



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

COURSE BOOK
B. Sc. (Animation and Multimedia)

CBCS

Curriculum

2024

School of Media and Communication Centurion University of Technology and Management

<http://www.cutm.ac.in>

The Media and Entertainment industry is undergoing a transformation with several waves of digitalization. This rapid progress has led to a shortage of professionals capable of developing adequate content for the industry using digital platforms. The B.Sc. Animation and Multimedia course offered by Centurion University of Technology and Management aims to bridge this gap by developing professionals equipped with strong digital knowledge and skills.

PROGRAMME OBJECTIVES:

The **B.Sc. Animation and Multimedia** program aims to meet the growing demand for skilled and well-trained media and entertainment professionals by integrating multiple domains of the industry. The program focuses on developing knowledge and skills in Game Design and Development, Animation, and VFX. Students will undertake a one-year internship in the industry to gain hands-on experience and become industry-ready by the end of the program.

- The **B.Sc. Animation and Multimedia** program is an undergraduate degree course that helps students learn modern and advanced **2D and 3D animation techniques** using the latest software.
- The course is a perfect choice for those who want to showcase their creativity in digital film production technology, animation techniques, visual effects, and game design. It is ideal for individuals passionate about working with gaming companies, animation studios, and entertainment firms.

ELIGIBILITY:

Students must have passed 10+2 in any stream or an equivalent public examination conducted by a recognized Board of Education in India or abroad.

PROGRAMME DURATION:

The 4-year (3+1) degree course of B. Sc. Animation and Multimedia will consist of eight semesters. One academic session of one year will be devoted to two semesters. The last two semesters will be spent by the candidate in industry as interns. Candidates shall be admitted to B.Sc. Animation and Multimedia 1st Semester only and thereafter required to qualify all Eight Semesters consequently to earn the degree. Minimum credit requirement for the degree: **160**

CAREER OPPORTUNITY:

After completion of B.Sc. Animation and Multimedia, one can join Animator, Character Designer, 3D Modeler, 3D Rigging Artist, 3D Lighting Artist, Modeling Artist, Texturing Artist, VFX Artist, Video Editor, Storyboard Artist, Graphic Designer, Motion Graphics Artist, Game Designer, Game Developer, Game Tester, Level Designer, Game Writer, Game Audio Engineer, Multimedia Artist, Animator Educator, UI Designer, UX Designer etc.

COURSE STRUCTURE:

Basket	Basket Category	Minimum Credits to be acquired
I	Major / Core Discipline	80
II	Domains/Minor Stream	32
	Multidisciplinary	09
	Skill Enhancement Courses (SES)	09
III	Ability Enhancement Courses (AEC)	08
IV	Value Added Courses	06-08
V	Summer Internship	02-04
VI	Research Project / Production Action Learning	12
Total		160

MAJOR / CORE DISCIPLINE

Sl. No	Course	Credit	Type T+P+P
1	Creative writing	4	1+1+2
2	Culture, Communication, and Society	4	2+1+1
3	Design Thinking	4	1+2+1
4	Introduction to Film Analysis	4	0+2+2
5	Media Laws and Ethics	4	2+0+2
6	Photography	4	1+1+2
7	Cinematography	4	1+1+2
8	Basic Drawing Techniques	4	0+3+1
9	Basics of Photoshop	4	0+3+1
10	Scripting and Storyboarding Techniques	4	0+2+2
11	Digital Sound Production	4	1+2+1
12	3D Sculpting Tools & Techniques	4	0+3+1
13	3D Modeling	4	0+3+1
14	3D Animation	4	0+2+2
15	Portfolio Development	4	0+0+4
16	Digital Tools for Graphic Design	4	1+2+1
17	Video Editing	4	1+2+1
18	3D Texturing	4	0+2+2
19	Environment Design	4	0+1+3
20	2D Animation	4	1+1+2
Total		80	

MINOR STREAM / DOMAIN

Animation and VFX			
Sl. No	Course	Credit	Type T+P+P
21	Lighting & Rendering	4	0+2+2
22	Rigging and Skinning	4	0+2+2
23	Particles and Dynamics	4	0+2+2
24	3D Compositing and Visual Effects	4	0+3+1
	Motion Graphics	4	0+2+2
26	Advanced Film Making	4	0+1+3
27	Advanced Character Modelling	4	0+2+2
28	Advanced Character Animation	4	0+2+2
Total		32	

Game Design and Development			
Sl. No	Course	Credit	Type T+P+P
29	Introduction to Blender	4	0+2+2
30	UI & UX DESIGN	4	1+2+1
31	C++	4	0+3+1
32	Introduction to Java	4	0+3+1
33	Python	4	1+2+1
34	Mobile Game Development	4	0+2+2
35	Unreal Engine	4	0+3+1
36	AR/VR	4	1+2+1
Total		32	

MULTIDISCIPLINARY

- University Basket

ABILITY ENHANCEMENT COURSE (AEC)

- Job Readiness
- University Basket

SKILL ENHANCEMENT COURSE (SEC))

- University Skill Basket

VALUE ADDED COURSES

- **Environmental Science**
- **Universal Human Values**

SUMMER INTERNSHIP

- **Internship**

RESEARCH PROJECT / DISSERTATION