



## **COURSE DESCRIPTION:**

A Game Design and Development course in ASFD covers a comprehensive range of topics that equip students with the skills and knowledge needed to create games across various platforms. Here are some common aspects that students will learn in this course:

**Introduction to Game Design:** Understanding the principles of game design, including mechanics, dynamics, and aesthetics (MDA framework), player psychology, and game genres.

Game Development Tools and Technologies: Familiarizing with game development engines such as Unity, Unreal Engine, Godot, or Construct and learning programming languages (e.g., C#, C++, JavaScript) and software development kits (SDKs) relevant to game development.

**Game Prototyping:** Developing rapid prototypes to test game concepts and mechanics, including paper prototyping, digital prototyping, and playtesting methodologies.

**Game Art and Animation:** Learning the basics of 2D and 3D art creation, including character design, environment design, animation principles, and asset creation using tools like Adobe Photoshop, Blender, Maya, or Zbrush.

**Level Design:** Understanding level design principles, including spatial layout, pacing, player flow, difficulty balancing, and environmental storytelling.

**Game Programming:** Developing programming skills for game development, including scripting gameplay mechanics, implementing user interfaces, managing game states, and optimizing performance.

**Game Audio:** Exploring the role of audio in games, including sound design, music composition, voice acting, and integrating audio assets into game projects.

**Game Production Management:** Learning project management methodologies specific to game development, including agile development, scrum, milestone planning, & team collaboration tools.

Game Narrative and Storytelling: Understanding narrative techniques for games, including worldbuilding, character development, branching narratives, dialogue systems, and interactive storytelling.

**User Experience (UX) Design:** Designing intuitive and engaging user interfaces (UI), menus, controls, and feedback systems to enhance the player experience.

**Monetization Strategies:** Exploring business models and monetization strategies for games, including free-to-play, premium, subscription, in-app purchases, advertising, and crowdfunding.

**Playtesting and Iterative Design:** Conducting playtests to gather feedback from players and iteratively improve game design, mechanics, and the user experience.









**Ethical and Legal Considerations:** Understanding ethical issues related to game content, player behavior, and representation, as well as legal considerations such as intellectual property rights and licensing.

**Emerging Technologies and Trends:** Staying updated on the latest trends, technologies, and platforms in the game industry, including virtual reality (VR), augmented reality (AR), cloud gaming, and indie game development.

**Capstone Project:** Completing a final project or portfolio that showcases the skills and knowledge acquired throughout the course, such as developing a playable game prototype or a polished game demo.

## **CAREER OPTIONS AS A GAME DESIGN & DEVELOPER:**

After completing a Game Design and Development course, individuals have various career options in the gaming industry and related fields. Here are some potential career paths:

**Game Designer:** Designing game concepts, mechanics, levels, and systems to create engaging and enjoyable gameplay experiences. Game designers collaborate with artists, programmers, and other team members to bring game ideas to life.

**Game Developer/Programmer:** Writing code and programming scripts to implement game mechanics, user interfaces, artificial intelligence (AI), networking features, and other aspects of game development.

**Game Artist/Animator:** Creating 2D and 3D artwork, characters, environments, animations, and visual effects for games. Game artists work closely with designers and developers to ensure that the visual elements align with the overall game vision.





Game Writer/Narrative Designer: Crafting storylines, characters, dialogue, and narrative arcs for games. Narrative designers collaborate with designers and developers to integrate storytelling elements seamlessly into gameplay experiences.

**Game Producer/Project Manager:** Overseeing the production process for game development projects, including scheduling, budgeting, resource allocation, risk management, and team coordination.

**Quality Assurance (QA) Tester:** Testing games for bugs, glitches, and usability issues to ensure quality and functionality before release. QA testers provide feedback to developers and assist in debugging and troubleshooting.

**User Experience (UX) Designer:** Designing intuitive and engaging user interfaces, menus, controls, and feedback systems to enhance the player experience and usability of games.

**Level Designer:** Designing and creating levels, puzzles, challenges, and environments for games. Level designers balance gameplay mechanics, pacing, and difficulty to provide enjoyable and rewarding player experiences.

## **Game Design & Development**

**Audio Designer/Sound Engineer:** Creating and implementing sound effects, music, voiceovers, and audio cues for games. Audio designers enhance immersion and atmosphere through sound design and integration.

**Monetization Specialist:** Developing strategies for monetizing games through various business models, including free-to-play, premium, in-app purchases, subscriptions, advertising, and microtransactions.

**Indie Game Developer:** Starting a small independent game development studio or working as a solo developer to create and publish original games independently or through digital distribution platforms.

**Educational Game Developer:** Designing and developing educational games and interactive learning experiences for schools, museums, corporate training programs, and other educational institutions.

**Serious Game Developer:** Creating games for non-entertainment purposes, such as healthcare, military training, simulations, therapy, and social impact initiatives.

**Game Industry Consultant:** Providing expertise and advice to game companies, startups, and organizations on game design, development, production, marketing, and business strategies.

**Game Journalist/Critic:** Writing reviews, articles, and analysis on games, game industry trends, and gaming culture for publications, websites, blogs, and social media platforms.

These are just a few examples of the diverse career options available to individuals with training and skills in game design and development. Depending on individual interests, strengths, and career goals, there are many paths to pursue within the gaming industry and related fields.



Semester I						
S. No.	Course Type	Course Title	Course Description			
1	Core Courses	Game Industry Themes and Perspectives	Explore the multifaceted landscape of the game industry with this course. Analyze key themes, trends, and perspectives shaping the gaming landscape, preparing you to navigate the dynamic world of game development, publishing, and consumption with critical insight and strategic foresight.			
2	Core Courses	Game Design & Development Processes	Dive into the fundamentals of game design and development with this course. Explore the iterative process of game creation, from concept ideation to prototyping and testing, gaining practical skills and insights to bring your game ideas to life in the competitive and ever-evolving gaming industry.			
3	Core Courses	HTML & Java Script for Game Development	Master the essential coding languages for game development with this course. Learn HTML and JavaScript to build interactive & dynamic game experiences for web browsers, equipping you with the skills to create engaging games that run seamlessly across different platforms.			
4	Core Courses	Illustrations and Graphic Design	Immerse yourself in the world of visual communication with the course, Illustrations & Graphic Design. Explore the principles of design, typography, and illustration techniques, empowering you to create compelling visual narratives and impactful designs across print, digital, and multimedia platforms.			
5	Core Courses	3D Modeling & Digital sculpting	Dive into the realm of three-dimensional artistry with the course, 3D Modeling and Digital Sculpting. Master industry-standard software and techniques to create lifelike models and sculptures, empowering you to bring your creative visions to life in animation, gaming, virtual reality, and beyond.			
6	Core Courses	Writing for Comics, Animation & Games	Unlock the art of storytelling across multiple mediums with the course, Writing for Comics, Animation & Games. Learn to craft dynamic narratives tailored for sequential art, animated features, and interactive gaming, honing your skills to captivate audiences in diverse and immersive storytelling landscapes.			
7	VAC	FBL	With an eye for creating Global Leaders Amity University encourages the students to opt and learn a foreign Business Language students select from numerous options in first semester and study it for the programme duration.			
8	VAC	Communication Skills	Learning and applying effective communication skills happens in this course.			
		Sen	nester II			
1	Core Courses	Game Development Programming Concepts ©++ & C#)	Dive into the core programming concepts of game development with this postgraduate course. Explore C++ and C# languages to understand fundamental principles, data structures, and algorithms essential for creating robust and immersive games, preparing you for a career in the dynamic and competitive gaming industry.			
2	Core Courses	Board and Card Game Design & Development	Explore the art and strategy of board and card game design in this course. Dive into the principles of game mechanics, player interaction, and balance, honing your skills to create innovative and engaging tabletop experiences that captivate players and stand out in the gaming market.			
3	Core Courses	Design Research & Pre- Visualization	Embark on a journey of design innovation with the course, Design Research & Pre-Visualization. Learn to conduct thorough research, conceptualize ideas, and visualize design solutions using advanced pre-visualization techniques, empowering you to create impactful and innovative designs across various industries and disciplines.			
4	Core Courses	3D Character Modeling and Texturing	Enter the realm of three-dimensional character creation with the course, 3D Character Modeling and Texturing. Learn industry-standard techniques for sculpting, modeling, and texturing to breathe life into your characters, preparing you to create stunning and immersive digital experiences in animation, gaming, & visual effects.			



## M.A. Game Design and Development

5	Industry Specific Course	Game Design and Development for Casual and Mobile Platforms	Enter the thriving world of casual and mobile game development with this course. Learn to design & develop addictive & engaging games optimized for mobile platforms, exploring key concepts such as user experience design, monetization strategies, & platform-specific considerations to create successful & captivating gaming experiences.
6	Employability & Skill Enhancement	Sound Designing for VFX, Animation & Games	Dive into the immersive world of sound design for VFX, Animation, & Games with the course. Explore advanced techniques and industry-standard tools to create rich and dynamic soundscapes that enhance storytelling and elevate the viewer's experience across various digital media platforms.
7	VAC	FBL	With an eye for creating Global Leaders Amity University encourages the students to opt and learn a foreign Business Language students select from numerous options in first semester and study it for the programme duration.
8	VAC	Behavioural Science	Gain a deep understanding of human behavior and decision- making processes with the course in Behavioral Science. Explore the intersection of psychology, sociology, and economics to uncover insights into individual and group behaviors, preparing you to address complex societal challenges & drive positive change.
		Sem	nester III
S No	Course Type	Course Title	Course Description
		Core	Courses
1	Core Courses	3D Charecter, Rigging & Animation	Unlock the art of 3D character animation with this course. Learn advanced techniques for character modeling, rigging, and animation, equipping you to create lifelike and expressive characters that come to life on screen in animation, gaming, and visual effects projects.
2	Core Courses	Game Design for Simulator	Delve into the intricacies of simulator game design, explore the principles of realism, immersion, and player engagement, mastering the art of designing and developing simulation games that replicate real-world experiences, environments, and systems with accuracy and authenticity.
3	Core Courses	UX UI for Game Design	Master the art of user experience (UX) and user interface (UI) design for games in this course. Learn to create intuitive and visually appealing interfaces, optimize player interactions, and enhance overall gaming experiences, equipping you with the skills to design games that captivate & engage players across diverse platforms.
		Specialization	Electives Courses
1	Specialisation Elective		Dive into the realm of social and pervasive game design, explore innovative concepts and strategies for creating interactive experiences that seamlessly blend with players' everyday lives, leveraging social interactions and mobile technologies to design games that engage players in new and immersive ways.
2	Specialization Elective	Game Optimization for Multiple Platforms	Maximize the performance & reach of your games across various platforms with this course. Learn advanced optimization techniques to ensure smooth gameplay experiences, efficient resource management, & compatibility across different devices, empowering you to create high-quality games that resonate with a wide audience.
3	Specialization Elective	Application of AR, VR, and MR technologies in Computer Games	Explore the frontier of gaming technology in this course. Learn to harness the power of Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR) technologies to create immersive and interactive gaming experiences, pushing the boundaries of gaming innovation and player engagement.
4	Specialization Elective	Virtual Production Using Unreal Engine	Unlock the power of virtual production with this postgraduate course. Explore advanced techniques in utilizing Unreal Engine for virtual production, enabling you to create immersive & photorealistic virtual environments, streamline production workflows, & enhance storytelling in film, television, & gaming projects.
1	NTCC	Independent Study and Research(PG) Guidelines	Non Teaching Credit Course focuss to develop the research acumn among the students



2	Mandatory Courses	Minor Project (Game Capstone in 2d / 3d Game to develop till 2 to 3 levels)	Minor Project is the precursor to the Capston Project students will be working on in their final semester.
3	Employability & Skill Enhancement Course	Professional Development	Advance your career trajectory and personal growth with the course "Professional Development". Acquire essential skills in communication, leadership, and strategic planning, empowering you to thrive in diverse professional environments and achieve your career goals with confidence and success
4	Industry Specific Course	Level Design	Dive into the intricacies of level design in this course. Explore advanced techniques in creating immersive game environments, mastering the art of pacing, balance, and player progression to craft compelling and memorable gaming experiences that captivate players from start to finish.
5	VAC	FBL	With an eye for creating Global Leaders Amity University encourages the students to opt and learn a foreign Business Language students select from numerous options in first semester and study it for the programme duration.
6	VAC	Professional Ethics	Explore the intersection of professional ethics, social responsibility, and sustainability in this postgraduate course. Delve into ethical decision-making frameworks, corporate social responsibility practices, and sustainability initiatives, preparing you to navigate complex organizational challenges while fostering positive impact and societal progress.
S. No.	Course Type	Course Title	Course Description
	,	Specialization	Electives Courses
1	Specialization Elective	Blender: Assest Development for Games	Unlock the potential of Blender for game asset development in this course. Explore advanced techniques in modeling, texturing, and animation using Blender, empowering you to create high-quality assets for immersive gaming experiences across various platforms.
2	Specialization Elective	Video Game Business	Gain insight into the business side of the gaming industry. Explore key concepts in game publishing, marketing, monetization strategies, & industry trends, empowering you to navigate the competitive landscape & succeed in the dynamic world of video game business.
3	Specialization Elective	Developing 2D Game	Dive into the world of 2D game development, learn essential skills in game design, programming, and asset creation to bring your game concepts to life in captivating 2D environments, preparing you for a career in the dynamic & rapidly growing gaming industry.
4	Specialization Elective	Developing 3D Game	Unlock the world of 3D game development, learn to create immersive and dynamic gaming experiences from scratch, mastering essential concepts in 3D modeling, animation, level design, and programming to bring your game ideas to life in the competitive gaming industry.
6	Industry Specific	Cama Davalanment Using	Evalore advanced techniques in leveraging artificial intelligence
	Industry Specific Course	Game Development Using Artificial Intelligence	Explore advanced techniques in leveraging artificial intelligence (AI) to enhance gameplay experiences, from creating intelligent non-player characters (NPCs) to implementing adaptive game mechanics, empowering you to design innovative and immersive games that adapt & respond intelligently to player actions in this course.
7	Supervised Independent Learning	Graduating Capstone Project (Game Capstone in 2d / 3d Game Development till 5/6 levels)	Embark on a comprehensive culmination of your game development journey. Undertake a capstone project to design and develop a fully realized 2D or 3D game, spanning multiple levels, showcasing your mastery of game design principles, programming skills, & creative vision in creating captivating & polished gaming experiences.
8	Outdoor Activity Based Courses (HVCO)	HVCO	Human Value and Community Outreach is the course where students reach out different organisation working directory with people and bringing improvements at the grass root level. In the course the students learn to contribute in the society building.
9	VAC	FBL	With an eye for creating Global Leaders Amity University encourages the students to opt and learn a foreign Business Language students select from numerous options in first semester and study it for the programme duration.

