UNIVERSITY OF MYSORE
Estd.1916

(Re-accredited by NAAC at 'A')
(NIRF-2023 Ranked 44 in University Category & 71 in Overall Category)

No.: PMEB-1/Spl./10(1)/2023-24   Date: 06-01-2024

NOTIFICATION

Sub.: Syllabus and Examination pattern of **B.Sc. (Hons.)(Multimedia)** and **M.Sc. (Multimedia Design)** courses under Specialized Programmes from the academic year 2023-24-reg.

Ref.: 1. Decision of the BOS Meeting held on 30-05-2023.
2. Decision of the Academic Council meeting held on 10-11-2023.

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The Board of Studies in **B.Sc. (Hons.)(Multimedia)** and **M.Sc. (Multimedia Design)** (CB) at its meeting held on 30-05-2023 has recommended to approve the scheme of examination and the syllabus of **B.Sc. (Hons.)(Multimedia)** and **M.Sc. (Multimedia Design)** courses in University of Mysore under specialized/specified programs from the academic year 2023-24.

The Academic Council has also approved the above said proposals at its meeting held on 10-11-2023 and the same is hereby notified.

The syllabus of **B.Sc.(Hons.)(Multimedia)** and **M.Sc.(Multimedia Design)** courses may be downloaded from the University website **https://uni-mysore.ac.in/PMEB/**.

REGISTRAR
REGISTRAR
University of Mysore
MYSURU- 570 005

To,
1. The Registrar (Evaluation), University of Mysore, Mysuru.
2. The Dean, Faculty of Science & Technology, DoS in Mathematics, Manasagangothri, Mysuru.
3. Prof. Suresha, DoS in Computer Science, Manasagangothri, Mysuru.
4. The Principal, Wiztoonz Academy of Media & Design, MIT Campus, Belawadi, Srirangapatna Tq., Mandya Dist.
5. The Deputy Registrar/ Asst. Registrar/ Superintendent, Examination Branch, UOM, Mysuru.
6. The PA to Vice-Chancellor/Registrar/Registrar (Evaluation), University of Mysore, Mysuru.
7. Office Copy.

ANNEXURE
B.Sc. (Hons) Multimedia
As per NEP Regulations

To be implemented from the Academic Year 2023-24

Proposed Scheme & Syllabus for B.Sc. (Hons) Multimedia
As per NEP 2020 Regulations

1. PROGRAM OBJECTIVE:

The primary objective of a B.Sc. Multimedia / B.Sc. (Hons) Multimedia UG program is to provide students with a comprehensive understanding of multimedia technology and its various applications. The program aims to develop students' skills in creating, managing, and presenting multimedia content using different tools and technologies. It typically combines theoretical knowledge with practical training to equip students with the necessary skills for a career in the multimedia industry. The program shall equip students with the knowledge and skills necessary to work in various fields related to multimedia, such as graphic design, web design, animation, video production, Visual effects, interactive media, and more.

Here are the objectives of B.Sc. (Hons) Multimedia program:

- **Develop technical skills:** The program aims to provide students with a solid foundation in multimedia technologies, software tools, and production techniques. Students learn to use industry-standard software and hardware to create multimedia projects.

- **Foster creative and design abilities**: The program focuses on developing students' artistic and creative skills in areas such as Graphic Design, Visual Communication, Animation, Audio-Video Editing, Visual Effects, 2D-3D Animation, and User Interface Design. Students learn principles of design, colour theory, typography, and layout to create visually appealing and effective multimedia content.

- **Enhance storytelling and communication skills:** Multimedia is often used as a means of storytelling and communication. The program helps students develop effective storytelling techniques and communication strategies through various multimedia mediums like videos, animations, interactive presentations, and websites.

- **Foster critical thinking and problem-solving abilities:** Students are encouraged to think critically and analytically when approaching multimedia projects. They learn to identify problems, evaluate different solutions, and make informed decisions to achieve desired outcomes.

- **Develop collaborative and project management skills:** Multimedia projects often require collaboration and teamwork. The program provides opportunities for students to work in teams, manage projects, and develop effective communication and leadership skills.

- **Stay updated with emerging technologies:** The field of multimedia is constantly evolving with new technologies and trends. The program aims to keep students up-to-date with the latest advancements in multimedia, such as Virtual Reality (VR), Augmented Reality (AR), Motion Graphics, and Interactive Media.

- **Prepare for industry demands and careers:** The ultimate objective of a Bachelor's degree in Multimedia is to prepare students for successful careers in the multimedia industry. Through a combination of theoretical knowledge and practical skills, students are equipped to pursue various roles, such as Multimedia Designer, Web Designer, 2D/3D Animator, 3D Artist, Video Editor, VFX Artist, User Interface & User Experience (UIUX) Designer, and Multimedia Producer.

- **B.Sc. (Hons) Multimedia in Semester pattern (CBCS)** enables learners to learn about the nuances of creativity and communication and lays foundation for making them self-motivated artists with strengths in creative vision, concept development, and critical thinking as well as a commitment to communicating visual messages through innovative artistic expression.

- **To encourage entrepreneurship among student pursuing the education.**

Relevance of the Programme with HEI's Mission and Vision:
Multimedia course is designed to offer media students a comprehensive background and contemporary fluency in the impact of visual images on culture. It provides students with practical skills about Multimedia course and subject knowledge related to design principles and research methodologies in Multimedia course.

Procedure for admissions, curriculum transaction and evaluation:

2. ELIGIBILITY FOR ADMISSION:

Candidates who have passed two years Pre-University course of Karnataka State in any discipline or its equivalent (viz., 10 + 2, Inter, HSC of other states, 2-Years ITI, 3-Years Diploma recognised by any Technical Board, Medical Board, Skill/Vocation Board or Sector, etc.) are eligible for admission into this program. Foreign nationals are also eligible to take admission into this course subject to eligibility clearance from University of Mysore. Admission will be done as per the norms set by University of Mysore.

LATERAL ENTRY
a. The students who have passed one year – Multimedia/Animation & VFX Diploma/Certificate programmes in Animation & VFX/Skill Enhancement programmes in Animation & VFX, Multimedia, Graphic Design of Recognized

bodies (Regular/Distance/Open University mode) after Plus two/PUC/Equivalent will be allowed admission to the third semester B.Sc. Multimedia.

b. The students who have passed Two years – Multimedia/Animation & VFX Diploma/Certificate programmes in Animation & VFX, Multimedia, Graphic Design/Skill Enhancement programmes in Animation & VFX of Recognized bodies (Regular/Distance/Open University mode) after Plus two/PUC/Equivalent will be allowed admission to the fifth semester B.Sc. Multimedia.

c. All compulsory subjects (Languages, Environmental studies, Constitution of India, etc.) as required by UGC should be successfully completed in a bridge course if the student has not undergone the prescribed subjects in the diploma/Certificate Course.

3. DURATION OF THE PROGRAM:

The program of study is 4 years with 8 semesters. A candidate shall complete his or her degree within 8 academic years from the date of his or her admission to the first semester. The NEP 2020 provides multiple exit options for students as specified below.

EXIT OPTIONS:
a. The students who successfully complete one year or two semesters and leave the program will be awarded **Certificate** (in Multimedia).
b. The students who successfully complete 2 years or 4 semesters and leave the program will be awarded **Diploma** (in Multimedia).
c. Students who successfully complete 3 years or 6 semesters and leave the program will be awarded **Bachelor's degree** (B.Sc. Multimedia).
d. An option is given to the students to continue their education to the fourth year and those who successfully complete 4 years or 8 semesters will be awarded **Bachelor's degree with honours** (B.Sc. (Hons) Multimedia).

4. MEDIUM OF INSTRUCTION
The medium of instruction shall be English.

5. ATTENDANCE.
a. For the purpose of calculating attendance each semester shall be taken as a Unit.
b. A student shall be conserved to have satisfied the requirement of attendance for the semester, if he/she has attended not less than 75% in aggregate of the number of working periods in each of the subjects compulsorily either Online or Offline.
c. A student who fails to complete the course in the manner stated should not be permitted to take the University examination.

6. TEACHING AND EVALUATION
A basic degree from a recognised University is only eligible to teach and to evaluate all the honours courses except languages such as constitution of

India and environmental studies health wellness social and emotional learning/sports/NCC/NSS, others.

7. SKILL DEVELOPMENT SESSIONS
   a. Every college is required to ensure students have their laptops with prescribed softwares for the purpose of conducting/attending practical classes and working on assignments without any time restrictions.
   b. In every semester the students should maintain a record book/or a Digital Portfolio in which a minimum of 4 exercises or activities for course are to be recorded.

NATIONAL SKILLS QUALIFICATIONS FRAMEWORK

The National Skills Qualifications Framework (NSQF) is a competency-based framework that organizes qualifications according to a series of knowledge, skills and aptitude. The NSQF levels, graded from one to ten, are defined in terms of learning outcomes which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning. National Occupational Standards (NOS) are statements of the skills; knowledge and understanding needed for effective performance in a job role and are expressed as outcomes of competent performance. They list down what an individual performing that task should know and also are able to do. These standards can form the requirements. Just as each job role may require the performance of a number of tasks, the combination of NOSs corresponding to these tasks form the Qualification Pack (QP) for that job role. The NOSs and QPs for each job role corresponding to each level of the NSQF are being formulated by the respective Sector Skill Councils (SSCs) set up by National Skill Development Corporation (NSDC) with industry leadership. The curriculum which is based on NOSs and QPs would thus automatically comply with NSQF.

General Education has to be synchronized/ aligned with skill and Vocational Education as per National Skills Qualifications Framework. The level descriptors are given below as described in UGC Guidelines on National Skills Qualifications Framework. The curriculum should be designed in a manner that at the end of year-1, year-2 and year-3, students are able to meet below-mentioned level descriptors for level 5, 6 and 7 of NSQF respectively:

The progressive curriculum proposed shall position knowledge and skills required on the continuum of novice problem solvers (at entry level of the program) to expert problem solvers (by the time of graduation):

- At the end of first year – Ability to solve well-defined problems.
- At the end of second year – Ability to solve broadly-defined problems.
- At the end of third year – Ability to solve complex problems that are ill-structured requiring multi-disciplinary skills to solve them.
- During the fourth year – Experience of workplace problem solving in the form of Internship or Research Experience preparing for Higher Education or Entrepreneurship Experience.

8. SCHEME OF EXAMINATION
   a. There shall be a University examination at the end of each semester and the maximum marks of the universities examination in each paper shall be 60 marks for DSC/DSE/Vocational/SEC and OEC.
   b. Internal assessment – 40 marks for DSC/DSE/Vocational/SEC and OEC.

9. Guidelines for continuous internal evaluation and semester end examination

The CIE and SEE will carry 40% and 60% weightage each to enable the course to be evaluated for a total of 100 marks it is respective of its credits. The evaluation system of the course is comprehensive and continuous during the entire period of the semester.

For a course the CIE and SEE evaluation will be on the following Parameters.

Sl. No	Parameters for the evaluation	Marks
	Continuous Internal Evaluation (CIE)	
1	Continuous and comprehensive Evaluation (CCE)-(A)	20
2	Internal Assessment Test (IAT) (B)	20
	Total of CIE(A+B)	40
3	Semester End Examinations (SEE)-(C)	60
	Total of CIE and SEE (A+B+C)	**100 Marks**

Continuous Internal Evaluation:

a. Continuous and Comprehensive Evaluation (CCE):

The CCE will carry a maximum of 20% weightage (20 Marks) of the total marks of a course before the start of academic session in each semester, a faculty member should choose for his/her course.

Minimum for 4 of the following assessment methods with 5 marks each (4X5=20)

i. Individual Assignment.
ii. Seminars, classroom presentations, quizzes.
iii. Group discussion, class discussion, group assignments.
iv. Case studies/Caselets.
v. Participatory and Industry-Integrated Learning/Industrial Visits.
vi. Practical activities/Problem-solving exercises.
vii. Participation in seminars/Academic events/Symposia.
viii. Mini projects/Capstone projects.

Internal Assessment Test

Course Code: Name of the Course:

Duration: 1 Hour   Total Marks: 40

PART-A (20 MARKS)

I Choose the correct answer (10 Marks)   (10X1=10)

1. ....
   a)   b)   c)   d)

2. ....
   a)   b)   c)   d)

3. ....
   a)   b)   c)   d)

4. ....
   a)   b)   c)   d)

5. ....
   a)   b)   c)   d)

6. ....
   a)   b)   c)   d)

7. ....
   a)   b)   c)   d)

8. ....
   a)   b)   c)   d)

9. ....
   a)   b)   c)   d)

10. ....
   a)   b)   c)   d)

II Match the Following with the right answers   (5 Marks)   [5x1=5]

1 ....

2 ....

3 ....

4 ....

5 ....

III Fill up the blanks   (5 Marks)   [5x1=5]

1. ....

2. ....

3. ....

4. ....

5. ....

PART-B (20 MARKS)

I Answer any four of the following questions.   (20 Marks)   [4×5=20]

1. ....

2. ....

3. ....

4. ....

5. ....

6. ....

Semester End Examination (SEE):
The semester end examination will be conducted for all the students who are eligible to take the exam. SEE of the course shall be conducted after fulfilling the minimum attendance requirement as per the university norms and completing CCE as prescribed above. The BOS constituted by the University has prepared the SEE framework and the question paper for SEE is presented below for 60 marks.

PATTERN OF QUESTION PAPER

Time: 3 Hours   Marks: 60

<u>PART-A (20 MARKS)</u>

I Choose the correct answer (10 Marks)   (10X1=10)

1. ....
   a)   b)   c)   d)

2. ....
   a)   b)   c)   d)

3. ....
   a)   b)   c)   d)

4. ....
   a)   b)   c)   d)

5. ....
   a)   b)   c)   d)

6. ....
   a)   b)   c)   d)

7. ....
   a)   b)   c)   d)

8. ....
   a)   b)   c)   d)

9. ....
   a)   b)   c)   d)

10. ....
   a)   b)   c)   d)

II Match the Following with the right answers   (5 Marks)   [5x1=5]

1 .... | ....

2 .... | ....

3 .... | ....

4 .... | ....

5 .... | ....

III Fill up the blanks   (5 Marks)   [5x1=5]

1. ....
2. ....
3. ....
4. ....
5. ....

PART-B (40 MARKS)

I Answer any four of the following questions.   (20 Marks)   [4×5=20]

1. ....
2. ....
3. ....
4. ....
5. ....
6. ....

II Answer any two of the following questions.   (20 Marks)   [2×10=20]

1. ....
2. ....
3. ....
4. ....

Minimum Marks for a Pass:
Candidates who have obtained a minimum of 35% marks in Semester End Examination, i.e., 21 marks out of 60 marks of theory examination and 40% in aggregate, i.e., total 40 marks out of 100 marks of Semester End Examination marks and Continuous Internal Evaluation marks.

B.Sc. (Hons) Multimedia

Proposed Scheme of Teaching & Evaluation for B.Sc. Multimedia (Basic/Hons)

SEMESTER I

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE		CIE		L	T	P	TOTAL MARKS	CREDITS
			Theory	Practical	C1	C2					
1	AECC1	**Language-1** Functional English- I	60	-	20	20	3	0	0	100	3
2	AECC2	**Language-2** Kannada/Hindi/ French/ German	60	-	20	20	3	0	0	100	3
3	DSC01	Digital Art	60	-	20	20	3	2	0	100	5
4	DSC02	Introduction to Graphic Design & Creating Illustrations	60	-	20	20	3	2	0	100	5
5	DSC03	Fundamentals of Art	60	-	20	20	2	1	0	100	3
6	SEC1	SEC – Digital Fluency	-	25	10	15	0	0	2	50	2
7	VB1	Physical Education - Yoga	-	25	10	15	0	0	2	50	2
		TOTAL MARKS & CREDITS								600	23

SEMESTER II

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE		CIE		L	T	P	TOTAL MARKS	CREDITS
			Theory	Practical	C1	C2					
1	AECC3	**Language-1** Functional English-2	60	-	20	20	3	0	0	100	3
2	AECC4	**Language-2** Kannada/Hindi/ French/ German	60	-	20	20	3	0	0	100	3
3	DSC4	Multimedia Design	60	-	20	20	3	2	0	100	5
4	DSC5	Introduction to Audio-Video Editing	60	-	20	20	3	2	0	100	5
5	DSC6	Cinematography & Photography Concepts	60	-	20	20	2	1	0	100	3
6	AECC5	Environmental Studies	30	-	10	15	2	1	0	50	3
7	VB2	Sports/NCC/NSS/R &R(S&G)/ Cultural	-	25	10	15	0	0	2	50	2
		TOTAL MARKS & CREDITS								600	24

SEMESTER III

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE Theory	SEE Practical	CIE C1	CIE C2	L	T	P	TOTAL MARKS	CREDITS
1	AECC3	**Langaue-1** Functional English-3	60	-	20	20	3	0	0	100	3
2	AECC4	**Language 2** Kannada/Hindi/ French/ German	60	-	20	20	3	0	0	100	3
3	DSC7	Introduction to 3D	60	-	20	20	2	2	0	100	4
4	DSC8	Character Design	60	-	20	20	2	1	0	100	3
5	DSC9	Interaction Design	60	-	20	20	2	2	0	100	4
6	VB3	Physical Education – Cultural	-	25	10	15	0	0	2	50	2
7	OEC	Open Elective / Indian Constitution	60	-	20	20	3	0	0	100	3
8	SEC3	Introduction to Business Management	25	-	10	15	2	0	0	50	2
		TOTAL CREDITS								700	24

SEMESTER IV

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE Theory	SEE Practical	CIE C1	CIE C2	L	T	P	TOTAL MARKS	CREDITS
1	AECC5	**Langaue-1** Functional English -4	60	-	20	20	3	0	0	100	3
2	AECC6	**Language 2** Kannada/Hindi/ French/ German	60	-	20	20	3	0	0	100	3
3	DSC10	3D Modelling & Texturing	60	-	20	20	2	2	0	100	4
4	DSC11	Lighting and Rendering	60	-	20	20	2	2	0	100	4
5	DSC12	Motion Graphics1	60	-	20	20	2	1	0	100	3
6	OEC4	Open Elective / Indian Constitution	60	-	20	20	2	1	0	100	3
7	VB4	Sports/NCC/NSS/R&R(S&G)/ Cultural	-	25	25	0	0	0	2	50	2
8	SEC4	Personality Development & Career Management	-	25	10	15	0	1	1	50	2
		TOTAL CREDITS								700	24

SEMESTER V

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE Theory	SEE Practical	CIE C1	CIE C2	L	T	P	TOTAL MARKS	CREDITS
1	DSC13	3D Rigging and Animation	60	-	20	20	3	2	0	100	5
2	DSC14	Internship - 1	-	-	25	25	0	1	2	50	3
3	DSC15	3D Sculpting and Painting	60	-	20	20	3	2	0	100	5
4	DSE 1	Elective 1: (From list of Electives)	-	60	20	20	0	2	3	100	5
5	VB3	Sports/NCC/NSS/ R&R(S&G)/ Cultural	-	25	10	15	0	0	2	50	2
6	SEC3	Cyber Security or some other SEC	25	-	10	15	1	1	0	50	2
		TOTAL CREDITS								450	22

SEMESTER VI

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE Theory	SEE Practical	CIE C1	CIE C2	L	T	P	TOTAL MARKS	CREDITS
1	DSC16	Compositing	60	-	20	20	2	1	0	100	3
2	DSC17	Video Production Techniques	60	-	20	20	2	2	0	100	4
3	DSC18	Visual Effects	60	-	20	20	2	2	0	100	4
4	DSC19	Internship - 2	-		50	50	0	2	2	100	4
5	DSE 2	Elective:2 (From list of Electives)	-	60	20	20	0	2	3	100	5
6	SEC	Professional Communication	25	-	10	15	1	1	0	50	2
7	SEC	Sports/NCC/NSS/ R&R(S&G)/ Cultural	-	25	10	15	0	0	2	50	2
		TOTAL CREDITS								600	24

SEMESTER VII

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE		CIE		L	T	P	TOTAL MARKS	CREDITS
			Theory	Practical	C1	C2					
1	DSC20	Advanced UIUX Design	60	-	20	20	3	3	0	100	6
2	DSC21	VFX Portfolio	-	60	20	20	0	2	4	100	6
3	DSC22	Pre-Visualization	60	-	20	20	3	3	0	100	6
4	DSE 3	Elective 3: (From list of Electives)	-	60	20	20	0	2	4	100	6
	TOTAL CREDITS									400	24

SEMESTER VIII

SL No.	COURSE CODE	TITLE OF THE COURSE	SEE		CIE		L	T	P	TOTAL MARKS	CREDITS
			Theory	Practical	C1	C2					
1	DSC23	Immersive Design - AR Specialization	60	-	20	20	2	3	0	100	5
2	DSC24	Matte Painting	60	-	20	20	3	2	0	100	5
3	DSC25	Movie Project Planning	60	-	20	20	3	2	0	100	3
4	DSE 4	Elective 4: (From list of Electives)	-	60	20	20	0	2	3	100	5
5	DSE 5	Specialization Research Project (Work/Internship with VIVA)	-	100	50	50	0	0	6	200	6
	TOTAL CREDITS									600	24

BACHELOR DEGREE WITH HONOURS – Experience of workplace problem solving in the form of internship or research experience preparing for higher education or entrepreneurship experience.

Notes:
One hour of lecture is equal to 1 Credit
Two hours of tutorial is equal to 1 credit (Except Language)
Two hours of tutorial is equal to 2 hours of teaching.
Two hours of practical is equal to 1 credit
Two hours of practical is equal to 1 hour of teaching

Practical class may be conducted in the Blended model depending on the requirements. One batch of students should not exceed half (i.e., 40 or less than 40 students) of the number of students in each class/section. 2 hours of practical class is equal to 1 hour of teaching, however, whenever it is conducted for the entire class (i.e.,) more than 40 students) 2 hours of Practical class is equal to two hours of teaching.

Acronyms Expanded

AECC	:	Ability Enhancement Compulsory Course
DSC	:	Discipline Specific Course
SEC	:	Skill Enhancement Course
SB/VB/OEC	:	Skill Based/Value Based/Open Elective Course
DSE	:	Discipline Specific Elective
SEE	:	Semester End Examination
CIE	:	Continuous Internal Evaluation
L+T+P	:	Lecture + Tutorial + Practical(s)

Detailed Syllabus for B.Sc. (Hons) Multimedia

Year: 1	Semester: 1	AECC 1A	Functional English - 1	Credits: 3:0:0

Objectives:

1. To introduce students to the theory, fundamentals and tools of communication and to develop in them vital communication skills that is integral to personal, social and professional interactions.
2. Inculcate abilities needed to students such as: ability to share thoughts, emotions and ideas through various means of communication: both verbal and non-verbal. In the context of rapid globalization and increasing recognition of social and cultural pluralities, the significance of clear and effective communication has substantially enhanced
3. Fulfil the above state goals through an interactive mode of teaching-learning process and by focusing on various dimensions of communication skills: language of communication, various speaking skills such as personal communication, social interactions and communication in professional situations such as interviews, group discussions and office environments, important reading skills as well as writing skills such as report writing, note-taking etc.
4. While, to an extent, the art of communication is natural to all living beings, in today's world of complexities, it has also acquired some elements of science. It is hoped that after studying this course, students will find a difference in their personal and professional interactions.

SYLLABUS

UNIT I: Introduction to Grammar – What is grammar – Its importance, etc; - Different approaches to grammar: Traditional – Generative – Transformative – Communicative.

UNIT II: Articles and Determiners – Forms and Functions of Nouns, Pronouns and Prepositions

UNIT-III: Verbs (Transitive & Intransitive, Regular & Irregular) – Tense & Aspect – Auxiliaries (Primary & Modal) – Negatives – Questions – Agreement and Concord.

UNIT-IV: Forms and Functions of Adjectives, Adverbs, Agreement and Concord.

Text Books and References:
1. *"A Communicative Grammar of English"*, by G Leech and J Svarvik
2. *"Complete Grammar"*, by J H Pandey
3. *"Advanced English Grammar"*, P C Wren and H Martin

Year: 1	Semester: 1	AECC 2	Language- 1 Kannada/Hindi/ French/ German	Credits: 3:0:0

Objectives: To impart working knowledge of multi-lingual ability to students as part of projecting the composite culture of our country envisaged under Article 351 of the Indian Constitution and for strengthening national integration, Indian languages like Kannada, Hindi are offered and as part of International approach French & German languages are offered. Students can choose any one of the above languages for study.

SYLLABUS

As stipulated by the NEP / University of Mysore for Kannada & Hindi

Year: 1	Semester: 1	DSC 1	Digital Art	Credits: 3:2:0

Objectives:
To familiarize the students with the tools used in Adobe Photoshop and its application for typography, image editing, digital painting etc. for print and digital media.

SYLLABUS

UNIT I: Getting started with Adobe Photoshop CC – Overview of Adobe Photoshop CC, Features, Overview of tools used, Importance of Adobe Photoshop CC.

UNIT II: Working with Typography – Creating Typographies, Choosing the right font and colour.

UNIT III: Working with Layers and Images – Cropping a Photo, Resizing Images, Basics of Layers, Creating Layers for Print and Digital Media, Aligning Images with Multiple Layers, Merging Layer Techniques.

UNIT IV: Working with Filters – Photoshop Filters, Smart Filters, Common Features of Filters.

UNIT V: Digital Painting – working with brush tool, importance of using colours.

UNIT VI: Masking and File Formats – Introduction to Mask, Creating Vector and Layer Masks, Essential File Formats, Choosing the Right format for Print and Digital Media

REFERENCES
1. Basic Drawing Techniques by Richard Box Pub: Winsor & Newton, (U.S.A)
2. Still Life by Sanjay Shelar, Jyotsana Prakashan Pub(India).
3. Drawing and Anatomy by Victor Perard, Kingsport Press Pub(U.K).

Year: 1	Semester: 1	DSC 2	**Introduction to Graphic Design & Creating Illustrations**	**Credits: 3:2:0**

Objectives:

To learn the process of graphic design including the principles and elements of design, different color types and visualization techniques that are required in making a good design using Adobe Illustrator.

SYLLABUS

UNIT I: Design Basics - Introduction to Design, History of Design, Content and Form, Rules for making Good Design, Graphic Design Process, Creating Effective Layouts

UNIT II: Principles and Elements of Design - Principles of Design, Elements of Design, Design Problems to Avoid

UNIT III: Understanding Colors – Introduction, Color Wheel, Primary and Secondary Colors, Black and White, Tertiary Colors, Warm and Cool Colors, Color Models, Hue, Saturation, Value, Transparent and Opaque Colors, Indexed Color, True color

UNIT IV: Graphical Aspects of Design and Computer Graphics – Aspects of Design, Introduction to Computer Graphics, Effects.

UNIT V: Visualization - Visualization and Imagery Techniques, Direct And Indirect Approach, Thinking in various points of view

UNIT VI: Resolution and File Formats – Understanding resolution, image resolution, device resolution, printer resolution, interpolated resolution, digital image, file size and bit depth, scanning images, graphic file format.

UNIT VII: Understanding and working with Graphics and Web Images – Understanding Graphic images, types of graphic program, file formats for web, colors and text for the web.

REFERENCES

1) Graphic Design for the 21st century - by Charlotte Fiell, Peter Fiell
2)What is Graphic Design - by Quentin Newark
3)Graphic Design - by Aaris Sherin
4)Adobe Photoshop - by Bittu Kumar
5)Adobe Illustrator - by Code Kart
6) Adobe Photoshop - by Code Kart
7)Adobe illustrator - by Schwabe

Year: 1	Semester: 1	DSC 3	Fundamentals of Art	Credits: 2:1:0

Objectives:
To understand the basics of Art such as light, color and perspectives from various elements of nature and learn fundamentals of character sketching.

SYLLABUS

UNIT I: Outdoor studies – observing forms and shapes, Adding Tones, Shading with Texture Quality, Contour Drawing, Cinematography Drawing, Creating Rough sketches, Shadows, Overlapping Objects, Time and Season, Layers and Character Staging

UNIT II: Lighting and Color Concepts – Understanding Lights, Understanding proper light source, lighting and shading, drawing groups of basic shapes, Primary, secondary, tertiary and quaternary color, warm and cool color applications, greyscale keys

UNIT III: Perspective study – understanding perspective, one, two, three and four-point perspective

UNIT IV: Character Design Concepts – Role of a character designer, designing character, creating character drawings, and character based on age, creating four-legged animal, add-on features

REFERENCES

1. Art fundamentals: Colour, Light, Composition, Anatomy – 3Dtotal publishing
2. Light for visual artists: Understanding & using visual light in art & design – Richard Yot
3. Bridgman's complete guide to drawing from life – George B Bridgman
4. How to draw: Drawing and sketching objects and environments

Year: 1	Semester: 1	SEC1 SB	Digital Fluency	Credits: 0:0:2

Objectives:

a. Understand the Computer concepts and Operations
b. Design and Demonstrate the MS Office applications

SYLLABUS

UNIT I: Basic Computer Concepts and Operations – Introduction, Computer in Daily Activities, Computer Components, Windows – Basics, Windows Accessories, File creation, Modification, conversion.

UNIT II: Introduction, Editing a Document – Move and Copy text – Formatting text and paragraph – Finding and Replacing text and spelling checking – Using tabs, tables, and other features, Enhancing document – using mail merge and other features.

UNIT III: MS Excel – Introduction, Getting started with Excel – Editing cells and using commands and functions – moving, copying, inserting, deleting rows and columns – getting help and formatting a worksheet – Printing the worksheet – creating tables and charts.

UNIT IV: MS PowerPoint – Introduction, Menus, Home, Inserts, Design, Animation, Slideshow. Adding new slides, Adding text box, rearranging slides.

UNIT V: Internet Fundamentals and Application – Using the internet, creation of email. Sending email with attachments, using google form, internet applications.

References:
1. *Fundamentals of Computers*, by Rajaraman V , Adabala N
2. *Fundamentals of Computers* by Manoj Wadhwa (Author)
3. *Fundamentals of Computers* by (V. Rajaraman)
4. *Learning MS-Word and MS-Excel*, by Rohit Khurana

Year: 1	Semester: 2	AECC 3	Functional English - 2	Credits: 3:0:0

SYLLABUS

UNIT I: Introduction to Linguistics and Phonetics – Air-stream mechanism – Organs of Speech Mechanism – Classification and description of speech sounds in English a. Vowels and Diphthongs b. Consonants – Elementary Phonetic Symbols in Transcription

UNIT II: Verbs – linking verbs, auxiliaries, transitive ad-intransitive verbs, negative verbs and infinitives – Tenses, concord, adverbs, confusion of adjectives and adverbs, degrees of comparison

UNIT III: Introduction to the Language of Communication: Theory of Communication, types and modes of communication; verbal and non-verbal (spoken and written), personal, social and business, Barriers and strategies, intra-personal, Inter-personal and group communication

UNIT IV: Speaking skills: Monologue, dialogue, group discussion, Effective Communication, Interview, Public Speech – Reading and Understanding: Close reading, comprehension, Summary, Paraphrasing, Analysis and Interpretation – Writing skills: Documenting, report writing, making notes, Letter writing, E- mail

Text books and reading reference:
1. "*Unlock: Reading and Writing Skills*", by Sabina Ostrowska
2. "*Soft Skills and Professional Communication*", by Francis Peter SJ
3. "*Basic Communication Skills*", by P Kiranmai Dutt and Geetha Rajeevan

Semester: 2	AECC 4	Language -2 Kannada/Hindi/ French / German	Credits: 3:0:0

As stipulated by the NEP / University of Mysore for Kannada & Hindi

Semester: 2	DSC4	Multimedia Design	Credits: 3:2:0

Objective:
To learn various domains of graphic design including the mediums, types and styles of visual communication design.

SYLLABUS

UNIT I: What is multimedia, Types of medium

UNIT II: Promotional Design, Social Media Design, Drip Campaigns

UNIT III: Scalable Designs, Design Systems, Atomic Design

UNIT IV: Types and Styles of Design, Design trends for design medium

UNIT V: Digital Publishing, Using InDesign to setup display friendly layouts

REFERENCES
1) Multimedia and Graphic Designers: A Practical Career Guide, KEZIA ENDSLEY
2).Design Systems Handbook Written by: Marco Suarez, Jina Anne, Diana Mounter, Katie Sylor-Miller, Roy Stanfield

Year: 1	Semester: 2	DSC-5	Introduction to Video Editing	Credits:3:2:0

Objectives:
To familiarize students about audio and video editing using Adobe Audition and Premiere Pro interface and to get started with editing, working with clips and adding different effects.

SYLLABUS

UNIT I: Introduction to Adobe Audition - Fundamentals of Sound, Understanding Adobe Audition Interface, Adjusting Audio Preferences, Creating and Opening Files

UNIT II: Working with Audio Editing - Editing Audio Clips, Saving and Exporting File, Batch Process, Converting Sample Type

UNIT III: Editing Video - Basic Workflow, Adding, Rearranging, and Working with Clips in a
Sequence, Rendering and Previewing Sequences, Overview of Audio and Audio Track Mixer, Working with Clips, Channels, and Tracks, About Effects - Applying, Removing, Finding, and
Organizing Effects, Applying Audio Effects and Transitions

REFERENCES

1. Sound and Recording: Francis Rumsey, Tim McCormick
2. Modern Recording Techniques: David Miles Huber
3. Audio post production for film and Video: Jay Rose
4. Non-linear Editing:Bryce Button
5. Notes on Digital Film Editing: Gerhard Schumm

Year: 1	Semester: 2	DSC6	Cinematography and Photography Concepts	Credits: 2:1:0

Objectives:
On completion of the course, students will gain knowledge about camera, type of lighting, composition techniques for photography and sensors involved in photography and cinematography

SYLLABUS

UNIT I: Photography Concepts – Camera, Lighting, Composition Techniques

UNIT II: Cinematography Concepts – Cameras and sensors, lighting, exposure, camera movement

REFERENCES

1. Cinema Studies, The Key Concepts (3rd Ed.): Susan Haywood, London: Routledge
2. How to Read A Film: James Monaco. New York: OUP, 2000
3. Genre and Contemporary Hollywood: Steve Neal (Ed.). London: BFI, 2002

Semester: 2	AECS5	Environmental Studies	Credits: 2:1:0

Objectives:
To develop the sense of awareness among the students about environment and its various problems. To help the students in realizing the inter-relationship between man and environment.

SYLLABUS

Unit 1: the multidisciplinary nature of environmental studies Unit 2: natural resources
Unit 3: ecosystems
Unit 4: biodiversity and its conservation Unit 5: environmental pollution
Unit 6: social issues and the environment
Unit 7: human population and the environment
Unit 8: field work, visit to a local area to document environmental assets, river/forest/grasslands/hill/mountain and environmental problems

Year: 2	Semester: 3	AECC 3	Functional English-3	Credits: 3:0:0

As stipulated by the NEP / University of Mysore

Year: 2	Semester: 3	AECC 4	Language -3 Kannada/Hindi/ French / German	Credits: 3:0:0

As stipulated by the NEP / University of Mysore for Kannada & Hindi

Year: 2	Semester: 3	DSC7	Introduction to 3D	Credits:2:2:0

Objectives:
To understand the basics of 3D modelling such as 3D axes, projections, workspace and coordinate system and understand the processes involved from modelling up to post production.

SYLLABUS

UNIT I: Overview of 3D - Understanding 3D, 3D Projection, 3D Geometry, 3D Workspace

UNIT II: 3D Modeling to Rendering Process – Modeling, Materials and Textures,
Lighting, Rigging, Animation, Rendering

UNIT III: 3D Animation Environment and Post-Production – Views and Projections

Reference Books:
1. Animation: From Pencil to Pixels by Tony White
2. Animator's Survival Kit – Richard Williams
3. The Illusion of Life – Frank Thomas &OlieJohnstan
4. Animation Script to Screen (Author: Shamus Culhane)
5. Animation Writing and Development: From Script Development to Pitch By Jean AnnWright
6. The History of Moviemaking: Animation and Live-Action, from Silent to Sound, Black-AndWhite to Color (Voyages of Discovery), Scholastic Trade

Year: 2	Semester: 3	DSC8	Character Design	Credits:2:1:0

Objective:
To learn the concepts of creating a character, traits and illustrating various characters using digital production techniques.

SYLLABUS

UNIT I: Character design Fundamentals, Personality and Traits

UNIT II: Fundamentals of Digital Illustration, Concept Art, Working with Colours, Shapes and custom tools, Illustrator Production Pipeline for character design

UNIT III: Visual Articulation of Character, Poses, Emotions and Personality

UNIT IV: Props, Accessories, Hair and Fur

UNIT V: Setting up Space, Compositing Characters, Backgrounds and Perspectives, Various Illustration Styles

REFERENCES
1) Character Design from the Ground Up, Kevin Crossley
2).Creating Stylized Characters, 3DTotal

Year: 2	Semester: 3	DSC9	Interaction Design	Credits:2:2:0

Objective:
To learn the Fundamentals of Interactive design medium, User Behaviour, User Interface technology and Web Design concepts.

SYLLABUS

UNIT I: Intro to Interaction Design, History of Interactive medium, Intro to web.

UNIT II: Using XD for designing interactive experiences, Prototyping Websites

UNIT III: Understanding HTML, CSS and JavaScript, Using CMS Platforms, Landing pages using Readymag.

UNIT IV: Sitemaps, Userflow, Website design using WIX

UNIT V: E-commerce Sites, Portfolio Site Building

REFERENCES
1) **Interaction Design: Beyond Human-Computer Interaction, 6th Edition,** Yvonne Rogers, Helen Sharp, Jennifer Preece
2)Designing Interfaces, 3rd Edition: Patterns for Effective Interaction Design, O'Rielly

Year: 2	Semester: 3	OEC	Open Elective / Indian Constitution	Credits:3:0:0

As stipulated by the NEP / University of Mysore

Year: 2	Semester: 3	SEC3	Introduction to Business Management	Credits:2:0:0

As stipulated by the NEP / University of Mysore or any other B-School

Year: 2	Semester: 4	AECC 5	Functional English-4	Credits: 3:0:0

As stipulated by the NEP / University of Mysore

Year: 2	Semester: 4	AECC 6	Language -4 Kannada/Hindi/ French / German	Credits: 3:0:0

As stipulated by the NEP / University of Mysore

Year: 2	Semester: 4	DSC-10	3D Modeling & Texturing	Credits: 2:2:0

Objectives: On completion of this topic, students will be able to understand the concepts in shading and texturing 3D Models using Maya for various models and characters.

SYLLABUS

UNIT I: Introduction to Shading and Texturing - Materialistic Properties of Objects, Shader/Material, textures, UVW Co-ordinate System, Maya Hypershade, Working with Maya Shading Nodes - Blinn, Phong,an Lambert Shading Nodes

UNIT II: Working with 2D and 3D Textures - Procedural Textures - An Introduction, Difference between Bitmap and Procedural Textures, Working with 2D Procedural Textures, Working with 3D Procedural Textures

UNIT III: Basics of UV Mapping – Bump, Normal and Displacement Maps

UNIT IV: Layered Shader and Layered Texture - Understanding the Layered Shade, Applying Layer Shaders, Understanding the Layered Texture, Working with Layered Textures

UNIT V: Introduction to UV Unwrap – BG – UVs, UV Editor, UV Mapping Techniques

UNIT VI: Unwrapping and texturing a character – Skin shaders, Diffuse Maps, Specular Maps, creating Bump Maps, Texturing body and apparel

UNIT V: Fundamentals of Hypershade and Utilities

REFERENCES

1. Principles of Form and Design by Wucius Wong John Wiley & Sons, New York
2. Digital compositing for film & video by Steve Wright
3. Professional digital compositing: Essential Tools and Techniques by Lee Lanier, Pub. - Sybex.

Year: 2	Semester: 4	DSC-11	Lighting and Rendering	Credits: 2:2:0

Objectives:
To learn the Fundamentals and principles of Lighting of a 3D model and publishing it with rendering.

SYLLABUS

UNIT I: Fundamentals of Standard Lights and Shadows – Basic properties of Lights, Types of Lights in Maya, Types of Shadows

UNIT II: Studio Lighting and three-point lighting.-Principles of three-point lighting, planning the setup, lighting the character, shadows, important tips on light setup

UNIT III: Day Lighting- Exterior Model and fill lights – Creating a day light setup on a background, using fill lights, using rim and Hi Lights for the background, Character Lighting setup based on the background, Pre-compositing character and background

UNIT IV: Night light -Interior light and passes – Lighting the background, creating a Moonlight setup on an Interior Background

UNIT V: Image Based lighting – Introduction to HDRI, Lights and Shadows in the Live Plate, Adjusting the camera as per the Live Plate, Shading and Lighting for Cyborg Character, Color correction

REFERENCES

1. Introducing Autodesk Maya 2014 Basic Guide By Dariush Derakshani
2. Color And Light : A Guide For The Realist Painter (James Gumey Art)
3. Digital Lighting And Rendering – 1st And 2nd Edition. – By JermyBim

Year: 2	Semester: 4	DSC-12	Motion Graphics	Credits: 2:1:0

Objective:
To learn the Fundamentals of Motion Design, Animating Design Elements and Visual Story Telling

SYLLABUS

UNIT I: Intro to Visual Story Telling.

UNIT II: Principles of Animation, Mastering Timing

UNIT III: Working with Aftereffects, Shape Animation, Text Animation

UNIT IV: Working with Sound and Music in Motion Graphics, Editing Motion Design

UNIT V: Formats, Compilation and Compressions

REFERENCES
1) Adobe After Effects: A Complete Course and Compendium of Features, Ben Goldsmith.

Year: 2	Semester: 4	OEC	Open Elective / Indian Constitution	Credits:2:1:0

As stipulated by the NEP / University of Mysore

Year: 2	Semester: 4	SEC-4	Personality Development and Career Management	Credits: 0:1:1

Objectives:

The main objective of this scheme is to develop a critical mind, self-confidence and assurance to society. The students are given training in Personality development activities, self- employment and all possible other activities that enhance their social confidence. It is helpful to them to survive in any type of environment.

Unit 1: Personality development
Unit 2: Attitude & emotional intelligence
Unit 3 Goal setting, motivation & time management
Unit 4: Career development
Unit 5: Professional communication

Year: 3	Semester: 5	DSC-13	3D Rigging and Animation	Credits: 3:2:0

Objectives:
To understand the fundamentals of Rigging and Animation required to a good 3D Animation model that can be used for games, movies etc.

SYLLABUS

UNIT I: Introduction to Rigging – Concept of Rigging in Maya, Relation between Objects, Designing a chair Rig

UNIT II: Working with Constraints and Set Driven Key – Set Driven Key, Creating a Functional Rig Setup of a Cuckoo Clock

UNIT III: Mechanical Rig (Usage of constraints, utilities, SDK) – Aim Constraint, Developing a Functional Mechanical Rig

UNIT IV: Deformers - Lattice, Wrap, Cluster – What are Deformers?, Lattice Deformer, Wrap Deformers, Clusters

UNIT V: Working with Sculpt, Jiggle, and Wire Tool Deformer – Sculpt Deformer, Jiggle Deformer, Wire tool deformer

UNIT VI: Introduction to Character Rigging – Concept of Character Rigging, Introduction to joints, Joint creation process, develop a join system for a character

UNIT VII: Introduction to Timeline and Keyframe Animation – Animation Interface, Animation Preferences, Understanding Key frame Animation

UNIT VIII: Bouncing Ball – Introduction to Dope Sheet, Understanding the graph editor, tangents, Bouncing ball assignment, gravity

UNIT IX: Pendulum Exercise – Pendulum Animation Fundamentals, Arc of Motion, Animating the pendulum, Secondary Action (Drag)

UNIT X: Wave Exercise – working on wave animation

UNIT XI: Working with weights – Sack Exercise – Explain the basics of Weight, Adding emotions, Flour Sack – Jumping Actions

UNIT XII: Creating Strong Poses – Gesture Drawings – An introduction, Line of Action, Negative Space Versus Positive Space, Silhouettes, Creating a pose using line of action

REFERENCES

1) An Introduction to Rigging in the Entertainment Industry (Applications & Techniques)
2) Art of Rigging by George Biddlecombe, Pub.- Dover Publications
   by Chris Higs,Pub.- Entertainment Technology Press Ltd.

Year: 3	Semester: 5	DSEC 14	Internship	Credits: 0:1:2

The student is expected to work in any company for a minimum period of 6 weeks. He is supposed to work on the assignments given by the company and submit the same as per the schedule given. He is supposed to submit a report from the company on successful completion. Alternatively if he not able to get any company internship, the college can assign a simulated project to the student. On submission, the same can be evaluated by the respective lecturer.

Year:3	Semester: 5	DSC 15	3D Digital Sculpting & Painting	Credits: 3:2:0

Objectives:
To understand the basic tools in ZBrush, its interface, basics of sculpting, character creation process and advanced tools in sculpting for surface and procedural modelling.

SYLLABUS

UNIT I: Getting started with ZBrush - Introduction to Digital Sculpting, Getting Started with the ZBrush Interface, Getting Ready for Sculpting

UNIT II: Digital Sculpting and Retopolizing - Character Sculpting, Sculpting using Advance Tools, Retopolizing

UNIT III: Hard Surface Modeling, Texturing and Rendering - Hard Surface Modeling, Texturing and Polly painting, Lights and Rendering

References:
1-Introducing Z-Brush by-Eric Keller
2. Digital Sculpting Human anatomy By-Scott Spencer

Year: 3	Semester:5	DSE 1	Elective 1:	Credits: 0:2:3

Electives to be selected from the list enclosed.

Year: 3	Semester: 5	SEC3	Cyber Security or some other SEC	Credits: 1:1:0

Year: 4	Semester: 6	DSC16	Digital Compositing	Credits: 2:1:0

Objectives:

At the end of this course, student will be able to define various types of compositing, create a composition for a project with appropriate parameters, learn to manage layers, practice animation, perform effects and more using Adobe After Effects.

SYLLABUS

UNIT I: Getting started with Adobe After Effects CC - Introduction to After Effects, Setup and Installation, System Requirements, General workflow in After Effects CC, Menu Bar, Tool Bar, and Panels, Dynamic Links, Working with Other Applications, Projects and Composition

UNIT II: Adding Various Digital Assets and Previewing the Composition - Importing Digital Assets, Interpreting Footages, Details of Files, Switches and Columns, Working on Digital Assets, Arranging and Managing Layers, Previewing the Composition, Region of Interest, Snapshots

UNIT III: Creating Animation Effects - Animation Basics, Keyframes, Expressions, Graph Editor, Motion Paths, Motion Blur, Animating with Puppet Tools, Time-based Effects

UNIT IV: Text Animation and Animation Effects - Applying Effects Using Preset, Mask, Color Keying, Working with Green Screen Footages, Blending Modes, Text Animation, Particles

UNIT V: 3D in After Effects, Previewing and Rendering Output

REFERENCES

1. Editing Digital Video: The Complete Creative and Technical Guide by Robert Goodman (McGraw-Hill)
2. Digital compositing for film & video by Steve Wright
3. Professional digital compositing: Essential Tools and Techniques by Lee Lanier, Pub. - Sybex.

Year: 4	Semester: 6	DSC17	Video Production Techniques	Credits: 2:2:0

Objective:

To learn the Fundamentals of Video handling and project management

Syllabus:

UNIT I: Intro to Video production workflow

UNIT II: Pre production techniques, story board, script

UNIT III: Working with Camera

UNIT IV: Working with Crew, Sound and Music

UNIT V: Post production, Video publishing

REFERENCES

1) Adobe After Effects: A Complete Course and Compendium of Features, Ben Goldsmith.

2). Adobe premiere for dummies

3). DSLR Film Making, Klapton

Year: 4	Semester: 6	DSC18	Visual Effects	Credits: 2:2:0

Objective:
To impart basic concepts of Rotoscopy in VFX, understand the general workflow of Nuke and Silhouette, process of creating traditional key-framed roto and assisted roto using Silhouette and Nuke and to understand the step by step approach in exporting mattes, vector shapes and trackers to compositing software.

Syllabus:

UNIT I:
RotoPaint Introducing RotoPaint's Interface, Rotoscoping in VFX, SilhouetteFX, Getting to Know the Interface, Creating New Projects, Import, Creating New Sessions, Working with Shapes/Layers/Points, Core Competencies, Rotoscoping Workflow, Power Matte Node, Power Matte Parameters, IK (Inverse Kinematics), Motion Tracking, Types of Trackers.

UNIT II:
RotoPaint Understanding the Curve Editor, Understanding Point Tracker, Working with Tracker Pop-Up Menu, Applying Trackers, Exporting Tracking Data, Importing Tracking Data, Planar Tracking, Mocha Tracker, Understanding Motion Blur,

Understanding Shot Stabilization , Working with Occlusion and Spinning, Scene Improvement Techniques, Understanding Paint Node

UNIT III:
Keying and Rendering: Understanding Features of Keying, Working with different types of Keying, Understanding Keyer Node, Working with Deartifact, Working with Primary Matte, Working with Secondary Matte, Rendering objects

UNIT IV:
Introduction to Roto and RotoPaint& Using Bezier and B-Spline Tools for

Rotoscoping Introduction to Roto and RotoPaint, RotoPaint Node, RotoPaint Toolbar, Drawing Paint Strokes, Bezier and Cusped Tools, B-Spline Tool, Ellipse, Rectangle, and Cusped Rectangle Tools, Selecting the Output Format and Channels, Combining Paint, Roto, and Animation

UNIT V:
Editing Strokes and Shapes: Selecting Existing Strokes/Shapes for Editing, Editing Attributes Common to Strokes and Shapes, Transforming Strokes/Shapes/Groups, Adjusting Mask Controls, Animating Strokes/Shapes, Viewing Points in the Curve Editor and the Dope Sheet, Bezier and Paint Nodes Using the 3d Viewer, Understanding 3d Objects, Merging Objects, Modifying Object Shapes

Reference Books:
1. Nuke 101 Professional Compositing and Visual Effects– Edition 1, Ron Ganbar-Peachpit Press
2. The Foundry Nuke X 7 for Compositors Paperback-by Prof. Sham Tickoo Purdue Univ. (Author),
3. CADCIM Technologies (Author), Edition – 1st (June 20, 2013), Publication: CADCIM Technologies
4. Digital Compositing for Film and Video: Production Workflows and Techniques by Steve Wright (Author), Edition -4th, Publication: Routledge
5. Rotoscoping: Techniques and Tools for the Aspiring Artist 1st Edition.

Year: 3	Semester: 6	DSC 19	Internship	Credits: 0:2:2

The student is expected to work in any company for a minimum period of 6 weeks. He is supposed to work on the assignments given by the company and submit the same as per the schedule given. He is supposed to submit a report from the company on successful completion. Alternatively if he not able to get any company internship, the college can assign a simulated project to the student. On submission, the same can be evaluated by the respective lecturer.

Year: 3	Semester: 6	DSE-2	Elective 2: Project work	Credits: 2:0:3

Electives to be selected from the enclosed list

Objective:
To showcase the skills learnt in the 3D Modelling / Rigging & Animation VFX by creating a portfolio on any topic of their choice. One of the lecturer will be assigned as mentor who will guide throughout the period of portfolio development. The portfolio should be submitted in the format mentioned by the lecturer in the stipulated time frame.

Year: 3	Semester: 6	SEC-4	Professional Communication	Credits: 0:2:3

Objective:

To educate students that Professional Communication skills are the most essential tools we possess to fulfill our social needs. Student will obtain learnable skills such as Awareness, Improve communication skills, Clear Thinking, Digging Down, Assertion, Emphatical listening skills, Meta talk and Problem Solving.

Syllabus:

UNIT-I: Essentials of Grammar – Parts of Speech, Punctuation, Vocabulary Building, and Phonetics

UNIT-II: Office Management – Types of correspondence, Receipt & Dispatch of mail, Filing Systems, Classification of files, Roles & Functions of correspondence, Management Information System, Managing Computer

UNIT-III: Letter & Resume Writing – Types of Letters- Formal / Informal, Importance and Functions of Letter writing, Business Letters / Element of structure, Resume and Covering letter, Guidelines for making a Result-oriented Resume/ Helpful Hints

UNIT-IV: Presentation Skills – Importance of Presentation Skills, Organising contents / Structural Elements of a Presentation Concerning Data, Visual Aids and Voice & Picture Integration, Guidelines to make Presentation Interesting, Body Language, Voice Modulation.

UNIT-V: Interview Preparation – Types of Interview, Preparation for an Interview, Employers Expectations, General Etiquette, Dressing Sense, Posture & Gestures.

UNIT-VI: Group Discussion & Presentation – Process of Group Discussion, Guidelines, Helpful Expressions, Evaluation

Year: 4	Semester: 7	DSC20	Advanced UIUX Design	Credits: 3:3:0

Objective:
On completion of this module, students will be able to explain the principles of UXie User Experience and learn how to make their designs responsive.

SYLLABUS

UNIT I: Introduction to User Experience Design - Definition of UX and UX Design, Difference Between UI and UX E, Elements of UX Design, Significance of UX, Principles and Guidelines of UX Design, Best Practices in UX Design

UNIT II: Understanding Responsive Web Design - What is Responsive UI Design? Definition of Responsive Web Design (RWD), Evolution of RWD, Fundamental Techniques for RWD, Progressive Enhancement, Difference Between Graceful Degradation and Progressive Enhancement, Responsive Work Design Workflow, Significance of RWD

UNIT III: Using Common RWD Patterns in Mobile Designs – Breakpoints, Navigation Drawers, Stacked Pagination, Fluid Images, Bottom Bar, Tab Bar, Call to Actions, Short and Simple Menu

UNIT IV: Testing and Usability Studies Guideline to test RWD, testing insability studies,

UNIT V: Introduction to User Interface Design - Definition of UI and UI Design, Parts of User Interface Design, Principles and Attributes of User Interface Design, Types of UIs, Processes in User Interface Design, Models in User Interface Design

UNIT VI: Understanding the strategies for Responsive Web Design - Strategies for RWD in Various Devices, Need for Content Strategy in RWD, Importance of Content Audit, Performance Optimization for a Mobile-friendly Site, Difference Between Responsive and Adaptive Website Designs

UNIT VII: Using Common RWD Patterns in Mobile Designs – Bottom Bar, Tab Bar, Call to Actions, Short and Simple Menu

UNIT VIII: usability test plan template, usability testing for RWD

References:
1. Designing for Digital Age: How to create human-centered products and services - Kim Goodwin
2. Sketching the User experiences - Bill Buxton
3. The design of everyday things - Don Norman
4. The elements of user experience - Jesse James Garrett

Year: 4	Semester: 7	DSC21	VFX - Portfolio	Credits: 0:2:4

Objective:

To showcase the skills learnt in the Vfx designing by creating a portfolio on any topic of their choice. One of the lecturer will be assigned as mentor who will guide throughout the period of portfolio development. The portfolio should be submitted in the format mentioned by the lecturer in the stipulated time frame.

Year: 4	Semester: 7	DSC 22	Pre-Visualization	Credits: 3:3:0

Objectives:
To understand the concept of pre-visualization involved before the creation of any film and to understand the storytelling and 3D Previs Process.

SYLLABUS

UNIT I: VFX Storytelling - What is VFX Storytelling, 3 Stages of VFX Film-Making, Steps of VFX Pre- Production process, What is Pre-visualization, Skills of a Previs Artist, Different Types of Previs (Postvis, Techvis), Interface & Features of iClone

UNIT II: 3D Previs Process
Casting: Customise your own animation-ready talking characters
Action: Generate motion with puppet animation tools, animate motions with Human IK, and apply loopable motions
Scene Building: Construct 3D Scene using content library
Camera & Lighting: Create different Lighting inscenes, apply multiple cameras & camera movements and switch between them for enhanced storytelling, Compositing & Visual Effects: preview visual effect output in real-time

References
1. Building Interactive Worlds in 3D: Virtual Sets and Pre-visualization for Games, Film & the Web by Jean-Marc Gauthier, January 2018

Year: 4	Semester: 7	DSE 3	Elective 3:	Credits: 0:2:4

Electives to be selected from the enclosed list.

Year: 4	Semester: 8	DSC 22	Immersive Design – VR Specialization	Credits: 2:3:0

Objectives:
At the end of this module, students will have a brief understanding of the techniques used for Virtual Reality Game applications and software's used to create such an immersive experience.

SYLLABUS

UNIT I: Introduction to virtual reality using software tools applied to computer games.

UNIT II: Demonstrate knowledge of virtual reality integration with level design using the software tools applied to computer games.

UNIT III: Demonstrate knowledge of virtual reality integration with Game UI

design using the software tools applied to computer games.

UNIT IV: Demonstrate knowledge of basic scripts for virtual reality using the software tools applied to computer games.

UNIT V: Integration of virtual reality with the Controllers and console.

Reference Books:

1. The Game Console: A Photographic History from Atari to Xbox Hardcover – 30 September 2017

Year: 4	Semester: 8	DSC 24	Matte Painting	Credits: 3:2:0

Objectives:

To understand the importance of light, exposure, color theory and composition that is required for matte painting
To impart knowledge of mixing techniques such as digital painting, compositing and Photoshop magic to create the wonderful scenes.

SYLLABUS

UNIT I: Camera Projection Object Material Properties, Merging Shaders, Projecting Textures, Inserting Lights, Shadows, Building a Camera Projection Scene.

UNIT II: Tweaking the Geometry, Animating the Camera, Tweaking the Texture, Projection Cameras, Importing Cameras, Transformer Handles, Pivot Points, TransformGeo Node, Applying Tracks, Adding Motion Blur, Rendering

UNIT III: Camera Projection Transformer Handles, Pivot Points, Transform Geo Node, Applying Tracks, Adding Motion Blur, Rendering,

UNIT IV: Using a Spherical Transform to Replace Sky, Compositing Outside the ScanlineRender Node, 2D Compositing Inside 3D Scenes

UNIT V: Overview of Digital Matte Painting, Understanding Lighting, Working with Perspective, and Composition, Understanding Project Breakdown, Creating a 3d Scene

UNIT Vl: Using the 3d Viewer, Understanding 3d Objects, Merging Objects, Modifying Object Shapes

Reference Books:

1.   The Foundry Nuke X 7 for Compositors Paperback-by Prof. Sham Tickoo Purdue Univ. (Author), CADCIM Technologies (Author), Edition – 1st (June 20, 2013), Publication: CADCIM Technologies
2.   Digital Compositing for Film and Video: Production Workflows and Techniques- by Steve Wright (Author), Edition -4th, Publication: Routledge

Year: 4	Semester: 8	DSC 25	Movie Project Planning	Credits: 3:2:0

Objectives:
To understand the different animation stages, recognize client requirements, estimate the project budget, create script and storyboard, plan and schedule the project, define production, create, compose and publish the project.

SYLLABUS

UNIT I: Production House Process – Introduction to a Production house, 2D and 3D Animation Stages

UNIT II: Pre-Production - Client Brief, Research, Create Story and Script, Visualization, Create Story Board, Planning and Scheduling

UNIT III: Production – Modelling, Materials, Light and Camera, Rigging,

Animation UNIT IV: Post Production – Editing, Compositing, Adding Sound,

Publishing

References
1. The 3D production Pipeline by Fabio Pellacini
2. Film Art: An introduction by David Bordwell, Kristin Thompson, Publisher: McGraw- Hill Education, 2012

Year: 4	Semester: 8	DSE 4	Elective 4:	Credits: 0:2:3

Electives will be selected from the enclosed list

Year: 4	Semester: 8	DSE 5	Research Project (Work/Internship with VIVA)	Credits: 0:0:6

The student is expected to work in any company for a period of 6 weeks. He is supposed to work on the assignments given by the company and submit the same as per the schedule given. He is supposed to submit a report from the company on successful completion. Alternatively if he not able to get any company internship, the college can assign a simulated project to the student. On submission, the same can be evaluated by the respective lecture.

List of Electives

1. Portfolio Development (Graphic Design)

2. Portfolio Development (Motion Graphic Design)

3. Project Work on 3D Modeling

4. Project Work on 3D Rigging & Animation

5. Project Work on VFX

6. Media Advertising

7. 3D Motion Graphics

8. Advanced Compositing

9. Advanced FX & Simulation

Specialized Programme by University of Mysore
CBCS CAGP Pattern (2019-2020)

M.Sc. Multimedia Design
Regulations & Syllabus

Program Objective:

The objective of the MSc. Multimedia Design program is to equip students with advanced knowledge, skills, and expertise in the field of multimedia design, enabling them to become highly competent professionals in the industry. The program aims to provide a comprehensive understanding of the principles, theories, and practices of multimedia design, fostering creativity, critical thinking, and technical proficiency.

1. **In-depth Knowledge:** The program seeks to develop a deep understanding of multimedia design concepts, including graphic design, web design, animation, video production, interactive media, and user experience design. Students will explore the theoretical foundations and practical applications of these disciplines, gaining a solid foundation for their professional careers.

2. **Technical Proficiency:** Through hands-on training and practical assignments, students will acquire advanced technical skills in multimedia design tools, software, and technologies. They will learn to effectively utilize industry-standard software, such as Adobe Creative Suite, 3D modeling software, video editing tools, and web development frameworks, to create visually stunning and interactive multimedia projects.

3. **Creative Problem-Solving:** The program emphasizes the development of creative thinking and problem-solving abilities. Students will engage in various design projects and challenges, where they will learn to conceptualize, ideate, and develop innovative multimedia solutions that address real-world problems. They will be encouraged to think outside the box, experiment with different design approaches, and push the boundaries of multimedia design.

4. **User-Centric Design:** Understanding the importance of user experience and user-centered design principles, the program will train students to create multimedia content that effectively engages and communicates with the target audience. They will learn to conduct user research, analyze user behavior, and apply usability principles to create intuitive and engaging multimedia experiences across different platforms and devices.

5. **Collaboration and Communication:** The program recognizes the significance of collaboration and effective communication in the multimedia design industry. Students will work in interdisciplinary teams, simulating real-world project environments, to foster their teamwork, communication, and leadership skills. They will learn to effectively present and pitch their design concepts, considering feedback and incorporating it into their work.

6. **Ethical and Professional Practices:** The program will emphasize the ethical and professional responsibilities of multimedia designers. Students will learn about copyright laws, intellectual property rights, and ethical considerations related to multimedia design. They will be encouraged to develop a strong sense of professional integrity and uphold industry standards and best practices.

7. **Industry Exposure:** To bridge the gap between academia and industry, the program will provide opportunities for students to interact with industry professionals, participate in internships, and engage in real-world multimedia design projects. Through industry collaborations and guest lectures, students will gain insights into the latest trends, technologies, and challenges in the field.

By the end of the **MSc. Multimedia Design** program, graduates will be equipped with a diverse skill set and a comprehensive understanding of multimedia design, enabling them to pursue careers as multimedia designers, web designers, graphic designers, UI/UX designers, multimedia artists, creative directors, and other related roles. They will be prepared to contribute to the dynamic and ever-evolving multimedia design industry, bringing their unique creative vision and technical expertise to create impactful multimedia experiences.

Regulations:

The credit pattern for the Multimedia Design is similar to the university's Choice based credit system. The total credit for the course is same as that of PG Programme offered by the university.

Following shall be minimum and maximum credits per semester.

The credit pattern is Lecture (L); Tutorial (T); Practical (P); (L:T:P)

Pattern Lecture: One hour session of theory class per week in a semester is 1 credit.
Tutorial & Practical: Two-hour session of tutorial or Practical class per week in a semester is 1 credit.

One semester period: 16 weeks of teaching and learning

Duration of semester: 20 weeks that includes semester end examinations.

A candidate can enroll for a minimum of 16 and a maximum of 24 credits per semester.

A candidate has to earn a minimum of 72 credits for successful completion of a master's degree.

C1 – Multiple choice questions test for 10 marks and Assignments – 10 marks
C2 – Descriptive test 10 marks and portfolio presentation – 10 marks
C3 – Semester End Examination – 60 marks

Continuous Assessment	Time Duration	Marks		Minimum 30% and an aggregate of 40% to declare pass.
		Maxi	Min	
C1	1 week to 8 weeks	20	6	
C2	9 weeks to 16 weeks	20	6	
C3	On Completion of 16 weeks	60	18	

Eligibility for Admission: Students with any Bachelor's degree from any UGC recognized universities or any equivalent bachelor degree, completed either in Regular, Distance or Online mode. Foreign nationals are also eligible to take admission into this course subjected to eligibility clearance from University of Mysore. Admission will be done as per the norms set by University of Mysore.

M.Sc. Multimedia Design
Proposed Scheme of Teaching & Evaluation for
M.Sc. Multimedia Design

SEMESTER 1   **Total: 24 Credits**

Sl. No.	Title of the Course	HC/SC	Credit Pattern			Total Credits
			L	T	P	
1.1	Design Fundamentals	HC	0	3	3	6
1.2	Principles of Layout	SC	0	1	1	2
1.3	Design History and Design Styles	SC	0	2	2	4
1.4	Raster Design	HC	0	3	3	6
1.5	Vector Design	HC	3	3	0	6

SEMESTER 2   **Total: 24 Credits**

Sl. No.	Title of the Course	HC/SC	Credit Pattern			Total Credits
			L	T	P	
2.1	Fundamentals of Multimedia Design	HC	1	1	0	2
2.2	Branding Design	HC	3	3	0	6
2.3	Working on Various Design Mediums	SC	2	2	0	4
2.4	Publication Design	SC	3	3	0	6
2.5	Interaction Design	HC	3	3	0	6

SEMESTER 3   **Total: 24 Credits**

Sl. No.	Title of the Course	HC/SC	Credit Pattern			Total Credits
			L	T	P	
3.1	Advanced Interaction Design Principles	HC	2	0	0	2
3.2	Web Design with CMS Platforms	HC	3	3	0	6
3.3	Complete Ui-Ux Concepts	SC	3	3	0	6
3.4	Applicational Design	SC	2	2	0	4
3.5	Project	HC	0	3	3	6

SEMESTER 4   **Total: 24 Credits**

Sl. No.	Title of the Course	HC/SC	Credit Pattern			Total Credits
			L	T	P	
4.1	Photography & Imaging for Design	HC	2	0	0	2
4.2	Principles of Animation	SC	3	3	0	6
4.3	Motion Design	SC	3	3	0	6
4.4	3D Design	HC	3	3	0	6
4.5	Mixed Media Design	HC	3	1	0	4

Detailed Syllabus for
M.Sc. Multimedia Design

Year: 1	Semester: 1	HC	Design Fundamentals	Credits: 0:3:3

Objective:
To understand fundamental theory behind graphic design and visual
Communication.

Syllabus:

Unit-I: Intro to design
What is design, why design is required, Good vs Bad design, Qualities of Good
Design

Unit-II: Design Elements
Building blocks of design, Type, Shapes, Colors and Imagery, Fundamentals of
design anatomy.

Unit-II: Mood-boarding
Design Exposure, Studying Designers, What is a moodboard, How to do
moodboarding, Intro to Milanote

Unit-III: Typography
Typeface, font, glyphs, Type Hierarchy, Type Anatomy, Type Arrangement
(Kerning, Tracking, Leading, Alignment), Type Scale, Pairing

Unit-IV: Design Thinking
Concept Development, Design Brief: Good Brief, The 5 step process, Mind
mapping, Case Study: Logo Design, Project management, Visual Narratives

Recommended Text

* Graphic Design School: The Principles and Practice of Graphic Design, David
Dabner

Year: 1	Semester: 1	SC	Principles of Layout	Credits: 0:1:1

Objective:
To understand and implement hierarchy, spacing and alignment efficiently to
create functional design layouts

Syllabus:

Unit-I: Intro to Getstalt Theory, Geometric Abstraction, and Fundamentals of layout

Unit-II: Hierarchy, Alignment, Spacing,

Unit-III: Composition Techniques, Compositional Elements, Working with various layouts

Unit-IV: Compositional Principles, Best practices

Recommended Text
* Grid Systems in Graphic Design, Josef Müller-Brockmann

Year: 1	Semester: 1	SC	Design History and Design Styles	Credits: 0:2:2

Objective:
To understand the history, evolution and movements involved in graphic design timeline

Syllabus

Unit-I: Introduction to Design domains, Possibilities and Limitations of various domains, Approaching Mediums

Unit-II: History of Graphic Design, Evolution of Graphic Design, Pioneers of Design, Technology

Unit-III: Introduction to Design Styles, Types of Styles, Hybrid Styles, Building a narrative and picking the right style.

Unit-IV: Art Movements, Schools of Design

Recommended Text
* Design: The Definitive Visual History, PENGUIN DK

Year: 1	Semester: 1	HC	Raster Design	Credits: 0:3:3

Objective:
To understand and practice various raster editing techniques required for graphic design

Syllabus:

Unit-I: Introduction to Raster Editing with Photoshop

Unit-II: Image Editing, Introduction to Image Editing, Principles of Editing, Using various tools for image editing

Unit-III: Layers and Layer Effects: Introduction to Layers, Mastering Layers and Layer
Effects, Understanding design elements in detail

Unit-IV: Working with Photoshop to create various design collaterals

Recommended Text
* Adobe Photoshop 2021 for Beginners, Tech Demystified

Year: 1	Semester: 1	HC	Vector Design	Credits: 3:3:0

Objective:
To understand and practice various vector editing techniques required for graphic design

Syllabus

Unit-I: Introduction to Vector Graphics with illustrator

Unit-II: Pen tool, Shape Builders, PathFinders and Other key design tools

Unit-III: Boolean Operations, 2D vs 3D Graphics, Working with Artboards

Unit-IV: Introduction to Logo Design, Iconography, Infographics.

Recommended Text
* Adobe Illustrator CC Classroom in a Book, Brian Wood

Year: 1	Semester: 2	HC	Fundamentals of Multimedia Design	Credits: 1:1:0

Objective:
To understand and evaluate the principles of multiple design domains

Syllabus

Unit-I: Introduction to Multimedia concepts, Multiple Design platforms

Unit-II: Web Advertisements

Unit-III: Social Media Design

Unit-IV: Digital Publications

Recommended Text
* Multimedia Systems" by Ralf Steinmetz and Klara Nahrstedt

Year: 1	Semester: 2	HC	Branding Design	Credits: 3:3:0

Objective:
To learn workflow and practices on creating brand identities

Syllabus

Unit-I: Design Systems, Scalable design, Patterns and Behaviors of Design elements.

Unit-II: Scalable Designs in XD, Distributing a design system

Unit-III: Identity Design, Studying a brand, Stylescapes, Brandboards

Unit-IV: Atomic Design Principles, Reverse Atomic Design

Recommended Text
* Design Systems Handbook, Marco Suarez, Jina Anne, Diana Mounter, Katie Sylor-Miller, Roy Stanfield

Year: 1	Semester: 2	SC	Working with Design Medium	Credits: 2:2:0

Objective:
To learn workflow and practices working on different design platforms

Syllabus

Unit-I: Types of Design Domains

Unit-II: Technical Specification of Designs, Templates, Grid System, Rule of thirds, Golden Ratio

Unit-III: Design Formats, File Management, Publishing

Unit-IV: Marketing Design, Drip Campaigns, Emailer, Digital Marketing Fundamentals

Recommended Text:
* The Practical Guide to Design Theory, Lindsay Marsh

Year: 1	Semester: 2	SC	Publication Design	Credits: 3:3:0

Objective:
To learn and implement print publication design techniques

Syllabus

Unit-I: Introduction to Publication Design and Print Technology

Unit-II: Layout and Hierarchy for publications, Brochures, Booklets, Books, Magazines and Zines.

Unit-III: Pagination Techniques, Bleeds, Flight

Unit-IV: e-Pubs and e-Books, Interactive Digital Publication

Recommended Text:
* What is Publication Design?, Lakshmi Bhaskaran

Year: 1	Semester: 2	HC	Interaction Design	Credits: 3:3:0

Objective:
To understand and learn fundamentals of interactive medium

Syllabus

Unit-I: History of Interaction Design, Evolution and Pioneers

Unit-II: 3 Waves of computing, Mainframes, Personal Computers and Ubiquitous, IOT

Unit-III: Understanding Users, UX factors, UX Heuristics

Unit-IV: ACD & UCD, Applications.

Recommended Text:
* The Design of Everyday Things, Don Norman

Year: 2	Semester: 3	HC	Advanced Interaction Design Principles	Credits: 1:1:0

Objective:
To learn and evaluate techniques of interactive design in web and applicational design

Syllabus

Unit-I: Introduction to Experience Design, Intro to XD and Figma

Unit-II: Adaptive & Responsive Design, Applications and approach

Unit-III: Mobile First Vs Desktop First Approach

Unit-IV: Design and Prototyping in XD, Working with various interaction design formats, Plugins and Addons.

Recommended Text:
* Designing Interfaces, O'Reilly

Year: 2	Semester: 3	HC	Web Design with CMS Platforms	Credits: 3:3:0

Objective:
To learn web design principles and technology using CMS platforms

Syllabus

Unit-I: Introduction to Web design Workflow

Unit-II: Site maps, CJM, Research

Unit-III: User flow, Navigation Design, Prototyping design solutions

Unit-IV: CMS Workflow, Working with WIX, E-Commerce Design

Unit-V: Design Landing Pages, Designing Websites

Recommended Text:
* The Principles of Beautiful Web Design, Sitepoint

Year: 2	Semester: 3	SC	Complete UI UX Concepts	Credits: 3:3:0

Objective:
To understand and evaluate various User Experience Principles and Practices

Syllabus

Unit-I: Introduction to UIUX

Unit-II: User Experience workflow, Research, Scope, SWOT, SCAMPER, Fishbone

Unit-III: UX Laws, Content Breakpoints, User Interviews, Surveys.

Unit-IV: Advanced Prototyping, Figma, Developing interactive deliverables

Recommended Text:
* Laws of UX O'Reilly

Year: 2	Semester: 3	SC	Applicational Design	Credits: 2:2:0

Objective:
To learn and practice principles and technology used in applicational interaction design

Syllabus

Unit-I: Introduction to Applicational Design with Figma

Unit-II: Art Board, Workspace, Tools, Collaborating and Sharing

Unit-III: Onboarding – Process, techniques, Design Sprints

Unit-IV: Gamification, Ubiquitous Design, Design testing, Rapid Prototyping, Technophobes, Design Documentation

Recommended Text:
* Designing and prototyping using figma, Fabio Staiano

Year: 2	Semester: 3	HC	Project	Credits: 0:3:3

Objective:

To showcase the skills learnt in the Advanced Interaction Design by creating a portfolio website using a CMS Platform. One of the lecturers will be assigned as mentor who will guide throughout the period of portfolio development. The Project should be submitted in the format mentioned by the lecturer in the stipulated time frame.

Year: 2	Semester: 4	HC	Photography & Imaging for Design	Credits: 1:1:0

Objective
On completion of the course, students will gain knowledge about camera, type of lighting, composition techniques for photography and sensors involved in photography and cinematography

Syllabus

UNIT I: Photography Concepts – Camera, Lighting, Composition Techniques

UNIT II: Cinematography Concepts – Cameras and sensors, lighting, exposure, camera movement

Reference:

*The basic book of photography: fourth edition, tom grim
*Photoshop CC For Beginners - The Ultimate Digital Photography and Photo Editing Tips and Tricks for creating Amazing Photos by- Joseph Joyner, Mihails Konoplovs.

Year: 2	Semester: 4	SC	Principles of Animation	Credits: 3:3:0

Objective

To learn the Fundamentals of Principles of Animation for Motion Design, Animating Design Elements and Visual Story Telling

Syllabus

UNIT I: Introduction to Principles of Animation – Stretch and Squash, Timing and Spacing, Ease in and ease out, Arcs, follow through and overlapping, staging, anticipation, exaggeration, Animation Principles in Animate

UNIT II: Working with timeline, layers and keyframes - Understanding the Timeline, Changing the Appearance of the Timeline, Changing the Display Frames in the Timeline, Onion Skinning, Moving the Play head, Using layers and keyframes

UNIT III: : Shapes and Symbols – Creating basic shapes, stroke and fill, patterns, types of symbols, editing symbols, using library panels

UNIT IV: Creating Animations – Understanding Motion tween, classic tween, shape tween, suing sound

REFERENCES

1. The Animator Survival Kit by Richards Williams
2. Basic Drawing Techniques by Richards Box
3. Drawing and Anatomy by Victor Perard
4. Sketching by Pratap Mulik
5. Human Anatomy for Artist by Eliot Goldfinger

Year: 2	Semester: 4	SC	Motion Design	Credits: 3:3:0

Objectives:

On completion of the course, students will be able to understand the basics of motion graphics, special effects using Adobe After Effects and applying effects in Adobe After Effects.

Syllabus

UNIT I: Introduction to Motion Graphics - Pal and NTSC formats, Frame rate, Adobe After effect interface, Panels ,composition, composition setting, nested composition, pre composition, preferences, importing files, transform properties, key farming, basic animation using transform properties, motion blur, interpolation, graph, ,blending modes

UNIT II: Case study of motion graphics video, Text tool, Parenting, Masking, types of masking tool, stroke application of masking, creation of motion graphics video(explainer video)

UNIT III: Making Basic animation using keyframe, Creating Basic motion graphics video, Creating rotoscopy video, Creating explainer video, Creating cinematic effects, Creating chroma video, Creating tracking video

Reference Books:

1. Adobe After Effects Classroom in a Book (2021 release) by Lisa Fridsma
2. Creating Motion Graphics with After Effects: Essential and Advanced Techniques, 5th Edition, Version CS5 by Chris Meyer and Trish Meyer
3. Adobe After Effects CS6 Digital Classroom Book by Jerron Smith.
4. Creating Motion Graphics with After Effects by Chris Meyer and Trish Meyer

Year: 2	Semester: 4	HC	3D Design	Credits: 3:3:0

Objective:

On completion of this topic, students will be able to understand the concepts in Modeling, shading and texturing for various models and characters.

Syllabus

Unit-I: Intro to 3D Graphics, 3D Pipeline, Intro to 3D tool UI

Unit-II: Scene Building with Geometry, Parametric Modelling, Polygonal

Modelling, Spline Modelling, Modifiers, Deformers, Vertices, Edges and Polygons,

Unit-III: 3D Typography - Materials & Maps, Working with 3D Typography, Advanced Lighting Techniques, Rendering Settings and Passes

Unit-IV: MoGraph with 3D - Basics of Keyframe animation, Dynamics and Simulation

Year: 2	Semester: 4	HC	Mixed Media Design Project	Credits: 3:1:0

Objective:
To showcase the skills learnt in using various mediums (Mix-Mediums) by creating a Project on their specialization topic. The Project should be submitted in the format mentioned by the lecturer in the stipulated time frame.