



St. Xavier's College, Ranchi
ACCREDITED BY NAAC WITH "A" GRADE

COURSES OF STUDIES

1 (ONE) YEAR DIPLOMA

(UNDERGRADUATE)

3D ANIMATION & GAME DESIGNING



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3D ANIMATION & GAME DESIGNING PROGRAMME

I. Syllabus for 3D ANIMATION & GAME DESIGNING (Undergraduate Diploma).

II. YEAR OF IMPLEMENTATION: This Syllabus will be implemented from July 2013 onwards.

III. PREFACE

In the past few years, the world of audio-visual production has gone through a sea change. One of the major areas that have been developed immensely is animation and multimedia related application. The popularity and prospects of the animation is well known. There is a vibrant vast market and potential for web related application and multimedia CD-ROMS/ Games development, in addition to animation films. In the next five years, India will become a major outsourcing destination for animation-related work. There is a huge demand for trained manpower to support these activities. Thus, it is high time to start this course to keep pace with the changing environment of audio-visual art. Foundation training is given on key areas of game development theories and concepts whilst allowing specialization studies across all standard development platforms of 3Dimensional computer animation..

IV. GENERAL OBJECTIVES OF THE COURSE:

Consumer demand for high quality animation and visuals has fueled the growth of the computer animation industry over the last decade. Visual artists with excellent design and character animation skills and a firm understanding of computer animation technology are in demand worldwide. With the assistance of new computer animation technologies, skilled artists are producing stunning visuals for computer games, multimedia, web, television and feature film.

The goal of the 3D Animation program is to prepare talented artists for a successful career in the computer animation field. This intensive one year training program is designed for accomplished artists and animators wishing to develop the artistic and technical skills necessary to work in the computer animation industry. This production-oriented approach to training prepares students for a successful animation career in the entertainment industry.

The program is focused on developing students' creative and artistic skills in the areas of drawing, design, modeling, texturing and animation expertise. Successful graduates will complete a professional quality demo reel showcasing their 3-D design and computer animation capabilities.

V. PRIOR LEARNING

In our opinion, computer animation training is a waste of your money if you are coming into this field "cold." The following describes areas of competence which



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should be considered for success in the 3D Animation & Game Designing Program at Xavier's Ranchi:

Art and Design Experience

A portfolio of work which demonstrates your ability to draw and design will be required for application to the program. Excellent creative and artistic vision is necessary in order to develop good quality animation skills.

Basic Computer Skills

If you are familiar with computer operating systems and a variety of software including 2D and 3D programs, it will be easier for you to learn the high-end computer animation packages.

Animation Experience

Knowledge of traditional animation principles and timing will be an important asset for success in our 3D Animation and Game Designing Program. There are number of part-time and summer courses available in various private Institutes to get you started.

Personal Vision

You should have a clear idea of what you want to achieve and what you want to do with the knowledge and experience you will acquire. You should have researched your options and come to the conclusion that this program is the "tool" to realize your goals.

VI. CAREER OPPORTUNITIES

Graduates of the 3D Animation & Game Design diploma will be qualified to produce 3D characters and animation using a variety of software tools.

Graduates may find work in computer games, multimedia, web, animation film and television production companies. Students may specialize in:

- Character Design, Sculpting and Texturing
- Environment Design, Modeling and Texturing
- Material Shading and Lighting
- Character Rigging and Technical Direction
- Character Animation

VII. STRUCTURE OF COURSE AND MARKS DISTRIBUTION

Theory Papers 200 and Practical Papers 600

VIII. HIGHER STUDY OPPORTUNITY

The Diploma Program of 3D Animation & Game Designing will pave the path to future design career in the following areas:

1. Computer Animation & Visual Effects
2. Film and Visual Cultures
3. Visual and Material Culture
4. Film and Media Studies
5. Visual Communication Design



Programme Structure

3D ANIMATION & GAME DESIGNING

- The duration of the program shall be of one year divided into two semesters. Each semester shall comprise of 8 courses (4 Theory and 4 Practical). The Theory Course is of 1 Credit where the Practical Course is of 2 Credits.
- Theory Course shall be of **25 marks** and for this the students will have to undergo a Theory Examination in the **End Semester**. The Practical Course shall be of **75 marks** and divided into two parts. The **Internal** and the **External**. In the Internal there will be total **4 assignments of 5 marks** and **5 marks** shall be awarded on the attendance of a student on the basis of the following scheme:

Attendance%	Marks
75-80	1
81-85	2
86-90	3
91-95	4
96-100	5

) **50 marks** shall be awarded for the **External** and for this the students will have to undergo a **Practical** Examination in the **End Semester**.

- The **Pass Marks** in **Theory** Course is **12**. The **Pass marks** in **Practical** Course is **34**. But a student has to score **minimum 10 marks** in the **Internal** and **minimum 23 marks** in the **External**. If a student fails to obtain the mentioned minimum marks in either Internal or External of Practical Course, he/she has to **repeat** that **Practical Course** in subsequent semester along with the regular students.
- A student shall have to obtain a minimum of **Grade C** in a course to be deemed as '**Pass**'.
- Grade in Practical course shall be awarded on the basis of marks obtained in Internal Assessment and End Semester Practical examination taken together.
- A learner shall be awarded Diploma only when he/she clears all the eight courses offered within a period of two years from the date of admission.



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ONE YEAR SEMESTER COURSE OUTLINE- 3D ANIMATION & GAME DESIGNING

Yr.	SEM	COURSE CODE	COURSE NAME	FULL MARKS	CREDITS	END SEM			PASS MARKS		
						TH.	INT	EXT.	TH.	INT	EXT.
I	I	3DAC101A	LEVEL DESIGNING FOR VIDEO GAMES (THEORY)	25	1	25	X	X	12	-	-
		3DAC101B	LEVEL DESIGNING IN 3DSMAX (PRACTICAL)	75	2	x	25	50	-	10	23
		3DAC102A	CHARACTER DESIGNING FOR VIDEO GAMES (THEORY)	25	1	25	X	X	12	-	-
		3DAC102B	CHARACTER DESIGNING IN 3DS MAX (PRACTICAL)	75	2	x	25	50	-	10	23
		3DAC103A	VIDEO GAME TEXTURING (THEORY)	25	1	25	X	X	12	-	-
		3DAC103B	VIDEO GAME TEXTURING IN 3DS MAX (PRACTICAL)	75	2	x	25	50	-	10	23
		3DAC104A	CG LIGHTING & RENDERING (THEORY)	25	1	25	X	X	12	-	-
		3DAC104B	CG LIGHTING & RENDERING IN 3DS MAX (PRACTICAL)	75	2	x	25	50	-	10	23
-	-	-	-	-	-	-	-	-	-	-	-
	II	3DAC205A	ANIMATION BG (THEORY)	25	1	25	X	X	12	-	-
		3DAC205B	ANIMATION BG IN MAYA (PRACTICAL)	75	2	x	25	50	-	10	23
		3DAC206A	ADVANCED CHARACTER DESIGNING (THEORY)	25	1	25	X	X	12	-	-
		3DAC206B	ADVANCED CHARACTER DESIGNING IN MAYA (PRACTICAL)	75	2	x	25	50	-	10	23
		3DAC207A	ADVANCED CG LIGHTING&TEXTURING (THEORY)	25	1	25	X	X	12	-	-
		3DAC207B	ADVANCED CG LIGHTING&TEXTURING IN MAYA (PRACTICAL)	75	2	x	25	50	-	10	23
		3DAC208A	ADVANCED 3D RIGGING & ANIMATION (THEORY)	25	1	25	X	X	12	-	-
		3DAC208B	ADVANCED 3D RIGGING & ANIMATION IN MAYA (PRACTICAL)	75	2	x	25	50	-	10	23
			TOTAL	800	24						



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The Diploma (UG) Examinations in 3D Animation & Game Designing as per Curriculum will be conducted in Two Semester. [Diploma] 1st year-Two Semester. It will spread over two academic sessions consisting **800 marks (Theory Papers 200 and Practical Papers 600)**.

NATURE OF QUESTION PAPER (Theory):

Ques: 1) Short Note Type Question (Any five out of eight)

Ques: 2) Description Type Question (Any two out of four)

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St. Xavier's College

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