|| सा विद्या या विमुक्तये ||

स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

'ज्ञानतीर्थ', विष्णुपुरी, 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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आंतरविद्याशाखीय अभ्यास विद्याशाखे अंतर्गत राष्ट्रीय शैक्षणिक धोरण २०२० नुसार पद्व्युत्तर द्वितीय वर्षाचे अभ्यासक्रम (Syllabus) शैक्षणिक वर्ष २०२४–२५ पासून लागू करण्याबाबत.

प रि प त्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, या विद्यापीठा अंतर्गत येणा–या सर्व संलग्नित महाविद्यालयामध्ये शैक्षणिक वर्ष २०२४–२५ पासून पद्व्युत्तर द्वितीय वर्षाचा राष्ट्रीय शैक्षणिक धोरण –२०२० लागू करण्याच्या दृष्टीकोनातून आंतर विद्याशाखीय अभ्यास विद्याशाखे अंतर्गत येणा–या अभ्यासमंडळांनी तयार केलेल्या पद्व्युत्तर द्वितीय वर्षाचा अभ्यासक्रमांना मा. विद्यापरिषदेने दिनांक १५ मे २०२४ रोजी संपन्न झालेल्या बैठकीतील विषय क्रमांक १८/५९–२०२४ च्या ठरावाअन्वये मान्यता प्रदान केली आहे. त्यानुसार आंतर विद्याशाखीय अभ्यास विद्याशाखेतील खालील एम. ए. द्वितीय वर्षाचे अभ्यासक्रम (Syllabus) लागू करण्यात येत आहेत.

Sr. No.	Name of the Course Subject
01	M. A. II year Fashion Desing. (Affiliataed College)
02	M. A. II year Animation. (Affiliataed College)
03	M. A. II year Education. (Affiliataed College)
04	M. A. II year Music. (University Campus)
05	M. A. II year Music. (Affiliataed College)
06	M. J.M.S. II year (Affiliataed College)
07	M.A./M.Sc. II year Electronic Media (University Campus)
08	M.A. II year (Mass Communication & Journalism. (University Campus)
09	M.A. II year Theart Arts (University Campus)

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/एनईपी/आंविशाखापदवी/२०२४–२५/१५९
दिनांक २२.०७.२०२४

डॉ. सरिता लोसरवार
सहा.कुलसचिव
शैक्षणिक (१–अभ्यासमंडळ) विभाग

प्रत : १) मा. अधिष्ठाता, आंतर विद्याशाखीय अभ्यास विद्याशाखा, प्रस्तुत विद्यापीठ.
२) मा. संचालक, परीक्षा व मुल्यमापन मंडळ, प्रस्तुत विद्यापीठ.
३) मा. प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
४) मा. संचालक, सर्व संबंधित संकुले व उपपरिसर, प्रस्तुत विद्यापीठ.
५) मा. प्राचार्य, न्यु मॉडेल डिग्री कॉलेज हिंगोली, प्रस्तुत विद्यापीठ.
६) सिस्टीम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ. याना देवून कळविण्यात येते की, सदर परिपत्रक संकेतस्थळावर प्रसिध्द करण्यात यावे.

SWAMI RAMANAND TEERTH

MARATHWADA UNIVERSITY, NANDED - 431 606

University Affiliated College

(Structure and Syllabus of Two Years Multidisciplinary Master in Animation Program with Multiple Entry and Exit Option)

TWO YEAR MASTERS PROGRAMME IN ARTS

Subject ANIMATION

Under the Faculty of
Interdisciplinary Studies

Effective from Academic year 2024 – 2025
(As per NEP-2020)

Dr. C. R. Baviskar, I/C Dean, Faculty of Interdisciplinary Studies, School of Educational, Swami Ramanand Teerth Marathwada University, Nanded.

From Desk of Chairman, Board of Studies of Interdisciplinary Studies the Subject Animation

Preamble:

The engineering education in India in general is expanding in manifolds. Now, the challenge is to ensure its quality to the stakeholders along with the expansion. To meet this challenge, the issue of quality needs to be addressed, debated and taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education and reflects the fact that in achieving recognition, the institution or program of study is committed and open to external review to meet certain minimum specified standards. The major emphasis of this accreditation process is to measure the outcomes of the program that is being accredited. Program outcomes are essentially a range of skills and knowledge that a student will have at the time of graduation from the program. An engineering program must ensure that its graduates understand the basic concepts of science and mathematics, have gone through one engineering field in dept of appreciate and use its methodologies of analyses and design, and have acquired skills for life- long learning.

An engineering program must therefore have a mission statement which is in conformity with program objectives and program outcomes that are expected of the educational process. The outcomes of a program must be measureable and must be assessed regularly through proper feedback for improvement of the programme. There must be a quality assurance process in place within the Institute to make use of the feedback for improvement of the programme. The curriculum must be constantly refined and updated to ensure that the defined objectives and outcomes are achieved. Students must be encouraged to comment on the objectives and outcomes and the role played by the individual courses in achieving them. In line with this Faculty of Technology of University of Mumbai has taken a lead in incorporating philosophy of outcome based education in the process of curriculum development.

I, as Chairman, Board of Studies in Electronics and Telecommunication Engineering University of Mumbai, happy to state here that, Program Educational Objectives were finalized in a meeting where more than 20 members from different Institutes were attended, who were either Heads or their representatives of Electronics and Telecommunication Engineering Department. The Program Educational Objectives finalized for undergraduate program in Electronics and Telecommunication Engineering are listed below;

- To provide students with a strong foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyze engineering problems and to prepare them for graduate studies.

- To prepare students to demonstrate an ability to identify, formulate and solve electronics and telecommunication engineering problems.

- To prepare students to demonstrate ability to design electrical and electronics systems and conduct experiments, analyze and interpret data.

- To prepare students to demonstrate for successful career in industry to meet needs of Indian and multi-national companies.

- To develop the ability among students to synthesize data and technical concepts from applications to product design.

- To provide opportunity for students to work as part of teams on multidisciplinary projects.

- To promote awareness among students for the life-long learning and to introduce them to professional ethics and codes of professional practice.

In addition to above more program educational objectives of their own may be added by affiliated Institutes.

In addition to Program Educational Objectives, for each course of undergraduate program, objectives and expected outcomes from learner's point of view are also included in the curriculum

to support the philosophy of outcome based education. I believe strongly that small step taken inright direction will definitely help in providing quality education to the stake holders.

Dr. Durga S. Sharma

Chairman, Board of Studies of the Animation under the Faculty of Interdisciplinary Studies

Swami Ramanand Teerth Marathwada University, Nanded

Aims & objective of the program

Aims:

Four Year Bachelor of Arts Major in ANI and Minor in ANI eight semester full time program, to equip the students with the tools & techniques balanced with theory & practical knowledge which has today taken the shape of Multimedia industry. We focus on providing high end media and entertainment training. The Animation has seen the entry of many global majors who have tapped into India's talent pool for offshore delivery of services. The websites has become important resource and attached in many aspects to our life. Nowadays, websites becomes an interactive platform that is used for receiving information as well as providing information.

Objective:

- *To develop student's aesthetic, intellectual & technological abilities through programs that integrates theory & practical.*

- *To offers students a rigorous & innovative curriculum taught by faculty with outstanding academic & industry experience.*

Details of the Board of Studies Members in Animation under the faculty of Interdisciplinary Studies of S.R.T.M. University, Nanded

Sr No	Name of the Member	Designation	Address	Contact No.
01	Dr. Durga S. Sharma	Chairman	Dayanand College of Arts, Latur	9545205999
02	Prof. Sachin Patange	Member	Dayanand College of Arts, Latur	9096463943

Swami Ramanand Teerth Marathwada University, Nanded
Faculty of Interdisciplinary Studies
Credit Framework for Two Year PG Program
Subject: Animation

Year & Level 1	Sem. 2	Major Subject		RM 5	OJT / FP 6	Research Project 7	Practicals 8	Credits 9	Total Credits 10
		(DSC) 3	(DSE) 4						
1	1	IANIC501 Core designing and connectivity theory (3 Cr) IANIC502 Game design theory (3 Cr) IANIC503 Final FX theory (3 Cr)	IANIE501 Animatics Theory (3 Cr) IANIE502 Project (1Cr)	--	IANIE501 Project	IANIOJT/FP501 Practical	IANIP501 Core designing and connectivity Practical (2Cr) IANIP502 Game Design Practical (2Cr) IANIP503 Final Fx Practical (2Cr)	22	44
	2	IANIC551 Advance Rigging theory (3 Cr) IANIC552 Advance web Development theory (3 Cr) IANIC553 Obstract Painting theory (3 Cr)	IANIE551 Advance Rigging Practical (3 Cr) IANIE552 Advance web Development Practical (1Cr)	---	IANIOJT practical 551 (3 Cr)	--	IANIP551 Project 1 Practical (2Cr) IANIP552 Demoreel (2Cr) IANIP553 Obstract Painting Practical (2Cr)	22	
Total Credits		18	08	03	03	00	12		44

M. A. Second Year Semester III *(Level 6.0)*
Teaching Scheme

	Course Code	Course Name	Credits Assigned			Teaching Scheme (Hrs/ week)	
			Theory	Practical	Total	Theory	Practical
Major	**IANIC501**	Core designing and connectivity theory	03	--	**03**	03	--
	IANIC502	Game design theory	03	--	**03**	03	--
	IANIC503	Final FX theory	03	--	**03**	03	--
Elective (DSE)	**IANIE501**	Animatics Theory	03	--	**03**	03	--
DSE Practical	**IANIE502**	Project	--	01	**01**	--	01
On Job Training	**IANIOJT/FP501**	practical	--	03	**03**	--	03
DSC Practical	**IANIP501**	Core designing and connectivity Practical	--	02	**02**	--	02
	IANIP502	Game Design Practical	--	02	**02**	--	02
	IANIP503	Final Fx Practical	--	02	**02**	--	02
Total Credits			**12**	**10**	**22**	**12**	**10**

M. A. Second Year Semester III *(Level 6.0)*
Examination Scheme

[20% Continuous Assessment (*CA*) and 80% End Semester Assessment (*ESA*)]

(For illustration we have considered a paper of 02 credits, 50 marks, need to be modified depending on credits of individual paper)

Subject (1)	Course Code (2)	Course Name (3)	Theory				Practical		Total Col (6+7) / Col (8+9) (10)
			Continuous Assessment (CA)			ESA			
			Test I (4)	Test II (5)	Avg of (T1+T2)/2 (6)	Total (7)	CA (8)	ESA (9)	
Major	IANIC501	Core designing and connectivity theory	20	20	20	80	--	--	100
	IANIC502	Game design theory	20	20	20	80	--	--	100
	IANIC503	Final FX theory	20	20	20	80	--	--	100
Elective (DSE)	IANIE501	Animatics Theory	15	15	15	60	--	--	75
DSE Practical	IANIE502	Project	--	--	--	--	05	20	25
On Job Training	IANIOJT/FP501	practical					25	50	75
DSE Practical	IANIP501	Core designing and connectivity Practical	--	--	--	--	05	20	25
	IANIP502	Game Design Practical	--	--	--	--	05	20	25
	IANIP503	Final Fx Practical	--	--	--	--	05	20	25

M. A. Second Year Semester IV *(Level 6.0)*
Teaching Scheme

	Course Code	Course Name	Credits Assigned			Teaching Scheme (Hrs/ week)	
			Theory	Practical	Total	Theory	Practical
Major	**IANIC551**	Advance Rigging theory	03	--	**03**	03	--
	IANIC552	Advance web Development theory	03	--	**03**	03	--
	IANIC553	Obstract Painting theory	03	--	**03**	03	--
Elective (DSE)	**IANIE551**	Advance Rigging Practical	--	03	**03**	--	03
DSE Practical	**IANIE552**	Advance web Development Practical	--	01	**01**	--	01
On Job Training	**IANIOJT/FP551**	Practical (OJT)	--	03	**03**	--	03
DSC Practical	**IANIP551**	Project 1 Practical	--	02	**02**	--	02
	IANIP552	Demoreel	--	02	**02**	--	02
	IANIP553	Obstract Painting Practical	--	02	**02**	--	02
Total Credits			**09**	**13**	**22**	**09**	**13**

M. A. Second Year Semester IV (*Level 6.0 *)
Examination Scheme

[20% Continuous Assessment (*CA*) and 80% End Semester Assessment (*ESA*)]

(For illustration we have considered a paper of 02 credits, 50 marks, need to be modified depending on credits of individual paper)

| Subject (1) | Course Code (2) | Course Name (3) | Theory | | | | Practical | | Total Col (6+7) / Col (8+9) (10) |
| | | | Continuous Assessment (CA) | | | ESA | | | |
			Test I (4)	Test II (5)	Avg of (T1+T2)/2 (6)	Total (7)	CA (8)	ESA (9)	
Major	IANIC551	Advance Rigging theory	20	20	20	80	--	--	100
	IANIC552	Advance web Development theory	20	20	20	80	--	--	100
	IANIC553	Obstract Painting theory	20	20	20	80	--	--	100
Elective (DSE)	IANIE551	Advance rigging Practical	--	--	--	--	25	50	75
DSE Practical	IANIE552	Advance web Development Practical	--	--	--	--	05	20	25
On Job Training	IANIOJT/FP551	Practical (OJT)					25	50	75
DSE Practical	IANIP551	Project 1 Practical	--	--	--	--	05	20	25
	IANIP552	Demoreel	--	--	--	--	05	20	25

	IANIP553	Obstract Painting Practical	--	--	--	--	05	20	25

M. A. Second Year Semester III Syllabus
IANIC501: *Core Designing and Connectivity Theory*

Credits: 03   (Marks: 100)   Periods: 36

Course pre-requisite:

- Knowledge of Photoshop

Course objectives:

- Understand the concept of design and implementation of Wordpress to design a particular design of their creativity.

Course outcomes:

- By the end of the course the student will be familiarized with the design of the webpage and create an interactive and dynamic Wordpress Website.

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			
Wordpress	**1.1**	Overview, What Is Content Management System (Cms)?, Features, Advantages, Disadvantages, Wordpress – Installation, System Requirements For Wordpress,Download Wordpress, Create Store Database, Set Up Wizard	**06**
2.0			
Wordpress	**2.1**	Dashboard, Dashboard Menu, Screen Options, Welcome, Quick Draft, Wordpress News, Activity , Settings, General Settings , Writing Settings, Reading Settings, Discussion Settings, Media Settings, Permalink Settings, Plugin Settings	**10**
3.0			
Categories	**3.1**	Add Category, Edit Category, Delete Category, Arrange, Categories, Posts - Add Posts, Edit Posts, Delete Posts, Preview Posts, Publish Posts, Media- Media, Library, Add Media, Insert Media, Edit Media	**10**
4.0			
Pages	**4.1**	Wysiwyg Editor, Text Insertion, Publish, Page Attribute, Featured Images, Publish Pages, Edit Pages, Delete Pages	**10**
		Total	**45**

Text Books:

- 1. Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India
- 2. Web Technologies, Black Book, Dreamtech Press
- 3. HTML 5, Black Book, Dreamtech Press
- 4. Web Design, Joel Sklar, Cengage Learning
- 5. Internet and World Wide Web How to program, P. J. Deitel & H. M. Deitel, Pearson

Reference Links:

- 1. http://www.w3schools.com

Credits: 03   (Marks: 100)   Periods: 36

Course pre-requisite:

- Flash

Course objectives:

- Uses a project based curriculum that teaches programming skills, animation, and game design, using Adobe Flash

- Exploring different character animation technique.

- To enable students to manage Animation Projects from its Conceptual Stage to the final product creation.

Course outcomes:

- Understand and apply techniques Flash

- Acquire knowledge about various principles of Flash and its usage.

- Will gain the knowledge of handling a project at industrial requirement.

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			
	1.1	Basic Animation, Introduction to The Game, Photoshop & Flash, Game Analysis Centipede, Game Scripting & Coding, Game Programming Language, Source Code Program, Game & Graphic Code	06
2.0			
	2.1	Game Visualization, Game Idea: Visualization & Story Telling, Game Analysis: Tetris, The essence of Game 1, Game Analysis: Loom, Essence of Game 2, Game Development & Documentation, Game Design Documents, Character Designing, Flash Based Game Designing	10
3.0			
	3.1	Character Make, Modeling, Texturing & Lighting Games, Game Lord, Rigging & Animation for Games, FX For Games, Game Analysis: The Sims, Sound for Games	10
4.0			
	4.1	Game Planning, Theft Auto III, Game Interface Designing, Rigging & Animation for Games , FX For Games, Game Analysis: The Sims, Sound for Games, Projects, Portfolio	10

		Total	36

Text Books:

- Timing for Animation by John Halas.,
- The Animator's Survival Kit by Richard E. Williams

Reference Links:

- 1. http://www.w3schools.com

IANIC503: Final FX theory

Credits: 03   (Marks: 100)   Periods: 36

Course pre-requisite:

- Basic Autodesk
  Maya

Course objectives:

This course is meant to introduce the students to the possibilities of using dynamic simulation in movies and animation projects. It is meant to introduce the student to an animation using mathematical calculations to get a desired effect through simulation.

Course outcomes:

- To be a good FX artist
- . Simulation artist

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

Module No.	Unit No.	Topic	Hrs. Required to cover the contents
1.0			
	1.1	What is dynamic simulation? Discuss the application of dynamic simulation in animation movies and visual effects, Movement with forces	**10**
	1.2	What is Particle system? Study of Particles: Emitters, Animating particles, Render the particles, Goals, Multiple goals, Particle instance etc.	
	1.3	Soft and Rigid Bodies: Soft bodies, Rigid bodies, Rigid body constraints, Edit rigid body constraints, Springs, Soft and rigid bodylimitations, Edit rigid body attributes	
	1.4	Introduction to fluid effects: Clouds, Fire, Smoke, creating an ocean etc.	
2.0			
	2.1	Using dynamics simulation in animation movies to simulate cloth, water, fire, ropes etc	**10**
	2.2	Simulating Ropes with Grains.	
	2.3	Faking Cloth with Grains	
3.0			
	3.1	Shrink-wrap with Grains.	**10**
	3.2	Intro to the Wire Solver: Hanging wire	
	3.3	Intro to RBD's: Rigid Body Dynamics	
4.0			
	4.1	Creating Fractured Geometry Properly.	**06**
	4.2	Activating RBDs: Creative ways to control Activation.	
	4.3	Animating RBD objects: Crumbling geometry over time	
	4.4	Destroying an RBD Wall with Particles 1	
		Total	**36**

Text Books:

- **The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures (Paperback)**
  The Visual Effects Producer (Paperback)

Reference Books:

- **The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures (Paperback)**

IANIE501: *Animatics*

Credits: 03   (Marks: 75)   Periods: 36

Course pre-requisite:

- Sketching.

Course objectives:

- To familiarize the students with various approaches, methods and techniques of
- Animation Technology.
- To develop competencies and skills needed for becoming an effective Animator..

Course outcomes:

Exploring different approaches in computer animation. o To enable students to manage Animation Projects from its Conceptual Stage to the final product creation. o To train students in applying laws of human motion and psychology in 2-D or 3-D characters. o To develop expertise in life-drawing and related techniques

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

Module No.	UnitNo.	Topic	Hrs. Required to cover the contents
1. 0		**Introduction**	
	1.1	Introduction of Drawing - Fundamentals of Art, Basic Techniques about figure drawing	
	1.2	Cartooning, Composition of a Scene or Background and Designs. Basic Drawing Practice - Basic Shape, Basic drawing technique, Free Hand Practice	**10**
	1.3	Understanding Lights, Shading and Shadow - Study of light and shade in pencil of still life object,	
	1.4	drawing still life objects in outline by pen and pencil, Study of still life objects in pen and ink to trace the light and shade	
2.0		One Point Perspective	
	2.1	Introduction of Perspective - One Point Perspective, Two Point Perspective, Learning three point perspectives,	
	2.2	Background designs with perspective - Drawing outdoor scenes showing one point perspective	**10**
	2.3	drawing outdoor scenes showing two point perspectives, drawing outdoor scenes showing three point perspectives	
3.0			
	3.1	Define your idea	
	3.2	Draft your story	**10**
	3.3	**Define pace & timing**	
4.0			
	4.1	Define visual approach	
	4.2	Plan the production process	**06**
	4.3	Animatics Making	
	4.4	Story Board	
		Total	**36**

Text Books:

The Complete Animation Course: The Principles, Practice and Techniques of Successful Animation by Chris Patmore o Anatomy for The Artist by Sarah Simblet o Cartoon Animation by Preston Blair

Reference Books:

The Complete Animation Course: The Principles, Practice and Techniques of Successful Animation by Chris Patmore o Anatomy for The Artist by Sarah Simblet o Cartoon Animation by Preston Blair

IANIP502: *Project Practical*

Credits: 02   (Marks: 25)   Periods: 24

Course pre-requisite:

- Basic Autodesk Maya, Photoshop. Houdini

Course objectives:

Learning advanced techniques and Will gain the knowledge of handling a complete

Compositing tools.

Course outcomes:

- To be a good Artist

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

Module No.	Unit No.	Topic	Hrs. Required to cover the contents
1.0			
	1.1	Introduction to 3D graphics, 3D Object's Coordinate System: X, Y and Z axis. How to identify the X, Y and Z axis by its color (Red, Green, Blue),	**06**
	1.2	3D software's available, What is 3D Animation? 3D production pipeline,	
	1.3	3D animation and their applications in animation movies, visual effects, advertisements,	
	1.4	3D visualization, simulation, training videos etc.	
2.0			
	2.1	3Dimensions –viewports–standard primitives –transformations – file formats and operations –selection –cloning–group –	**06**
	2.2	ungroup –alignment –basic rendering -Array –Array Transformations –Splines –Common Rollouts -editing splines –s	
	2.3	architectural tools –maya scene files –modifiers-World space modifiers –object space modifiers –modifier stack – instanced modifier -Compound Objects –type	

3.0				
	3.1	Modeling –Nurbs–converting objects to NURBS-Mesh Modeling –converting objects to editable mesh –sub objects –Vertex, Edge, Face, Polygon, Element-Edit Mesh	**06**	
	3.2	Modifier – Editable Poly Modeling -Material Editor –toolbar buttons-assigning materials to objects – material editor options-material properties –		
	3.3	material types -Concepts of Light –Omni Lights , spotlight , Target Lights, Free Lights , Directional Light, Area Lights – Mental Ray –Skylight, Creating Basic Lights –Lights Parameters-Positioning Lights, Creating light in exterior and Interior Environment		
4.0				
	4.1	Exterior Modeling: Buildings, Street, House, children's park Etc. Interior Modeling: Room and furniture's.	**06**	
	4.2	Exterior lighting, Interior Lighting: Global illumination,		
	4.3	Final Gather. Rendering:		
	4.4	Render settings, Batch rendering, Rendering image sequences		
		Total	**24**	

Text Books:

Fundamentals of Computer Graphics

Reference Books:

Digital Lighting & Rendering (Paperback)

IANIOJT501: *On job Training/FP*

Credits: 03   (Marks: 75)   Periods: 45

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 A practical approach to acquiring new competencies and skills needed for a job in a real or submit freelancing project on which subject you learned.

M. A. Second Year Semester III Syllabus
IANIC501: *Core Designing and Connectivity Practical*

Credits: 03   (Marks: 25)   Periods: 24

Course pre-requisite:

- Knowledge of Photoshop

Course objectives:

- Understand the concept of design and implementation of Wordpress to design a particular design of their creativity.

Course outcomes:

- By the end of the course the student will be familiarized with the design of the webpage and create an interactive and dynamic Wordpress Website.

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			**06**
	1.1	Wordpress – Installation Dashboard	
2.0			**06**
	2.1	Categories Create a Pages	
3.0			**06**
	3.1	Create a Tags Create Wordpress Website	
4.0			**06**
	4.1	Publish Website	
		Total	**24**

Text Books:

- 1. Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India
- 2. Web Technologies, Black Book, Dreamtech Press
- 3. HTML 5, Black Book, Dreamtech Press
- 4. Web Design, Joel Sklar, Cengage Learning
- 5. Internet and World Wide Web How to program, P. J. Deitel & H. M. Deitel, Pearson

Reference Links:

- 1. http://www.w3schools.com

IANIP502: *Game Designing Practical*

Credits: 03   (Marks: 25)   Periods: 24

Course pre-requisite:

- Flash

Course objectives:

- Uses a project based curriculum that teaches programming skills, animation, and game design, using Adobe Flash

- Exploring different character animation technique.

- To enable students to manage Animation Projects from its Conceptual Stage to the final product creation.

Course outcomes:

- Understand and apply techniques Flash

- Acquire knowledge about various principles of Flash and its usage.

- Will gain the knowledge of handling a project at industrial requirement.

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			**06**
	1.1	Game Analysis Game Visualization	
2.0			**06**
	2.1	Game Idea: Visualization & Story Telling Character Make	
3.0			**06**
	3.1	Game Planning	
4.0			**06**
	4.1	Games Projects	
		Total	**24**

Text Books:

- Timing for Animation by John Halas.,
- The Animator's Survival Kit by Richard E. Williams

IANIP503: Film FX Practical

Credits: 02   (Marks: 25)   Periods: 24

Course pre-requisite:

- Basic Autodesk
  Maya

Course objectives:

This course is meant to introduce the students to the possibilities of using dynamic simulation in movies and animation projects. It is meant to introduce the student to an animation using mathematical calculations to get a desired effect through simulation.

Course outcomes:

- To be a good FX artist
- . Simulation artist

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0 Introduction		Intro to Pyro : Creating a smoke plume.	**05**
2.0 Facebook Designing		Examining smoke nodes in depth.	**05**
3.0 Photoshop	**3.1**	Creating Dynamic Clouds 1: Starting from a static VDB.	**05**
4.0 Principles of Design	**4.1**	Creating Dynamic Clouds 2: Using our VDB as a smoke source	**05**
5.0		Creating Dynamic Clouds 3: Bonus - Disturbing our cloud with points	
Live Study Projects		Simulation Making	**04**
		Total	**24**

Text Books:

- **The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures (Paperback)**
  The Visual Effects Producer (Paperback)

M. A. Second Year Semester IV Syllabus

Course Code	Course Name (Paper Title)	Teaching Scheme (Hrs.)		Credits Assigned		
		Theory	Practical	Theory	Practical	Total
IANIC451	Advance rigging theory	04	--	04	--	04

Course Structure: *Major 1 - Teaching Scheme*

Major 1 - Assessment Scheme

Course Code (2)	Course Name (3)	Theory				Practical		Total [Col (6+7) / Col (8+9)] (10)
		CA			ESA (7)	CA (8)	ESA (9)	
		Test I (4)	Test II (5)	Avg of (T1+T2)/2 (6)				
IANIC451	Advance web Development theory	20	20	20	80	--	--	100

IANIC551: *Advance Rigging Theory*

Credits: 03   (Marks: 100)   Periods: 36

Course pre-requisite:

- 3D Software Knowledge

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:

- Animators use these to pose and animate the character.
- One purpose of joints is to define the freedom that the character has in its movement

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			
	1.1	Introduction : Understanding Rigging, Character Structure, Joints and their manipulations, IK and FK, Attribute controls, Rig controls.	**O4**
2.0			
	2.1	Character Skeleton : Creating and Organizing Joint Hierarchies, Orienting Joints, Naming JointsMirroring Joints.	**08**
3.0			
	3.1	Rigging the Character : Rigging the Character, IK Legs, FK Blending, Rotate Plane Solver, Creating Custom Attributes, Driven keys, Constraints, Spline IK.	**08**
4.0			
	4.1	Human Inverse Kinematics : Skeleton Generator, Character Controls, Interoperability, Fk & Ik Switch.	**08**
5.0			
	5.1	Skinning Geometry : Interactive/Smooth Binding, Weighting, Painting Skin Weights, Editing Skin Weights in the Component Editor, Copying Skin Weights, Mirroring Skin Weights.	**08**
		Total	**45**

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

IANIC552: *Advance Web Development Theory*

Credits: 03   (Marks: 100)   Periods: 36

Course pre-requisite:

- Knowledge of Drawing, Photoshop

Course objectives:

- Understand and apply techniques about WordPress

- Acquire knowledge about various principles of WordPress and its usage.

- Will gain the knowledge of handling a project at industrial requirement.

Course outcomes:

- At the end of the course the student will learn basic concepts of WordPress,, Prerequisites: Knowledge of Drawing, Photoshop

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			**06**
	1.1	Introduction, Demo Website Tour, Getting Best & Fastest Hosting, Installing FREE SSL	
2.0			**10**
	2.1	Installing WordPress, Basic & Important WordPress Settings, Installing FREE Theme & Plugins, WooCommerce Quick Setup, WooCommerce General Settings, WooCommerce Products & Inventory	
3.0			**10**
	3.1	Product Tax, VAT & GST, Product Shipping, Shipping Classes, PayPal & Stripe, Payment Gateway Integration, Other WooCommerce Settings, Creating Simple Product, Creating Variable Product, Creating Digital Downloadable Product, Creating Home Page	
4.0			**10**
	4.1	What is Elementor Page Builder?, Home - First Hero Section, Making Website Mobile & Tablet Friendly, Featured Categories	

		Section, Brands Carousel, Product Tabs SectionColorful Info Section, Creating Blog Posts, Creating Track Order Page, About Us & Contact Page, Wishlist Setup	
		Total	**36**

Text Books:

Reference Book:
- Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India
- Web Technologies, Black Book, Dreamtech Press
- HTML 5, Black Book, Dreamtech Press
- Web Design, Joel Sklar, Cengage Learning
- Internet and World Wide Web How to program, P. J. Deitel & H. M. Deitel, Pearson

Reference Links:
   1. http://www.w3schools.com

IANIP552: *ABSTRACT PANTING Theory*

Credits: 03   (Marks: 100)   Periods: 36

Course pre-requisite:

- Colour in formation
- Lins information

Course objectives:

- Understanding difference different lines

- Understanding difference different colour

- To enable students to manage abstract Conceptual Stage to the final product creation.

Course outcomes:

- Understand colour combination

- Understand design of principal

- Understanding design of elements

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			**06**
	1.1	Basic of design, lines, colour and shapes	
2.0			**10**
	2.1	Colour wheel ,colour combination	
3.0			**10**
	3.1	Maths shapes combination	
4.0			**10**
	4.1	Abstract panting compojishan	
		Total	**36**

Text Books:

- Rendering with pen +ink Robert w. gill
- Obsteerics, the science and the art
- Obstetrics, the science and the art.

IANIC551: *Advance Rigging Practical*

Credits: 03   (Marks: 75)   Periods: 36

Course pre-requisite:

- Knowledge of Maya

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:

- Animators use these to pose and animate the character.
- One purpose of joints is to define the freedom that the character has in its movement

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			
	1.1	Introduction : Understanding Rigging, Character Structure, Joints and their manipulations, IK and FK, Attribute controls, Rig controls.	04
2.0			
	2.1	Character Skeleton : Creating and Organizing Joint Hierarchies, Orienting Joints, Naming JointsMirroring Joints.	08
3.0			
	3.1	Rigging the Character : Rigging the Character, IK Legs, FK Blending, Rotate Plane Solver, Creating Custom Attributes, Driven keys, Constraints, Spline IK.	08
4.0			
	4.1	Human Inverse Kinematics : Skeleton Generator, Character Controls, Interoperability, Fk & Ik Switch.	08
5.0			
	5.1	Skinning Geometry : Interactive/Smooth Binding, Weighting, Painting Skin Weights, Editing Skin Weights in the Component Editor, Copying Skin Weights, Mirroring Skin Weights.	08
		Total	**36**

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

IANIE552: *Advance Web Development Practical*

Credits: 01   (Marks: 25)   Periods: 12

Course pre-requisite:

- Knowledge of Drawing, Photoshop

Course objectives:

- Understand and apply techniques about WordPress

- Acquire knowledge about various principles of WordPress and its usage.

- Will gain the knowledge of handling a project at industrial requirement.

Course outcomes:

- At the end of the course the student will learn basic concepts of WordPress,, Prerequisites: Knowledge of Drawing, Photoshop

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			**03**
	1.1	Installing WordPress Creating WooCommerce General Settings	
2.0			**03**
	2.1	Creating Product Tax, VAT & GST Creating Shipping	
3.0			**03**
	3.1	Creating Simple Product Creating Elementor	
4.0			**03**
	4.1	What is Elementor Page Builder ?	
		Total	**12**

Text Books:

Reference Book:
- Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India
- Web Technologies, Black Book, Dreamtech Press
- HTML 5, Black Book, Dreamtech Press

- Web Design, Joel Sklar, Cengage Learning
- Internet and World Wide Web How to program, P. J. Deitel & H. M. Deitel, Pearson

Reference Links:

1. http://www.w3schools.com

IANIOJT551: *On job Training*

Credits: 03   (Marks: 75)   Periods: 36

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IANIP551: *Project 1 Practical*

Credits: 02   (Marks: 25)   Periods: 24

Course pre-requisite:

- Knowledge of Maya, After Effects

Course objectives:

- To understand and explore complete compositing and vfx

Course outcomes:

- Learning advanced techniques and Will gain the knowledge of handling a complete compositing tools

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			**06**
	1.1	One Demo reel Including multiple Shots	
2.0			**06**
	2.1		
3.0			**06**
	3.1		
4.0			**06**
	4.1		
		Total	**24**

Text Books:

Reference Book:
- Adobe® After Effects® CS6 Visual Effects And Compositing Studio Techniques

IANIP552: *Demoreel*

Credits: 02 (Marks: 25) Periods: 24

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IANIP552: *ABSTRACT PANTING Practical*

Credits: 02   (Marks: 25)   Periods: 24

Course pre-requisite:

- Colour in formation
- Lins information

Course objectives:

- Understanding difference different lines

- Understanding difference different colour

- To enable students to manage abstract Conceptual Stage to the final product creation.

Course outcomes:

- Understand colour combination

- Understand design of principal

- Understanding design of elements

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

ModuleNo.	Unit No.	Topic	Hrs. Required to cover the contents
1. 0			06
	1.1	Basic of design, lines, colour and shapes	
2.0			06
	2.1	Colour wheel ,colour combination	
3.0			06
	3.1	Maths shapes combination	
4.0			06
	4.1	Abstract panting compojishan	
		Total	24

Text Books:

- Rendering with pen +ink Robert w. gill
- Obsteerics, the science and the art
- Obstetrics, the science and the art.