

B.Sc. (Animation & Multimedia)

Syllabus (Fifth Semester)

BAM 501 : FUNDAMENTALS OF GAME TECHNOLOGY

Introduction to game engine and its components, game assets. Overview of component interaction inside game engine.

Game theory. The process of game development and its management. Concept of machinima, editing game engine footage.

Introduction to scripting and customizing game engine. Game testing- internal testing, external testing.

BAM 502 : DIRECTION FOR ANIMATION

The thought process of a director, Learning to take charge. The director's approach to text analysis and articulation of ideas. Interpretation and critique of scripts and storyboard to develop an over all vision of production. Techniques of set composition , blocking and movement. Time management, rehearsal schedules, staging , scene work . Blending all the theoretical concepts into a practical solution for the problem at hand. Being the king of the set. Managing a creative crew to bring out the director's vision. Leadership.

BAM 503 : COMPUTER LABORATORY ON ADVANCED CONCEPTS OF 3D MATERIALS, LIGHTING & RENDERING

Introduction to basic material types & procedurals. Study of concepts :- opacity, smoothness, specularly and color. Drawing 2d art templates. Creating complex effects like water fire and smoke. Unwrapping the map for various 3D characters.

Introduction to the mapping and advanced texturing techniques. Shadow maps, Raytraced shadows & radiosity. Concept of lighting system and shadows.

Introduction to 3 point, 2 point and dramatic lighting. Creating photo real environments and textures. Applying on to a 3D objects. Understanding how to produce final output, rendering the scene, rendering the effects, network rendering. Introduction to advance lighting effects. Mental ray rendering and Toon shade rendering. Creating various output as per the end user requirements and maintaining the resolution.

BAM 504 : COMPUTER LAB ON ADVANCED 3D ANIMATION.

Producing natural articulation of realistic & semi-realistic, imaginary characters. Body Language, Attitude, Acting, Character Interaction, Animal walks & runs, snakes & birds.

BAM 505: COMPUTER LABORATORY ON GAMING TECHNOLOGY.

Game engine navigation, user interface, menu bar and tool box. Introduction to level design, prop design and static elements of game art. Creating textures for levels and making the level functional. Expanding the level by adding lights and objects. Understanding machinima, capturing machinima to make short movie.

BAM 506: DEGREE SHOW CASE PROJECT - I

Students produce short projects as experiments in concepts, style or technology and are encouraged to take risks, break rules and explore their own unique creative potential. Students may either work in 2D or 3D, Gaming, according to their inclination prerequisites, or, with consent of the Faculty, they may work in any medium appropriate to their experience and resources. While producing their own work, students also serve as production planning team and production crew for all other projects.