



# **BIRLA INSTITUTE OF TECHNOLOGY MESRA, RANCHI**

## **COURSE STRUCTURE OF 4 YEARS BACHELOR OF SCIENCE IN ANIMATION & MULTIMEDIA HONOURS PROGRAMME**

**(BASED ON NEP-2020)**

**NEW COURSE STRUCTURE –To be Effective from Academic Session 2023-24**

# BIRLA INSTITUTE OF TECHNOLOGY MESRA, RANCHI

## COURSE STRUCTURE OF BACHELOR OF SCIENCE IN ANIMATION & MULTIMEDIA HONOURS SEMESTER WISE CREDIT DISTRIBUTION (BASED ON NEP-2020 & CBCS MODEL)

### SEMESTER-I

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>Theory</b>						
Minor-1 (MS)	AN101	History of Art & Animation-I	2	0	0	2
Minor-2 (MS)	AN102	Introduction to Multimedia	2	0	0	2
MD		Multidisciplinary Course	3	0	0	3
Value Added Course-1 (VAC)		Human Values and Professional Ethics / Digital Empowerment / Emotional Intelligent	2	0	0	2
Major-1 (MJ)	AN103	Introduction To Visual Study	1	0	2	2
<b>Laboratories</b>						
Value Added Course-2 (VAC)		Yoga/ Sports for Life/ Physical Education	1	0	2	2
Ability Enhancement Course (AEC)	MT132	Communication Skills-I	0	0	3	1.5
Major-2 (MJ)	AN104	Experimental Animation	0	0	3	1.5
Major-3 (MJ)	AN105	Introduction to 3D	0	0	3	1.5
Major-4 (MJ)	AN106	Outdoor Study-I	0	0	3	1.5
Skill Enhancement Course (SEC)	<b>ELECTIVES (To be opted from List of SKILL ENHANCEMENT COURSES )</b>					
	SEC-I	Paper -I (Skill Enhancement Course)	1	1	2	3
					<b>TOTAL CREDITS</b>	<b>22</b>

### SEMESTER-II

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>Theory</b>						
MS-1	AN112	History of Art & Animation-II	2	0	0	2
MS-2	AN113	Introduction To Game Design & Development	2	0	0	2
MD		Multidisciplinary Course	3	0	0	3
AEC	CE101	Environment Science	2	0	0	2
MJ-1	AN114	Principles of Animation	1	0	2	2
<b>LABORATORIES</b>						
VAC		Yoga/ Sports for Life/ Physical Education	0	0	4	2
MJ-2	AN115	Graphic Design Tools & Techniques -I	0	0	3	1.5
MJ-3	AN116	3D Modeling Techniques-I	0	0	4	2
MJ-4	AN117	Visual Studies-II	0	0	3	1.5
MJ-5	AN118	Outdoor Study-II	0	0	2	1
SEC	<b>ELECTIVES (To be opted from List of SKILL ENHANCEMENT COURSES )</b>					
	SEC	Paper -II (Skill Enhancement Course)	1	1	2	3
					<b>TOTAL CREDITS</b>	<b>22</b>

**Note: Students exiting the programme after securing minimum 44 credits will be awarded UG Certificate in the relevant Discipline/ Subject provided they secure 4 credits in work based vocational courses offered during summer term or internship/ Apprenticeship in addition to 6 credits from skill-based courses earned during first and second semester.**

### SEMESTER-III

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>THEORY</b>						
MS-1	AN201	Writing & Storytelling	2	0	0	2
MS-2	AN202	Audio Visual Technology	2	0	0	2
MD		Multidisciplinary Course	3	0	0	3
AEC		Personality Development / Public Speaking	2	0	2	3
MJ-1	AN203	Animation Techniques	1	0	2	2
<b>LABORATORIES</b>						
MJ-2	AN204	Graphic Design Tools & Techniques-II	0	0	3	1.5
MJ-3	AN205	Visual Studies-III	0	0	3	1.5
MJ-4	AN206	3D Modeling Techniques-II	0	0	4	2
MJ-5	AN207	Outdoor Study-III	0	0	4	2
<b>ELECTIVES (To be opted from List of SKILL ENHANCEMENT COURSES )</b>						
	SEC	Paper -III (Skill Enhancement Course)	1	1	2	3
<b>TOTAL CREDITS</b>						<b>22</b>

### SEMESTER-IV

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>THEORY</b>						
MI-1	AN215	Advertising & New Media	3	0	0	3
MI-2	AN216	Web Technology	2	0	0	2
<b>LABORATORIES</b>						
AEC	MT133	Communication Skills-2	0	0	3	1.5
MJ-1	AN217	Graphic Design Tools & Techniques-III	0	0	3	1.5
MJ-2	AN218	Digital Film Production	0	0	3	1.5
MJ-3	AN219	Character Animation-I	1	0	2	2
MJ-4	AN220	Compositing & VFX	0	0	3	1.5
MJ-5	AN221	Character Modeling & Texturing	0	0	4	2
MJ-6	AN222	Game Design	0	0	3	1.5
MJ-7	AN223	Visual Development	0	0	3	1.5
MJ-8	AN224	Urban Sketching	0	0	4	2
	PE-I	Programme Elective-I	1	0	2	2
<b>TOTAL CREDITS</b>						<b>22</b>

**Note: Students exiting the programme after securing minimum 88 credits will be awarded UG Diploma in the relevant Discipline/ Subject provided they secure 4 credits in skill based vocational courses offered during first year or second year summer term.**

**SEMESTER-V**

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>THEORY</b>						
MI-1	AN301	Direction For Animation	2	1	0	3
MI-2	AN302	Character Design	2	0	2	3
<b>LABORATORIES</b>						
MJ-1	AN303	Graphic Design Tools & Techniques-IV (UI/UX)	0	0	3	1.5
MJ-2	AN304	Comic Production	0	0	3	1.5
MJ-3	AN305	Character Animation-II	0	0	3	1.5
MJ-4	AN306	3D Character Modeling, Texturing, Lighting & Rendering	0	0	4	2
MJ-5	AN307	Game Engine	0	0	3	1.5
MJ-6	AN308	Layout & Digital Painting	0	0	3	1.5
MJ-7	AN309	Documentary Film Making	0	0	3	1.5
MJ-8	AN310	Field Study	0	0	4	2
<b>ELECTIVES (To be opted from List of Program Electives (PE))</b>						
MJ-9	PE-II	Programme Elective-II	1	0	2	2
<b>TOTAL</b>						<b>21</b>

**SEMESTER-VI**

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>THEORY</b>						
MI-1	AN316	Entrepreneurship	2	0	0	2
MI-2	AN317	Digital Marketing	2	0	0	2
<b>LABORATORIES</b>						
MJ-1	AN318	3D Rigging & Skinning	0	0	4	2
MJ-2	AN319	Character Animation-III	0	0	4	2
MJ-3	AN320	Production Design Workshop-I (Specialization: Animation, Film Making, Visual Effects, Games, and Comics)	0	0	8	4
MJ-4	AN321	Degree Showcase Project-I				7
<b>ELECTIVES (To be opted from List of Program Electives (PE))</b>						
MJ-5	PE-III	Programme Elective-III	1	0	2	2
<b>TOTAL</b>						<b>21</b>
<b>TOTAL PROGRAM CREDITS FOR THREE YEAR B.Sc. PROGRAMME</b>						<b>130</b>
<p><b>Note: Students who want to undertake 3-year UG programme will be awarded UG Degree in the relevant Discipline/ Subject upon securing 130 credits.</b></p>						

**SEMESTER-VII**

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>THEORY</b>						
MI-1	AN401	Research in Animation & Multimedia	2	0	0	2
MI-2	AN402	Indian Art & Animation	2	0	0	2
<b>LABORATORIES</b>						
MJ-1	AN403	Advanced Animation Tools & Techniques	0	0	3	1.5
MJ-2	AN404	3D Dynamics & Simulation	0	0	3	1.5
MJ-3	AN405	Field Visit & Presentation	0	0	3	1.5
MJ-4	AN406	Storytelling Using Multimedia	0	0	3	1.5
MJ-5	AN407	Production Design Workshop-II (Specialization: Animation, Film Making, Visual Effects, Games, and Comics)	0	0	8	4
MJ-6	AN408	Degree Showcase Project-II				6
<b>TOTAL</b>						<b>20</b>

**SEMESTER-VIII**

Category	Course Code	Courses	Lecture	Tutorial	Practical	Total Credits
<b>LABORATORIES</b>						
RP-1	AN409	Industrial Training / Research Project / Dissertation				12
MJ-1	AN410	Final Exhibition / Showcase/ Publication				8
<b>TOTAL</b>						<b>20</b>
<b>TOTAL PROGRAM CREDITS FOR FOUR YEAR B.Sc. HONOURS PROGRAMME</b>						<b>170</b>
<b>Note: Students will be awarded UG Degree- B.Sc. Animation &amp; Multimedia with Honours.</b>						

**ELECTIVES (LIST OF SKILL ENHANCEMENT COURSES)**

Programme Elective (PE)	Code No	Name of the PE Course	L	T	P	C
			(Periods	(Periods	(Periods	
			/week)	/week)	/week)	
(SEC-I)	AN107	Basic Drawing Skills	1	1	2	3
	AN108	Presentation Design	1	1	2	3
	AN109	Photography	1	1	2	3
	AN110	Advertising Campaign Design	1	1	2	3
	AN111	Desk Top Publishing	1	1	2	3
(SEC-II)	AN119	Basic Writing Skills	1	1	2	3
	AN120	Web Design	1	1	2	3
	AN121	Comic Illustration	1	1	2	3
	AN122	Product Modeling in 3D	1	1	2	3
	AN123	Video Making	1	1	2	3
	AN124	Digital Animation	1	1	2	3
	AN125	Game Appreciation	1	1	2	3
(SEC-III)	AN208	Calligraphy	1	1	2	3
	AN209	Fiction Writing	1	1	2	3
	AN210	Architectural Modeling	1	1	2	3
	AN211	Basic Video Editing	1	1	2	3
	AN212	Sound Design	1	1	2	3
	AN213	3D Animation	1	1	2	3
	AN214	Matte Painting	1	1	2	3

**LIST OF PROGRAM ELECTIVES (PE)**

Programme Elective (PE)	Code No	Courses	L	T	P	C
			(Periods/week)	(Periods/week)	(Periods/week)	
PE-I	AN225	Story Boarding	1	0	2	2
(Semester-IV)	AN226	Stop Motion	1	0	2	2
	AN227	Story Appreciation for Gaming	1	0	2	2
	AN228	Fundamentals of Theatre and Acting	1	0	2	2
PE-II	AN311	Classical Animation	1	0	2	2
(Semester-V)	AN312	3D Sculpting	1	0	2	2
	AN313	3D Motion Graphics and Dynamics	1	0	2	2
	AN314	Magazine Design	1	0	2	2
	AN315	Design Thinking	1	0	2	2
PE-III	AN322	VFX in 2D Animation	1	0	2	2
(Semester-VI)	AN323	3D Compositing for Camera	1	0	2	2
	AN324	Graphic Novels	1	0	2	2
	AN325	Media Studies	1	0	2	2
	AN326	Film Production Design	1	0	2	2
	AN327	Product Designing and Visualization	1	0	2	2

**LIST OF MULTIDISCIPLINARY COURSES**

SEM.	Code No	Name of the Course	L	T	P	C
			(Periods/week)	(Periods/week)	(Periods/week)	
	MT115	Business Economics	3	0	0	3
	MT119	Introduction to Human Resource Management	3	0	0	3
	MT120	Introduction to Marketing Management	3	0	0	3
	MT123	Business Communication	2	0	2	3
	MT417	French Language	3	0	0	3

**LIST OF VOCATIONAL COURSES**

SEM.	Code No.	Name of the Course	Mode of delivery & credits			Total Credits
			<i>L-Lecture; T-Tutorial; P-Practical</i>			
			L (Periods/week)	T (Periods/week)	P (Periods/week)	C
SEM II	AN126	Internship on Digital Marketing				4
SEM IV	AN229	Internship on Multimedia				4