

स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

'ज्ञानतीर्थ', विष्णुप्री, नांदेड - ४३१ ६०६ (महाराष्ट्र राज्य) भारत

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

'Dnyanteerth', Vishnupuri, Nanded - 431 606 (Maharashtra State) INDIA

Established on 17th September, 1994, Recognized By the UGC U/s 2(f) and 12(B), NAAC Re-accredited with B+++ grade

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आंतरिबद्याशाखीय अभ्यास विद्याशाखे अंतर्गत राष्ट्रीय शैक्षणिक धोरण २०२० नुसार पदवी द्वितीय वर्षाचे अभ्यासक्रम (Syllabus) शैक्षणिक वर्ष २०२५—२६ पासून लागू करण्याबाबत.

परिपत्रक

या परिपत्रकान्वये सर्व संबंधितांना कळिवण्यात येते की, दिनांक २७ मे २०२५ रोजी संपन्न झालेल्या मा. विद्यापरिषद बैठकीतील विषय क्रमांक १८/६१—२०२५ च्या ठरावानुसार आंतरिवद्याशाखीय अभ्यास विद्याशाखेतील राष्ट्रीय शैक्षणिक धोरण—२०२० नुसारचे पदवी द्वितीय वर्षाचे अभ्यासक्रम (Syllabus) शैक्षणिक वर्ष २०२५—२६ पासून लागू करण्यास मा. विद्यापरिषदेने मान्यता प्रदान केली आहे. त्यानुसार आंतरिवद्याशाखीय अभ्यास विद्याशाखेतील बी. ए. द्वितीय वर्षाचे खालील विषयाचे अभ्यासक्रम (Syllabus) शैक्षणिक वर्ष २०२५—२६ पासून लागू करण्यात येत आहेत.

01	B. A. II year Lib & Information Science	
02	B. A. II year Fashion Design	
03	B. A. II year Education	
04	B. A. II year Home Science	
05	B. A. II year Animation	
06	B. A. II year Hospitality Studies	

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी, ही विनंती.

'ज्ञानतीर्थ' परिसर, विष्णुपुरी, नांदेड — ४३१ ६०६. जा.क्र.:शै—१/एनइपी/आंविअपदवी/२०२५—२६/ / 3 ० दिनांक १४.०६.२०२५ संसन्यक कुलसचिव शैक्षणिक (१—अभ्यासमंडळ) विभाग

प्रत: माहितीस्तव तथा कार्यवाहीस्तव.

- १) मा. कुलगुरू महोदयांचे कार्यलय, प्रस्तुत विद्यापीठ.
- २) मा. प्र. कुलगुरू महोदयांचे कार्यलय, प्रस्तृत विद्यापीठ.
- ३) मा. आधिष्ठाता, आंतरविद्याशाखीय अभ्यास विद्याशाखा, प्रस्तृत विद्यापीठ.
- ४) मा. संचालक, परीक्षा व मुंल्यमापन मंडळ, प्रस्तुत विद्यापीठ.
- ५) मा. प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
- ६) सिस्टीम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ. याना देवून कळविण्यात येते की, परिपत्रक अभ्यासक्रम संकेतस्थळावर प्रसिध्द करण्यात यावेत.

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED - 431 606



(Structure and Syllabus of Four Years Multidisciplinary Degree Program with Multiple Entry and Exit Option)

UNDERGRADUATE PROGRAMME OF

Major in **_DSC** (Animation)

Under the Faculty of Interdisciplinary Studies

Effective from Academic year 2025 – 2026 (As per NEP-2020)

Forward by the Dean, Faculty of Interdisciplinary Studies

National Education Policy 2020 has been announced on 29.07.2020 course Government of India. NEP 2020 proposes a new and forward-looking vision for India's Higher Education System through quality universities and colleges. Its key is in the curriculum and its practical implementation. NEP 2020 foresees more vibrant, socially engaged, cooperative communities and a happier, cohesive, cultured, productive, innovative, progressive, and prosperous nation. The introduction of Research Methodology and ethics will widen the vision and broaden the perspectives of the learners.

The curriculum must be exciting, relevant, and regularly updated to align with the latest knowledge requirements and meet specified learning outcomes. High-quality pedagogy is necessary to impart the curricular material to students successfully; pedagogical practices determine the learning experiences provided to students, thus directly influencing learning outcomes. The assessment methods must be scientific, designed to improve learning and continuously test the knowledge application.

When syllabi are developed and framed appropriately at University, it will result in the upbringing and nourishment of multidisciplinary and holistic citizens. Emphasis is on outcome-based learning. Every course has well-defined objectives and outcomes. The assessment guidelines also provide clarity and precision to the vision behind prescribing the particular course content.

The syllabus of four year undergraduate bachelor course is a reformative and constructive step in the effective implementation of National Policy on Education 2020 by the Swami Ramanand Teerth Marathwada University. It is a product of rigorous exercise undertaken by the

respective Board of Studies of the University which was prepared the guidelines provided by the steering committee set up by the Government of Maharashtra. This syllabus reflects the philosophical foundation through documents on National Education Policy 2020 which was provided by the Ministry of Education of Government of India and University Grants Commission, New Delhi.

This syllabus consists of content and activities that will empower the students for inculcating 21st century skills. The highlights of syllabus offers; holistic, inter- multi-trans disciplinary approach, research component, flexibility, technology embedded teaching-learning, value based and skill enhancement, which defines educational experience and opens up a whole new world of opportunities.

This syllabus structured on various predefined verticals that includes major subject and minor subject, generic or open electives, vocational and skill enhancement courses, ability enhancement courses, value education courses, Indian knowledge system, co-curricular courses which will be leading towards graduation and perusing their career thereafter. There are total eight semesters for four year undergraduate course where, each semester is of 22 credits and students will have to choose semester wise specific vertical carefully.

Introducing Case Studies and Field Projects has created a unique opportunity for the higher education institute to bridge the gap between the academia, industry and the community, NEP believes effective learning requires a comprehensive approach that involves an appropriate curriculum, engaging pedagogy, continuous formative assessment, and adequate student support.

We are sure that the Graduate centers of this university and its affiliated colleges will implement the course effectively and successfully, resulting in a healthy and more creative academic ambience.

The design and development of syllabus is a continuous process, therefore all these syllabic are constantly under review. It is a request to teachers and students to suggest addition and changes in the present syllabus for supporting bright future of the learners.

Professor Dr. Chandrakant Ragho Baviskar Dean (IC), Faculty of Interdisciplinary Studies Swami Ramanand Teerth Marathwada University Nanded- 431 606 (Maharashtra state)

Forward by the Chairman, Subject Animation

National Education Policy 2020 is the indigenous and ambitious educational framework that sets our vision to contribute immensely for the Vikasit Bharat @ 2047.

The curriculum must be engaging, up-to-date and updated on a regular basis to satisfy the most recent knowledge requirements and learning outcomes. High-quality pedagogy is required to properly impart curricular material to students; pedagogical practices shape the learning experiences delivered to students, hence directly influencing learning outcomes. Assessment procedures must be scientific, designed to increase learning, and regularly tested for knowledge application.

The universities correct syllabus structuring and development will result in the formation and nourishment of interdisciplinary and holistic citizens. The focus is on outcome-based learning. Each course has well stated objectives and outcomes. The assessment rules also add clarity and precision to the aim for prescribing specific course content.

Animation syllabus covers wide area of subject such as Animation, web, 2D Animation, 3D Animation, Graphic and VFX. Students will learn industry professional and study range of topic include basic Animation principles and Animation pipeline. Those skills are highly demanding in Animation and VFX industry.

NEP foresees more vibrant, socially engaged, cooperative communities and a happier, cohesive, cultured, productive, innovative, progressive, and prosperous nation. The introduction of Research Methodology and ethics will widen the vision and broaden the perspectives of the learners.

Introducing Case Studies and Field Projects has created a unique opportunity for the higher education institute to bridge the gap between the academia, industry and the community NEP believes effective learning requires a comprehensive approach that involves an appropriate curriculum, engaging pedagogy, continuous formative assessment, and adequate student support.

We are sure that the Graduate centres of this university and its affiliated colleges will implement the course effectively and successfully, resulting in a healthy and more creative academic ambience.

Dr. Durga Satyanarayan Sharma

Chairman, Animation

Interdisciplinary Studies
Swami Ramanand Teerth Marathwada University, Nanded.



Swami Ramanand Teerth Marathwada University, Nanded Members of the Board of Studies in the subject of Animation Under the faculty of Interdisciplinary Studies

Sr No	Name of the Member	Designation	Address with mail id	Contact No.
1	Prof. Dr. Durga Sharma	Chairman	Dayanand College of Arts, Latur. hellodsharma1508@gmail.com	9545205999
2	Prof. Sachin Patange	Member	Dayanand College of Arts, Latur sachinpptange@gmail.com	9096463943
3	Prof. Pooja Khonde	Member	Dayanand College of Arts, Latur Khondepooja04@gmail.co m	8788778183



Swami Ramanand Teerth Marathwada University, Nanded Under the faculty of Interdisciplinary Studies

General Guidelines for Selection of Courses

- i. **Major subject** is the discipline or course of main focus, **Bachelors**' degree shall be awarded in that Discipline / subject.
- ii. **Minor Subject(s)** is/are the subjects from the same discipline / faculty and shall act as supporting subjects to the Major.
- iii. At the entry level of the 3/4-year UG program students shall be required to choose any **THREE** of the available subjects in a college/institute as **Optional 1**, **Optional 2 and Optional 3 subjects**, respectively
- iv. No. of credits assigned to the **Optional 1**, **Optional 2** and **Optional 3** shall be same in **Semesters** I and II.
- v. In the second year of the degree program students shall have to select one of the three subjects (Optional 1, 2 and 3) as a Major Subject and one as Minor Subject, while third optional shall be discontinued.
- vi. Students shall have option to switch over from Major to Minor or vice-versa after first year.
- vii. Once they finalize their **Major subject** in the beginning of the second year of the programme, they shall pursue their further education in that particular subject as the **Major** course. Therefore, from second year onwards curriculum of the **Major** and **Minor** subjects shall be different.
- viii. Students are required to select Generic /Open Elective (vertical 3 in the credit framework) compulsorily from the faculties different from their Major / Minor subjects (select from Basket 3).
 - ix. Content and other details of the GE are available in the document prepared by the respective BOS from which the candidate has chosen his/her GE.
 - x. Students shall be required to complete the **Skill based courses of 06 credits** in the first two years.
 - xi. Vocational Courses (VSEC or VSC) shall be related to the Major course
- xii. Ability Enhancement Courses (AEC):
 - a) English Communication Course (Language) of 2 credits shall be offered in Semester I and III
 - b) **Modern Indian Languages** shall be of 2 credits and shall be offered in Semester II and IV
- xiii. Courses marked as **VEC**, **CI**, **IKS** and **CCC** in Column Nos. 7and 8 shall be common for all the students irrespective of their faculties of studies.
- xiv. Curriculum of **VEC**, **CI**, **IKS** and **CCC** shall be provided by the University separately.



SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED - 431 606

<u>Summary of the Credits Assigned to various courses to be proposed by</u> <u>the Board of Studies under the faculty of Interdisciplinary Studies</u>

A. No. Of Credits assigned to various courses:

Sr No.	Heads			Credits	assigned	in each	Semest	er		Total Credits
110.		Ι	II	Ш	IV	V	VI	VII	VIII	Credits
1	Optional 1	4	4	8	8	16	16	18/14	18/14	92/84
2	Optional 2	4	4	4	4					12
3	Optional 3	4	4							08
3	Generic Electives / Research Methodology	2	2	2	2			4		8+4 (12)
4	Vocational and Skill Enhancement Course / Indian Knowledge System	2	2	2	2	2	2			8+6 (14)
5	Ability Enhancement Course L1 (English)	2	2	4	6					8
6	Ability Enhancement Course L2 (SL)	2	2							8
7	Value Added Course /IKS (Constitution of India / EVS)	2	2							6
8	Community Engagement Services NCC/NSS/Sports/Culture									4
9	Project/ Field Work/ OJT /Internship			2		4	4	/4	4/8	14/22
10	Total Credits	22	22	22	22	22	22	22	22	176

- 1. Major Courses (92 / 84 credits, Basket-1): Each BOS shall suggest Major Courses of 04 credits (02 credit Theory and 02 credit practical papers or two theory papers each of credit 02) for semesters I and II
 - AS THE UNIVERSITY HAS ADOPTED THREE OPTIONAL CREDIT FRAMEWORK, THEREFORE, EVERY STUDENT HAVE A FREEDOM TO CHOSE THREE COURSES OF HIS CHOICE FROM AMONG THE OPTIONS MADE AVAILABLE BY A PARTICULAR COLLEGE / INSTITUTE (BASKET 1). AS NUMBER OF CREDITS ASSIGNED TO ALL THE THREE OPTIONAL ARE SAME, THEREFORE, HE / SHE HAVE A FREEDOM TO SELECT ANY ONE OF THEM AS MAJOR AND ONE AS MINOR COURSE FROM SECOND YEAR ONWARD.
- 2 MINOR COURSES (20 + 04 CREDITS): THERE SHALL BE THREE OPTIONALS (COURSES) OF SAME CREDITS IN FIRST YEAR UG. THEREFORE, MAJOR AND MINOR COURSES HAVE SAME WEIGHT-AGE AND STUDENTS HAVE FLEXIBILITY TO CHOSE ANY OF THE THREE OPTIONAL AS A MAJOR AND ONE AS MINOR, WHILE THIRD OPTIONAL SHALL BE DISCONTINUED IN SECOND YEAR.

TOTAL NUMBERS OF CREDITS ASSIGNED TO THE MINOR COURSES ARE 20 AND A COURSE ON RESEARCH METHODOLOGY OF 4 CREDITS IN VIITH SEMESTER.

- 3. <u>Generic Electives</u> (08 credits; <u>FOR STUDENTS FROM FACULTIES OTHER THAN Interdisciplinary</u>
 <u>Studies</u>
- <u>BASKET-2</u>):STUDENTS HAVE TO CHOOSE ONE PAPER OF 02 credits in semester I to VI as Generic Electives from Basket 2 of faculties other than that of three optionals. As these papers shall be opted by the students from other faculties; therefore, difficulty level of these courses shall at beginners' level (4.0). Students have freedom to choose one Generic Elective paper from Basket-2 in each semester, provided these GE courses are from other faculty.
- **4 Ability Enhancement Course (AEC)** (08 credits; common for all faculty STUDENTS, BASKET-3): One Language course each of 02 credits in the first four semesters.
 - **AEC First Language English** (*Compulsory for all disciplines*) (02 credits each in semesters I to IV)
 - MIL Second Language (Students have option to choose second language from the Language Basket-IV) (02 credits each in semesters I to IV)
- 5. Vocational and Skill Enhancement Courses (VSC/SEC) (08 +06 credits, VSC shall be related to the Major Course):
 - Students have freedom to choose SEC (Skill Enhancement Course) from **Basket 4.**Vocational Course (VSC) shall be related to the **Major subject**.
- **6.** Indian Knowledge System (IKS) (Generic) (02 credits, common for all faculties): Students have to undertake a course on Indian Knowledge System of 02 credits and shall be common for the students from all faculties of study.
- 7. Value Education Courses (VEC) (04 credits, common and compulsory for all faculty students): Students have to complete two Value Added courses each of 02 credits during semester V and VI and are compulsory for students of all faculties.
 - a. Constitution of India (02 credits) in Semester V
 - b. Environmental Studies (02 credits) in Semester VI
 - **&** Community Engagement Services (CES / CCC)(04 credits, common for all faculty students): Students need to complete four Community Engagement Services courses like NCC, NSS, Sports,

Cultural Studies each of 02 credits in semesters III and IV and are common across the faculty. Grades of NCC/NSS/Sports/Cultural courses shall be awarded to the students on the basis of their participation in University, Regional, National, International, Inter-University and Intra-University level activities. Guidelines for the award of grades for NCC/NSS/Sports/Cultural studies shall be prepared by a Committee constituted by the University.

- 9. Field Work / Projects/ OJT/ Internship/Apprenticeship related to DSC major subjects (14 credits for Honours and 22 credits for Honours with Research credits): The students shall have to complete Field Work, Project, Case Study, Internship or Apprenticeship, etc. as per the credit framework.
- 10. Bachelor of Science in DSC Honors and Minor in DSM.

For the award of **Bachelor of Arts in DSC Honors and Minor in DSM** students have to complete **92 credits** from Major, **20** credits of Minor and the required number of credits of Field Work / Projects/ Internship/Apprenticeship/Case study **related to Major subject**.

11. Bachelor of Science in DSC Honors with Research and Minor in DSM.

For the award of **Bachelor of Arts in DSC Honors with Research and Minor in DSM** students have to complete **84 credits** theory courses of Major subject, **20 credits** of Minor and required number of credits of Field Work /Projects/ Internship/Apprenticeship/Case study **related to Major subject**.

12. The guidelines in this booklet are as per the Directorate Office, Higher and Technical Education, Government of Maharashtra Circular dated 13th March 2024 and are subject to change time-to-time as per the revised guidelines from this office.

MULTIPLE EXIT Options for Students:

1. Exit Option after First year

Students may take exit after completion of first year with **Certificate in Major (DSC) and Minor (DSM) subject** on completion of minimum 44 credits and additional 4 credits of NSQF skill / vocational in major/minor subject or internship during summer vacation.

2. Exit Option after Two years

Students may take exit after completion of second year of the programme with **Diploma in Major** (**DSC**) and **Minor** (**DSM**) subject on completion of minimum 88 credits and additional 04 credits on NSQF skill / vocational or Internship on major/minor courses during summer vacation.

3. Exit Option after Three years

Students may take exit with a Degree as **Bachelors of Arts in Major (DSC) and Minor (DSM)** after earning minimum of 132 credits.

- **4. Exit Option after Four Years** after completing 176 credits
 - (a) Bachelor of Arts in DSC Honours and Minor in DSM.
 - (b) Bachelor of Arts in DSC with Research and Minor in DSM.



Swami Ramanand Teerth Marathwada University, Nanded

Faculty of Faculty of Interdisciplinary Studies (Example- 1 Three Optional)

Structure for Four Year Multidisciplinary Degree Program with Multiple Entry and Exit

Subject: DSC (Major) /DSM (Minor)

Year & Level	Sem ester		Optional-2	Optional-3	Generic Elective (GE) (select from Basket 3 of (Faculties other than Humanities)	Vocational & Skill Enhancement Course	Ability Enhancement Course (AEC) (Basket 4) Value Education Courses (VEC / Indian Knowledge System (IKS)(Basket 5) (Common across all faculties)	Field Work / Project/Internship/ OJT. Apprenticeship / Case Study Or Co-curricular Courses (CC) (Basket 6 for CC) (Common across all faculties)	Credi ts	Total Credits
1	2	3	4	5	6	7	8	9	10	11
	Ι	IANICTP1101 Graphic Design (Theory + Practical) (4 Cr)	IANIMTP 1101 Art Foundation (Theory + Practical) (4 Cr)	IANIETP1101 Matte Painting (Theory + Practical) (4Cr)	IANIGE1101 Introduction to Perspective and Shading (Pr)	Clay Modeling (Practical) (2 Cr)	AECENG1101(2Cr) AECXXX1101(2Cr) (Hin, Mar, Kan, Pal, Urd, San, etc) IKSXXX1101(2Cr)		22	
1		4 Credits	4 Credits	4 Credits	2 Credits	2 Credits	6 Credits			
(4.5)	П	IANICTP1151 Product Visualization (Theory + Practical) (4 Cr)	IANIMTP1151 Architecture Visualization (Theory + Practical) (4 Cr) 4 Credits	IANIETP1151 2D Digital Animation (Theory + Practical) (4Cr) 4 Credits	IANIGE1151 Introduction of Computer (Pr) (2cr)	Anatomy (Pr)	AECENG1151(2Cr) AECXXX1151(2Cr) (Hin, Mar, Kan, Pal, Urd, San, etc) VECCOI1151(2Cr) Constitution of India 6 Credits		22	44
	Cum. Cr.	08	08	08	04	04	12	00	44	

Exitoption: UG Certificate in Opt 1, Opt 2 and Opt 3 on completion of 44 credits and additional 4 credits from NSQF / Internship

2	III	IANICTP1201 3D BG Designing (Theory + Practical) (4 Cr) IANICTP1202 Character Modeling (Theory + Practical) (4 Cr) 8 Credits	IANIMP1201 2D Film Making (Theory + Practical)(4 Cr) 4vCredits		IANIGE1201 History of Animation (Th) (2Cr)	IANIVC1201 Presentation Skills (Pr) (2 Cr)	AECENG1201(2Cr) AECXXX1201(2Cr) (Hin, Mar, Kan, Pal, Urd, San, etc) 4 Credits	CCCXXX1201 (2Cr) (NCC/NSS/SPT(sports)/ CLS(Cultural Studies)/HWS(Health Wellness)/ YGE(Yoga Education) / FIT(Fitness) (2Cr) 2 Credits	22	
(5.0)	IV	IANICTP1251 Character Rigging (Theory+ Practical) (4 Cr) IANICTP1252 Animation (Theory+ Practical) (4 Cr) 8 Credits	IANIMT1251A Animation Principal (Theory + Practical) (4Cr) 4 Credits		IANIGE1251 Packaging Design (Th) (2Cr) 2 Credits	IANIVC1251 Soft Skills (Pr) (2Cr)	AECENG1251(2Cr) AECXXX1251(2Cr) (Hin, Mar, Kan, Pal, Urd, San, etc) VECEVS1251 (2Cr) Environmental Studies 6 Credits		22	88
	Cum. Cr.	24	16	08	08	6+2= 08	22	02	44	

Exitoption: UG Diploma in Major DSC and Minor DSM on completion of 88 credits and additional 4 credits NSQF / Internship in DSC

	V	Advance Lightening & Texturing(Theory+ Practical) (4 Cr) IANICTP1303 Rotoscopy (Theory+ Practical) (4Cr) 12 Credits	Animated short flim (Pr) 4 Credits				IANIVC1301 Basic Spoken English 4 Credits		IANIFP1301 2 Credits	22	
3 (5.5)		Compositing Based (Theory+ Practical) (4 Cr) IANICTP1352	IANIETP 1351 Color Grading (Theory+ Practical) (4Cr)				IANIVC1351 Advance Spoken English (Th)(2r)		IANIOJ1351	22	
		IANICP1353 Motion Graphics (Pr) (2 Cr) IANITP1351 E- Commerce(2Cr) (Pr) 12 Credits	4 Credits				2 Credits		4 Credits		
	Cum. Cr.	48+8=50	6	12	08	08	6 + 8 = 14	22	12	44	132

	Exit option: Bachelor of Interdisciplinary with Major in DSC and Minor in DSM										
		IANICTP1401	IANIEP	IANIRM1401							
		Video Editing	1401	Research						22	
		(Theory+ Practical)		Methodology						22	
		(4Cr)	Portfolio	Memodology							
		(401)	(Pr)								
		IANICTP1402	(2Cr)								
		FX (Theory+	(2Cr)								
		Practical) (4Cr)	IANIEP								
		1 ractical) (4C1)	1402								
	VII	IANICTP1403	Open								
		Paint (4Cr)	Source of								
		(Theory+ Practical)	Blender								
		(4Cr)	(Pr)								
			(Pr) (2Cr)								
		IANICP1404	(2CI)								
		Documentary Film (Pr)(2Cr)									
		14 Credits	4 Credits	4 Credits							
		14 Creuits		4 Credits					TANIO 11 451		
4		IANICTP1451	IANIEP1						IANIOJ1451		
(6.0)		Matchmoving	451							22	
(000)		(Theory+ Practical)	Blogging								
		(4Cr)	1 of dono								
			(Pr)								
		IANICP1452 Shot									
		Finalization (4Cr)									
	VIII										
		IANICTP1453									
		UI/UX Design									
		(Theory+ Practical)									
		(4Cr)									
		IANICP1454 VFX									
		Demo reel (Pr)									
		(2Cr)							4 Credits		
		14 Credits	4 Credits								
	Cum	H	C 02	12. DN/ 04	00	00	(V-08 + S-06)	(AEC-16 + VEC-4	(CC-04+FP/CS-	44	
	Cr	Honours: 76+1	0=92	12+ RM 04	08	08	14	+ IKS-2) 22	04+OJT-04+OJT 4)	44	

									16		176
		Exit	option: B	achelor of Inte	rdisciplinary wit	th Major in <mark>DS</mark> C	(Honours) and	Minor in DSM			
4 (6.0)	Advan Anima Techni Practic IANIC VII Advan Graph Practic	ce 3D tion ique (Theory+ cal) (4Cr) TP1402 ce Digital ic (Theory+ cal) (4Cr) TP1403 lio Making	IANIETP 1401 Fundame ntal of AI (Theory+ Practical)	Research Methodology					IANIRP1401 Research Project (4Cr) 4 Credits	22	
	IANIC and 3D (Theor (4Cr) IANIC VIII Final F VFX (Theor (4Cr)	O Credits TTP1451 2d O Compositing ry+ Practical) TTP1452 Editing in ry+ Practical) TT1453 VFX reel	4 Credits IANIETP 1451 Advance Web Developm ent (Theory+ Practical) 4 Credits	4 Credits					IANIRP1451 Research Project (8Cr)	22	
Exit option: Bachelor of Interdisciplinary with Major in DSC (With Research) and Minor in DSM									44		
	Total Credits Major - 68+16=84 12+RM 04 08 GE/OE - 08 (V-08 + S-06) (AEC-16 + VEC-4 + IKS-2)22 (CC-04+FP/CS-04+OJT-04+RP-12) 24 12+RM 04 12+RM 04 12+RM 04 14+RP-12+RM 04 14+RM 04 15+RM 04 15+R						76				

SEMESTER -III

IANICP1201: 3D BG DESIGNING (Optional 1) Curriculum Details

Credits – 04 Mark – 100 Periods – 84 Th and Pr

Course pre-requisite:

- **Basic Computer Graphics Knowledge** Understanding digital art concepts, resolution, and file formats.
- **Perspective & Composition** Knowledge of how to arrange elements in a scene for visual appeal.

•

Course objectives:

- To introduce students to the process of creating 2D animations using Flash CS3 (Adobe Animate).
- To teach how to create and animate characters, objects, and backgrounds in a 2D animated short film.
- To provide practical experience in producing a short 2D film from concept to export.
- To develop skills in integrating sound and audio with animation.
- To familiarize students with animation techniques like keyframes, tweens, and the use of ActionScript.

Course outcomes:

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

- After completing this course, students will gain knowledge of perspective and composition, allowing them to arrange elements in a scene for visual appeal.
- It will help In today's gaming and film industries, **high-quality 3D background models** play a crucial role in creating immersive and visually striking environments. These assets define the atmosphere, enhance storytelling, and provide depth to scenes, making them a fundamental component of world-building.

Template for the 4 year UG programme under the Faculty of Interdisciplinary of S.R.T.M.U., Nanded

Curriculum Details: (There shall be FOUR Modules in each course)

ModuleNo.	Торіс	Hrs. Required to cover the contents
1.0		
	Introduction to Maya & Environment Modeling Overview of Maya's interface and navigation tools	
Introduction to Maya	Understanding 3D space, coordinate systems, and scene organization	15
	Basics of polygon modeling and NURBS surfaces	
	Introduction to environment design principles (scale, proportion, and composition)	
2.0		
	Creating basic environment blockouts for level design	
Blocking & Layout	Using primitive shapes to define large structures	15
	Understanding perspective and composition in 3D spaces	
	Planning camera angles and scene framing	
3.0	<u> </u>	
Advanced Modeling	Hard surface modeling for architectural elements (buildings, bridges, roads) Organic modeling for natural environments (mountains,	
Techniques	trees, rocks)	18
	Using Booleans, extrusions, and deformers for complex shapes	
	Creating modular assets for efficient scene building	
4.0		
Basics of UV Mapping		20
& Texturing	Using Photoshop for texture creation	
5 0	Applying materials and shaders for realistic surfaces	
5.0	Ambient Occlusion (AO) since letter of Calculation	
	Ambient Occlusion (AO) simulates soft shadows in areas where light is naturally blocked.	
Occlusion Rendering	Used to enhance realism by adding depth and shading to objects.	16
	Typically rendered as a separate pass and combined with other layers in compositing.	

Rec	quires proper UV mapping for accurate shading.	
	orks well with global illumination to improve scene hting.	
	n be adjusted using samples and spread settings for tter quality.	
All	tch Rendering lows rendering multiple frames in the background thout manual intervention.	
Sur pro	pports network rendering, enabling distributed occessing across multiple machines.	
Wo	orks with various render engines like Arnold, V-Ray, d Redshift.	
Sav	ves output directly to a specified folder instead of idering in the viewport.	
	n be executed via Maya's UI or command line for tomation.	
	eful for long animations or high-resolution renders that puire extended processing time.	
	Total	84

Practical List:

- Basic Environment Blockout
- Create a simple room or outdoor scene using primitive shapes.
- Focus on scale, proportion, and composition.
- Architectural Modeling
- Design a building, bridge, or interior space.
- Use extrusions, bevels, and edge loops for detailing.
- Organic Environment Creation
- Model rocks, trees, and terrain for natural landscapes.
- Apply sculpting tools for organic shapes.
- UV Mapping & Texturing
- Unwrap UVs for a simple environment asset.
- Apply PBR textures using Photoshop.
- Lighting & Rendering
- Set up daytime and nighttimes lighting for a scene.
- Use Arnold Renderer for realistic output./ or occlusion render
- Scene Optimization
- Reduce poly count for game-ready assets.
- Bake textures and lighting for performance efficiency.
- Final Environment Project
- Create a fully detailed 3D environment.
- Render a portfolio-ready showcase piece.

Software:

Autodesk maya ,3ds max (optional)

Text Books:

Autodesk Maya 2026 Basics Guide – A beginner-friendly book by Kelly L. Murdock, covering modeling, texturing, animation, and rendering.

Autodesk Maya Books & Textbooks (SDC Publications) – A collection of books that provide structured learning for Maya, including video tutorials.

Career Options:

•Game Environment Artist

Creates immersive 3D worlds for video games.

Works with game engines like Unreal Engine and Unity.

•Film & VFX Environment Artist

Designs backgrounds and landscapes for movies and TV shows.

Works on CG environments for visual effects-heavy productions.

• Architectural Visualization Artist

Builds realistic 3D models of buildings and interiors.

Helps architects and designers present their concepts.

•3D Texture Artist

Specializes in creating high-quality textures for models.

Works with Substance Painter, Photoshop, and Maya.

• Virtual Reality (VR) & Augmented Reality (AR) Designer

Develops interactive environments for VR/AR applications.

Works in training simulations, gaming, and education.

IANICTP1202: Character Modeling (Optional 1) Curriculum Details

 $Credits - 04 \qquad \qquad Mark - 100 \qquad \qquad Periods - 84 \qquad \qquad Th \ and \ Pr$

Course pre-requisite:

• Basic Computer Knowledge

Course objectives:

- After completing this course, students will be familiar with a typical work-flow for creating 3D art assets in a modern game engine.
- Students will gain understanding of techniques and technical specifications of common high quality Model used in Film and Games today.

Course outcomes:

- Inform project development through the analysis of character designs, styles, commercial genres, technical approaches and workflows in supporting project material
- Show technical aptitude and efficiency in three-dimensional modeling by applying best practice techniques to the construction of a three-dimensional character base mesh
- Design the surface complexities and details of a three-dimensional character model through the application of digital sculpting tools and techniques to a base mesh
- Construct the appearance and reduce the surface complexity of a three-dimensional character model through the application of digital painting tools and techniques
- Use design and technical processes within a three-dimensional computer environment to present a fully resolved and audience appropriate three-dimensional character model

<u>Curriculum Details:</u> (There shall be FOUR Modules in each course)

ModuleNo.	Topic	Hrs. Required to cover
		the contents
1. 0		
Introduction	3D interface, Basic skills for handling the selected software like transforming objects, Object properties, Hierarchies, Pivots Etc.	15
2.0		

Interface	Creating a New Project, Editing and Changing Projects, File References	15		
3.0				
Tools Of Modeling	Polygon Vertices, Polygon Edges, Polygon Faces, Working with Smooth Polygons, Understanding NURBS, Understanding Curves, Understanding NURBS Surfaces Surface Seams, NURBS Display Controls.	18		
4.0	4.0			
The Process Of 3D Character Creation	Male or female anatomy. Body Structure - Proportion and construction of body parts (Torso, Face, Eyes, Nose, Ears, Mouth, Hand, Feet etc	20		
5.0				
Sculpting Polygons	Soft Select Tool, Sculpting Polygons.	16		
	Total	84		

Practical List:

- Books, Magazine, News papers
- Visual Identity such as Letterhead, business card, Brand Guide, Logos
- Marketing Materials: Pamphlet, Brochures, Postcard, one-sheet, Posters
- Product Packing and Labels
- Presentations
- Typography
- Web Layouts

Software: Autodesk Maya

Text Books:

- How to Draw What You See: Rudy De Reyna
- Figure Study Made Easy: Aditya Chari
- Figure Drawing Without a Model: Ron Tine

Career Options:

- In film and television production there are jobs for Modeling.
- The games industry is a big employer, and for any major game title, more than half of the production budget will go on art production

LANIMP1201:2D Film Making (Optional 1) Curriculum Details

Credits – 04 Mark – 100 Periods – 84 Th and Pr

Course pre-requisite:

- Basic computer knowledge
- Interest in drawing or storytelling
- Familiarity with any graphics or design tool is helpful, but not mandatory
- Basic understanding of English communication

Course objectives:

- Understand the process and stages of 2D animation film making
- Learn to use open-source tools like Inkscape and Synfig Studio
- Develop storytelling, character design, and animation skills
- Be able to create short animated films from concept to export
- Gain hands-on experience in the complete animation pipeline

Course outcomes:

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

- 1. Demonstrate an understanding of traditional and digital 2D animation techniques
- 2. Design characters and backgrounds using vector tools like Inkscape
- 3. Create frame-by-frame and tweened animations using Synfig Studio
- 4. Apply basic principles of animation in project work
- 5. Produce and export a short 2D animated film with synchronized audio
- 6. Work independently or collaboratively on animation projects using open-source software

Curriculum Details: (There shall be FOUR Modules in each course)

ModuleNo.	Topic	Hrs. Required to cover the contents
1.0		
Introduction to 2D animation	History, Types, Overview of Open Source Animation Tools, Introduction to Inkscape (Vector Drawing), Introduction to Synfig Studio (Animation), Animation Workflow: Pre- production, Production, Post-production	15
2.0		
Pre-Production Design	Concept & Script Writing for Animation, Storyboarding: Visual storytelling with sketches, Character Design: Turnarounds, expressions, and poses, Background Design using Inkscape, Creating an Animatic: Combining storyboard and sound	15
3.0		
Production with Synfig Studio	Setting up scenes and timeline in Synfig, Vector drawing and rigging in Synfig, Keyframes, tweening, and motion paths, Lip-syncing basics, Using layers, camera movement, and special effects	18
4.0		
Post-Production & Final Output	Sound Editing (Using Audacity), Final Composition and Scene Assembly, Adding transitions, credits, and effects, Exporting animation in various formats, Publishing on platforms (YouTube, portfolio, etc.)	20
5.0		
Final Output	Exporting animation in various formats, Publishing on platforms (YouTube, portfolio, etc.)	16
	Total	84

Practical List:

- Install and explore Inkscape &Synfig
- Draw basic objects and create simple movement animations
- Write a short animation script
- Create a storyboard (manual or digital)
- Design 1 character and 1 background using Inkscape
- Build an animatic with voice and background music
- Animate a 10–15 second character action
- Apply keyframe animation and use camera movement
- Add dialogues and sync with character mouth movements
- Combine scenes into a full animated short film
- Add background music and effects
- Export final video in MP4/AVI format

Software:

- Inkscape Vector design and illustration
- Synfig Studio 2D animation and tweening
- Audacity Audio recording and editing
- OpenShot / Kdenlive Video editing and final output

TextBooks:

- "The Animator's Survival Kit" by Richard Williams A comprehensive guide to animation principles, ideal for animators at all levels.
- "The Art of Animation" by Bob Thomas A good reference for understanding animation from an artistic perspective and its history.

Career Options:

- 2D Animator: Work in studios, gaming, or advertising creating animated content.
- Storyboard Artist: Create storyboards for animation studios, films, or video games.
- Character Designer: Specialize in designing characters for animated films or games.
- Motion Graphics Designer: Work in television, film, and online media producing animated graphics.
- Flash Animator: Animate for web projects, mobile apps, or short films.
- Video Editor: Combine video and animation for digital media projects.
- Freelance Animator: Offer animation services for various projects including commercials, web series, and independent films.
- Game Animator: Create 2D animation for video games (mobile, console, or web games).

IANIVC1201: Presentation Skills (Pr) (VSC) Curriculum Details

 $Credits - 02 \qquad Mark - 50 \qquad Periods - 48 \qquad Pr$

Course pre-requisite:

- Basic knowledge of computer operations and software.
- Familiarity with Microsoft PowerPoint (or similar presentation software).
- Basic communication and presentation skills.

Course objectives:

- To enhance students' ability to create impactful and professional presentations using PowerPoint.
- To teach effective strategies for delivering presentations with confidence and clarity.
- To develop students' skills in visual design, organization, and storytelling for presentations.
- To introduce students to presentation delivery techniques including body language, voice modulation, and audience engagement.
- To enable students to create presentations that effectively communicate ideas in both academic and professional settings.

Course outcomes:

- Upon successful completion of the course, students will be able to:
- Create visually appealing and well-structured presentations using Microsoft PowerPoint.
- Understand the principles of design and how to apply them to slides, ensuring clarity and engagement.
- Integrate multimedia elements like images, videos, and sound to enhance presentations.
- Deliver presentations effectively, engaging the audience through verbal and non-verbal communication.
- Use advanced PowerPoint features such as animations, transitions, and charts to support presentation goals.

Curriculum Details: (There shall be FOUR Modules in each course)

		Hrs.
		Required
ModuleNo.	Topic	to cover
		the
		contents

1.0		
Basic presentation	Creating a basic presentation with text, images, and a clear structure.	10
2.0		
Designing	Designing a set of slides with a consistent theme, using color schemes and fonts.	10
3.0		
Elements	Incorporating multimedia elements (video and audio) into a presentation.	8
4.0		
Presenting data	Creating and formatting charts, graphs, and tables for presenting data.	8
5.0		
Animations and Transitions	Adding animations and transitions to highlight key points during a presentation.	12
	Total	48

Practical List:

- Creating a basic presentation with text, images, and a clear structure.
- Designing a set of slides with a consistent theme, using color schemes and fonts.
- Incorporating multimedia elements (video and audio) into a presentation.
- Creating and formatting charts, graphs, and tables for presenting data.
- Adding animations and transitions to highlight key points during a presentation.
- Using advanced features like slide master and custom layouts for professional presentations.
- Delivering a live presentation and receiving peer feedback on delivery style and content.
- Preparing a presentation for a virtual meeting (using Presenter View, video conferencing tools).

Software:

Microsoft PowerPoint (version 2013 or later recommended)

Text Books:

- "Microsoft PowerPoint 2019 Step by Step" by Joan Lambert A comprehensive guide that covers everything from basic PowerPoint skills to advanced features.
- "Presentation Zen: Simple Ideas on Presentation Design and Delivery" by Garr Reynolds A guide that focuses on the art of storytelling, design, and the overall experience of delivering impactful presentations.
- "Slide:ology: The Art and Science of Creating Great Presentations" by Nancy Duarte This book dives deep into presentation design, focusing on how to create visually engaging and effective slides.
- "The Non-Designer's Presentation Book: Principles for People Who Have to Make Presentations" by Robin Williams A practical guide for beginners on creating beautiful and functional presentations without a design background.

Career Options:

- Corporate Trainer: Develop and deliver training presentations within organizations.
- Marketing and Sales Specialist: Create presentations for pitching products or services to clients.
- Public Speaker/Presenter: Deliver speeches at conferences, events, or seminars.

- Graphic Designer: Specialize in designing visual slides and presentation materials for businesses or individuals.
- Business Consultant: Present findings, strategies, and recommendations to clients and stakeholders.
- Event Coordinator: Plan and create visual presentations for events, conferences, and workshops.
- Academic Presenter: Present research findings or lessons to students in educational settings.
- Content Creator: Develop and present video content for social media, webinars, or online tutorials.

SEMESTER -IV

IANICTP1251: Character Rigging (Optional 1) Curriculum Details

Credits -04 Mark -100 Periods -84 Th and Pr

Course pre-requisite:

• Knowledge of 3Ds Max

Course objectives:

- In this Maya Course, we will understand all about rigging with characters.
- Working on making connections, basic joint structure, creating controllers and lastly learning skinning is all covered in this module.

Course outcomes:

- Students learn how to analyze the components of a model and how to rig and articulate a 3D character
- Students learn how to apply animation principles to create resolved animation sequences
- Students learn how to create character performances by finding and analyzing reference material
- Students learn how to develop animation sequences by creating a character's performance
- Students learn how to evaluate the progress of animation and screen elements through peer review
- Students learn how to assign weights to a character's mesh so that the character's skin moves realistically

<u>Curriculum Details:</u> (There shall be FOUR Modules in each course)

		Hrs.
Module No.	Topic	Required
		to cover

		the contents
1.0		
Introduction	Understanding Rigging, Character Structure, Joints and their manipulations, IK and FK, Attribute controls, Rig controls.	16
2.0		
Character Skeleton	Creating and Organizing Joint Hierarchies, Orienting Joints, Naming Joints Mirroring Joints.	15
3.0		
Rigging the Character	Rigging the Character, IK Legs, FK Blending, Rotate Plane Solver, Creating Custom Attributes, Driven keys, Constraints, Spline IK Polygon Vertices, Polygon Edges, Polygon Faces, Working with Smooth Polygons, Understanding NURBS, Understanding Curves, Understanding NURBS Surfaces Surface Seams, NURBS Display Controls.	20
4.0		
Human Inverse Kinematics	Skeleton Generator, Character Controls, Interoperability, Fk & Ik Switch.	15
5.0		
Skinning Geometry	Interactive/Smooth Binding, Weighting, Painting Skin Weights, Editing Skin Weights in the Component Editor, Copying Skin Weights, Mirroring Skin Weights.	18
	Total	84

Practical List:

- Skinning
- Inverse kinematics (IK)
- Forward kinematics(FK)
- Control curves
- Creating skeletons
- Creating the controls

Software: Autodesk Maya

Text Books:

- Animation Methods -Rigging Made Easy: Rig Your First 3D Character in Maya: David Rodriguez
- Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
- Maya Character Rigging: Cheryl Cabrera

Career Options:

- Rigging Artist in Film Production
- Character Animator: Creates the movements and expressions of animated characters for films, video games, and other media.
- Environment Artist: Designs and builds the 3D environments for movies, games, and other projects.
- Technical Animator (Rigging Artist): Develops the rigging systems that allow animators to manipulate characters in 3D software.
- Animation Supervisor: Oversees animation teams, manages projects, and ensures the overall quality of animation.

IANICTP1252: Animation (Optional 1) Curriculum Details

Credits – 04 Mark – 100 Periods – 84 Th and Pr

Course pre-requisite:

• Knowledge of 3Ds Max

Course objectives:

- This paper covers larger details of character animation process and wherein student would be learning more techniques of animation to be incorporated in a film.
- They shall also learn the lip sync and acting process that adds life to the film.

Course outcomes:

- To familiarize the students with various approaches, methods and techniques of Animation Technology. To develop competencies and skills needed for becoming an effective Animator.
- Mastering traditional
- & digital tools to produce stills and moving images. Exploring different approaches in computer animation.
- To enable students to manage Animation Projects from its Conceptual Stage to the final
- Product creation. To train students in applying laws of human motion and psychology in 2-D or 3-D
- Characters. To develop expertise in life-drawing and related techniques.
- To apply Audio and Video Production Techniques to an Animation Project.

<u>Curriculum Details:</u> (There shall be FOUR Modules in each course)

Module No.	Topic	Hrs. Required to cover the
		contents
1.0 Introduction	Timeline, Keyframe, Frame rate, Poses, Line of action, Working with 3d Rigs: Importance of poses, Creation of poses from reference images, Importance of familiarizing with the rig's controllers, Understanding the body mechanic	16
2.0		
Using Animation	Bouncing ball with (spacing, Timing and distance), Different materials bouncing balls together with Concept, Understanding the usage of Graph Editor, Progressive Bouncing Ball with (timing, spacing & distance), Progressive Bouncing Ball with (Stretch and Squash	18
3.0		
Introduction to Character	Pendulum with Settlement, Box with antenna Introduction to Character Studio	20
4.0		
Understanding Posing	Motion Mixer, Posing for understanding the body balance and arc, Walk Cycle, Run Cycle.	15
5.0		
Animation	Jump, Lip Sync and Facial Animation, Camera Animation.	15
	Total	84

Practical List:

- Scriptwriting. Start by developing your story.
- Storyboarding. Once the script is finalized, it is pre-visualized via a storyboard.
- Concept art.
- 3D Modeling.
- Rigging and skinning.
- Animation
- Lighting and rendering

Software: Autodesk Maya

Text Books:

- The Book of Animation Survival Kit by Richard Williams
- The Book of Cartoon Animation by Preston Blair
- The Book of Animation For Beginners by Morr Meroz

Career Options:

- Character Animator: Creates the movements and expressions of animated characters for films, video games, and other media.
- Environment Artist: Designs and builds the 3D environments for movies, games, and other projects.
- Technical Animator (Rigging Artist): Develops the rigging systems that allow animators to manipulate characters in 3D software.
- Game Animator: Animates characters, objects, and environments within video games, ensuring smooth and engaging gameplay.
- Motion Graphics Artist: Creates animated graphics for television, commercials, and online media.
- 3D Modeler: Designs 3D characters, environments, and props for various projects.
- Animation Supervisor: Oversees animation teams, manages projects, and ensures the overall quality of animation.

IANIMT1251: ANIMATION PRINCIPLE (Optional 2) Curriculum Details

 $Credits - 04 \hspace{1cm} Mark - 100 \hspace{1cm} Periods - 84 \hspace{1cm} Th \hspace{1cm} and \hspace{1cm} Pr$

Course pre-requisite:

- Basic Drawing and Observation Skills
- Understanding form, proportion, and gesture drawing is essential—even for digital animators.
- Observing real-life motion helps in applying principles like timing, squash & stretch, and anticipation.

Course objectives:

Develop a deep understanding of the 12 principles of animation, enabling students to create believable and expressive motion.

- Enhance observational and drawing skills to support character design, movement studies, and visual storytelling.
- Introduce key animation software such as Adobe Animate, After Effects etc., focusing on timeline-based animation and key frame control.
- Foster storytelling and visual communication skills, empowering students to conceptualize and execute short animated sequences.
- Encourage iterative thinking and creative problem-solving, preparing students for real-world production environments.
- Build a portfolio of practical exercises, including bouncing ball, walk cycles, and character acting, to demonstrate technical and creative growth.

Course outcomes:

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

- Demonstrate a clear understanding of the 12 principles of animation, applying them effectively in both 2D and 3D projects to create believable motion and character performance.
- Create original animated sequences using industry-standard software such as Adobe Animate, After Effects, , showcasing technical proficiency and creative storytelling.
- Develop strong visual storytelling skills, including storyboarding, character design, and scene composition, to communicate ideas clearly and emotionally.

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<u>Curriculum Details:</u> (There shall be FOUR Modules in each course)

ModuleNo.	Торіс	Hrs. Required to cover the contents
1.0		
Traditional Foundations	Gesture Drawing & Sketching: Daily warm-ups to improve observation and anatomy	15
2.0		
Drawing practice	Flipbook Animation: Bouncing ball, pendulum swing, and flag wave Line of Action Studies: Expressive poses and silhouettes	15
3.0		
Core Animation Principles	Squash & Stretch – Bouncing ball with exaggerated deformation Anticipation – Character preparing to jump or throw Staging – Framing a scene for clarity and focus Straight Ahead & Pose-to-Pose – Two versions of a falling object Follow Through & Overlapping Action – Tail or ponytail movement Slow In & Slow Out – Ball acceleration and deceleration Arcs – Arm swing or head turn Secondary Action – Blinking or hair movement during a walk Timing – Fast vs. slow motion studies Exaggeration – Cartoon-style reactions Solid Drawing – Volume consistency in character turns Appeal – Designing a charming, readable character	20
4.0		
Hands-on Exercises	Draw staging of walk cycle and run cycle	20
5.0		
Portfolio & Review	Compilation of all exercises Peer and instructor feedback sessions Final project: 30-second animated short using at least 6 principles	14
	Total	84

Practical List:

- Squash & Stretch exaggerated bouncing ball
- Anticipation character preparing to jump
- Staging silhouette posing for clarity
- Straight Ahead vs. Pose-to-Pose falling leaf vs. planned motion
- Follow Through & Overlapping tail or scarf movement
- Slow In & Slow Out pendulum swing
- Arcs arm swing or head nod
- Secondary Action blinking while walking
- Timing fast vs. slow motion ball drop
- Exaggeration cartoon reaction to surprise
- Solid Drawing character turn maintaining volume
- Appeal design a charming character

Software:

Autodesk Maya

TextBooks:

- "The Animator's Survival Kit" by Richard Williams A comprehensive guide to animation principles, ideal for animators at all levels.
- "The Art of Animation" by Bob Thomas A good reference for understanding animation from an artistic perspective and its history.

Career Options:

- 2D Animator Creates frame-by-frame animations for TV shows, ads, and games.
- 3D Animator Brings characters and environments to life using software like Maya or Blender.
- Character Designer Develops the look and personality of animated characters.
- Storyboard Artist Visualizes scripts through sequential sketches to guide production.
- Freelance Animator: Offer animation services for various projects including commercials, web series, and independent films.
- Game Animator: Create 2D animation for video games (mobile, console, or web games).

IANIGE1251: Packaging Design (GE) Curriculum Details

Credits – 02 Mark – 50 Periods – 48 Th

Course pre-requisite: Basic Computer Knowledge

Course objectives:

To learn & understand the stages of packaging design and development for any product.

Course outcomes:

- ❖ Explain the design & development stages involved in creating a new package.
- ❖ Describe the importance of package testing during development.
- ❖ Elaborate on the significance of considering packaging cost and sustainability.

Curriculum Details: (There shall be FOUR Modules in each course)

ModuleNo.	Торіс	Hrs. Required to cover the contents
Packaging Design Basics	 Packaging Design Basics: Design Thinking concepts, Graphics (influence of colour, typography, balance, etc.) Structural (influence of ergonomics, convenience, material reduction, strength, etc.) Packaging Technology – Introduction, Market Survey / Study. 	12
2.0		
Packaging Materials	 Packaging Materials – Introduction to primary and ancillary packaging materials. Selection Criteria – Compatibility studies — Shelf-Life evaluation / Stability studies. Industry Wise Packaging – Key Concepts (Consumer vs Industrial Product Packaging) 	06
3.0		10
Packaging Development	Manufacturing Process of Packaging Materials (Major	10

	manufacturing & conversion processes) • Caps and Closures; Labels & Printing Technology	
4.0		
Packaging Testing	 Dies and Tooling – Requirement and Designing Prototyping / Trials of end use form. Packaging Testing – Parameters & Studies. 	10
5.0		
Case Study	 Breakage in Transit & Packaging Development – Transport Tests – Drop, Vibration, Impact Compression, Rolling Secondary Packaging Concepts & Materials Packaging Sustainability and Costing Case studies of packaging design & development for an FMCG / Food product. 	10
	Total	48

Practical List:

- Define your Product to customer
- Research the competition
- Identify your product requirements
- Create your package concept
- Pre-press and print your packaging
- Test the package

Software: Adobe Illustrator, Adobe Photoshop, Adobe In Design

Text Books:

PACKAGE DESIGN BK Hardcover -by Julius Wiedemann (Author)

Packaging Design: Successful Product Branding from Concept to Shelf(English)- By: Marianne R Klimchuk (Author)

What is Packaging Design - by Giles Calver (Author)

Packaging Design (Hardback) | By: Chris Van Uffelen (Author)

Packaging Design: By: Marianne R Klimchuk (Author)

Career Options:

- Junior Packaging Designer
- Packaging Designer

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- Product Packaging Specialist
- Packaging Design Manager
- Even Packaging Engineer

IANIVC1251: Soft Skills (VSC) Curriculum Details

 $Credits - 02 \qquad \qquad Mark - 50 \qquad \qquad Periods - 48 \qquad \qquad Pr$

Course pre-requisite:

Verbal and non-verbal communication, active listening, and presenting ideas effectively.

Course objectives:

Communication:

Developing effective verbal and written communication, including public speaking and presentation skills.

• Interpersonal Skills:

Improving the ability to build rapport, work effectively with diverse individuals, and resolve conflicts.

• Leadership:

Identifying leadership potential, developing skills in team management, and inspiring others.

• Emotional Intelligence:

Understanding and managing emotions, developing empathy, and building positive relationships.

Problem-Solving:

Applying critical thinking, analysing situations, and making effective decisions.

Course outcomes:

• Career Planning and Job Search:

Students should develop skills for planning their career paths, preparing resumes and cover letters, and interviewing effectively.

• Networking:

Students thould learn to build professional petworks and utilize them to their advantage.

Ethical Behavior:

Students should understand and adhere to ethical principles in their professional lives.

Curriculum Details: (There shall be FOUR Modules in each course)

ModuleNo.	Торіс	Hrs. Required to cover the contents
1.0		
Communication Skills	Verbal & Non-verbal Communication Active Listening Public Speaking & Presentation Skills Written Communication (Emails, Reports, Proposals) Group Discussion Etiquette	8
2.0		
Interpersonal Skills	Teamwork & Collaboration Empathy & Emotional Intelligence Conflict Resolution Cultural Sensitivity & Diversity Awareness Building Professional Relationships	8
3.0	<u>,</u>	
Self-Management	Time Management Stress Management Goal Setting & Personal Productivity Self-Awareness & Self-Motivation Adaptability & Flexibility	8
4.0		
Professional Development	Resume Writing & Cover Letter Crafting Interview Skills Workplace Etiquette & Professionalism Networking Skills (Offline & Online) Career Planning & Personal Branding	12
5.0		
Leadership & Decision Making	Leadership Styles & Qualities Decision Making & Problem Solving Delegation & Task Management Influencing & Negotiation Skills Critical & Creative Thinking.	12
	Total	48

Practical List:

- Activity
- Discussion Time :
- What do good citizen do?
 - 1. For self
 - 2. For others
 - 3. For family
 - 4. For college
 - 5. For society
 - 6. For country

• Let's Discuss

How can your goal come true? What are the steps you would follow to achieve it?

• Tips to plan

I am good at

My areas of improvement

Two things which will help me reach my goal

If my plan doesn't work, what will I do?

Text Books:

- Soft Skills And Personality Development (This e-book has been authored by CA. M K Sridhar)
- Soft Skills Know Yourself & Know The World (K. Alex, 2009)
- The Hard Truth About Soft Skills (Peggy Klaus, 2007)

Career Options:

Education:

Teachers, counselors, and educational leaders all rely on strong communication, interpersonal, and problem-solving skills to effectively engage with students and staff.

Healthcare:

Doctors, nurses, and therapists need excellent communication, empathy, and teamwork skills to provide compassionate and effective care.

Customer Service:

Professionals in customer service roles need strong communication, empathy, and problem-solving skills to address customer needs and resolve issues.

Sales:

Sales professionals require strong communication, negotiation, and persuasion skills to build relationships and close deals.

Human Resources:

HR professionals need strong communication, interpersonal, and conflict resolution skills to manage employee relations and ensure a positive work environment.

Leadership and Management:

Leaders and managers at all levels rely on strong communication, delegation, and problem-solving skills to motivate teams, make decisions, and achieve organizational goals.

IT and Tech:

While technical skills are crucial, soft skills like communication, teamwork, and adaptability are also essential for IT professionals to effectively collaborate, troubleshoot, and communicate technical solutions.

T raining and Development:

Soft skills trainers and consultants help individuals and organizations improve their skills in areas like communication, leadership, and teamwork.

IANIGE1201: History of Animation (Optional1) Curriculum Details

Credits-02 Mark-50 Periods-48 Th

Course pre-requisite:

Basic understanding of visual arts and storytelling

Course objectives:

- Understand the 12 Principles of Animation –Apply concepts like squash & stretch, anticipation, and timing to create lifelike motion.
- Master Animation Software –Gain proficiency in Autodesk Maya, for professional animation workflows.
- Develop Character & Object Motion–Learn how to animate characters, props, and environments with realistic movement.
- Enhance Story telling Through Animation –Use staging, exaggeration, and appeal to create engaging narratives.
- Apply Physics & Weight in Animation –Understand how gravity, inertia, and force affect animated objects.
- Create Smooth & Natural Motion–Utilize key frames, interpolation, and motion curves for fluid animation.
- Optimize Animation for Different Media –Prepare animations for games, films, and digital content.
- Build a Professional Portfolio Develop industry-ready projects showcasing animation skills.

Course outcomes:

Upon completion of this course, students will be able to:

- 1. Analyze the evolution of animation a cross different period sand cultures
- 2. Understand the impact of technological advancements on animation
- 3. Identify key pioneers and movements in animation history
- 4. Recognize various animation styles and techniques
- 5. Examine the influence of animation on global entertainment and culture
- 6. Critically assess animated works in their historical context

<u>Curriculum Details:</u>(There shall be FOUR Module sin each course)

Module No.	Торіс	Hrs. Required to cover the contents
1.0		
Origins of Animation	Early attempts at animation(e.g., shadow puppetry, zoetropes) The influence of optical to ysandearly motion experiments Silent-era animation and it spioneers	08
2.0		
The Golden Ageof Animation	Rise of major studios(Disney, Warner Bros., Fleischer Studios) The birth of sound and color in animation The cultural impact of classic animated films	08
3.0		
International Animation Movements	Early animation in Japan, Europe, and the Soviet Union Experimental animation and independent filmmakers Technique sand styles across different regions	08
4.0		
Technological Advances in Animation	The transition from traditional hand-drawn to digital animation The influence of CGI and 3Danimation The role of software and technology in modern animation	08
5.0		
imidence	The emergence of anime and its worldwide impact Pixar, Dream Works, and modern animation giants How streaming and digital platforms shape animation trends storytelling	08
6.0		

Future of Animation	Innovations in animation(VR, AI, interactive media) Challenges and ethical concerns in animation production Predictions for the next era of animation storytelling	08
	Total	40

Practical List: no Software:

Not required

Text Books:

- "CartoonAnimation"byPrestonBlair Aclassicguideforunderstandinganimationfundamentals.
- "The Illusion of Life: Disney Animation" by Frank Thomas & Ollie Johnston

 Explores animation principles developed at Disney.
- "Animation: The Global History" by Maureen Furniss \Box A comprehensive over view of animation 'sevolution worldwide.
- "Enchanted Drawings: The History of Animation" by Charles Solomon

 Covers animation

 sdevelopment from early experiments to modern techniques.
- "Timing for Animation" by Harold Whitaker & John Halas A must-read for understanding animation timing.

Career Options:

Storyboard Artist or Concept Designer

Develop visual storytelling for animated films or series.

Create concept art that defines the aes the tic fan animation project.

• Digital Animator or Visual Effects Artist

Utilize modern technology to create animations for movies, TV, and games.

Work with CGI and motion graphics to enhance animated sequences.

• Animation Journalist or Content Creator

Produce documentary films, podcasts, or You Tube videos on animation history.

Write books or articles on the cultural impact of animation.

• Character Designer or Illustrator

Create unique character concepts inspired by different animation eras.

Work in gaming, comics, or animated series production.