rehabilitation. Emerging TeleMedicine Applications - Mobile Phone, email, Online chat (Skype), Social Networking Sites, Video Conferencing Technology - ICT for health-related goods and services – Electronic Patient Record, Picture Archiving and Communication Systems (PACS), e Prescriptions, Health Cards, Health Portals, Hospital Information Systems (HIS). Mobile Health (m Health) - ICT for Medical education and Health research.

Unit V - Review of 12 Case studies on ICT for development

Text Books

1. Jochen Schiller. Mobile Communications. 2nd Edition.2e Paperback – 2008
2. Maria Manuela Cruz-Cunha Et.Al Handbook Of Research On ICT's For Human-Centered Healthcare and Social Care Service. 2013

References

1. E-Governance: Concepts and Case Studies, C.S.R. Prabhu, Prentice-Hall of India Private Limited, 2004.
2. Backus, Michiel, e-Governance in Developing Countries, IICD Research Brief, No. 1, March 2001.

17MC3005 REPORT WRITING AND PUBLICATION

Credits: 3:0:0

Course Objectives

- To introduce students to the arena of report writing
- To enable students to gain practical knowledge
- To apply various kinds of research writing into practice.

Course Outcomes

- Students will be able to gain an insight into report writing
- Students will be able to write different kinds of reports.

- Students will distinguish between technical and non-technical reports.
- Students will gain insight into editing and writing techniques.
- Students will be able to write research abstracts
- Students will be able to write research papers.

Unit I - Introduction to Report Writing - Different kinds of writing. Report Writing. Technical Writing, Scientific and Descriptive Writing
Unit II - Organisation - Formal & Informal Reports in an Organisation. Organisational Communication. Emails, Memos, Circulars, Official letters, Letters of complaints.
Unit III - Marketing /Business Report - Writing a proposal, Survey Design, market strategies and research Executive Summary - Annual Report.
Unit IV - Creative Report - Report on Client. Advertorial. Classifieds. Creative and Marketing Strategy. Client Brief. Background details of Competitor.
Unit V - Research Writing - Abstracts - Review - Research Proposal – Synopsis - Research Review - Findings and Conclusion.

Text Books

1. John Bowden, Writing a report**.** 9th edition Paperback – Amazon Publications June 24, 2011

References

1. Handbook of Writing Research. Edited by Charles A. MacArthur, Steve Graham, Jill Fitzgerald
2. Roger D Wimmer,Joesph R.Dominick, Mass Media Research ,Wordsworth Publishing
3. Qualitative Communication Research Thomas Lindlof and Taylor.

17MC3006 VIRTUAL REALITY

Credits: 3:0:0

Course Objectives

1. To learn the concepts and principles of Virtual Reality
2. To learn VR environment and software.
3. To understand the various tools and production techniques

Course Outcomes

1. To understand the behavior of VR environment
2. To learn the style, the activities & protocol involved in the process of Virtual Reality
3. To be able to assess the Virtual Reality Productions.
4. To work in latest virtual reality environments
5. To conceive new features for advances in VR solutions
6. To be fully effective in producing need based VR environments.

Unit I - Introduction to Virtual Reality, Historical Development,- Navigation and interfaces.- Augmented Reality, –input –Output devices,- immersive /non immersive VR, -VR terminology,
Unit II - HMD, Modeling in VR- Boom, Cave- Sensual Technology-Trackers, Shared VR environment,- VR tool Kits,- VR applications in Education, Engineering, Design Training, Medical, Military , Gaming and Entertainment.
Unit III - Virtual environment, virtual presence, VR system, human perception, motor and cognitive -systems, basic applications - Dynamics of Virtual Environment -DOF, translational and rotational transformations, pose and displacement, dynamic models of VR- equations of motion, inertia, momentum, collision detection, computation of body - movements. Tracking and Modalities - Pose sensor- mechanical, ultrasonic, optical, video metric, radio frequency and electromagnetic, motion tracking, physical input devices, Modalities- visual, Audio, Haptic.
Unit IV - Interaction with Virtual Environment -Manipulations with virtual environments, navigations in virtual environments, interaction with other users, interactive computer game, Interactive educational methods.
Unit V - VR and Unity3d Starting Unity project, setting up project files for VR integration, creating UI elements for VR interaction, gaze based control, move around, jump, using 360 degrees, physics and environment-FPS

References

1. Grigore C. Burdea and Philippe Coiffet, Virtual Reality Technology, John Wiley and sons Publishers, 2006.
2. Tay Vaughan, Multimedia: Making it work. Tata McGraw Hills 2006
3. John Vince, Introduction to Virtual Reality, Springer, 2004.

4. John Vince, Essential Computer Animation, Springer, 2000

17MC3007 MEDIA CHAIN PRODUCTIONS LAB

Credits: 0:0:4

Course objectives

- To learn about the media chain operations.
- To learn the skills to convert one media production to another
- To learn about the structure of media convergence.

Course outcomes

- To familiarize with production scripts of various medium.
- To learn the skills to convert and develop chain productions.
- To study the media ownership patterns and operations.
- To learn about the cost cutting methods in chain operations.
- To learn to assess the marketing trends in Chain operations.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC3008 RESEARCH PUBLICATION LAB

Credits: 0:0:2

Course Objectives

- To understand review of literature.
- To apply analytical methods.
- To enable students to write a research report.

Course Outcomes

- Students will be able to conduct a research study.
- Students will be able to analyze.
- Students will be able write a research report.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of HoD/Director and notify it at the beginning of each semester.

17MC3009 VIRTUAL REALITY LAB

Credits: 0:0:2

Course Objectives

- To make students know the basic concept and framework of virtual reality.
- To teach students the principles and multidisciplinary features of virtual reality.
- To teach students the technology for multimodal user interaction and perception in VR, in particular the visual, audial and haptic interface and behavior.

Course Outcomes

- Students will identify and describe technical implications of virtual reality.
- Students will design and construct a simple virtual environment.
- Students will apply current virtual reality hardware and software.
- Students will apply the technology for managing large scale VR environment in real time.
- Students will use VR for solving evolving human-centric problems.
- Students will design advanced VR using new creative templates.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC3010 ADVANCED ANIMATION

Credits 3:0:0

Course Objectives

- Students will be introduced to animation for films
- Students will be introduced to aesthetics of animation for films and gaming
- Students will be able to apply techniques learned

Course Outcomes

- Students will understand nuances of animation for films
- Students will apply animation techniques in their projects
- Students will demonstrate expertise in high end projects
- Students will experiment with animation design for film aesthetics.
- Students will undertake projects in gaming
- Students will gain expertise at least one animation software

Unit I - Animation - Pre-production- Aesthetics of Film-Making- Character Animation- 3D Character Development
Unit II - Rigging & Character Set-up- Texturing and Look Development-Digital Painting- Matte Painting- BG Modeling and Surfacing
Unit III - Texturing & Look Development- Lighting & Rendering - Particle Dynamics.-Sculpting
Unit IV - Game -Theory-Game Development Pipeline- Game Concept Art- Environment Modeling -Stylised Character Modeling-
Unit V - Next-Gen Character Modeling-Next-Gen Vehicle Modeling- Rigging & Animation for games-Introduction to Game Engine-Asset Integration in Game Engine

Text Book

1. Advanced Animation Rendering Technique by Alan Watt, Mark Watt, Published by Addison Wesley Professionals 1992.

References

2. Real-Time Rendering, Third Edition by Tomas Akenine-Möller, Eric Haines, Naty Hoffman AKPress/CRC Press 2008

17MC3011 ADVANCED ANIMATION LAB

Credits 0:0:4

Course Objectives

- Students will be introduced to animation for films
- Students will be introduced to aesthetics of animation for films and gaming
- Students will be able to apply techniques learned

Course Outcomes

- Students will understand nuances of animation for films
- Students will apply animation techniques in their projects
- Students will demonstrate expertise in high end projects
- Students will experiment with animation design for film aesthetics.
- Students will undertake projects in gaming
- Students will gain expertise at least one animation software

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC3012 SOUND EFFECTS AND FOLEY LAB

Credits: 0:0:2

Course Objectives

- To teach the students the optimal microphone techniques for recording and editing sound effects.
- To enable the students to learn the working and optimal use of recording setups to effectively capture the required sounds.
- To teach the students the basics of mixing and mastering the effects tasks.

Course Outcomes

- Students will know to use audio techniques to create sound effects.
- Students will know to use audio tools and techniques to create Foley sound.
- Students will learn to mix audio for obtaining desired sounds.
- Students will learn to use appropriate microphones to produce quality sound.
- Students will learn the post production techniques used in creating Foley sound.
- Students will learn to store and label Foley sound as samples.

Experiments
The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC3013 DIRECTION

Credits 3:0:0

Course objectives
- To understand the basic elements of Direction.
- To understand the essentials and learn the skills of direction
- To learn the professional techniques of Direction

Course Outcomes
- The students will be able to understand the role and responsibility of direction
- The students learn the skills and approaches of the direction as a profession.
- The students will be able to assess the various types of directors and their styles

Unit I - Direction – action techniques – elements of direction. – Principles of direction. Planning and performance-
Unit II - Roles and responsibilities of direction- skills and techniques related to performance and direction- rehearsal
Unit III - Location scouting- evaluation of different styles of direction. Ethics and moral responsibility in direction- Artistic identity and drama –
Unit IV - Screencraft – The story and its development – Aesthetics and Authorship
Unit V - What Do Directors Direct? – How to Direct the Eyes? – How to Convey and Suggest Meaning

Text Books
1. Michael Rabiger, "Directing, Fourth edition", Focal Press, 2008.
2. Francis Glebas, "Directing the Story", Focal Press, 2009.

References
1. Nicholas T. Proferes, "Film Directing Fundamentals", Third edition, Focal Press, 2008.
2. Eden H. Wurmfeld & Nicole Shay Laloggia, "Independent Filmmaker's Manual, Second edition", Focal Press, 2006.

17MC3014 DIRECTION LAB

Credits: 0:0:4

Course Objectives
- To equip the students with knowledge of directing and its prospects
- To bring out the hidden artistic talents of the students through direction
- To inculcate an insight on the role of directors and the importance of directing skills.

Course Outcomes
- The students will have a thorough knowledge on the qualities to possess to become a professional director
- The student will acquire the required skills for direction
- The student will understand the necessitate of possessing acting-directing skills
- The students will have a complete knowledge on the requisites to become a successful director
- The student will acquire the complete set of skills to direct a film
- The student will possess a thorough cognition on the overall workflow of directing process

Experiments
The faculty will frame acting and directing exercises based on different genres and the lab will be completely activity based.

17MC3015 SOCIAL MEDIA

Credits: 3:0:0

Course Objectives
- Students will explore the effects of our emerging Social media and its growth in development communication.
- Students will become proficient in the use of various social media tools for professional objectives and

incorporate solving real-world concerns.

- Students will become skilled in the creation of various digital media content formats, including websites, video, and blogs.

Course Outcomes

- Students will create and maintain a blog using a common blogging platform.
- Students will be able to compare and contrast the purpose and features of different types of social media, including: blogs, social networks, wikis, and photo and video sharing sites.
- Students can effectively utilize multiple forms of social media to publish real-time updates and engage with relevant communities.
- Students can create different social media templates for developmental communication
- Students will be able to frame new media concepts for creative ideas.
- Students will be able to effectively apply social media and produce contemporary convergent media platforms.

Unit I - History and Evolution of Social Media - Understanding the fundamental working principles of Social Media – User profiles – User Applications – Social Media for growth and progressive society.
Unit II - Nature, Characteristics, Applications of Social Media – Social Media Terminologies - Websites – Blogs – Microblogs – User Generated Social Media Content (YouTube) – Social Networking Sites for professional Linkages (Facebook, LinkedIn), Over the Top Messaging Systems (WhatsApp), Voice over Internet Protocol (Skype, FaceTime), USSD, Mobile Calls/SMS, Emails, Mobile Apps
Unit III - Culture and Social Media – Economics and Ownership – Privacy – Law and Ethics - Central Issues in Social Media - Identity and reputation - Visuality – Case studies and review of published articles.
Unit IV - Measuring, Monitoring and Analysing Social Media trends and Impact - Application Domains - Case studies and review of published articles.
Unit V - Social Media, Crowd Sourcing and The News, Social Media Organizations - Social Media Activism- Case studies and review of published articles.

Text Books

1. Tom Standage. Writing on the Wall: Social Media - The First 2,000 Years. Bloomsbury Publishing. 2014
2. Ganis, Kohirkar. Social Media Analytics, Pearson India. 2016
3. Robert Scoble and ShelIsreal. Age of Context: Mobile, Sensors, Data and the Future of Privacy. Createspace Independent Publising. 2013

References

1. Paul Adams. Grouped: How small groups of friends are the key to influence on the social web (Voices That Matter). New Riders. 2011
2. Elisa Giaccardi. Heritage and Heritage and Social Media: Understanding Heritage in a Participatory Culture. Routledge. 2012

17MC3016 MEDIA ANALYSIS

Credits: 3:0:0

Course Objectives

- To learn about the basic of analysis and critical studies
- To learn the techniques and methods of content and form analysis
- To learn about the various tools applied in media analysis.

Course Outcomes

- To know and understand the concepts of media productions
- To learn about elements of media constructs.
- To learn the style, methods used in media criticism.
- To be able to assess the quality of media productions.
- To learn to develop analytical skills in comparative studies on media.
- To learn about media development trends for assessment.

Unit I - Introduction to media Organizations, Audience, Products and people-Techniques of media interpretation- Critical and Analytical Thinking, Cultural studies, Monitoring and Evaluation methods
Unit II - Media content analysis based on various social issues. Print media Narrative content analysis, Discourse analysis-Semiotic analysis-Marxist analysis-psycho-analytical criticism-Sociological analysis-Media literacy

Unit III - Broadcast Programs structure, Program content analysis, Audience analysis - Film analysis - Music analysis - Design analysis
Unit IV - New Media structure and content analysis, Comparative analysis - Product, people and Production houses.
Unit V - Specific issues selected for content analysis application. Case studies Media Marketing Analysis – New media marketing analysis.

Text Books
1. Arthur Asa Berger, Media analysis and Techniques, Sage Publications, 2008.
2. Catherine Kohler Riessman, Narrative Analysis, Sage Publications, 2006

References
1. David L, Altheide & Christopher J. Schneider, Qualitative media analysis, Sage publications 2011.
2. Gail Dines and Jean M. Humez, Gender, Race, Class in Media –Critical reader, Routledge, Publishers, 2015.

17MC3017 SOCIAL MEDIA LAB

Credits: 0:0:2

Course Objectives
- Students will explore the effects of our emerging Social media and its growth in development communication.
- Students will become proficient in the use of various social media tools for professional objectives and incorporate solving real-world concerns.
- Students will become skilled in the creation of various digital media content formats, including websites, video, and blogs.

Course Outcomes
- Students will create and maintain a blog using a common blogging platform.
- Students will be able to compare and contrast the purpose and features of different types of social media, including: blogs, social networks, wikis, and photo and video sharing sites.
- Students can effectively utilize multiple forms of social media to publish real-time updates and engage with relevant communities.
- Students can create different social media templates for developmental communication
- Students will be able to frame new media concepts for creative ideas.
- Students will be able to effectively apply social media and produce contemporary convergent media platforms.

Experiments
The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC3018 DOCUMENTARY PRODUCTION

Credits 3:0:0

Course objectives
- To understand the basic elements of Documentary Storytelling, the various approaches involved in Documentary structure.
- To understand the research mechanism and treatment of ideas to transform into script
- To learn the techniques of Documentary production and editing.

Course Outcomes
- The students understand and apply the various formats make Professional Documentary to create social impact.
- The students will be efficient in documentary production.
- The students will be enabled to evaluate documentary films.

Unit I - Documentary writing - subset of Non-fiction film and video –subjectivity in story telling-story basics – formats –documentary subject identification – Review of basic documentary videos.
Unit II - Dramatic story-telling- Documentary story – Evaluation Story ideas – Developing the story – shots for documentary - Approaches in documenting - Review of documentary videos.
Unit III - Archival Film making – Docu-Drama – 3act structure – applying film structure – Outlining the cast – Treatment of roles - Review of docu-drama videos.

Unit IV - Docu-fiction – Mocumentary – Experimental Videos – Popular documentary formats and Review of docu-fiction and experimental videos.
Unit V - Documentary research basics –Types of researches – Casting – Hosts and Narrators – Documentary proposal writing – case studies.

References

1. Bill Nichols. Introduction to Documentary. 2nd Edition. Atlantic Publishers and Distributors. 2010
2. Sheila Curran Bernard. Documentary Storytelling: Making Stronger and More Dramatic Nonfiction Films. Focal Press. 2007.
3. Alan Rosenthal. Writing, Directing and Producing Documentary Films and Videos. 3rd Edition. CBS Publishers & Distributors Pvt Ltd. 2002.
4. Michael Rabiger. Directing the Documentary. Focal Press. 2014.

17MC3019 VISUAL MERCHANDISING

Credits: 3:0:0

Course Objectives

- To introduce students to aspects of store design and layout.
- To allow students to explore the concept of Visual Merchandising
- To enable students to gain exposure to store lighting and display.

Course Outcomes

- Students will be able to understand importance of visual merchandising.
- Students will be able apply the concepts of store layout and lighting.
- Students will be able to take up practical assignments in Visual Merchandising.
- Students will apply techniques of color theory to visual merchandising.
- Students will apply techniques of design to visual merchandising.
- Students will be able to devise communication strategies in visual design.

Unit I - Concept of Visual Merchandising, Objectives of Visual Merchandising, Growth of Visual Merchandising, Visual Merchandising in India.
Unit II - Scope of visual merchandising in India, Visual Merchandising as a Support for Positioning Strategy, Prospects of Visual Merchandising,
Unit III - Challenges in Visual Merchandising: The common challenges, ways to overcome the visual merchandising challenges it.
Unit IV - The Merchandise Mix: Introduction, Objectives, Concept of Merchandise Mix, Merchandise line, The Assortment of Products, Assortment strategy, Merchandise Mix of Show Off.
Unit V - Role of a merchandiser, Other Atmospherics in Merchandising, Colour scheme, Lighting- Store Layout.

Text Books

1. Visual Merchandising: Window and In-store Displays for Retail, Second Edition by Tony Morgan Laurence King Publishing , 2011

References

1. Advertising Management**:** Rajeev Batra ,John G. Myers, David A. Aaker. Prentice-Hall International, 1996.
2. Visual Merchandising: Swati Bhalla, Anurag S, Mc Graw Education, 2010.

17MC3020 DEVELOPMENT COMMUNICATION

Credits 3:0:0

Course Objectives

- The student will understand the holistic nature of social development.
- The student will learn about the roles of development for social change.
- The student will understand social marketing strategies for development.

Course Outcomes

- The students will be aware of development concepts
- The students will be skilled in analyzing various developmental strategies.
- The students will gain knowledge on Traditional empowerment efforts.
- The Students will learn about Social marketing methods for Development.
- The students will be able to evaluate various developmental projects.

- The students will be able to apply campaign for Development.

Unit I - Nature of development-Defining development goals-Key concepts-Dependency-decentralization-Industrialization.
Unit I - Modernization-third world needs-complexity and alternate paths. Development communication-Roles and philosophy- difference between communication and development communication-
Unit III - Models of Daniel Lerner, Everett Rogers and Wilbur Schramm
Unit IV - Communication for social change-Folk forms-theatre and empowerment through silver screen-Social Advertising-
Unit V - Agencies involved-DAVP and NGOs –Campaign Strategies and applications

Text Books

1. Development Communication, B.N Ahuja and S.S Chhabra, Surjeet Publishers, 2013
2. Mass Communication in India. Keval J. Kumar, Jaico Publishers 2011
3. Communication theory, Dennis Macquil, Sage Publication 2007.

References

1. Communication for Development in Third World, Srinivas R. Melkote Sage Publications.
2. Michael T.Ewong, Social Marketing, Routledge Publications 2007

17MC3021 DOCUMENTARY FILM LAB

Credits: 0:0:4

Course Objectives

- To understand the differences between documentary and other film making process
- To equip students with documentary narratives.
- To impart social issues and concepts for documentary making.

Course Outcomes

- The students will gain in-depth knowledge in research on true facets of life.
- The students will create consumable narratives for impressive documentation of social issues.
- The students will know the differences in various types of documentary making.
- The students will produce documentary videos for solving life issues.
- The students will use cinematic concepts in real-life story telling.
- The students will come out with various convergent ideas on documentary making for divergent audiences.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/Director and notify it at the beginning of each semester.

17MC3022 VISUAL MERCHANDISING LAB

Credits: 0:0:2

Course Objectives

- To get acquainted with aspects of visual merchandising.
- To get hands on exposure to store display.
- To become well versed with elements of design and lighting.

Course Outcomes

- Student will gain hands on knowledge in store display
- Student will learn retailing techniques
- Student will experiment with in store design
- Student will demonstrate knowledge of lighting and space management.
- Student will learn display techniques
- Student will understand importance of visual merchandising and undertake practical assignments.

Experiments

The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HOD/ Director and notify it at the beginning of each semester

17MC3023 INTERNATIONAL COMMUNICATION

Credits 3:0:0

Course Objectives

- To learn about the basic principles and practices of global communication.
- To learn the management of information flow.
- To learn the skills needed for understanding global issues.

Course Outcomes

- To know and learn the concepts and Principles of global media.
- To learn the style, methods of media functioning worldwide.
- To be able to assess the quality communication policies.
- To familiarize with global communication technologies.
- To learn to compare and evaluate the effects of global communication.
- To learn the role of global agencies in world communication.

Unit I - International communication: nature, importance, scope and dimensions, factors affecting the flow of information.
Unit II - Communication policies and world communications order and structure. Recent Changes and development in the Global Information and Communication order.
Unit III - Issues in International Communication; communication imbalances in news, radio, TV, film, ICT, advertising and PR and technology –
Unit IV - Transborder data flow – Cross-cultural communication: implications, problems and perspectives.
Unit V - Mass media and information imbalances, inequalities and other problems, NIICO and UNESCO mass media declaration.

Text Books

1. Robin Mansell & Marc Raboy, The Handbook of Global Media and communication Policy, Willy-Blackwell Publishing, 2011
2. Yuezhi Zhao & Paula Chakravartty, Global Communication Towards: a Transcultural Political Economy, Rowman & Littlefield publication, 2008.
3. Howard H. Fredrick, Global and International Relations, Wadsworth Publications, 1995

References

1. Angela Crack, Global Communication and Transnational Public Spheres, Google publication, 2008
2. Keval J.Kumar, Mass Communication in India, Jayco Publications, 2007.

17MC3024 MEDIA PSYCHOLOGY

Credits 3:0:0

Course Objectives

- To provide the students with the essential knowledge to know and understand the psychology of media viewing habits of the individual and its repercussions.
- To make students realize the importance of research and the various rubrics plausible in the area.
- To study the nature of media users and audience

Course Outcomes

- The students interested in pursuing research in the area of media will be highly benefitted by the course content
- The students can carry out pilot studies on media audience based on the knowledge imbibed from the subject
- The subject will suffice the students in understanding the target audience and thereby prepare themselves to step in the media industry.
- The Students will learn differences in functioning of various media forms.
- The Students will know various psychological aspects behind social programs 6. The Students will demonstrate good reasoning and analytical skills required for working in media organizations.

Unit I - Media psychology in context – What Is Media Psychology, and Why Do We Need It? – Research Methods In Media Psychology – Analysis of Media Texts.
Unit II - Discourse Analysis – Psychological effects and influences of media – The Effects of Media Violence
Unit III - Media and Prosocial Behavior – The Role of Psychology in Media – Developmental issues in Media

Psychology.
Unit IV - The Psychology of The Media Audience – Genres – The Viewer as Psychologist: Identification and Parasocial Interaction.
Unit V - The future of Media Psychology – Psychology in the Media Production.

Text Books
1. David Giles, "Media Psychology", Taylor & Francis, 2008.
2. Richard Jackson Harris, Fred W. Sanborn, "A Cognitive Psychology of Mass Communication", Sixth Edition, Routledge, 2014.

Reference Books
1. Karen E. Dill, "The Oxford Handbook of Media Psychology", Oxford University Press, 2013.
2. Virginia Nightingale, "The Handbook of Media Audiences", Wiley – Blackwell, 2011.
3. Keval J.Kumar, Mass Communication in India, Jayco Publications, 2007.

17MC3025 LAB JOURNAL

Credits 0:0:4

Course Objectives
- To gain an insight into basics of writing and designing.
- To develop creative and journalistic writing skills.
- To understand various strategies of effective writing.

Course Outcomes
- The students will learn the basics of writing.
- The students will be able to write effective headlines.
- The students will learn effective strategies in journalistic writing.
- The students will enhance designing skills.
- The students will learn creative writing skills.
- The students will demonstrate ability to develop content for different forms of writing.

Experiments
The faculty conducting the laboratory will prepare a list of 12 experiments and get the approval of the HoD/ Director and notify it at the beginning of each semester

17MC3026 NEW AGE PRINTING

Credits 3:0:0

Course Objectives
- This course will orient students about Printing as an innovative industry in media communication.
- It will introduce advanced printing production and techniques for various media platforms.
- It will instruct students about the applications of advanced printing technologies for promotion and marketing media products.

Course Outcomes
- The students will be able to inculcate high visual acuity.
- The students will develop artistic ways to create media formats in print.
- The students will learn printing techniques for film, media and news industry.
- The students will create new concepts in print production.
- The students will generate printing techniques for new media like digital marketing campaigns.
- The students will find placements in newspaper organizations, publishing and advertising houses, e-publishing companies.

Unit I - Modern age printing - Using colors - Layout preparation - Electronic Composition and DTP, Image Generation.
Unit II - Printing Image Generation - Printing Material Science - Basic Drives and Controls - Offset Technology - Computer Graphics and Image Processing.
Unit III - Printing setting - Print finishing - Conversion - Types of Paper and Ink quality - Tone and Color analysis - Screen printing - Gravure printing.
Unit IV - Newspaper and Periodical publishing - Advanced packaging technology - 3D Banners and Flex - On Demand Printing - Web Offset Technology.
Unit V - Designing and Planning for Media production - Printing techniques for Film Industry – Advanced printing technology for creative advertisements – The role of Graphic Designer - Offset and Digital printing

operator - Proof reader – Photographer - Review of popular printing formats.

Text Books

1. H Kipphan, handbook of Print Media, Springer – VetagBzlin Heidelberg, 2001
2. Phil Green, Understanding Digital Color, GATF press
3. R.W.G Hunt, The Reproduction of Color, Fountain Press, England
4. E.P. Danger, The Color Handbook, Gower Publication
5. Aaron L. Brody, Kenneth S. Marsh, (1997), Encyclopedia of Packaging Technology, 2nd Edition A Wiley-Interscience Publication.

References

1. N.N Sarkar, Art and Print Production, Oxford Publication
2. Flexography Principles and Practices, 5th edition, Foundation of FTA
3. Chris H. Williams; Printing Ink Technology, Pira International, 2001.