VISION

"J.C. Bose University of Science and Technology, YMCA Faridabad aspires to be a nationally and internationally acclaimed leader in technical and higher education in all spheres which transforms the life of students through integration of teaching, research and character building."

MISSION

- **To contribute to the development of science and technology by synthesizing teaching, research and creative activities.**
- **To provide an enviable research environment and state-of-the art technological exposure to its scholars.**
- **To develop human potential to its fullest extent and make them emerge as world class leaders in their professions and enthuse them towards their social responsibilities.**

ABOUT THE DEPARTMENT

The Department of Communication and Media Technology offers competitive programs for Undergraduate and Postgraduate students seeking interdisciplinary degrees in Journalism & Mass Communication, Social Work and Visual Communication and Multimedia. The Department which was earlier integrated with Sciences, started Master's degree in Journalism and Mass Communication in the year 2016. In 2018, the department re-established as Department of Humanities. B.A. (Journalism and Mass Communication) was introduced in the year 2019. In the year 2021, the department is renamed as Department of Communication and Media Technology (CMT) and with these achieved new millstones by introducing Bachelor in Social Work (BSW) and Ph.D. Programme in Journalism & Mass Communication. In the year 2023 department introduce cutting-edge Bachelor of Science (B.Sc.) program in Visual Communication and Multimedia Technology. In the same year department also introduce two minor degree programme Fashion Communication and Acting & Film making. Department is dedicated to nurturing creative minds and empowering students to become skilled professionals in the dynamic world of visual communication and multimedia technology. The department imparts knowledge of both theory and practical aspects of Communication and allied fields. From time to time the department keeps organizing events, seminars, conferences, workshops and expert lectures by eminent media personalities/Industry experts. Organizing educational visits and tours are an essential part of the department's curriculum. The department also organizes various extracurricular activities like debates, photography, film making, and content creating competition etc. to encourage students. In a very short time, the department has taken an initiative in imparting quality education in the field of Visual Communication & Multimedia, Journalism & Mass Communication & Social Work.

ABOUT THE PROGRAM

The Bachelor of Science (B.Sc.) in Visual Communication & Multimedia Technology is an innovative and dynamic undergraduate program designed to align with the objectives of the National Education Policy (NEP) 2020. This program integrates the principles of visual communication with cutting-edge multimedia technology to prepare students for a wide range of creative and technical roles in the media, 2D & 3D Animation, Game Design, Graphics,

VFX and entertainment industry. With the implementation of NEP 2020, education in India is undergoing transformative changes to foster holistic and multidisciplinary learning. The B.Sc. Visual Communication & Multimedia Technology program embraces these changes by offering a curriculum that focuses on experiential learning, critical thinking, and skill development. The program aims to nurture students into well-rounded professionals who not only possess technical prowess but also a deep understanding of the social, cultural, and ethical dimensions of media and technology.

Key Features of the B.Sc. Visual Communication & Multimedia Technology Program:

Interdisciplinary Approach: The program blends concepts from Visual Communication, Graphic Design, Artificial Intelligence, 2D & 3D Animation, VFX, Game design, Film-making, Multimedia Production, and technology to provide students with a comprehensive skill set that meets the demands of a rapidly evolving media landscape.

Project-based Learning: Emphasis is placed on hands-on projects that allow students to apply theoretical knowledge to real-world scenarios. This approach fosters creativity, problem-solving skills, and teamwork.

Industry-relevant Skills: Students will gain proficiency in various software tools, multimedia production techniques, visual storytelling, digital marketing, and interactive media creation, making them well- prepared for careers in diverse sectors.

Ethical and Cultural Awareness: The curriculum promotes critical thinking and ethical considerations in media creation and consumption. Students will learn to analyze the social impact of media content and make responsible choices in their work.

Digital Literacy and Innovation: In alignment with the digital era, the program will equip students with the ability to adapt to emerging technologies, ensuring they remain competitive in the ever-evolving field of multimedia.

Communication and Soft Skills: Beyond technical expertise, the program focuses on enhancing students' communication, teamwork, and presentation skills, which are essential for effective collaboration and career advancement.

Industry Exposure: Guest lectures, workshops, internships, and industry partnerships will provide students with valuable insights into the professional world, helping them bridge the gap between academia and industry.

Research and Creativity: Students will have opportunities to explore their creative potential and conduct research in areas such as media trends, user experience, and multimedia innovations.

The B.Sc. Visual Communication & Multimedia Technology program aligns with the spirit of NEP 2020 by fostering holistic education, promoting creativity, and preparing students for a technology- driven future. Graduates of this program will be equipped to contribute meaningfully to the media

and entertainment industry while being conscious of their roles in shaping society's perceptions and interactions with multimedia content.

CHOICE BASED CREDIT SYSTEM (CBCS):

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations, the UGC has formulated the guidelines to be followed.

COURSE STRUCTURE

AccordingtoNationalEducationPolicy(NEP:2020)

Sr. No.	Course Name	Course Code	Credits
Discipline- Specific Courses (DSC)			
1.	Communication Skills	VCU-101-V	4
2.	Fundamentals of Multimedia	VCU-103-V	4
3.	Introduction to Drawing	VCU-105-V	4
4.	Fundamentals of Visual Communication	VCU- 102-V	4
5.	Digital Photography Technique	VCU-104-V	4
6.	Design Fundamentals	VCU-106-V	4
7.	Animation Techniques	VCU-201-V	4
8.	Film Appreciation Technique	VCU-203-V	4
9.	Design & Graphics	VCU-205-V	4
10.	Basic of UI& UX Design	VCU-202-V	4
11.	Fundamentals of Game Design	VCU-204-V	4
12.	Fundamental of Typography	VCU-206-V	4
13.	2 D Character Design for Animation	B.Sc. VCMT 501-23	4
14.	Audio Production	B.Sc. VCMT 502-23	4
15.	Web Design and Development	B.Sc. VCMT 503-23	4
16.	3D Modeling & Visual Effect	B.Sc. VCMT 601-23	4
17.	Tools for Visual Analytics	B.Sc. VCMT 602-23	4
18.	Project Work & Viva	B.Sc. VCMT 603-23	4
19.	Rigging, Skinning & Animation	B.Sc. VCMT 701-23	4
20.	Advance 2 D Animation Studio	B.Sc. VCMT 702-23	4
21.	3D Animation – Studio	B.Sc. VCMT 703-23	4
22.	Corporate Communication	B.Sc. VCMT 704-23	4
23.	Multimedia Portfolio Development	B.Sc. VCMT 705-23	4
24.	Basic 3D modelling & texture	B.Sc. VCMT 801-23	4
25.	Information Security	B.Sc. VCMT 802-23	4

26.	Introduction to Architeure Modelling	B.Sc. VCMT 803-23	4
27.	Fundamental of UX Design	B.Sc. VCMT 804-23	4

28.	Visual Design & UI	B.Sc. VCMT 805-23	4
29.	Media Research & Practices*	B.Sc. VCMT 801(A)-23	4
30.	3D Modelling & Texturing Specializing*(A) 3D Lighting and Composition Specializing*(B) 3D Character Animation Specializing*(C) Visual Effects Specializing*(D)	B.Sc. VCMT 802(A,B,C,D)-23	4
Minor Courses (MIC)			
1.	Writing for Media	VCU-107-V	2
2.	Audio-Video Editing	VCU-108-V	2
3.	Art Design & Aesthetics	VCU-207-V	4
4.	Concept of Story Board& Scripting	VCU-208-V	4
5.	Artificial Intelligence (AI) & Multimedia	B.Sc. VCMT 504-23	4
6.	Augmented & Virtual Reality	B.Sc. VCMT 604-23	4
7.	New Media Applications	B.Sc. VCMT 706-23	4
8.	Product Photography	B.Sc. VCMT 805-23	4
9.	Digital Entertainment	B.Sc. VCMT 803(H)-23	4
Multidisciplinary Courses (MDC)			
1.	Start-ups and Entrepreneurship	JMU-209-V	3
2.	Indian Constitution	VAC-112-V	3
3.	Soft Skills	JMU-108-V	3
4.	Digital Product Design		4
Ability Enhancement Courses (AEC)			
1.	English –I	AEC-105-N1	2
2.	English -II	AEC- 201 -V	2
3.	Effective Corporate Communication(ECC)	AEC-103-N3	2
4.	Communication Meditation, And Resolution (CMR)	AEC-102-N1	2
Skill Enhancement Courses (SEC)/Internship/ Dissertation			
1.	Drawing Studio	VCU- 109-V	3
2.	Adobe Suite- Basic Level	VCU- 112-V	3
3.	Adobe Suite Studio	VCU- 211-V	3

4.	Internship	B.Sc. VCMT 505-23	4
5.	Research Project/ Dissertation	B.Sc. VCMT 804(H)-23	12

Value – Added Courses (VAC)			
1.	Cultural Heritage & Nation Building	VAC- 102-V	2
2.	Environmental Science-I	VAC- 101-V	2
3.	Indian Knowledge System	VAC- 104-V	2

*** Students pursue Honors degree with Research will opt one Specialization & Research Subject**

PROGRAMME EDUCATION OBJECTIVES

PEO1	To nurture creative individuals who can think innovatively and express ideas effectively through various multimedia channels & demonstrate proficiency in visual storytelling, design aesthetics, and multimedia content creation.
PEO2	To acquire a strong foundation in multimedia technology, including graphic design, 2D &3D animation, video production, interactive media, and user experience (UX) design.
PEO3	To prepared students to embrace new technologies and industry trends, ensuring their continued relevance in the digital media landscape & ever-evolving field of visual communication and multimedia technology.
PEO4	To encourage critical thinking, research aptitude, ethics and social responsibility related to media in the students.

PROGRAMMEOUTCOMES

PO1	Students will demonstrate proficiency in visual design principles, including composition, color theory, typography, and layout, to create visually appealing and impactful multimedia content.
PO2	Students will acquire proficiency in using industry-standard software and tools for graphic design, animation, audio-video editing, and interactive media production, among others.
PO3	Students will demonstrate their ability to anticipate and contribute to the future evolution of the industry through innovative ideas and design concepts.
PO4	Students will critically assess the impact of new technologies on visual communication and multimedia practices, considering ethical, social, and cultural implications.

Semester-I

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	VCU-101-V	Communication Skills	4	0	0	25	75	100	4	DSC
2.	VCU 103-V	Fundamentals of Multimedia	4	0	0	25	75	100	4	DSC
3.	VCU-105-V	Introduction to Drawing	4	0	0	25	75	100	4	DSC
Minor (MIC)										
1.	VCU-107-V	Writing For Media	2	0	0	15	35	50	2	MIC
Multidisciplinary Courses (MDC)										
1.	JMU-209-V	Start-ups and Entrepreneurship	3	0	0	25	50	75	3	MDC
Ability Enhancement Courses (AEC)										
	AEC-105-N1	ENGLISH-I	2	0	0	25	75	100	2	AEC
Skill Enhancement Courses (SEC)/Internship/ Dissertation										
1.	VCU-109-V	Drawing Studio	0	0	3	25	50	75	3	SEC
Value – Added Courses (VAC)										
1.	VAC-102-V	Cultural Heritage & Nation Building	2	0	0	15	35	50	2	VAC
								650	**24**	

Semester- II

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	VCU-102-V	Fundamentals of Visual Communication	4	0	0	25	75	100	4	DSC
2.	VCU-104-V	Digital Photography Techniques	4	0	0	25	75	100	4	DSC
3.	VCU-106-V	Design Fundamentals	4	0	0	25	75	100	4	DSC
Minor (MIC)										
1.	VCU-108-V	Audio-Video Editing	2	0	0	15	35	50	2	MIC
Multidisciplinary Courses (MDC)										
1.	VAC-112-V	Indian Constitution	3	0	0	25	50	75	3	MDC
Ability Enhancement Courses (AEC)										
1.	AEC-201 -V	ENGLISH-II	2	0	0	25	75	100	2	AEC
Skill Enhancement Courses (SEC)/Internship/ Dissertation										
1.	VCU-112-V	Adobe Suite-Basic Level	0	0	3	25	50	75	3	SEC
Value – Added Courses (VAC)										
1	VAC-101- V	Environmental Science	2	0	0	25	75	100	2	VAC
								700	**24**	

Students exiting the programme after second semester and securing 52 credits including 4 credits of summer internship will be awarded UG

certificate in the B.Sc. Visual Communication & Multimedia Technology. (48+4-52)

Semeste-III

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	VCU-201-V	Animation Techniques	4	0	0	25	75	100	4	DSC
2.	VCU-203-V	Film Appreciation Technique	4	0	0	25	75	100	4	DSC
3.	VCU-205-V	Design & Graphics	4	0	0	25	75	100	4	DSC
Minor (MIC)										
1.	VCU-207-V	Art Design & Aesthetics	4	0	0	25	75	100	4	MIC
Multidisciplinary Courses (MDC)										
1.	JMU-108-V	Soft Skills	3	0	0	25	50	75	3	MDC
Ability Enhancement Courses (AEC)										
1.	AEC-103-V	Effective Corporate Communication (ECC)	0	0	2	25	75	100	2	AEC
Skill Enhancement Courses (SEC)/Internship/ Dissertation										
1.	VCU-211-V	Adobe Suite Studio Advanced	0	0	3	25	50	75	3	SEC
								650	**24**	

Semester-IV

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	VCU-202-V	Basic of UI & UX Design	4	0	0	25	75	100	4	DSC
2.	VCU-204-V	Fundamentals of Game Design				25	75	100	4	DSC
3.	VCU-206-V	Fundamental of Typography	4	0	0	25	75	100	4	DSC
Minor (MIC)										
1.	VCU-208-V	Concept of Story Board & Scripting	4	0	0	25	75	100	4	MIC
Multidisciplinary Courses (MDC)										
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Ability Enhancement Courses (AEC)										
1.	AEC-102-V	Communication Meditation & Resolution	0	0	2	25	75	100	2	AEC
Skill Enhancement Courses (SEC)/Internship/ Dissertation										
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Value – Added Courses (VAC)										

1.	VAC-104-V	Indian Knowledge System	2	0	0	25	75	100	2	VAC
								600	**20**	
Students exiting the programme after fourth semester and securing 96 credits including 4 credits of summer internship will **be awarded UG diploma in the B.Sc. Visual Communication & Multimedia Technology. (48+44+4= 96)**										

Semester-V

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	B.Sc. VCMT 501-23	2 D Character Design for Animation	4	0	0	25	75	100	4	DSC
2.	B.Sc. VCMT 502-23	Audio Production	4	0	0	25	75	100	4	DSC
3.	B.Sc. VCMT 503-23	Web Design and Development	4	0	0	25	75	100	4	DSC
Minor (MIC)										
1.	B.Sc. VCMT 504-23	Artificial Intelligence & Multimedia	4	0	0	25	75	100	4	MIC
Multidisciplinary Courses (MDC)										
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Ability Enhancement Courses (AEC)										
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Skill Enhancement Courses (SEC)/Internship/ Dissertation										

	B.Sc. VCMT 505-23	Internship	0	0	4		100	100	4	SEC
Value – Added Courses (VAC)										
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								500	**20**	

Semester-VI

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	B.Sc. VCMT 601-23	3D Modeling & Visual Effect	4	0	0	25	75	100	4	DSC
2.	B.Sc. VCMT 602-23	Tools for Visual Analytics	4	0	0	25	75	100	4	DSC
3.	B.Sc. VCMT 603-23	Project Work & Viva	4	0	0	25	75	100	4	DSC
Minor (MIC)										
1.	B.Sc. VCMT 604-23	Augmented & Virtual Reality	4	0	0	25	75	100	4	MIC
Multidisciplinary Courses (MDC)										
1.	B.Sc. VCMT 605-23	Digital Product Design				25	75	100	4	--
Ability Enhancement Courses (AEC)										
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Skill Enhancement Courses (SEC)/Internship/ Dissertation										
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Value – Added Courses (VAC)										
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								500	**20**	
Students will be awarded 3-years UG degree in the B.Sc. Visual Communication & Multimedia Technology upon securing **132 credits. (48+44+40=132)**										

Semester-VII

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	B.Sc. VCMT 701-23	Rigging, Skinning & Animation	4	0	0	25	75	100	4	DSC
2.	B.Sc. VCMT 702-23	Advance 2 D Animation Studio	4	0	0	25	75	100	4	DSC
3.	B.Sc. VCMT 703-23	3D Animation – Studio	4	0	0	25	75	100	4	DSC
4.	B.Sc. VCMT 704-23	Corporate Communication	4	0	0	25	75	100	4	DSC
5.	B.Sc. VCMT 705-23	Multimedia Portfolio Development	4	0	0	25	75	100	4	DSC
Minor (MIC)										
1.	B.Sc. VCMT 706-23	New Media Applications	4	0	0	25	75	100	4	MIC
Multidisciplinary Courses (MDC)										

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Ability Enhancement Courses (AEC)										
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Skill Enhancement Courses (SEC)/Internship/ Dissertation										
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Value – Added Courses (VAC)										
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								600	**24**	

Semester-VIII (4 Years UG Honors Degree)

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	B.Sc. VCMT 801-23	3D modelling & Texture	4	0	0	25	75	100	4	DSC
2.	B.Sc. VCMT 802-23	Information Security (B.Sc. VCMT 802-23)	4	0	0	25	75	100	4	DSC
3.	B.Sc. VCMT 803-23	Introduction to Architecture Modelling	4	0	0	25	75	100	4	DSC
4.	B.Sc. VCMT 804-23	Fundamental of UX Design	4	0	0	25	75	100	4	DSC
5.	B.Sc. VCMT 805-23	Visual Design & UI	4	0	0	25	75	100	4	DSC
Minor (MIC)										

1.	B.Sc. VCMT 806-23	Product Photography	4	0	0	25	75	100	4	MIC
Multidisciplinary Courses (MDC)										
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Ability Enhancement Courses (AEC)										
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Skill Enhancement Courses (SEC)/Internship/ Dissertation										
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Value – Added Courses (VAC)										
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								600	**24**	

Semester-VIII UG Honors with Research

S. No.	Course Code	Course Title	L	T	P	Sessional	Final Exam Marks	Total	Credit	Category Code
Discipline- Specific Courses (DSC)										
1.	B.Sc. VCMT 801A-23	Media Research & Practices	4	0	0	25	75	100	4	DSC
2.	B.Sc. VCMT 802 A-23	Specialization – 1* 3D Modelling & Texturing	4	0	0	25	75	100	4	DSC
3.	B.Sc. VCMT 802 B-23	Specialization – 2* 3D Lighting and Composition	4	0	0	25	75	100	4	DSC
4.	B.Sc. VCMT 802C-23	Specialization – 3* 3D Character Animation	4	0	0	25	75	100	4	DSC
5.	B.Sc. VCMT 802D-23	Specialization – 4* Visual Effects	4	0	0	25	75	100	4	DSC
***Students will choose one Specialization from above mentioned Four**										
Minor (MIC)										
1.	B.Sc. VCMT 803 R-23	Media & Entertainment	4	0	0	25	75	100	4	MIC
Multidisciplinary Courses (MDC)										
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Ability Enhancement Courses (AEC)										
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Skill Enhancement Courses (SEC)/Internship/ Dissertation										
1.		Research Project/ Dissertation	0	0	12	50	250	300	12	SEC
Value – Added Courses (VAC)										
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								600	**24**	

Students will Awarded With 4 Year UG Honors with Research in B.Sc. Visual Communication and Multimedia Technology after choosing and securing Minimum Grade in this Scheme.

*****Students will opt one specialization from given

Semester-1

COMMUNICATION SKILLS (VCU-101-V)

L	T	P
4	0	0

Time Allowed: 3 Hours

I.A. :25Marks
Theory:75Marks
Total Credits: 4
Max. Marks: 100

COURSE OBJECTIVES

1. To impart knowledge about the elements of effective communication skills
2. To create understanding of impactful writing & speech communication
3. To develop the knowledge of employment communication about resumes
4. To inculcate the knowledge of employment communication about job interview

UNIT-I: BASICS OF COMMUNICATION

1.1 Components of effective Communication
1.2 Verbal and Non-verbal communication
1.3 Barriers to effective communication
1.4 Improving Writing skills
1.5 Essentials of good Writing styles expressions & words to be avoided

UNIT-II: LISTENING SKILLS & PRESENTATION SKILLS

2.1 Art of Listening, Types of listening, listening skills
2.2 Barriers of effective listening
2.3 Reading Skills: Purpose & Types, Steps in making presentation
2.4 Techniques for Effective reading
2.5 Oral presentation, body language & public Speaking skills

UNIT-III: RESUME AND COVERING LETTER

3.1 Content of good resume
3.2 Guidelines for writing resume
3.3 Types & style of resume
3.4 Different types of Cover letter

3.5 Emails & Power Point Presentation

UNIT-IV: INTERVIEW AND ETIQUETTES

4.1 Importance job Interview

4.2 Characteristics of job Interview

4.3 Interview process

4.4 Techniques – Manners and Etiquettes

4.5 Common questions during interview

ASSIGNMENTS

1. Submit any five case study assignment that illustrates effective communication.
2. Classroom presentations on contemporary issues.
3. Practice active listening skills by maintaining eye contact, nodding in agreement, and providing verbal and non-verbal cues to show that you are attentive.
4. Speaking practice: Role play and communicative activities.
5. Interpersonal communication: Ice breakers, Jumble story etc.

COURSE OUTCOMES

1. Students will have the knowledge about the elements of effective communication skills.
2. Students will be able to have the understanding of impactful writing.
3. Students would be able to understand the significance of speech communication.
4. Students will be having the knowledge of employment communication.

SUGGESTED READINGS

1. Soft skills and professional communication, Francis Peters SJ, 1st Edition, McGraw Hill Education, 2011
2. Effective communication, John Adair, 4th Edition, Pan Mac Millan,2009
3. Bringing out the best in people, Aubrey Daniels, 2nd Edition, McGraw Hill, 1999
4. Koneru Aruna, Professional Communication McGraw Hill Pub. 1998,
5. Murphy Herta, Herbert WHidderbrandt, Jane P Thomas Effective Business Communication, 1997
6. Petit Lesikkar, Business Communication, 1994
7. Rai and Rai, Business Communication, 1999

FUNDAMENTALS OF MULTIMEDIA (VCU 103-V)

L	T	P	I.A. : 25Marks
4	0	0	Theory : 75Marks

Time Allowed: 3 Hours

Total Credits: 4

Max. Marks: 100

COURSE OBJECTIVES

1. To enumerate and describe the multimedia components
2. To understand students with basics of text & fonts in multimedia
3. To generate, manipulate and use audio, video & images in multimedia
4. To provide Software basic skills and hands on work on digital media

UNIT-I: MULTIMEDIA BASICS

1.1 Evolution of multimedia technology

1.2 Definition and characteristics of multimedia.

1.3 Components of multimedia systems

1.4 Applications of multimedia

1.5 Media Convergence & Multimedia

UNIT-II: TEXT, FONTS AND HYPERTEXT IN MULTIMEDIA

2.1 Usage of text in Multimedia

2.2 Fonts & Type Face

2.3 Fonts editing & designing tools

2.4 Hypermedia & Hypertext

2.5 Digital font's techniques

UNIT-III: PROJECT MULTIMEDIA

3.1 Stages of a multimedia project

3.2 Requirements to make good multimedia

3.3 Hardware peripherals - connections, memory and storage devices

3.4 Multimedia authoring basics and authoring tools.

3.5 Making of some Multimedia with animations

UNIT-IV: AUDIO -VIDEO & IMAGE FUNDAMENTALS AND REPRESENTATION

4.1 Digital audio, MIDI audio, audio file formats

4.2 Analogue video, digital video, video file formats

4.3 Still images – bitmaps, vector drawing

4.4 Image Compression & file formats

4.5 White balance correction, Dynamic range correction, Photo Retouching

ASSIGNMENTS

1. Design an interactive website using Word Press
2. To Modify the document (changing background color etc.) using the various tool
3. Create an scene to show the sunrise (using multiple layers and motion twining)
4. Create a short in which text Hello gets converted into Good Bye
5. Create a short video having five images having fade-in fade-out effect

COURSE OUTCOMES

1. Students will have the knowledge about the basics of multimedia
2. Students will be able to have the understanding of technologies behind multimedia applications
3. Students would be able to understand the process of retrieve the multimedia data
4. Students will be having the knowledge of image colors and its correction

SUGGESTED READINGS

1. Multimedia: Making It Work (9th edition). McGraw Hill Education, Vaughan, T. (2017)

2. Multimedia System Design (1st edition). Pearson Education India. Andleigh, K.., & Thakkar, K. (2015)

3. The Ultimate Multimedia Handbook. TMH.Keyes, J. (2000)

4. Multimedia Computing, Communications Applications. Pearson.

Effective communication skills by John Neilson. Steinmetz, R., &Naharstedt, K. (2012)

5. Tay Vaughan, “Multimedia making it work”, Tata McGraw-Hill, 2008.

6. Rajneesh Aggarwal & B. B Tiwari, “ Multimedia Systems”, Excel Publication, New Delhi, 2007.

7.https://www.youtube.com/watch?v=GhcMFOHyZfo&list=PLmTmzlfvwSwypTWCV8rV eTK-ie76Y57N_

INTRODUCTION TO DRAWING (VCU-105-V)

L	T	P	
4	0	0	I.A. : 25Marks
			Theory : 75Marks
Time Allowed: 3 Hours			Total Credits: 4
			Max. Marks: 100

COURSE OBJECTIVES

1. To introduce students to the basics of drawing and develop their fundamental drawing skills.
2. To familiarize students with various drawing tools, techniques, and mediums.
3. To encourage creativity and artistic expression through drawing.
4. To enable students to communicate ideas effectively through visual representation.

UNIT: I INTRODUCTION TO DRAWING

1.1 Importance of drawing in various professional fields

1.2 Different drawing mediums and tools

1.3 Introduction to basic drawing techniques

1.4 Line, shape, Dot, space and form

1.5 Drawing simple objects using different techniques

UNIT: II FUNDAMENTALS OF DRAWING

2.1 Principles and elements of design in drawing

2.2 Understanding composition and layout in drawings

2.3 Drawing exercises focusing on proportion and perspective

2.4 Introduction to shading techniques: hatching, cross-hatching, and blending

2.5 Creating a still life drawing using proportion and shading techniques

UNIT: III EXPLORING DIFFERENT DRAWING STYLES

3.1 Different drawing styles: realistic, abstract, and expressive

3.2 Characteristics and applications of each style

3.3 Creating drawings in different styles

3.4 Critique and analysis of student work,

3.5 Focusing on style and expression

UNIT: IV DRAWING AS COMMUNICATION

4.1 Role of drawing in visual communication

4.2 Introduction to technical drawing and its applications

4.3 Introduction to sketching.

4.4 Importance of sketching in design and ideation

4.5 Creating technical drawings and sketches to communicate ideas

COURSE OUTCOMES

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

1. Demonstrate an understanding of the principles and elements of design in drawing

2. Use various drawing tools and mediums to create different types of drawings

3. Apply different techniques and styles in their drawings to achieve desired effects

4. Use drawing as a means of communication to convey ideas and concepts

PRACTICAL/ASSIGNEMENTS

1. Hands-on activities completed during each class

2. Artistic portfolio showcasing student progress and development throughout the course

3. Class participation and engagement in discussions and critiques

4. Periodic quizzes and assignments to assess understanding of concepts and techniques

SUGGESTED READING

1. "Drawing on the Right Side of the Brain" by Betty Edwards
2. "Keys to Drawing" by Bert Dodson
3. "How to Draw What You See" by Rudy De Reyna
4. "The Natural Way to Draw" by KimonNicolaides
5. "Figure Drawing for All It's Worth" by Andrew Loomis
6. "Drawing Lessons from the Great Masters" by Robert Beverly Hale
7. "Perspective Made Easy" by Ernest R. Norling
8. "The Complete Guide to Anatomy for Artists & Illustrators" by Gottfried Bammes
9. "Drawing the Head and Hands" by Andrew Loomis
10. "Color and Light: A Guide for the Realist Painter" by James Gurney
11. https://artincontext.org/what-is-drawing/
12. https://artsandculture.google.com/story/zQWB8rqqdj9t4g
13. https://www.britannica.com/art/drawing-art
14. https://www.youtube.com/@GCFLearnFree

WRITING FOR MEDIA (VCU-107-V)

L	T	P	I.A. : 15 Marks
2	0	0	Theory: 35 Marks
Time Allowed: 3 Hours			Total Credit: 2
			Max. Marks: 50

COURSE OBJECTIVES

1. Students will familiarizing with writing skills for various media
2. To equip the students with recent trends in media writing.

UNIT I: MEDIA AND WRITING

1.1 Overview of media platforms and their unique characteristics

1.2 The role of media writing in storytelling and journalism

1.3 Principles of effective communication in different mediums

1.4 Structure and format of news articles, features, and opinion pieces

1.5 Ethical considerations in media writing

UNIT-II: WRITING DIFFERENT MEDIA PLATFORMS

2.1 Introduction to Writing for Print Media, Principles & Techniques of Writing for Print

2.2 Writing for Radio, Language and Grammar, Formats of Radio Writing

2.3 Basic Principles and Techniques of TV Writing, Elements of TV Scripting Writin, General and Special audience programmes

2.4 Writing Techniques for New Media, Writing for Social Media Platforms – Facebook, Twitter, Instagram etc.

2.5 Blog/Vlog writing, Live Writing, Reviews Blog- Book, Film

ASSIGNMENTS

1. Prepare one script on 5 minutes Radio programme.
2. Prepare one script on 5 minutes TV programme.
3. Prepare chart/poster on story boarding for television or radio script.
4. Prepare a brief report on famous TV Script Writers of India and their Writing Style.
5. Any other assignment given by the concerned faculty.

COURSE OUTCOMES

1. Students will learn various writing techniques for different media.
2. Students will create content for various social media platforms.

SUGGESTED READINGS

1. Dilwali, Ashok. (2002). All about photography. New Delhi: National Book Trust.
2. Kobre, Kenneth. (2000). Photojournalism. The professional approach (4th Ed). London: Focal Press
3. Horton, Brian. (2000). Guide to photojournalism. New York: McGraw-Hill
4. Chapnick, Howard. (1994). Truth needs no ally: Inside photojournalism. New York: University of Missouri Press 6. British Press Photographers Association. (2007). 5000 Days: Press photography in a changing world. London: David & Charles
5. David, J. (2007). Radio Broadcasting Journalism in India. New Delhi: Cyber Tech Publications.
6. Gandhi, Prakash, Ved. (2009). Handbook of Television and Radio Broadcast. New Delhi: Kanishka Publishers, Distributers.

START-UPS & ENTREPRENEURSHIP (JMU-209-V)

L	T	P	I.A. :25 Marks
3	0	0	Theory: 50 Marks
Time Allowed: 3 Hours			Total Credits: 3
			Max. Marks: 75

COURSE OBJECTIVES

1. To understand the concept of entrepreneurship and identify the dimensions and resources required to establish a start-up
2. To identify the entrepreneurial strategies and various business models, and develop the entrepreneurial competencies
3. To analyze the schematic of the new venture's environment and understand the elements of business plan. To identify the various sources of finance for a new venture and role of central and state government in promoting entrepreneurship

UNIT-I: FOUNDATIONS OF START-UP

1.1 Concept of Entrepreneur - Features

1.2 Types & Functions of Entrepreneur

1.3 Attributes of Strategic Resources – Approaches, Women Entrepreneur

1.4 Entrepreneur Process & Role of Entrepreneurship in Economic Development

1.5 Sources for Idea Generation

UNIT-II: ENTREPRENEURIAL STRATEGIES AND COMPETENCIES

2.1 Crafting and Evaluating Strategy

2.2 Different types of New Venture expansion strategies

2.3 Entrepreneurship competencies - qualities of a successful entrepreneur - Entrepreneurial traits

2.4 Developing competencies - Tools of assessment , Organizational structures

2.5 Role of public Sector & financial institution in the growth of entrepreneur

UNIT-III: START-UP ENVIRONMENT

3.1 Sources of new ventures capital, importance & benefits

3.2 Processes of Business Environment Analysis

3.3 Elements of Business plan, Formalities and procedures in registration of a business

3.4 Regulatory norms and legal aspects

3.5 Introduction to various incentives, subsidies and grants

ASSIGNMENTS

1. Design Thinking & Customer Validation
2. Generating Market Traction
3. Positioning and Packaging
4. Start-up Models fade-in fade-out effect
5. Design a business plan as start-up

COURSE OUTCOMES

1. Students will have the knowledge of entrepreneur and entrepreneurship
2. Students will be able to have the understanding about different business models and strategies
3. Students would be able to develop a start-up business plan and examine the elements & students would be able to understand the process of new venture launch or expansion **SUGGESTED READINGS**

1. Vasant Desai, Small-Scale Enterprises and Entrepreneurship Ecosystem, 6th Edition, Himalaya Publishing House, 2016.

2. Robert Hisrich, Michael Peters, and Dean Shepherd, Entrepreneurship, 11th Edition, McGraw Hill Education, 2019.

3. Poornima M. Charantimath, Entrepreneurship Development and Small Business Enterprises, 3rd Edition, Pearson Education, 2018.

4. Andrew Zacharakis, WiliiamBygrave, and Andrew Corbett, Entrepreneurship, 4th Edition, Wiley, 2016.

5. Marc J. Dollinger, Entrepreneurship: Strategies and Resources, 4th Edition, Marsh Publications, USA, 2008.

6. Rajeev Roy, Entrepreneurship, 2nd Edition, Oxford University Press, 2011.

7. C.V. Bakshi, Entrepreneurship Development, 2nd Edition, Excel Publications, 2010.

ENGLISH - I PAPER CODE: AEC-105-V

Total credits: 2
External marks: 75
Internal marks: 25

Course Outcomes:

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

1. Learn about the foundation of English language.
2. Familiarize with essentials of grammar of English language.
3. Inculcate creative & aesthetic sensitivity and critical faculty through comprehension, appreciation, and analysis of the prescribed literary texts.
4. Understand proper pronunciation and accent of English language.

Unit I

Basic Grammar: Noun, Pronoun, Adjective, Verb, Adverb, Prepositions. Vocabulary Building: Suffix, Prefix, Synonyms, Antonyms,

Unit II

Essentials of Grammar-I: Articles, Subject -Verb agreement, Parts of Speech, Tenses

Unit III

Essentials of Grammar – II: Vowels, Consonants, Diphthongs, Clusters and Syllable, Direct and Indirect Speech.

Unit IV

Spoken English Communication: Speech Drills, Pronunciation, Accent Stress and Intonation

SUGGESTED READINGS:

1. Madhulika Jha, Echoes, Orient Long Man
2. Ramon & Prakash, Business Communication, Oxford.
3. Sydney Greenbaum Oxford English Grammar, Oxford.
4. M. Ashraf Rizvi, Effective Technical Communication, Tata McGraw Hill

Note: Only the latest editions of the above books are recommended.

DRAWING STUDIO (VCU-109-V)

L	T	P	I.A/Practical: 25 Marks
0	0	3	Lab: Marks -50
			Max. Marks: 75
Time Allowed: 3 Hrs.			Total Credit: 3

COURSE OBJECTIVES

1. To develop a strong foundation in drawing techniques and skills and also to foster creativity and artistic expression through drawing.

2. To enhance students' ability to observe and represent objects accurately and also cultivate critical thinking skills in analyzing and interpreting visual messages.

UNIT: I INTRODUCTION TO DRAWING STUDIO, TECHNIQUES, COMPOSITION AND DESIGN PRINCIPLES

1.1 Different drawing tools and materials

1.2 Basic drawing techniques: line drawing, contour drawing, and gesture drawing

1.3 Principles of composition and design in drawing

1.4 Understanding concepts such as balance, proportion, rhythm, and focal point

1.5 Analysis and critique of examples of well-composed drawings, Application of composition principles in student drawing, Develop hand-eye coordination and observation skills

UNIT: II DEVELOPING AND EXPLORING DRAWING, SKILLS, STYLES AND APPROACHES

2.1 Intensive practice sessions focusing on perspective drawing, shading, cross hatching, and texture rendering

2.2 Techniques to various subjects (still life, landscapes, figures, etc.)

2.3 Different drawing styles (realism, abstract, impressionism, etc.)

2.4 Study and analysis of works by renowned artists to understand their unique approaches

2.5 Challenging assignments to encourage experimentation with different styles

COURSE OUTCOMES

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

1. Demonstrate proficiency in a variety of drawing techniques, such as line drawing, shading, cross-hatching, and texture rendering.
2. Apply principles of composition and design to create visually appealing and balanced drawings and employ creative and innovative approaches to drawing exercises and assignments.

PRACTICAL/ASSIGNEMENTS

1. Regular class participation and engagement in studio sessions

2. Completion and quality of assigned drawing exercises, projects, and portfolio and active participation and contribution to group discussions and critiques

SUGGESTED READING

1. "Figure Drawing for All It's Worth" by Andrew Loomis

2. "Drawing Lessons from the Great Masters" by Robert Beverly Hale

3. "Perspective Made Easy" by Ernest R. Norling

4. "The Complete Guide to Anatomy for Artists & Illustrators" by Gottfried Bammes

5. "Drawing the Head and Hands" by Andrew Loomis

6. https://artincontext.org/what-is-drawing/

7. https://artsandculture.google.com/story/zQWB8rqqdj9t4g

8. https://www.britannica.com/art/drawing-art

CULTURAL HERITAGE & NATION BUILDING (VAC-102-V)

L	T	P	I.A : 15 Marks
			Lab: Marks -35
2	0	0	Max. Marks: 50
Time Allowed: 3 Hrs.			Total Credit: 2

COURSE OBJECTIVES

1. To develop an understanding of the importance of cultural heritage in promoting national identity and unity.

2. To explore the historical, social, and cultural significance of different aspects of cultural heritage.

UNIT: I DIFFERENT PERSPECTIVES TO CULTURAL HERITAGE AND NATION BUILDING

1.1 Definition and components of cultural heritage

1.2 Significance of cultural heritage in nation-building

1.3 Evolution of cultural heritage

1.4 Historical events and movements influencing cultural heritage

1.5 Career opportunities in Cultural Heritage

UNIT: II CULTURAL HERITAGE IN THE CONTEMPORARY CONTEXT

2.1 Cultural heritage and social cohesion

2.2 Tourism and cultural heritage

2.3 Challenges in preserving cultural heritage

2.4 Govt. initiatives in preserving cultural heritage

2.5 Role of mass media in promoting cultural preservation

COURSE OUTCOMES

1. Students will be able to define cultural heritage and discuss its importance in promoting national identity.
2. Students will be able to analyze the historical factors that have shaped cultural heritage and also able to discuss the challenges and opportunities of utilizing cultural heritage for nation-building.

PRACTICAL/ASSIGNEMENTS

1. Short quiz to assess understanding of key concepts.

2. Group presentation on the impact of a historical event on cultural heritage.

3. Group project on proposing a preservation plan for a specific cultural heritage site.

4. Class debate on the repatriation of cultural artifacts.

5. Organised Visits/Exhibitions for students.

SUGGESTED READING/WEB LINKS

1. UNESCO World Heritage Sites: A Complete Guide by UNESCO

2. Cultural Heritage and Nation Building: Modern India and its Ancient Past by RomilaThapar

3. Cultural Heritage Management: A Global Perspective by Anna Leask and Conal McCarthy

4. Intangible Cultural Heritage: A Global Perspective by Laurajane Smith and NatsukoAkagawa

5. Cultural Heritage and Tourism: An Introduction by Dallen J. Timothy

6. https://asi.nic.in/national-cultural-heritage-sites-list/

7. https://www.nmcg.nic.in/writereaddata/fileupload/47_River%20Basin%20Guide%20for%20Medium%20and%20Minor%20Rivers.pdf

8. https://www.cgisaopaulo.gov.in/svcc.php

Semester-II

FUNDAMENTALS OF VISUAL COMMUNICATION (VCU- 102-V)

L	T	P	I.A.: 25 Marks
4	0	0	Theory: 75 Marks
Time Allowed: 3 Hours			Max. Marks: 100
			Total Credits: 4

COURSE OBJECTIVES

1. Introducing the concept of Visual Communication.
2. To inculcate knowledge of Visual communication culture.
3. To acquaint students with knowledge of Design.
4. To orient students toward visual composition.

UNIT-I: INTRODUCTION TO VISUAL COMMUNICATION

1.1 Communication: Definition, types of Communication nature of communication

1.2 Understanding Visual Communication and its importance

1.3 Visual Communication as expression and skill

1.4 Visual Communication –Encoding and Decoding

1.5 Scope of Visual Communication

UNIT-II: DEVELOPING VISUALS & COMPOSITION

2.1 Ideating Design, Journey of an idea to visual

2.2 Contemporary practices in visual development

2.3 Principles of Visual and Other Sensory Perceptions

2.4 Color psychology

2.5 Color wheel.

UNIT-III: UNDERSTANDING VISUAL CULTURE

3.1 Visual Universe, Visual Thinking

3.2 Visual Culture and Visual Grammar

3.3 Art and Aesthetics of visual communication

3.4 Narrative representation through Visuals

3.5 Case studies of the visual culture of India

UNIT-IV: VISUAL AND MARKET

4.1 Optical / Visual Illusions

4.2 Visual market and research

4.3 Process of developing ideas-verbal, visual, combination & thematic, visual thinking

4.4 Associative techniques, materials, tools

4.5 Design execution and presentation.

ASSIGNMENTS

1. Discuss basic visual communication processes as well as self-perception of visual communication
2. Write an essay/article on contemporary visual Communication practices (500-800) words.
3. Students will test the relevance of any one selected theory on basis of survey and interaction, and present the result through ppt.
4. Assignment on audience understanding
5. Other assignment given by the concerned faculty

COURSE OUTCOMES

1. Students would be able to introduce themselves to concept of Visual Communication.
2. Students would be able to inculcate knowledge of Visual communication culture.
3. Students would be able to develop their knowledge of visual composition.
4. Students would be able to apply of knowledge of the market and visual communication.

SUGGESTED READINGS:

1. Barnes, S. B. (2011). *An introduction to visual communication: From cave art to second life*. Peter Lang, International Academic Publishers.
2. Hollis, R. (2001). *Graphic design: A concise history*.
3. Samara, T. (2020). *Design elements: Understanding the rules and knowing when to break them - A visual communication manual* (3rd ed.). Rockport Publishers.
4. Cheng, K. (2020). *Designing type* (2nd ed.). Yale University Press.
5. Davis, M., & Hunt, J. (2017). *Visual communication design: An introduction to design concepts in everyday experience*. Bloomsbury Publishing

DIGITAL PHOTOGRAPHY TECHNIQUES (VCU-104-V)

L	T	P	I.A: 25 Marks
4	0	0	Theory: 75 Marks
Time Allowed: 3 Hours			Total Credits: 4
			Max. Marks: 100

COUSRE OBJECTIVES

1. To teach students the fundamental principles of photography, including composition, exposure, and lighting.
2. To provide students with hands-on experience using different types of cameras and lenses, as well as editing software.
3. To help students develop their own personal style and vision in photography.
4. To introduce students to different genres of photography, such as portrait, landscape, Wild Life & Nature.

Unit -I INTRODUCTION TO PHOTOGRAPHY

1.1 Meaning of Photography, History & Evolution of Photography.

1.2 Film photography & Digital Photography, VGA vs. Megapixel

1.3 Different Types of Cameras- SLR, DSLR, Mirror Less, Pinhole Camera, Full Frame & Crop Sensor, Action Camera etc.

1.4 Camera Accessories – Tripod, Additional Lens, Gimble, Flash Light & Camera Bag, Memory unit etc.

1.5 Image Formats – RAW, JPEG, PNG,TIFF, GIF, PSD etc.

Unit-II CAMERA FUNCTIONS AND SETTINGS

1.1 Understand the Exposure Triangle- aperture, shutter speed, and ISO , Zoom, Optical Zoom vs. Digital Zoom

1.2 Depth of field and focus, Composition and framing

1.3 Focal Length, F stop & T stop, Image sensor

1.4 Angle of View, Program Mode & Auto Mode, Histogram

1.5 Function of White Balance & Rule of Third, Gamma

Unit-III CAMERA LENSES AND TYPES OF SHOTS, ANGLE & MOVEMENTS

3.1 Different types of Lenses- Standard, Wide/Ultra Angle, Macro, Telephoto, Fisheye Lens, Zoom lens vs. Prime Lens etc.

3.2 Camera Lens on the Basis of Mount-EF Lenses, EFS Lenses, DX & FX Mount Lenses, A Mount lens & A Mount DT etc.

3.3 Different types of Shots.

3.4 Different Camera Angeles.

3.5 Different Camera Movements.

Unit-IV LIGHTS & FLASH UNIT

4.1 Lighting & types of Light in photography

4.2 Three Point Lightning System, Ring Light & Spot Light

4.3 Light meter in photography, Spot Metering, Center weighted metering mode.

4.4 Flash accessories including diffusers, reflectors, and gels, Soft Boxes, Umbrella lights.

4.5 Creative lighting techniques, including high-speed flash and light painting.

COURSE OUTCOMES

1. Students will demonstrate an understanding of the technical aspects of photography, including camera operation, lighting, exposure, and post-processing.
2. Students will be learn the importance of light in Photography.
3. Students will demonstrate an ability to use photography as a means of creative expression, conveying emotion, mood, and message through their images.
4. They will apply various shooting techniques for different subjects and contexts, including portraiture, landscape, macro and street photography.
5. Students will create a portfolio of their work, demonstrating their technical competence, creative expression, and professional skills.

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PRACTICAL/ASSIGNEMENTS

1. Handling Camera

2. Experiment with aperture and shutter speed to achieve different effects in photographs. Take photos of the same subject using different apertures and shutter speeds, and compare the results.

3. Set up a still life or portrait scene in a studio and experiment with different types of lighting, modifiers, and techniques to create different moods and effects.

4. Choose a subject and explore different composition techniques, including the rule of thirds, leading lines, symmetry, and depth of field.

5. Analyze the resulting images and discuss how the different compositions affect the overall impact of the photograph.

SUGGESTED READINGS

1. "Understanding Exposure" by Bryan Peterson - This book covers the technical aspects of photography, including aperture, shutter speed, and ISO, and provides practical tips for achieving correct exposure.

2. "The Photographer's Eye" by Michael Freeman - This book focuses on the compositional aspects of photography, including framing, balance, and visual flow, and provides guidance for creating impactful images.

3. "On Photography" by Susan Sontag - This classic work explores the role of photography in society and culture, and raises important questions about the ethics and politics of image-making.

4. "The Americans" by Robert Frank - This influential photography book is a seminal work of documentary photography, and offers a powerful critique of American society in the 1950s.

5. "The Decisive Moment" by Henri Cartier-Bresson - This book is a collection of images by one of the most celebrated photographers of the 20th century, and provides insight into his approach to photography and his philosophy on capturing the decisive moment.

6. GFX Mentor, Kunal Malhotra, Gmax Studio on Youtube

DESIGN FUNDAMENTALS (VCU-106-V)

	I.A: 25 Marks
L T P	Theory: Marks -75
4 0 0	Max. Marks: 100
Time Allowed: 3 Hrs.	Total Credit: 4

COURSE OBJECTIVES

1. To familiarize students with design and its various disciplines
2. To introduce students to the design process
3. To teach students the fundamentals of design principles
4. Prepare students for more advanced design coursework and professional careers in this field

Unit-I DESIGN PRACTICES

1.1 Definition of design & Overview of design

1.2 Ideation and concept development, Design process and methodology.

1.3 Various design disciplines (graphic design, web design, product design & user experience design.)

1.4 Making of Prototyping

1.5 Testing Prototyping

UNIT-II DESIGN ELEMENTS AND COMPOSITION

2.1 Elements of Design

2.2 Principle of Design

2.3 Composition and layout, Gestalt principles

2.4 Grid, Proximity, White Space & Repetition symmetry & asymmetry

2.5 Composition techniques used in print, web, and branding design

UNIT –III COLORS & DESIGN

3.1 Color Theory , Color properties - hue, saturation, value

3.2 Color harmony - analogous, complementary and triadic

3.3 Color mixing

3.4 Color Schemes

3.5 Cultural associations & symbolism in design,

UNIT-IV PROFESSIONAL ETHICS

4.1 Ethical considerations in design practice

4.2 Intellectual property and copyright law, fair use and plagiarism, Protecting design with trademarks, patents, and copyrights

4.3 The impact of digital technologies on intellectual property

4.4 Understanding professional codes of conduct and standards

4.5 Environmental regulations and laws governing design

COURSE OUTCOME

1. Students will have a solid understanding of the principles of design & the processes used to create effective designs.
2. Students will have an understanding of the history of design and the major design movements.
3. Students will be able to think creatively and critically when approaching design challenges.
4. Students will be able to communicate their design ideas effectively through visual presentations.

ASSIGNEMENTS

1. Create an infographic: Choose a topic or theme and create an infographic that presents information in a clear and visually appealing way. Consider factors such as data visualization, typography, and color scheme.

2. Design a print layout: Choose a publication, such as a magazine or brochure, and design a layout that effectively communicates information and engages the reader. Consider factors such as typography, hierarchy, and visual elements.

3. Design a product: Choose a product and design it from concept to completion, including sketches, digital renderings, and prototypes.

4. Create a branding identity: Choose a product or service and create a branding identity for it, including a logo, color scheme, and other visual elements that convey the brand's values and personality.

5. Design a website: Choose a topic or theme and design a website that effectively communicates information and engages the user. Consider factors such as user experience, layout, typography, and color scheme.

SUGGESTED READING

1. "Thinking with Type" by Ellen Lupton
2. The Elements of Graphic Design" by Alex W. White
3. "Don't Make Me Think" by Steve Krug
4. "Grid Systems in Graphic Design" by Josef Müller-Brockmann
5. https://www.youtube.com/@GCFLearnFree
6. https://www.youtube.com/@envatotuts

AUDIO - VIDEO EDITING (VCU-108-V)

	I.A: 15 Marks
L T P	Theory: Marks -35
0 0 2	Max. Marks: 50
Time Allowed: 3 Hrs.	Total Credit: 2

COURSE OBJECTIVES

1. To introduce students to the fundamentals of audio and video editing.
2. To introduce students to advanced audio-video editing techniques.
3. To prepare students for careers in audio-video editing and related fields, such as filmmaking, video production, and multimedia design.
4. To provide students with opportunities to practice their audio-video editing skills through hands-on projects and assignments.

UNIT-I BASICS OF AUDIO & EDITING

1.1 Basics of sound and audio.

1.2 Pitch, Tone & Bass, Tempo, Audio Modulation, and Console.

1.3 Editing audio by editing software- Avid Pro tools, Adobe Audition, Audacity.

1.4 Removing background noise from audio, Applying audio effects and filters.

1.5 Linear & Non linear editing, Mixing and mastering audio- EQ, compression, reverb.

UNIT-II VIDEO EDITING

2.1 Basics of video and video formats, Video timeline & Scroll

2.2 Video editing software and their features- Adobe premiere pro, Final cut Pro.

2.3 Cutting and arranging video clips Adding transitions and effects to video.

2.4 Color grading and correction, Exporting video for various platforms and formats.

2.5 Introduction to non-linear editing, online editing, the role of editing in visual storytelling.

UNIT-III FUNDAMENTAL OF AUDIO- VIDEO EDITING

3.1 Introduction to Audio Formats

3.2 Introduction to Video Formats- MP4

3.3 The role of codecs and compression- lossless compression and lossy compression.

3.4 Understanding resolution, aspect ratio, frame rate, HD, FHD,4K & 8K

3.5 Audio- Video Transitions.

UNIT-IV EMERGING TRENDS IN AUDIO- VIDEO EDITING

4.1 360-degree video editing, Live streaming and real-time editing.

4.2 Multi-camera editing, Mobile editing, 3D editing and compositing

4.3 Immersive audio formats: Dolby Atmos and DTS:X.

4.4 Use of AI and VR in Audio & Video editing.

4.5 Motion graphics and animation software, Key frame animation techniques.

COURSE OUTCOMES

1. Understanding the basics of audio and video formats, codecs, and compression.
2. Understanding the fundamentals of audio and video editing software.
3. Developing proficiency in basic audio and video editing techniques such as cutting, trimming, and splitting clips.
4. Understanding emerging trends and technologies in audio and video editing, such as 360-degree video editing, virtual production, and artificial intelligence.

PRACTICAL/ASSIGNEMENTS

1. Create a short video montage using Adobe premiere Pro.
2. Create a podcast using Pro tools or Adobe Audition.
3. Create a music video using Final Cut Pro.
4. Edit a short film using Final Cut Pro.
5. Create a virtual tour for 360 video editing by AI.

SUGGESTED READING

1. "In the Blink of an Eye: A Perspective on Film Editing" by Walter Murch
2. "The Technique of Film and Video Editing: History, Theory, and Practice" by Ken Dancyger.
3. "Digital Non-Linear Desktop Editing" by Thomas Ohanian and Michael Phillips
4. "Color Correction Handbook: Professional Techniques for Video and Cinema" by Alexis Van Hurkman
5. "Pro Tools 101: An Introduction to Pro Tools 11" by Frank D. Cook.

Constitution of India (VAC-112-V**)**

I.A./Practical: 25 Marks
Theory: 50 Marks
Max. Marks: 75
Total Credits: 3

L T P

3 0 0

Time Allowed: 3 Hrs.

COURSE OBJECTIVES:

1. To understand the political framework for social welfare
2. To understand the foundation of democracy in India
3. To Understand Special Constitutional provision

UNIT I: FOUNDATION OF DEMOCRACY IN INDIA

1.1 Introduction of Constitution of India: History, Origin and Drafting committee

1.2 Meaning and importance of the Constitution

1.3 Preamble of Indian Constitution

1.4 State: Origin, Concept and its Organs.

1.5 Concepts of Welfare State

Unit II: SALIENT FEATURES OF INDIAN CONSTITUTION

1.1 Directive Principles of State Policy

1.2 Fundamental Rights, Fundamental Duties

1.3 Reasonable Restriction on Article 19(a)

1.4 The President, Union Executive and Indian Parliament

1.5 Salient Feature & Characteristics of Indian Constitution

UNIT III: SPECIAL FEATURES OF INDIAN CONSTITUTION

3.1 Amendment to Constitution, and Important Constitutional Amendments

3.2 Emergency Provisions: National and financial Emergency, Presidential Rule

3.3 Citizen oriented measures – RTI and PIL – Provisions and significance

3.4 Part 9 B: The Cooperative Societies

3.5 Constitutional Remedies for Citizens

Assignments:

1. Group Activity: Group Presentation on Welfare state
2. Group Activity: Poster/Chart on Constitution of India and its Features.
3. FDG on Constitutional Amendments

COURSE OUTCOME

1. Able to understand the political framework for social welfare
2. Able to understand the foundation of democracy in India
3. Able to Understand Special Constitutional provision

SUGGESTED READINGS:

- Mahajan, G. (Ed.). (1998). Democracy, Difference and Social Justice. New Delhi: Cambridge University Press
- Mohanty, Manoranjan (2004) Class, Caste, Gender – Readings in Indian Government and Politics, New Delhi: Sage Publication
- "The Constitution of India" by B.R. Ambedkar, Published by Oxford University Press, 1951, ISBN: 9780195650292
- "Indian Constitutional Law" by M.P. Jain, Published by Lexis Nexis, Sixth Edition, 2016, ISBN: 9789351444867
- "Commentary on the Constitution of India" by D.D. Basu, Published by Eastern Book Company, Twentieth Edition, 2018, ISBN: 9788170195190
- "Constitutional Law and Philosophy" by Granville Austin, Published by Oxford University Press, Third Edition, 2015, ISBN: 9780195674551
- "The Oxford Companion to the Supreme Court of India" edited by A.G. Noorani, Published by Oxford University Press, Second Edition, 2015, ISBN: 9780199457122
- "The Indian Constitution: Cornerstone of a Nation" by Granville Austin, Published by Oxford University Press, Second Edition, 1966, ISBN: 9780195604753
- "The Making of the Indian Constitution: Select Documents" edited by B. Shiva Rao, Published by Indian Law Institute, Sixth Edition, 2016, ISBN: 9788182483469
- "Constitutional Interpretation in India" by S.K. Agnihotri, Published by Deep & Deep Publications, Second Edition, 2012, ISBN: 9788176293468

ADOBE SUITE-BASIC LEVEL (VCU-112-V)

L	T	P
0	0	3

Time Allowed: 3 Hrs.

I.A: 25 Marks
Practical: Marks -50
Max. Marks: 75
Total Credits: 3

1. **Adobe Photoshop:**

- Introduction to the Photoshop interface
- Basic image editing tools and techniques
- Layers and masks
- Selections and manipulation
- Color correction and adjustment

2. **Adobe InDesign:**

- Introduction to the InDesign interface
- Working with text and typography
- Importing and manipulating images
- Layout and design principles
- Creating interactive PDFs

3. **Adobe Premiere Pro**

- Introduction to the Adobe premiere Pro
- Understand timelines
- Edit video using Adobe Premiere Pro.
- Working with transitions
- Create a Show-reel using Adobe premiere Pro

ENVIRONMENT STUDIES -1
SUBJECT CODE: VAC- 101-V

L	T	P	Credits		
2	0	0	2	**SESSIONAL**	: 25
				FINAL EXAM	: 75
				TOTAL	: 100

NOTE: Question paper will have two parts.Part-1 will be compulsory and have 10 questions of equal marks covering the entire syllabus.Attempt any four questions out of six from Part-2.

COURSE OUTCOMES:

At the completion of this course, the learner will be able to:

CO1: Understand human interaction with the environment and efforts taken for emergence of environmentalism at international level.

CO2: Understand concept of natural resources, their distribution, conservation, management and sustainable utilization.

CO3: Develop critical thinking towards local, regional and global environmental issue.

CO4: Describe the concept of ecosystem, biodiversity and their conservation at national and international levels.

Unit I: Humans and the Environment (4 hrs)

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

Unit II: Natural Resources and Sustainable Development (6 hrs)

Overview of natural resources: Definition of resource; Classification of natural resources- biotic and abiotic, renewable and non-renewable.
Biotic resources: Major type of biotic resources- forests, grasslands, wetlands, wildlife and aquatic (fresh water and marine); Microbes as a resource; Status and challenges.
Water resources: Types of water resources- fresh water and marine resources; Availability and use of water resources; Environmental impact of over-exploitation, issues and challenges; Water scarcity and stress; Conflicts over water.
Soil and mineral resources: Important minerals; Mineral exploitation; Environmental problems due to extraction of minerals and use; Soil as a resource and its degradation.
Energy resources: Sources of energy and their classification, renewable and non-renewable sources of energy; Conventional energy sources- coal, oil, natural gas, nuclear energy; non-conventional energy sources- solar, wind, tidal, hydro, wave, ocean thermal, geothermal, biomass, hydrogen and fuel cells; Implications of energy use on the environment.
Introduction to sustainable development: Sustainable Development Goals (SDGs)- targets and indicators, challenges and strategies for SDGs.

Unit III: Environmental Issues: Local, Regional and Global (6 hrs)

Environmental issues and scales: Concepts of micro-, meso-, synoptic and planetary scales; Temporal and spatial extents of local, regional, and global phenomena.

Pollution: Impact of sectoral processes on Environment; Types of Pollution- air, noise, water, soil, thermal, radioactive; municipal solid waste, hazardous waste; transboundary air pollution; acid rain; smog.
Land use and Land cover change: land degradation, deforestation, desertification, urbanization.
Biodiversity loss: past and current trends, impact.
Global change: Ozone layer depletion; Climate change. Disasters – Natural and Man-made (Anthropogenic)

Unit IV: Conservation of Biodiversity and Ecosystems (8 hrs)

Biodiversity and its distribution: Biodiversity as a natural resource; Levels and types; Biodiversity in India and the world; Biodiversity hotspots.
Ecosystems and ecosystem services: Major ecosystem types in India and their basic characteristics- forests, wetlands, grasslands, agriculture, coastal and marine; Ecosystem services- classification and significance.
Threats to biodiversity and ecosystems: Land use and land cover change; Commercial exploitation of species; Invasive species; Fire, disasters and climate change.
Major conservation policies: in-situ and ex-situ conservation; Major protected areas; Biosphere reserves; Ecologically Sensitive Areas; Coastal Regulation Zone; the role of traditional knowledge for biodiversity conservation, community-based conservation; Gender and conservation.
Overview of the following conventions and protocols- Convention on Biological Diversity (CBD); Cartagena Protocol on Biosafety; Nagoya Protocol on Access and Benefit-sharing; Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES); Ramsar Convention on Wetlands of International Importance; Ramsar sites; United Nations Convention to Combat Desertification (UNCCD).

Unit V: Case studies/ Field Work (6 hrs)

The students are expected to be engaged in some of the following or similar identified activities:

a) Field visits to identify local/regional environmental issues, make observations including data collection and prepare a brief report.
b) Discussion on one national and one international case study related to the environment and sustainable development.
c) Participation in plantation drive and nature camps.
d) Documentation of campus flora and fauna.

Suggested Readings:

1. Baskar, R & Baskar, S. (2010). Natural Disasters: Earth's Processes & Geological Hazards, Unicorn Books
2. Bawa, K.S., Oomen, M.A. and Primack, R. (2011) Conservation Biology: A Primer for South Asia. Universities Press.
3. Bhagwat, Shonil (Editor) (2018) Conservation and Development in India: Reimagining Wilderness, Earthscan Conservation and Development, Routledge.
4. Chiras, D. D and Reganold, J. P. (2010). Natural Resource Conservation: Management for a Sustainable Future.10th edition, Upper Saddle River, N. J. Benjamin/Cummins/Pearson.
5. De Anil, K. (2003). Environmental chemistry. New Age International.
6. Fisher, Michael H. (2018) An Environmental History of India- From Earliest Times to the Twenty-First Century, Cambridge University Press.
7. Gilbert M. Masters and W. P. (2008). An Introduction to Environmental Engineering and Science, Ela Publisher (Pearson)
8. Harper, Charles L. (2017) Environment and Society, Human Perspectives on Environmental Issues 6th Edition. Routledge.

9. Harris, Frances (2012) Global Environmental Issues, 2nd Edition. Wiley- Blackwell.
10. Headrick, Daniel R. (2020) Humans versus Nature- A Global Environmental History, Oxford University Press.
11. Hughes, J. Donald (2009) An Environmental History of the World- Humankind's Changing
Role in the Community of Life, 2nd Edition. Routledge.
12. John W. Twidell and Anthony D. (2015). Renewable Energy Sources, 3rd Edition, Weir Publisher (ELBS)
13. Kaushik, A., & Kaushik, C. P. (2006). Perspectives in environmental studies. New Age International.
14. Krishnamurthy, K.V. (2003) Textbook of Biodiversity, Science Publishers, Plymouth, UK
15. Manahan, S.E. (2022). Environmental Chemistry (11th ed.). CRC Press. https://doi.org/10.1201/9781003096238
16. Perman, R., Ma, Y., McGilvray, J., and Common, M. (2003) Natural Resource and Environmental Economics. Pearson Education.
17. Rajagopalan, R. (2011). Environmental Studies: From Crisis to Cure. India: Oxford University Press.
18. Sharma, P. D., & Sharma, P. D. (2012). Ecology and environment. Rastogi Publications.
19. Simmons, I. G. (2008). Global Environmental History: 10,000 BC to AD 2000. Edinburgh University Press
20. Singh, J.S., Singh, S.P. & Gupta, S.R. 2006. Ecology, Environment and Resource Conservation. Anamaya Publications https://sdgs.un.org/goals
21. Sinha, N. (2020) Wild and Wilful. Harper Collins, India.
22. Varghese, Anita, Oommen, Meera Anna, Paul, Mridula Mary, Nath, Snehlata (Editors) (2022) Conservation through Sustainable Use: Lessons from India. Routledge.
23. William P. Cunningham and Mary A. (2015). Cunningham Environmental Science: A global concern, Publisher (Mc-Graw Hill, USA)

CODE: AEC- 201-V

ENGLISH-II

I.A./Practical: 25 Marks
Theory: 75 Marks

L T P
2 0 0

Max. Marks: 100
Total Credits: 2

Course Outcomes:

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

1. Understand basics of narration and writing for effective communication.
2. Learn techniques of effective public speaking.
3. Write various kinds of letters, essays, and articles.
4. Practically perform reading and speaking through drills.

UNIT I

Narration and Writing: Define, Describe, Narrate and Argue; Reading Comprehension, Precise Writing, Letter Writing - Job Application Letter, Resume writing, Report Writing.

UNIT II

Introduction to Oratory: Techniques for effective public speaking, both prepared and extemporaneous. Brainstorm ideas for your own short speech.

UNIT III

Written English communication: Progression of Thought/ideas, Structure of Paragraph, Structure of Essays, Essay Writing.

UNIT IV

Writing Features and Articles: Op-Eds (Editorials, Opinions), Features; Articles; Performance and Drills: Reading Drills, Speaking Drills, Team-Performance Drills, Solo Performance Drills

SUGGESTED READINGS:

1. Madhulika Jha, Echoes, Orient Long Man
2. Ramon & Prakash, Business Communication, Oxford.
3. Sydney Greenbaum Oxford English Grammar, Oxford.
4. M. Ashraf Rizvi, Effective Technical Communication, Tata McGraw Hill
5. Anjanee Sethi & Bhavana Adhikari, Business Communication, Tata McGraw Hill

Animation Techniques (VCU-201-V)

L	T	P	I.A/Practical: 25 Marks
4	0	0	Theory: 75 Marks
			Max. Marks: 100

Course Objective

1. To understand the historical development and cultural significance of animation
2. To Develop Practical Skills in Traditional Animation
3. To Explore Digital Animation Techniques
4. To Delve into advanced character animation techniques

UNIT-I: Introduction to Animation Principles

1.1 History and Evolution of Animation,

1.2 Understanding the origins and development of animation.

1.3 Basic Principles of Animation, Key concepts: squash and stretch, timing, easing, anticipation, and staging.

1.4 Follow-through and overlapping action, arcs, exaggeration, and appeal.

1.5 Analyzing animated sequences to identify and understand the application of animation principles.

Unit II: Traditional Animation Techniques

2.1 Traditional Animation Tools and Techniques

2.2 Introduction to traditional animation tools such as light tables, exposure sheets, and peg bars.

2.3 Techniques for creating animations frame by frame using hand-drawn illustrations.

2.4 Cel Animation: Understanding the process of cel animation, including ink and paint techniques.

2.5 Flipbooks and Zoetropes: Exploring historical animation devices and creating simple animations using these tools.

Unit III: Digital Animation Techniques

3.1 Introduction to Digital Animation Software

3.2 Overview of industry-standard software such as Adobe Animate, Toon Boom Harmony, MAYA and Blender.

3.3 2D Animation in Digital Environment

3.4 Techniques for creating 2D animations using digital tools, including character rigging and motion tweening, 3D Modeling and Animation Introduction to 3D modeling principles and techniques using software like Autodesk Maya or Blender.

3.5 Rendering and Exporting: Understanding rendering settings and exporting animations for various platforms and formats.

Unit IV: Advanced Animation Techniques

4.1 Advanced techniques for bringing characters to life, including lip-syncing, facial expressions, and body language.

4.2 Techniques for creating special effects such as explosions, fire, water, and particle effects.

4.3 Introduction to motion captures technology

4.4 Techniques for integrating motion-captured performances into animations.

4.5 Apply the principles and techniques learned throughout the course to create a final animation project

Course Outcomes

1. Students will demonstrate an understanding of the historical development and cultural significance of animation, including its impact on popular culture, entertainment, and society.
2. Students will demonstrate the ability to create frame-by-frame animations and cel animation using hand-drawn illustrations.
3. Students will receive an introduction to 3D modeling and animation principles using software like Autodesk Maya or Blender.
4. Students will explore techniques for creating special effects such as explosions, fire, water, and particle effects in animations.

Practical Assignments

1. Research and create a presentation on the history and evolution of animation, highlighting key milestones and influential figures.
2. Create a series of short animations demonstrating each of the basic principles of animation
3. Create a flipbook animation and a zoetrope animation, experimenting with different subjects and storytelling techniques.

4. Create a 2D animation using digital tools, incorporating character rigging and motion tweening techniques.
5. Design and animate a simple 3D character or object using software like Autodesk Maya or Blender, applying basic modeling and animation principles.

Suggesting Reading

1. The Animator's Survival Kit" by Richard Williams.
2. The Animator's Workbook: Step-by-Step Techniques of Drawn Animation" by Tony White
3. "The Art of Walt Disney" by Christopher Finch
4. The Animator's Workbook: Step-by-Step Techniques of Drawn Animation" by Tony White
5. "Character Animation Crash Course!" by Eric Goldberg
6. "The Art of 3D Computer Animation and Effects" by Isaac Kerlow
7. "Motion Capture in Performance: An Introduction" by Matt Woolman
8. "Digital Character Animation 3" by George Maestri
9. "Introducing Autodesk Maya 2016" by Dariush Derakhshani
10. "Blender Basics: Introduction to 3D Modeling, Texturing, and Animation" by Gordon Fisher

Film Appreciation Technique (VCU-203-V)

L	T	P	I.A/Practical: 25 Marks
4	0	0	Theory: 75 Marks
			Max. Marks: 100

Course Objectives –

1. To introduce students to the art of filmmaking
2. To Foster Critical thinking about cinematic elements
3. To analyse diverse film genre
4. To understand the historical and cultural context of the films

Unit 1 -Film aesthetics

1.1 Historical development of film as a medium

1.2 Elements of Film Language (The Language of Cinema:. Mise-en-scene – (Setting, Costume, Lighting, Props and Performance)

1.3 Cinematography: framing, Types of shots, camera angles and movements

1.4 Color theory in film

1.4 Journey of Cinema from Silent Era to the Evolution of Sound

Unit 2. Genres in World Cinema –

2.1 Documentary

2.2 Avant-Garde Films

2.3 Fantasy

2.4 Animation

2.5 Romantic Comedies

Unit 3. Basics of Film Editing –

3.1Continuity editing & Cross cutting

3.2Montage

3.3 Jump cuts

3.4 Match cuts

3.5 30 Degree rule & 180 Degree rule

Unit -4 History of Animation -

4.1 The Origins of Animated Cinema

4.2 Technological and Organizational Processes during the Silent Era.

4.3 Walt Disney & Warner Brothers and MGM cartoons

4.4 Avant-Garde and Experimental Animation

4.5 The Evolution of Animation Techniques and Styles

Suggested Assignments: Films for Analysis and Appreciation:

1. Grave of the Fireflies (1988)
2. Persepolis (2007)
3. The Iron Giant (1999)
4. Your Name (2016)
5. Princess Mononoke (1997).
6. Rashomon (1950): Japanese Cinema
7. Aparajito (1956): drama film written and directed by Satyajit Ray.

Course Outcomes:

1. Understand the fundamental elements of film language and their role in visual communication.
2. Analyze and interpret the technical and creative aspects of films.
3. Recognize different film genres, styles, and movements.
4. Critically evaluate the cultural and social impact of films.

Suggested Readings

"Film Art: An Introduction" by David Bordwell and Kristin Thompson
"Understanding Movies" by Louis Giannetti:
"How to Read a Film: Movies, Media, and Beyond" by James Monaco
"Film Theory and Criticism: Introductory Readings" edited by Leo Braudy and Marshall Cohen
"The Elements of Cinema: Toward a Theory of Cinesthetic Impact" by Stefan Sharff
"The Visual Story: Creating the Visual Structure of Film, TV and Digital Media" by Bruce Block

Design and Graphics (VCU-205-V)

L	T	P	
4	0	0	I.A. : 25Marks Theory : 75Marks

Time Allowed: 3 Hours | Max. Marks: 100

COURSE OBJECTIVES

1. To introduce and explain the fundamental principles of design and graphics
2. To provide students with a comprehensive understanding of design elements and principles
3. To enable students to use graphic design tools and software effectively
4. To foster creativity and innovation in design through hands-on projects

UNIT-I: FUNDAMENTALS OF DESIGN

1.1 Introduction to design and its significance

1.2 Elements of design: line, shape, color, texture and space etc.

1.3 Principles of design: balance, contrast, emphasis, unity, and rhythm etc.

1.4 Historical evolution of design styles and movements

1.5 Applications of design in various industries

UNIT-II: GRAPHICS SOFTWARE AND TOOLS

2.1 Overview of graphic design software

2.2 Introduction to illustrator, after effect, in design and other graphic tools

2.3 Understanding layers, brushes and filters in graphic design

2.4 Typography in graphic design

2.5 Color theory and its application in graphic design

UNIT-III: DIGITAL IMAGE EDITING AND ILLUSTRATION

3.1 Digital Imaging Editing Fundamentals

3.2 Image editing and manipulation techniques

3.2 Vector graphics and illustration

3.3 Creating logos and icons

3.4 Creating graphics for web and social media

3.5 Creating Advertising Posters and Typographic Design.

UNIT-IV: PROJECT DESIGN AND IMPLEMENTATION

4.1 Planning and conceptualization of design projects

4.2 Prototyping and wire framing in design

4.3 Execution of design projects using graphic design tools

4.4 Design critique and feedback

4.5 Finalizing and presenting design projects on Social Media Platform

ASSIGNMENTS

1. Design a visually appealing logo for a fictional company
2. Create a poster for a social cause using appropriate design elements
3. Develop a digital illustration representing a concept or idea
4. Design a user Social Awareness program logo
5. Produce a multimedia presentation showcasing various design projects

COURSE OUTCOMES

1. Students will gain a solid understanding of design principles and elements
2. Students will develop proficiency in using graphic design software and tools

3. Students will be able to apply design concepts creatively in practical projects

4. Students will acquire the skills to critically analyze and critique design work

SUGGESTED READINGS

1. "The Non-Designer's Design Book "by Robin Williams

2. "GraphicDesignSchool:ThePrinciplesandPracticeofGraphicDesign"byDavidDabner,Sandr aSt ewart,and Eric

3. Adobe Photoshop Classroom in a Book (2023 Release)

4. Adobe Illustrator Classroom in a Book (2023 Release)

Art Design &Aesthetics (VCU-207-V)

L	T	P	
4	0	0	I.A. : 25Marks
			Theory : 75Marks
Time Allowed: 3 Hours			Total Credits: 4
			Max. Marks: 100

COURSE OBJECTIVES

1. To introduce students to the fundamental concepts of art and aesthetics
2. To explore various art forms and their historical development
3. To foster an understanding of aesthetic theories and their application in appreciating art
4. To encourage creative expression and critical thinking in the realm of art and aesthetics

UNIT-I: FUNDAMENTALS OF ART

1.1 Definition and concept of Art

1.2 Nature & Aesthetic of Art

1.3 Principles of design in art

1.4 Artistic styles and movements throughout history

1.5 The role of art in different cultures and societies

UNIT-II: ART FORMS AND MEDIA

2.1 Painting, sculpture, and architecture: Understanding traditional visual arts

2.2 Photography and new media in contemporary art

2.3 Performing arts: theater, dance, and music

2.4 Applied arts: design, crafts, and multimedia

2.5 Interdisciplinary approaches in modern art

UNIT-III: AESTHETIC THEORIES

3.1 Introduction to aesthetics and philosophy of art

3.2 Major aesthetic theories: formalism, expressionism, and contextualize

3.3 Aesthetics of beauty, taste, and judgment

3.4 Cross-cultural perspectives on aesthetics

3.5 Aesthetic experience and its significance

UNIT-IV: ART CRITICISM AND ANALYSIS

4.1 Techniques of art criticism

4.2 Art analysis: interpreting meaning and context

4.3 Critiquing various art forms and styles

4.4 Art and society: Understanding the social impact of art

4.5 Ethical considerations in art creation and appreciation

ASSIGNMENTS

1. Create an original artwork inspired by a specific art movement

2. Write a critical analysis of a contemporary art exhibition or performance

3. Develop a multimedia presentation exploring the aesthetics of a chosen art form

4. Explore and present a comparative study of two different art styles

5. Participate in a group project to create an interdisciplinary art piece

COURSE OUTCOMES

1. Students will gain a foundational understanding of the principles and elements of art

2. Students will explore various art forms and their historical and cultural contexts

3. Students will develop the ability to analyze and critique art using aesthetic theories

4. Students will foster a deeper appreciation for artistic expression and creativity

SUGGESTED READINGS

1. "The Story of Art" by E.H. Gombrich

2. "Ways of Seeing" by John Berger

3. "Art: A Brief History "by Marilyn Stokstad

4. "Aesthetics: A Comprehensive Anthology "edited by Steven M. Cahnand Aaron Meskin

5. "Art Theory :A Very Short Introduction "by Cynthia Freeland

SOFT SKILLS (JMU-108-V)

L	T	P
3	0	0

I.A. :25Marks
Theory 50Marks
:

Time Allowed: 3 Hours

Total Credits: 3

Max. Marks: 75

COURSE OBJECTIVES

1. To develop and enhance the students' soft skills necessary for effective communication, teamwork, and leadership in the professional environment.
2. To improve the students' interpersonal skills, including empathy, active listening, and conflict resolution.
3. To cultivate the students' presentation and public speaking skills, enabling them to effectively articulate ideas and influence others and to equip the students with essential skills for time management, problem-solving, and decision-making.

UNIT: I Introduction to Soft Skills and Communication Skills

1.1 Definition and importance of soft skills
1.2 Key soft skills needed in the professional environment ,Verbal communication
1.3 Effective speaking techniques ,Techniques for active listening and responding
1.4 Developing clarity and conciseness in speech, Non-verbal communication
1.5 Understanding body language and facial expressions, Mastering effective eye contact and gestures

UNIT: II Teamwork, Leadership and Presentation Skills

2.1 Understanding team dynamics and roles, Building effective teams
2.2 Developing leadership qualities and influencing skills, Facilitating collaboration and conflict resolution
2.3 Planning and structuring a presentation, Engaging the audience and maintaining interest
2.4 Effective use of visual aids and technology
2.5 Overcoming stage fear and controlling nervousness

UNIT: III Problem-solving, Decision-making, Time Management and Adaptability

3.1 Introduction to problem-solving models, Analyzing problems and generating possible solutions
3.2 Evaluating alternatives and selecting the best solution, Implementing and evaluating the effectiveness of the solution
3.3Setting goals and prioritizing tasks, Managing time effectively to meet deadlines 3.4Adapting to changes in the workplace
3.5 Developing resilience in challenging situations

COURSE OUTCOMES

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

1. Demonstrate effective verbal and non-verbal communication skills in professional settings.
2. Collaborate efficiently and productively in teams, showcasing leadership qualities and the ability to contribute meaningfully.
3. Employ active listening skills to foster understanding and build strong interpersonal relationships and utilize negotiation and conflict resolution techniques to address and resolve conflicts constructively.

PRACTICAL/ASSIGNEMENTS

1. Assignments, presentations, and group projects
2. Role plays and simulations
3. Self-reflection exercises and peer evaluations
4. Written and practical examinations

SUGGESTED READING

1. "Emotional Intelligence 2.0" by Travis Bradberry and Jean Greaves
2. "How to Win Friends and Influence People" by Dale Carnegie
3. "Crucial Conversations: Tools for Talking When Stakes Are High" by Al Switzler, Joseph Grenny, and Ron McMillan
4. "Drive: The Surprising Truth About What Motivates Us" by Daniel H. Pink
5. "The 7 Habits of Highly Effective People" by Stephen R. Covey
6. "Quiet: The Power of Introverts in a World That Can't Stop Talking" by Susan Cain
7. "Nonviolent Communication: A Language of Life" by Marshall B. Rosenberg
8. "The Power of Positive Thinking" by Norman Vincent Peale
9. "Mindset: The New Psychology of Success" by Carol S. Dweck
10. "The Art of Possibility: Transforming Professional and Personal Life" by Rosamund Stone Zander and Benjamin Zande

Adobe Suite Studio Advance (VCU-211-V)

L	T		IA/Practical: 25
0	0	3	Theory Marks: 50
Time Allowed: 3			Maximum Marks: 75

Course Objective:

1. Introduce students to the Adobe Suite and its main applications.
2. Providing a foundation for further exploration and learning.

UNIT-1 Introduction to Adobe Creative Cloud

1.1 Overview of main Adobe applications- Photoshop, Illustrator, In Design

1.2 Overview of main Adobe Premiere Pro, After Effects

1.4 creating vector graphics: shapes, paths, and basic illustrations.

1.5 Applying design principles in Photoshop and Illustrator projects.

UNIT -2 Advanced Techniques in Adobe Suite

2.1 Mastering Illustrator with Layout and Typography in design

2.2 Advanced vector illustration techniques: gradients, patterns, and effects

2.3 Creating logos and branding assets in Illustrator,

2.4 Introduction to Adobe in Design- workspace, tools, and interface, Layout design principles: grids, margins, and alignment

2.5 Typography essentials: working with text, styles, and formatting

Unit 3: Multimedia and Motion Graphics

3.1 Introduction to Adobe Premiere pro: workspace, tools, and interfaces

3.2 Importing and organizing footage Basic video editing techniques: cutting, trimming, transitions, and effects.

3.3 Introduction to Adobe after Effects: workspace, tools, and interfaces

3.4 Creating motion graphics: animations, key frames, and effects, Compositing and visual effects in After Effects &

3.5 Introduction to Figma : interface, tools, and features, Prototyping and UI/UX Design with Figma

Practical Assignment

1. Design a logo and branding assets for a fictional company or brand using Illustrator.
2. Using Adobe Illustrator, create a vector illustration depicting a scene or concept of your choice
3. Design a multi-page document (e.g., brochure, magazine spread) using Adobe In Design, incorporating advanced layout and typography techniques.
4. Create a visually compelling poster promoting an event, product, or social cause using Adobe Photoshop or Illustrator.
5. Using Adobe Illustrator, create a vector illustration depicting a scene or concept of your choice
6. Develop an interactive PDF portfolio showcasing your design projects, including hyperlinks, buttons, and navigation elements using Adobe InDesign.
7. Create a short promotional video for a product or service using Premiere Pro and After Effects.
8. Design a mobile app interface for a specific use case using Figma.
9. Choose a real-world design problem or project and apply skills learned throughout the course to solve it.
10. Design a responsive website layout for a fictional business or organization using Figma, focusing on user experience and interaction design.

Effective Corporate Communication (ECC)

CODE: AEC-103-V

No. of Credits: 2

L T P — Sessional: 25 marks

2 0 0 — Theory: 75marks

Max Marks: 100

Time Allotted: 3 Hours

Course Objectives:

CO I: To acquaint students with the appropriate grammatical structures in written forms.

CO II: To enable the students understand the significance of technical writing and formal communication.

CO III: To equip students develop and demonstrate effective writing skills in varied forms.

CO IV: To inspire students to deliver persuasive presentations.

Unit-I:Writing Skills and Basics of Grammar: Subject-verb agreement; sentence correction; tense-verb usage; Composition of a Paragraph; Characteristics of a Good Paragraph; Use of Idioms and Proverbs, Literary Tropes and Use of Figures of Speech.

Unit-II: Technical Writing and Reports: SPSE structure; IMRD structure; Report Writing: Types of Reports and Structure of a Long Report. Hedging, Nominalization; Memos; Agenda and MoM ; Case Study Method; Presentations; Business Letters-quotation and placing order.

Unit-III: Drafting proposals: From essays to proposals; Types of Essay Writing: Structure of an essay; Argumentative essays; Expository essays; Narrative essays; and Descriptive essays; Structure of an Essay Reading, Writing and Comprehension. Drafting proposals; Synopsis Writing; Definitions; Comparisons and Contrasts; Hedging; Nominalization, proposal presentations

Unit-IV: Exercises in Proposal Presentations: Drafting and Presenting Proposals.

Course Outcomes:

CO I: The students will be acquainted with the appropriate grammatical structures in written forms.

CO II: The students will be able to understand the significance of technical writing and formal communication.

CO III: The students will be able to develop and demonstrate effective writing skills in varied forms.

CO IV: The students will be able to deliver persuasive presentations.

Suggested Readings:

Effective Business Communication by Asha Kaul Professional Communication for Business by Carolyn Bussom

Business Communication and Technical Writing by Meenakshi Raman and Sangeeta Sharm

Semester –IV

Basics of UI/UX Design (VCU-202-V)

L T P	Practical/IA: 25 Marks
4 0 0	Theory : 75 Marks
Time Allowed: 3 Hours	Maximum Marks : 100

Course Objectives

1. To guide students in mapping user journeys and conducting A/B testing to evaluate design variations.
2. To guide students in mapping user journeys and conducting A/B testing to evaluate design variations.
3. To familiarize students with prototyping tools such as Figma, Adobe XD, and Sketch.
4. To introduce basics of AR and VR technology and design immersive experiences using tools like Unity and Unreal Engine.

Unit 1: Introduction to UI/UX Design and Design Thinking Process

1.1 Introduction to UI/UX Design, Definition and importance of UI/UX

1.2 Differences and overlaps between UI and UX, Principles of UI Design

1.3 Key principles and best practices, Principles of UX Design, Core concepts and methodologies

Design Thinking Process

1.4 Steps: Empathize, Define, Ideate, Prototype, and Test

1.5 Application of the design thinking process

Unit 2: User Research and Analysis

2.1 User Personas, Creating and utilizing user personas,

2.2 User Journey Mapping

2.3 Mapping user journeys for better insights, A/B Testing,

2.4 Planning and conducting experiments

2.5 Analyzing and comparing design variations

Unit 3: Wireframing, Prototyping, and Interaction Design

3.1 Wire framing and Prototyping, Sketching and wire framing techniques

3.2 Low-fidelity vs. high-fidelity prototypes, Prototyping tools (Figma, Adobe XD, Sketch) 3.3Interaction Design, Principles of interaction design

3.4 Micro-interactions

3.5 Animation in UI

Unit 4: Information Architecture and Visual Design for UI

4.1 Information Architecture, Organizing information, Navigation design

4.2 Content strategy, Visual Design for UI, Layout and composition, Iconography

4.3 Design systems and style guides

4.4 Accessibility and Inclusive Design, Accessibility principles, Designing for inclusivity

4.5 Legal and ethical considerations, AR and VR Design, Basics of AR and VR technology Designing immersive experiences, Tools and software for AR/VR design (Unity, Unreal Engine) Portfolio and Case Studies

Course Outcomes

1. Students will be able to distinguish between UI and UX design and apply their principles to create user-centered designs**.**
2. Students will be able to utilize the design thinking process to develop innovative and effective design solutions**.**
3. Students will be able to map user journeys and conduct A/B testing to evaluate design variations.
4. Student will be able to students will be able to Map user journeys and conduct A/B testing to evaluate design variations

Practical Assignments

Creating a portfolio showcasing UX processes

Presentation and storytelling skills

Personal Branding and Job Profiles

Social media presence (LinkedIn, Twitter, YouTube)

Updating job profiles on Naukri.com, Internshala, and Wellfound

Suggested Reading

1. Garrett, J. J. (2010). The Elements of User Experience: User-Centered Design for the Web and Beyond. New Riders.
2. Krug, S. (2014). Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability. New Riders.
3. Cooper, A., Reimann, R., Cronin, D., & Noessel, C. (2014). About Face: The Essentials of Interaction Design. Wiley.
4. Hartson, R., & Pyla, P. S. (2012).
5. The UX Book: Process and Guidelines for Ensuring a Quality User Experience.
6. Brown, T. (2009). Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation.
7. Kelley, T., & Kelley, D. (2013). Creative Confidence: Unleashing the Creative Potential.

Fundamentals of Game Design (VCU-204-V)

L	T	P
4	0	0

I.A. : 25Marks

Theory : 75Marks

Time Allowed: 3 Hours

Total Credits: 4

Max. Marks: 100

COURSE OBJECTIVES

1. To understand the concept of Game Design
2. To understand the game art project management
3. To analyze different kind of game art development
4. To learn game engine & environment design

UNIT I: INTRODUCTION TO GAME DESIGN

1.1 Fundamentals of game development and design principles

1.2 Game genres and player experience

1.3 Story telling & narrative design in games

1.4 Understanding color theory and composition

1.5 Creating concept art and character design

UNIT II: GAME ART PROJECT MANAGEMENT

2.1 Writing design documents & concept pitches

2.2 Understanding game mechanics & level design

2.3 Collaborating with game development teams, project coordination

2.4 Team management & meeting deadlines

2.5 Delivering a polished game art projection

UNIT III: 2D GAME ART DEVELOPMENT

3.1 Creating 2D assets for games (characters, props, backgrounds)

3.2 Pixel art techniques and animation

3.3 Introduction to game engines and asset integration

3.4 UV mapping and texturing techniques

3.5 Implementing lights & Visual effects

UNIT IV: GAME ENGINE AND ENVIRONMENT DESIGN

4.1 Exploring game engines like Unity or Unreal Engine

4.2 Designing game environments and level layouts

4.3 Techniques for optimizing game art for performance

4.4 Baking textures and creating LOD'S (Level of Detail)

4.5 Understanding the technical limitations of game platforms

ASSIGNMENTS

1. Case Studies related to various game designing of various professionals
2. Students have to present at least one game designed by them
3. Exhibition would be planned to showcase the project of students
4. Make a user interface for 3d & 2D Game using Figma /Adobe XD / Unreal engine

COURSE OUTCOMES

1. Students would be able to understand the concept of design
2. Students would analyze different kind of genre game art
3. Students would understand the game art project management
4. Students would learn game engine & environment design

SUGGESTED READINGS

- Changing the Game: How Video Games Are Transforming the Future of Business by David Edery and Ethan Mollick
- Innovation and Marketing in the Video Game Industry: Avoiding the Performance Trap by David Wesley and Gloria Barczak
- Online Game Pioneers at Work by Morgan Ramsay
- The video games text book Dr.brian j.wardyga
- Fundamentals of Game Design, Third Edition, by Ernest Adams, Released December 2013, Publisher(s): New Riders, ISBN: 9780133435726
- Designing Games, A Guide to Engineering Experiences by Tynan Sylvester.
- Game Design Essentials by Briar Lee Mitchell

Fundamental of Typography (VCU-206-V)

L	T	P	I.A/ Pratical Marks : 25
4	0	0	Theory Marks :75
			Max. Marks : 100

COURSE OBJECTIVES

1. This course focuses on the further exploration of typographic studies.
2. To introduce students to the learned design and typography theory.
3. To teach students the fundamentals of typography principals.\
4. Prepare students for more advanced typography design coursework and professional careers in this field.

UNIT-1 TYPOGRAPHY PRACTICES

1.1 Definition of typography & Overview of typography

1.2 Idealization and concept development of typography

1.3 Various typography design (Book Cover Design, Logo design, press layout, poster using typography)

1.4 Making Illustrations

1.5 Mastering Typographic Techniques

UNIT-2 TYPOGRAPHY ELEMENT AND COMPOSITION

2.1 Anatomy of Type, Understanding type anatomy,Legibility vs. readability, Typeface selection criteria

2.2 Elements and principal of typography

2.3 Contrast, scale, and proportion, Grid systems and layout, Typographic hierarchy

2.4 Characteristics of typography

2.5 Typography elements tracking,Information hierarchy, Alignment,Kerning, font family,font

UNIT-3 COLOURS AND TYPOGRAPHY DESIGN

3.1 Typography and colour chart

3.2 Different font and colour

3.3 Colour schemes

3.4 Colour harmony in typography

3.5 Colour terminology, tint, shades ,chroma ,tone

UNIT-4 GRAPHICS DESIGN & TYPOGRAPHY

4.1 Editorial design principles, Book typography
4.2 Interface design considerations,Responsive typography
4.3 Corporate identity systems, Logotype design
4.4 Brand typography guidelines
4.5 Web typography

COURSE OUTCOME:

1. Understand the fundamental principles of typography, like font selection, spacing, and layout.
2. Gain proficiency in using typography software and tools effectively.
3. Learn how to create visually appealing and functional designs using typography.
4. Develop an eye for detail and precision in typography work.
5. Explore the historical and cultural aspects of typography to inform your design choices.
6. Apply typography knowledge creatively in various design projects. 7.

Practical Assignments

1. Create a typographic poster using a provided quote or phrase. Emphasize hierarchy, contrast, and alignment.
2. Design a typographic logo for a fictional company or organization. Focus on legibility and brand identity.

3. Develop a typographic style guide for a hypothetical brand or publication. Include guidelines for font selection, hierarchy, spacing, and color usage.
4. Design a set of typographic compositions exploring different typefaces, sizes, weights, and styles. Experiment with contrast and rhythm.
5. Redesign a magazine spread or webpage focusing on typographic elements such as headlines, body text, pull quotes, and captions. Consider readability, visual hierarchy, and consistency.
6. Analyze and critique typographic choices in existing print or digital media. Discuss the effectiveness of typeface selection, layout, and typographic systems.

Suggested Reading

- The Elements of Typographic Style" by Robert Bringhurst - Publisher: Hartley & Marks Publishers
- "Thinking with Type" by Ellen Lupton - Publisher: Princeton Architectural Press
- "Typography Workbook: A Real-World Guide to Using Type in Graphic Design" by Timothy Samara - Publisher: Rockport Publishers
- "The Anatomy of Type: A Graphic Guide to 100 Typefaces" by Stephen Coles - Publisher: Harper Design
- "Just My Type: A Book About Fonts" by Simon Garfield - Publisher: Gotham Books
- "Designing Type" by Karen Cheng - Publisher: Yale University Press

CONCEPT OF STORY BOARD & SCRIPTING (VCU-208-V)

L	T	P		
4	0	0	I.A.	:25Marks
			Theory:	75Marks

Time Allowed: 3 Hours

Total Credits: 4

Max. Marks: 100

COURSE OBJECTIVES

1. To introduce the concept and principles of storyboard and scripting in the context of multimedia and film production.
2. To develop students' understanding of the importance of planning and organizing visual and narrative elements in a storytelling medium.
3. To equip students with the necessary skills to create effective storyboards and scripts for various media platforms.
4. To enhance students' creativity and critical thinking abilities in expressing ideas through visual and written storytelling.

UNIT: I Introduction to Storyboarding and Scripting

1.1 Definition and purpose of storyboarding and scripting

1.2 Importance of effective planning and organization in visual storytelling

1.3 Overview of the process of storyboarding and scripting

1.4 Benefits of planning in pre-production.

1.5 Workflow from script to storyboard

UNIT: II Principles of Storyboarding

2.1 Elements of a storyboard: shots, angles, composition, and transitions

2.2 Techniques for conveying action, emotion, and atmosphere

2.3 Creating a coherent visual narrative through storyboards

2.4 Principles of composition in storyboarding (e.g., rule of thirds, leading lines, balance).

2.5Transitions between shots and their narrative impact (e.g., cuts, fades, wipes).

UNIT: III Scripting for Multimedia Productions

3.1 Structure and format of scripts for films, animations, commercials, etc.

3.2 Developing engaging characters, dialogues, and plotlines

3.3 Integrating visual and auditory elements in the script

3.4Understanding the standard script formats (e.g., screenplay, storyboard script, spec script). 3.5Formatting guidelines specific to different media (e.g., feature films, TV series, short films, commercials)

UNIT: IV Software, Tools and Collaborative Storyboarding and Scripting

1. Introduction to industry-standard software for storyboarding and scripting
2. Hands-on training in utilizing software features for creating storyboards and scripts
3. Team dynamics and collaboration in the production of storyboards and scripts
4. Effective communication and coordination among team members
5. Integrating feedback and improving the storyboard and script

COURSE OUTCOMES

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

1. Comprehend the fundamentals of storyboarding, including the purpose, elements, and techniques involved.
2. Analyze the structure and characteristics of effective scripts for films, animations, commercials, and other multimedia productions.
3. Apply the principles of storytelling and visual communication to effectively convey narratives through storyboards.
4. Develop scripts that effectively communicate ideas, characters, and dialogue in a cohesive and engaging manner and also demonstrate proficiency in using appropriate software and tools for creating storyboards and scripts.

PRACTICAL/ASSIGNEMENTS

1. Quizzes: Students will be assessed through quizzes to evaluate their understanding of theoretical concepts related to storyboarding and scripting.
2. Project work: Students will work on individual and group projects, where they will create storyboards and develop scripts for multimedia productions. The projects will be evaluated based on creativity, structure, and effectiveness in conveying the intended message.

SUGGESTED READING

1. "The Five C's of Cinematography: Motion Picture Filming Techniques" by Joseph V. Mascelli
2. "The Storyboard Artist: A Guide to Freelancing in Film, TV, and Advertising" by Giuseppe Cristiano
3. "Prepare to Board! Creating Story and Characters for Animated Features and Shorts" by Nancy Beiman
4. "The Storyboard Design Course: The Ultimate Guide for Artists, Directors, Producers, and Scriptwriters" by Giuseppe Cristiano
5. "Save the Cat! The Last Book on Screenwriting You'll Ever Need" by Blake Snyder
6. "Screenplay: The Foundations of Screenwriting" by Syd Field
7. "Story: Substance, Structure, Style, and the Principles of Screenwriting" by Robert McKee
8. "The Anatomy of Story: 22 Steps to Becoming a Master Storyteller" by John Truby
9. "Writing Movies for Fun and Profit: How We Made a Billion Dollars at the Box Office and You Can, Too!" by Robert Ben Garant and Thomas Lennon
10. "Story Engineering: Mastering the 6 Core Competencies of Successful Writing" by Larry Brooks

Communication, Mediation and Resolution(CMR)

AEC-102-V

Final Exam: 75

Internal assessment: 25

No. of Credits: 2

L	T	P
2	0	0

Sessional : 25 marks

Theory: 75marks

MaxMarks: 100

Time Allotted:3 Hours

Course Objectives:

CO I: To familiarize the students with the process and barriers of communication.

CO II: To enable the students develop critical thinking and identify logical

fallacies.

CO III: To help students in recognizing factors and applying strategies in conflict resolution.

CO IV: To inspire students in appreciating the role of mediation and find creative solutions.

Unit-I: Communication and Barriers to Communication: 7C's of Communication, Win-Win Communication, Strategies for Effective Communication, Zero-Sum; Reasons for Conflict; Communication Barriers.

Unit-II: Critical Thinking and Cognitive Skills: reason; analysis, synthesis, divide and rule; root-cause analysis; logic and logical fallacies.
Reasoning; Logic; Inductive and Deductive Reasoning; Logical fallacies: *Ad hominem*, straw man fallacy; bandwagon fallacy; hasty generalization; false dilemma; false dichotomy;*Tu Quoque*; circular reasoning and hasty generalization; Recognizing fallacies.

Unit-III: Mediation and Conflict-Resolution: Cognitive Skills and Critical thinking; Listening for key words, phrases and hints, Creative Communicating, Managing and celebrating Diversity, Adaptability and Negotiation; Dispute-resolution; arbitration; mediator's role; caucuses, third party, objectivity, impartiality, neutrality, offers, counter offers, questions, demands, and proposals, impasse, settlement .Brain storming, Problem solving strategies, Stress management, Significance of Collaboration, Confronting challenges.

Unit-IV: Mediation in Practice: Exercises in role-playing and mediation and one case study assignment as directed by the teacher.

Course Outcomes:

CO I: The students will be familiarized with the process and barriers of communication.

CO II: The students will be enabled to develop critical thinking and identify logical

fallacies.

CO III: The students will be able to recognize factors and apply strategies in conflict resolution.

COIV: The students will be able to appreciate the role of mediation and find creative solutions.

Suggested Readings:

Basics of Communication, Mediation and Resolution by Dr.Rajesh Kumar Mangla

Effective Communication Skills by Meenakshi Raman and Sangeeta Sharma

Conflict, Conflict Resolution and Mediation: Theory,Processand Practice by Clay Conrad Phillips.

Introduction to Indian Knowledge System (VAC-104-V)

NO. OF CREDITS: 2
SESSIONAL : 25
L T P FINAL EXAM : 75
2 0 0 TOTAL : 100

NOTE: Question paper will have two parts. Part-1 will be compulsory and have 10 questions of equal marks covering the entire syllabus. Any four questions have to be attempted out of six from Part-2.

COURSE OBJECTIVES:

To provide an overview of different knowledge systems originated in India.
To introduce in the students a comprehensive understanding of Indian ethics and values.

UNIT-I: Introduction and foundational concepts of IKS (4 Hrs)

Overview of various streams of knowledge in India and classification of ancient Indian texts; Various philosophical systems of India and fundamental principles inlaid in them

UNIT-II: Psychology from Indian perspective, Yoga and Indian Linguistics (4 Hrs)
Introduction to Asgtaanga Yoga: Rasa Sidhanta of Natyasastra (throry of emotions).
Panini's contribution to linguistics; Contributions of the Vakyashatra and Pramansastra to linguistics.

UNIT-III: Indian Mathematics and Astronomy (8 Hrs)
An overview of Indian mathematics, Development of arithmetic geometry and Trigonometry;
Introduction to spherical geometry and calculus in India.
Vedic system of arithmetic computation, Vedic sutra for arithmetic computation.
An introduction to Indian Astronomy, Pre and Post Siddhantic period

UNIT-IV: Medicinal traditions in India (3 Hrs)
An Introduction to Ayurveda; Distinct features of Ayurdeva, as compared to Alopathy; Excerpts from Sutrasthana

UNIT-V: Indian Architecture and Planning (3 Hrs)
Traditional measurement system used in Vastusastra; Prescriptions for residential Vastu, City planning as per Vastusastra

UNIT-VI: Economics, Management and Governance (4 Hrs)
An overview of Indian economic thought- Arthasastra and Nitisasra, Leadership and Motivation,Planning and Organizing, Financial Management etc.

SUGGESTED BOOKS:

1. Introduction to Indian Knowledge System, B. Mahadevan, V. R. Bhat, Nagendra Pavana R. N., PHI. 2022
2. Yoga System of Patanjali, J. H. Woods, Bharatiya Kala Prakashan 2009
3. Indian Philosophy Vol I and II, S. Radhakrishnan, Oxford University Press. 2009
4. Mayamatam Indian Treatise on Housing, Architecture and Iconography (2 volumes),Bruno Daegens, Indira Gandhi National centre for Arts. 2007
5. Vedanta and Management: Relevance of Vedantic Concepts in Modern Management Practices, N. V. Dave, Deep & Deep. 2002
6. Tantrasa graha with detailed Mathematical Explanatory Notes, K. Ramasubramanian, M. S.Sriram, Hindustan Book Agency. 2011
7. Karanapadhati of Putumana Somayaji, Venkateswara Pai, Ramasubramanian, M. S. Sriram and M.D. Srinivas, Hindustan Book Agency 2018
8. Panini's grammer; An Overview, Bhate. S, Sahitya Academy ,New Delhi 2002
9. The Nighantu and the Nirukta of Sri Yaskarcarya, Sarup. L, Motilal Banarsidass Publishers 2015
10. The Vedanga Literature, Archak K.B. Kaveri Books, New Delhi, 2012
11. Textbook of Ayurveda: Volume 1 - Fundamental Principles of Ayurveda, Vasant Lad, Ayurvedic Press; UK ed. Edition 2002
12. Glimpse into Kautilya's Arthshastra, Ramachandrudu P Sanskrit Academy, Hyderabad. 2010
13. Vedic Mathematics, Jagadguru Swami Sri Bharati Krsna Tirathji Maharaj, Motilal Banarsidass Publishers, Delhi 1965
14. Lilavati Bhaskaracarya: A Treatise of Mathematics of Vedic Tradition, K S Patwardhan, S A Naimpally and Shyam Lal Singh, Motilal Banarsidass Publishers Pvt Ltd, Delhi 2006

Semester-V

2D Character Design for Animation (B.Sc. VCMT 501-23)

L	T	P	
4	0	0	I.A.: 25Marks Theory: 75Marks

Max Marks : 100

Time Allowed: 3 Hours

Total Credits : 4

COURSEOBJECTIVES

1 To develop a strong understanding of shape language and visual storytelling to design unique and easily recognizable characters.

2 To explore brainstorming techniques, research methods, and iterative design processes to create well-rounded characters with compelling personalities, backstories, and narrative roles.

3 To acquire skills in sketching dynamic facial expressions and body language to effectively convey emotions, personality, and character traits.

4 To understand Apply color theory, shading, and lighting techniques to enhance the visual appeal, depth, and mood of character designs.

UNIT 1: INTRODUCTION TO CHARACTER DESIGN

1.1 Definition and Importance of Character Design

1.2 History and Evolution of 2D Character Design

1.3 Types of 2D Characters – Cartoon, Realistic, Stylized

1.4 Role of Character Design in storytelling

1.5 Understanding the target audience for Character Design.

UNIT II: INTRODUCTION TO CHARACTER DESIGN

2.1 Basic Geometric Shapes and Construction: Understanding how to build characters from simple shapes like circles, squares and triangles.

2.2 Proportions and Ratios: Exploring different proportional systems for various character types like heroic, comical.

2.3 Simplified Anatomy and Gesture: Learning to represent the human or animal form with simplified shapes.

2.4 Emphasizing the importance of clear lines of action for conveying movement.

2.5 Line Art and Outlining Techniques.

UNIT-III: VISUAL DEVELOPMENT AND STYLIZATION

3.1 Color Theory for Characters. Emotional impact of color palettes and harmony.

3.2 Reflecting personality and context through attire, clothing.

3.3 Facial Expressions and Emotions. Conveying mood and personality through facial features.

3.4 Model sheets including front, side, and back views of character.

3.5 Visual Storytelling through Design. Understanding how character design contributes to the overall narrative and visual communication.

UNIT-IV: TECHNICAL AND PRACTICAL ASPECTS

4.1 Sketching and Thumb nailing. Developing ideas through quick sketches.

4.2 Cleaning Up and Polishing the Design. Adding Shadows and Highlights.

4.3 Reference Gathering and Research. Understanding the importance of research and using reference materials effectively.

4.4 Iteration and Refinement. Improving designs through feedback and revisions

4.5 Presentation and Portfolio. Showcasing and presenting character designs effectively.

ASSIGNMENTS

1. Draw three different characters using only circles, squares, and triangles as their base shapes.
2. Draw five simple stick figure and gradually exaggerate one feature (e.g., large head, long arms, and tiny feet). See how it changes the character's appeal.
3. Draw a basic character and show five different expressions (happy, sad, angry, surprised, and confused).
4. Design a simple character and color it in three different ways to see how color changes the mood.

COURSE OUTCOMES

1 Students will be able to apply shape language and visual storytelling principles to create unique and recognizable character designs.

2. Students will demonstrate the ability to brainstorm, research, and refine character concepts by developing detailed personalities, back stories, and narrative roles.

3. Students will proficiently sketch expressive facial features and body language to effectively communicate emotions and character traits.

4. Students will utilize color theory, shading, and lighting techniques to enhance the visual appeal and mood of their final character designs.

SUGGESTED READING

1. "Creating Characters with Personality" by Tom Bancroft.

2. "Force: Character Design from Life Drawing" by Mike Mattesi.

3. "The Art of Animal Characters" by David Colman.

4. "Character Design From the Ground Up" by Kevin Crossley.

Audio Production (B.Sc. VCMT 502-23)

L	T	P	
4	0	0	I.A.: 25Marks Theory: 75Marks

Max Marks : 100

Time Allowed: 3 Hours

Total Credits : 4

COURSEOBJECTIVE

1. To introduce students to the fundamentals of sound and audio production.
2. To develop skills in recording, editing, mixing, and mastering audio.
3. To familiarize students with digital audio workstations (DAWs) and audio effects.
4. To explore the role of AI in modern audio production.
5. To enable students to produce professional-quality audio for various media formats.

UNIT- 1: Fundamentals of Sound & Audio Technology

1.1 Physics of Sound (Waves, Frequency, Amplitude, Decibels)

1.2 Microphones & Recording Techniques (Dynamic, Condenser, Polar Patterns)

1.3 Signal Flow & Audio Hardware (Mixers, Preamps, Audio Interfaces)

1.4 Digital Audio Basics (Sampling Rate, Bit Depth, File Formats)

1.5 Acoustics & Soundproofing (Room Treatment, Reflection, Absorption)

Unit 2: Digital Audio Workstations (DAWs) & Editing

2.1 Introduction to DAWs (Pro Tools, Audacity, Logic Pro, FL Studio)

2.2 Multitrack Editing (Cut, Fade, Crossfade, Time-stretching Etc.)

2.3 MIDI & Virtual Instruments (Synthesizers, Drum Machines)

2.4 Audio Effects & Plugins (Reverb, Delay, Chorus, Distortion Etc.)

2.5 Automation & Non-Destructive Editing

Unit 3: Mixing & Mastering

3.1 Principles of Mixing (Balance, Panning, EQ, Dynamics)

3.2 Compression & Limiting (Threshold, Ratio, Attack/Release)

3.3 Spatial Effects (Stereo Imaging, Reverb, Delay)

3.4 Mastering Techniques (Loudness, EQ Finalization, Dithering)

3.5 Exporting for Different Media (Music, Film, Streaming)

Unit 4: AI in Audio Production & Emerging Trends

4.1 AI-Based Audio Restoration (Noise Reduction, Voice Cloning)

4.2 Automated Mixing & Mastering Tools (LANDR, iZotope Neutron)

4.3 AI Music Composition (AIVA, Amper Music)

4.4 Voice Synthesis & Deepfake Audio (Lyrebird, Descript)

4.5 Future of AI in Sound Design

ASSIGNMENTS

1. Record a 1-minute voice-over using different mic techniques and compare results.
2. Edit a provided audio clip with effects and submit a before-after comparison.
3. Mix a multi-track song/podcast and submit a mastered version.
4. Use an AI tool (e.g., Adobe Podcast Enhancer) to improve a raw recording.

Course Outcomes:

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

1. Understand the physics of sound and principles of audio recording.
2. Operate industry-standard DAWs (e.g., Pro Tools, Audacity, FL Studio).
3. Apply audio effects, EQ, compression, and spatial processing.
4. Mix and master audio tracks for different media (film, music, podcasts).
5. Utilize AI-based tools for audio enhancement and automated production

Suggested Readings

1. **Huber, D. M. (2021).** *Modern Recording Techniques* (10th ed.). Focal Press.
2. **Owsinski, B. (2017).** *The Mixing Engineer's Handbook* (4th ed.). Bobby Owsinski Media
3. **Rumsey, F. (2020).** *Sound and Recording: Applications and Theory* (8th ed.). Routledge.
4. **Case, A. (2019).** *Sound FX: Unlocking the Creative Potential of Recording Studio Effects*. Focal Press.

Weblinks

1 Audio Engineering Society (AES)

2 Pro Tools Tutorials (Avid)

3 LANDR AI Mastering

4 iZotope AI Audio Tools

5 Adobe Podcast AI Enhancer

Web Design and Development (B.Sc. VCMT 503-23)

L	T	P	
4	0	0	I.A.: 25Marks Theory: 75Marks

Max Marks : 100

Time Allowed: 3 Hours

Total Credits : 4

COURSEOBJECTIVE

1. Understand the evolution and fundamentals of web design.
2. Develop proficiency in front-end technologies (HTML, CSS, Java Script).
3. Learn responsive design, UI/UX best practices, and accessibility.
4. Gain exposure to web development frameworks and deployment basics

UNIT- 1: Introduction & Fundamentals

1.1 History and evolution of the web History

1.2 Basic structure of a web page: HTML fundamentals

1.3 Introduction to UI and UX principles

1.4 Role of a front-end developer vs. back-end developer.

UNIT- II: Styling and Responsive Design

2.1 CSS fundamentals and advanced styling techniques

2.2 Responsive design and mobile-first development

2.3 Introduction to CSS frameworks (e.g., Bootstrap)

2.4 Basic syntax and document structure (<!DOCTYPE html>, <html>, <head>, <body>)

UNIT-III: Interactive Web Development

3.1 JavaScript basics and DOM manipulation

3.2 Client-side scripting and interactive features, Working with arrays and objects

3.3 Overview of modern JavaScript frameworks/libraries

3.4 Basic syntax: variables, data types, operators.

UNIT-IV: Back-End Integration & Deployment

4.1 Introduction to server-side concepts and APIs

4.2 Integration with CMS and databases

4.3 Website testing, optimization, and deployment

4.4 Introduction to APIs and Restful architecture, Fetching data from the back-end and Displaying it in the front-end

ASSIGNMENTS:-

1 The wireframes should represent the layout of key elements on each page (e.g., header, navigation, footer, main content area)

2 Create navigation links, forms, and sections for different content..
3 Choose fonts and colors that align with web design best practices and consider accessibility (contrast ratio, legibility).
4 End-of-semester project: Develop a complete website or web application.

COURSE OUTCOMES

1. Students will be able to apply shape language and visual storytelling principles to create unique and recognizable character designs.
2. Students will demonstrate the ability to brainstorm, research, and refine character concepts by developing detailed personalities, backstories, and narrative roles.
3. Students will proficiently sketch expressive facial features and body language to effectively communicate emotions and character traits.
4. Students will utilize color theory, shading, and lighting techniques to enhance the visual appeal and mood of their final character designs.

Suggested Readings & Resources:

1. Learning Web Design" by Jennifer Niederst Robbins

2. Online tutorials (MDN Web Docs, W3Schools)

3. Relevant documentation for frameworks like Bootstrap and React

Artificial Intelligence & Multimedia (B.Sc. VCMT 504-23)

L	T	P	I.A.: 25Marks
4	0	0	Theory: 75Marks

Max Marks : 100

Time Allowed: 3 Hours

Total Credits : 4

COURSE OBJECTIVE

1. Introduce fundamental concepts of AI and machine learning.
2. Explore the processing of multimedia data using AI tools.
3. Develop skills in applying AI for creative content production (e.g., image and sound synthesis).
4. Enable students to build practical AI-enhanced multimedia projects.

UNIT- 1: Fundamentals of AI

1.1 Overview of AI, machine learning, and deep learning

1.2 Key algorithms and models

1.3 Introduction to AI software tools and libraries

1.4 Historical context and applications of AI in multimedia

UNIT- II: Multimedia Data Analysis

2.1 Techniques for image, audio, and video processing

2.2 Feature extraction and pattern recognition in multimedia

2.3 Tools for multimedia data analytics, Synchronizing text and audio for multimedia applications (e.g., voiceovers, interactive storytelling)

2.4 Multimodal learning: combining image and text data

UNIT-III: AI in Creative Multimedia

3.1 Generative models (GANs, auto encoders) for art and design

3.2 AI-driven content creation and editing

3.3 AI-driven user interfaces and virtual assistants (e.g., Siri, Alexa)

3.4 Case studies of AI in film, music, and digital art.

UNIT-IV: Practical Applications and Project Work

4.1 Integration of AI modules into multimedia workflows

4.2 Development of a project (e.g., automated video editing, AI art generation)

4.3 Evaluation of performance and ethical considerations

4.4 The project should combine at least two multimedia modalities (e.g., image + text, audio + Video).

ASSIGNMENTS:-

1. Hands-on lab sessions using Python
2. Tensor Flow/ PyTorch, and multimedia libraries
3. Students present their projects, demonstrating the AI techniques used and the outcomes
4. Use a GAN model (e.g., DCGAN) to generate synthetic images.

COURSE OUTCOMES

i. Students will be able to apply shape language and visual storytelling principles to create unique and recognizable character designs.

ii. Students will demonstrate the ability to brainstorm, research, and refine character concepts by developing detailed personalities, back stories, and narrative roles.

iii. Students will proficiently sketch expressive facial features and body language to effectively communicate emotions and character traits.

iv. Students will utilize color theory, shading, and lighting techniques to enhance the visual appeal and mood of their final character designs.

Suggested Readings & Resources:

1. “Deep Learning with Python” by François Chollet

2. Research articles and case studies on AI in multimedia

3. Online courses/tutorials on machine learning and multimedia processing

COURSE OUTCOMES

1. Students will be able to apply shape language and visual storytelling principles to create unique and recognizable character designs.

2. Students will demonstrate the ability to brainstorm, research, and refine character concepts by developing detailed personalities, back stories, and narrative roles.

3. Students will proficiently sketch expressive facial features and body language to effectively communicate emotions and character traits.

4. Students will utilize color theory, shading, and lighting techniques to enhance the visual appeal and mood of their final character designs.

Suggested Readings & Resources:

1. Learning Web Design” by Jennifer Niederst Robbins

2. Online tutorials (MDN Web Docs, W3Schools)

3. Relevant documentation for frameworks like Bootstrap and React

Semester-VI

3D Modeling and Visual Effect (B.Sc. VCMT 601-23)

L	T	P	I.A.: 25Marks
4	0	0	Theory: 75Marks

Time Allowed: 3 Hours Max Marks : 100

Total Credits : 4

COURSEOBJECTIVE

1. Understanding concept of object modeling
2. Understanding of organic and inorganic modeling
3. Create high poly and low poly models
4. Create3Dmodelsfor games
5. Create visual effect using software

UNIT- 1: BASIC OF 3D MODELLING

1.1 Fundamentalof3DModelling.

1.2 Introduction to lines, planes and other geometrical shapes.

1.3 Understanding the concept of geometry and its implementation in software.

UNIT- II: ORGANIC AND INORGANIC MODELLING

2.1 Introduction to organic and inorganic modelling.

2.2 Object Modelling such as Truck, Car, any vehicle, Robot, toys etc.

UNIT-III: 3D MODELLING,TEXTURING AND COLOURING

1. Low poly modelling vs High poly modelling
2. Introduction to 3D texturing and coloring the object, understanding the deformers and

modifier for 3D objects

3. Product modelling : use of proxy mesh and its concept.
4. Creating a detailed environment

UNIT-IV: VISUAL EFFECTS

4.1 Introduction of Vfx Techniques

4.2 Creating Visual effect Like smoke, fire, candle light, etc.

4.3 FumeFx such as blast and explosion

Course outcomes

1. Create low and high poly models for games and animation
2. Create environment for games and animation
3. Understanding the concept of proxy meshes.
4. Useofdeformersandmodifiersforcomplex3Dobjects
5. Creating different style of visual effects
6. Rendering techniques

Practical Assignment.

1. Create a object or vehicle and low poly & high polymodels .Product modeling with proxy mesh

2. Creating anything with use of deformers and modifiers.

3. Creatingaportfolioshowcaselikedetailedenvironmentgenerallyusedingameworld or in animation and visual effects such as waterfall, river, fire etc.

4. Create a blast effect to vehicle or any object

Presentation

1. Show casing your work flow while creating any thing in software vs final outcome. (It is all about the processes involving in creating anything)

SUGGESTED BOOKS

1. Autodesk3DSMAX2018completereferencebookguidedbyKelly L.Murdock
2. Comprehensive3ds Max2018 a comprehensiveguide by ShamTickoo
3. Autodesk Maya 2018 Basics guide paperback by Kelly Murdoch
4. AzamiF.3DModellingforAdvancedDesignandApplication.KendallHunt Publishing
5. Comprehensive Autodesk Maya 2018 a comprehensive guide by ShamTickoo

Tools for Visual Analytics (B.Sc. VCMT 602-23)

L	T	P	I.A.: 25Marks
4	0	0	Theory: 75Marks

Max Marks : 100

Time Allowed: 3 Hours

Total Credits : 4

COURSE OBJECTIVE

1 Understand the principles of data visualization and visual analytics.

2. Gain proficiency in using popular visual analytics tools and software.

3. Learn how to design and create interactive dashboards and visual stories.

4 Apply analytical techniques to solve real-world problems using data visualization.

UNIT- 1: Introduction to Visual Analytics

1.1 Concepts, importance, and process of visual analytics

1.2 Overview of data types and sources

1.3 Cognitive aspects of data visualization: perception, design, and interpretation

1.4 Visualization principles and best practices

UNIT- II: Hands-on with Visualization Tools

2.1 Training in tools like Tableau, Power BI, or open-source alternatives

2.2 Designing static and interactive visualizations

2.3 Comparing the tools based on use cases: ease of use, flexibility, interactivity

2.4 Case studies and software walkthroughs

UNIT-III: Advanced Techniques in Data Visualization

3.1 Interactive dashboard creation and real-time data visualization

3.2 Storytelling with data and visual narrative techniques

3.3 Evaluation of visualization effectiveness, Choropleth maps, heatmaps, and geospatial overlays

3.4 Visualizing geographical data in Tableau and Power BI

UNIT-IV: Practical Applications & Project Work

4.1 Analyzing real-world datasets

4.2 Group project: Designing a comprehensive visual analytics solution

4.3 Presentation and critique of visualizations

4.4 How different industries use visual analytics for decision-making and communication

ASSIGNMENTS:-

1. A short report (1-2 pages) explaining the process and insights
2. A group or individual project involving data collection, analysis, and visualization
3. Create at least 5 different types of visualizations (e.g., bar chart, line graph, heatmap, pie chart, scatter plot).
4. Design an interactive dashboard that allows users to filter data and drill down into specific insights.

COURSE OUTCOMES

1. Students will be able to apply shape language and visual storytelling principles to create unique and recognizable character designs.
2. Students will demonstrate the ability to brainstorm, research, and refine character concepts by developing detailed personalities, backstories, and narrative roles.
3. Students will proficiently sketch expressive facial features and body language to effectively communicate emotions and character traits.
4. Students will utilize color theory, shading, and lighting techniques to enhance the visual appeal and mood of their final character designs.

Suggested Readings & Resources:

1. "Storytelling with Data" by Cole Nussbaumer Knaflic
2. Tutorials on Tableau, Power BI, or similar tools
3. Online courses from platforms like Coursera or edX

PROJECT WORK & VIVA (B.Sc. Visual Communication 603-23)

L	T	P	I.A.: 25Marks
4	0	0	Theory:75Marks

Max Marks:100

Time Allowed: 3 Hours

Total Credits : 4

COURSE OBJECTIVE

1.To create a portfolio to show their creativity and their creative approach.

2.To boost their confidence

3.To create a portfolio to match industry standards.

PROJECT – I

1. **PRINT MEDIA**
   a. Logo, Magazine Design, Comic Design etc.
2. **Research & Design (UI/UX)**
   a. Research and design App interface
3. **Film Design (Group work)**
   a. Script and storyboarding
   b. Short Film or Product shoot
4. **Visual effect &Editing Techniques**
   a. Pop up Advertisement

PROJECT – II

1) ANIMATION FILM DESIGN

a) Script and storyboard

b) 2D character model sheet, props and its different poses.

Motion Graphics (Group work)

2) 3D Design

a) Create a environment for animation or game

b) Create a vehicle, toys, props, product etc.

3) Visual effect

a) Create Cinematics of Fantasy world including visual effects .(Group work)

Note :- Every student go for minimum two options in both the section Project I and Project II

VIVA

Portfolio work description including thinking process with pre production, production and post production process.

Course Outcome

1 Create a portfolio to match with industry standard.

2 And prepare them to crack interviews.

Augmented & Virtual Reality (B.Sc. VCMT 604-23)

L	T	P	I.A.: 25Marks
4	0	0	Theory: 75Marks

Max Marks : 100

Time Allowed: 3 Hours

Total Credits : 4

COURSE OBJECTIVE

1. Understand the key concepts, technologies, and hardware of AR and VR.
2. Learn the fundamentals of designing immersive and interactive experiences.
3. Gain hands-on experience with AR/VR development platforms (e.g., Unity, Unreal Engine).
4. Explore emerging trends and applications of AR/VR in various industries.

UNIT- 1: Introduction to AR & VR

1.1 History, definitions, and evolution of AR and VR

1.2 Comparison between augmented reality, virtual reality, and mixed reality

1.3 Overview of hardware (headsets, sensors) and software ecosystems

1.4 Controllers and motion tracking systems (e.g., Oculus, HTC Vive)

UNIT- II: AR/VR Technologies and Tools

2.1 Introduction to development platforms (Unity, Unreal Engine)

2.2 Basics of 3D modeling and environment creation

2.3 Tools for tracking, interaction, and immersion

2.4 3D audio and its role in immersion

UNIT-III: Designing Immersive Experiences

3.1 Principles of immersive design and user experience in AR/VR

3.2 Storyboarding and prototyping AR/VR scenarios

3.3 Designing effective and intuitive interfaces

4.4 Integrating audio, visual, and hepatic feedback

UNIT-IV: Project Work and Future Trends

4.1 Understanding Mixed Reality vs. AR and VR, Microsoft Holo Lens and other MR devices

4.2 Developing a mini-project (e.g., AR app or VR simulation)

4.3 Testing, evaluation, and user feedback methodologies

4.4 Discussion of future trends and ethical considerations in AR/VR

ASSIGNMENTS:-

1. Hands-on labs with AR/VR development kits and software
2. Develop a simple AR or VR application or a prototype
3. Project work and demo exhibition
4. End-of-semester project to design, develop, and present an AR/VR experience.

COURSE OUTCOMES

1. Students will be able to apply shape language and visual storytelling principles to create unique and recognizable character designs.
2. Students will demonstrate the ability to brainstorm, research, and refine character concepts by developing detailed personalities, back stories, and narrative roles.
3. Students will proficiently sketch expressive facial features and body language to effectively communicate emotions and character traits.
4. Students will utilize color theory, shading, and lighting techniques to enhance the visual appeal and mood of their final character designs.

Suggested Readings & Resources:

i. “Augmented Reality: Principles and Practice” by Dieter Schmalstieg and Tobias Hollerer

ii. “Learning Virtual Reality” by Tony Parisi

iii. Online tutorials and development documentation for Unity/Unreal Engine

DIGITAL PRODUCT DESIGN (B.Sc. VCMT 605-23)

L T P I.A : 25 Marks

4 0 0 Theory : 75 Marks

Time Allowed 3 Hours Max. Marks : 100

Total Credits: 04

COURSE OBJECTIVES

1. Teach to apply creative process techniques in synthesizing problem, problem solving and critical thinking.
2. To familiarize student with wire framing and 3D prototyping
3. To teach student to create app interface and new products.
4. To analyse User needs and user experience and approach different research methods.

Unit I: INTRODUCTION TO DESIGN AND INNOVATION

1.1 Human centered design vs User centered design.

1.2 Application of design thinking process.

1.3 Creative thinking techniques (Brain storming, Mind mapping, SCAMPER, Six thinking hats, Lateral thinking and Reverse Thinking)

1.4 Double Diamond and Abstract tangible cycle.

UNIT II: RESEARCH METHODOLOGY AND TESTING

2.1 UX Research methods and its role in product development.

2.2 Logical Fallacies and Biases in research.

2.3 Importance of UX in Brand experience.

2.4 Design System vs UI design system

2.5 User testing methods, Usability testing and Heuristic Evaluation.

UNIT III: APLLICATION OF COMPONENT OF COMPREHENSIVE DESIGN STRATEGY

3.1 User persona, User journey mapping

3.2 Wireframing and its technique and prototyping (low fidelity and high fidelity)

3.4 Information Architecture and navigation design

3.5 3D protype and 3D product design and their benefits.

UNIT IV: SUSTAINABLE DESIGN AND ERGONOMICS

4.1 Principle of sustainable design

4.2 Types of sustainable design

4.3 What is Ergonomics and its types.

4.4 Role of ergonomics in product design.

COURSE OUTCOMES

1. Student can create new app and product design digitally using software.
2. Students can generate new and innovative product design ideas.
3. Ability to apply knowledge, skill and attitude that will sustain an environment of learning and creativity.
4. Ability to understand, study, analyse and solve existing problem in the field of product design.
5. Ability to develop critical thinking and logic for the solution of product design.

Practical Assignment for portfolio and Presentation

- Analyse any app and point its pros and cons and what solution you will provide to make it better and interactive
- Create a new fresh idea app after doing all the important steps taking before design it (like research, empathy mapping user persona and user journey mapping, protype, testing etc.)
- Create a 3D product design using any 3D software of any object related to day to day life and write a proper document about the research done to finding the problem and how your design can solve the user problem and their need.

- (while design any object kindly keep in mind about what material is going to used)

Suggested reading

1. Don't Make Me Think, Revisited: A Common sense Approach to Web Usability by Krug s.
2. The Art of Product Design by Hardi Meybaum
3. The element of user experience by Garette J.J
4. Design for How People Think by John Whalen.
5. The UX book : process and guidelines for ensuring a quality user experience.