AQC/10/23 – UG CID

Award title: BA (Hons)

Full Course Title: Computer Games Art 3 years

25/26

Awarded by	University for the Creative Arts
Taught by	University for the Creative Arts/ London College of Contemporary Arts
Location	Aldgate Campus, London
Language	English
Duration	3 years Full-time
Entry Criteria	As the UK's highest-ranking creative arts university, we want to attract the best and most creative minds in the country – so we take a balanced approach to candidate assessment, taking both individual portfolios and exam results into account. **That's why your portfolio is an especially important part of your application to study with us – and we can help.** Our academics can offer you expert advice on how to showcase your creative work and build a portfolio that will make your application stand out. More advice on how to create an exceptional portfolio is also available here, along with specific portfolio requirements for this course. Along with your portfolio, the standard entry requirements** for this course are: • 112 UCAS tariff points from accepted qualifications*, or • Pass at Foundation Diploma in Art & Design (Level 3 or 4), or • Distinction, Merit, Merit at BTEC Extended Diploma, or • Merit at UAL Extended Diploma, or • 112 UCAS tariff points from an accredited Access to Higher Education Diploma in appropriate subject, or • 27 points in the International Baccalaureate, see more information about IB entry requirements And 4 GCSE passes at grade A*-C and/or grade 4-9 including English and Maths

	Other relevant and equivalent level 3 UK and international qualifications are considered on an individual basis, and we encourage students from diverse educational backgrounds apply. If your first language is not English, you will need an IELTS score of 6.0 or equivalent. If you require a visa to study in the UK, you will also need a minimum score of 5.5 in each individual component. *To see the accepted QCF qualifications, visit: http://uca.ac.uk/study/accepted-qualifications/ ** We occasionally make offers which are lower than the standard entry criteria, to students who have faced difficulties that have affected their performance and who were expected to achieve higher results.
Recognition/Accreditation	N/A

Regulation	The University for the Creative Arts and its courses are regulated by the Office for Students. This course has been designed in line with Sector Recognised Standards and reference points, including the Art and Design Subject Benchmark Statement 2019 For further information about how the course is quality assured see Quality & Standards Manual .

WHAT TO EXPECT

You can expect a dynamic and immersive learning experience that combines theoretical knowledge with hands-on practical application. This well-rounded educational experience that not only equips you with the necessary skills but also challenges you to apply these skills in practical settings mirroring the complexities of the game development industry. The course aims to prepare you with a robust portfolio and the confidence to navigate the challenges of real-world game development scenarios.

Practical Skill Development:
Engage in a curriculum focused on the acquisition of practical, creative, and technical skills. Participate in project-based assessments that require the practical application of learned skills in simulated real-world scenarios.

Real-World Relevance:

Learn through real-world case studies and industry-relevant examples. Tackle industry-style challenges and projects, ensuring the skills acquired are directly applicable to the field of game development.

Studio Environment Simulation:
Experience a studio-like setting during dedicated Games Studio Practice modules. Showcase collaborative efforts, teamwork, and problem-solving abilities in scenarios reflecting the challenges of a professional game development studio.

Portfolio Building:
Develop a comprehensive portfolio throughout the course. Showcase the progression of skills and completed projects in a portfolio, providing a tangible representation of individual growth and capabilities.

Communication and Presentation Skills:
Emphasize effective communication and presentation skills. Present and demonstrate projects at various stages, honing the ability to articulate design choices and respond to feedback.

Group Collaboration:
Foster a collaborative learning environment with group projects. Evaluate individual contributions to group projects, teamwork, and the integration of diverse skill sets within a team.

Industry Exposure:
Provide insights into the industry through exposure to industry-style challenges. Tackle challenges and scenarios that mimic real-world industry demands, preparing you for the professional landscape. These include competitions such as “Search for a Star” and “The Rookies”.

Year 1 (Level 4)
Here you will start your journey into making a computer game from scratch as part of a multi-disciplinary team. You will learn skills in visual storytelling and games design, creating a paper prototype of your game idea. You will then move on to gain skills in 3D asset creation and lighting and texturing , progressing your game by taking your paper prototype and turning it into a digital prototype of the core game idea.

Year 2 (Level 5)
Whilst building your skills in 2D art and 3D environment and character modelling, You and your multi-disciplinary games development team will rapid prototype game ideas and assets choosing what to discard and what to develop further, moving onto the iterative prototyping stage of the development.

Year 3 (Level 6)
This year is about learning complex 3D modelling and fine tuning your skills to showcase in a curated portfolio. You will also work in a multi-disciplinary team , creating a game trailer demonstrating a vertical slice of the game as well as a playable demo version. You will end the year with a final year project in which you can develop and demonstrate a specific set of skills you feel passionate about to a high level.

Principles of this course

This course will deliver a personalised learning journey, following five key principles:

- Practice-led and professionally contextualised.
- Discipline-specific with interdisciplinary exposure.
- Technologically relevant
- Employment focussed.
- Internationalised learning

Highlights	Firstly, London's global status attracts industry professionals, offering you networking opportunities and exposure to cutting-edge developments. Additionally, access to renowned game studios and events enhances practical learning, while the city's multicultural environment prepares graduates for the international game design landscape. The city's vibrant cultural scene fosters creativity and innovation, providing you with diverse inspiration. Overall, London provides a dynamic setting that enriches the educational experience and equips you with a competitive edge in the evolving field of game design. Studying game degree in London offers unique advantages. The campus itself is in London in the Aldgate area of London, within proximity to a variety of games companies, known for their creative and experimental approach to game development. London hosts several annual games festivals and major esports events. One of which is the London Games Festival which is a celebration of video games across the UK capital. Since 2016, the event has supported over 1,000 games companies and generated £90m worth of business for participants, and in turn created nearly 600 jobs. Secondly, LCCA provides you with opportunities to work on real-world projects and gain hands-on experience from industry

	partners. These experiences can give you a better understanding of the industry pipelines and workflows.

Your Course – Unit by Unit

Year 1 (Level 4)

Module Title	Level	Credit	Core/ Option
Games Design Concepts and Visual Storytelling This unit encompasses various crucial aspects of game development. It delves into core game mechanics, such as rules, goals, challenges, and feedback, while exploring common mechanics like points and levels, using Unreal Engine Fortnite Engine (UEFN) as design and experimentation tool. Additionally, balancing and pacing techniques, emergent gameplay, and strategies for maintaining player interest are discussed and you create new UEFN game islands to develop gameplay and visual experiences. The unit also covers community building, understanding user bases, player motivations, and monetisation. Visual storytelling is a significant focus of this unit, with an in-depth study of visual elements and your impact on player emotions.	4	30	Core
Games Studio Practice 1 The Games Studio Practice Units, are where you collaborate to design, create, and test an original game created by you as a member of a multidisciplinary team consisting of a mix of students from both the Computer Games Design and Computer Games Art courses. Games Studio Practice 1 primarily focuses on the planning phase of game development, comprising two key elements: paper prototyping and digital prototyping to produce a simple game This Unit not only develops new prototyping skills but starts to scaffold your critical and contextual understanding of games development, exploring a variety of different aspects of games such as, their place in society, their influence on and by youth culture, player communities, motivations and behaviours. This Unit requires you to reflect upon your personal professional practice within a studio environment. You are taught and must reflect upon understanding group dynamics, different styles of working, personality types and the art of conflict resolution. As this unit is about professional practice you will work to a contract which is tailored to your role in the team with an element of negotiated deliverables	4	30	Core

Introduction to 3D Asset Creation for Games This unit offers a fundamental understanding of 3D modelling tailored for game development, encompassing both theoretical concepts and practical skills. You delve into fundamental principles while gaining proficiency in industry-standard 3D modelling software. The curriculum covers a wide range of topics, including 3D modelling fundamentals, software navigation, polygonal modelling, texture mapping, UV mapping, materials, shading, basic rigging, and insights into industry workflows.	4	30	Core
Lighting, Textures and Materials This unit offers a comprehensive understanding of lighting principles, texturing, material development, and creating a cohesive visual style within the game engines. You delve into fundamental lighting concepts such as ambient, diffuse, and specular models, along with distinctions between real-time and baked lighting. Advanced lighting techniques including Global Illumination (GI), High Dynamic Range (HDR) lighting, and lighting in open-world environments are also explored. Texturing essentials encompass 2D and 3D textures, UV mapping, unwrapping techniques, and texture filtering. Additionally, procedural texturing is introduced, highlighting its advantages and challenges in game development. Material creation and shading involve shader programming basics, material properties, and Physically Based Rendering (PBR) principles. Optimising textures and materials cover compression techniques, Level of Detail (LOD) for textures, and memory management.	5	30	Core

Year 2 (Level 5)

Module Title	**Level**	**Credit**	**Core/ Option**
Games Environments: 2D Art and 3D Modelling This unit offers a comprehensive journey through games environment design, blending traditional art and technical skills. You learn 2D art skills, exploring concepts such as shape, form, perspective, light, shadow, tone, and composition. Additionally, extending your expertise into the realm of environment 3D modelling, navigating the integration of narrative elements in 3D environments. The curriculum emphasises the balance between realism and stylised expression, preparing you to create visually compelling game environments. By mastering both traditional art principles and technical skills in 3D	5	30	Core

modelling, you develop the ability to create immersive and visually appealing game environments.			
Games Studio Practice 2 Games Studio Practice 2 is the second professional practice unit where you collaboratively design, create, and test a new and original game as part of a multidisciplinary team consisting of a mix of students from both the Computer Games Design and Computer Games Art courses. Within Games Studio Practice 2, you engage in rapid prototyping and iterative prototyping, two essential elements crucial for advanced game development from conception to a more refined stage. This unit will not only develop further your prototyping skills but will also make you explore deeper into the motivational drivers of players as both individuals and as teams in order to design a quality player experience which understands player psychology. This Unit requires you to reflect upon your personal professional practice within a studio environment by understanding the intricacies of being part of, creating and motivating a high performing team of members from technical and creative backgrounds. As this unit is about professional practice you will work to a contract which is tailored to your role in the team with an element of negotiated deliverables	5	30	Core
	5	30	Core
Vehicles and Weapons Modelling This advanced unit integrates cutting-edge hard surface 3D modelling techniques with principles of advanced design for vehicles and weapons. You delve into mastering subdivision surface modelling, scripting, and procedural modelling to create highly detailed and realistic models. The emphasis is on equipping you with the skills necessary to produce sophisticated and visually stunning models that meet both design and technical specifications. Through hands-on exercises and case studies, you develop proficiency in tools such as Substance Painter, advanced detailing, optimisation, and real-time rendering, ensuring they can create compelling designs for vehicles and weapons.	5	30	Core
Games Characters: 3D Modelling and Digital Sculpting This unit offers an extensive exploration of 3D character design and modelling, providing you with a comprehensive skill set applicable to the games industry as well as making you question cultural and societal stereotyping and its role in character design. You will also study the psychology of player attachment to characters and what this means in terms of design considerations. The unit begins with establishing a solid foundation in the core principles of 3D character design, covering key elements' definition	5	30	Core

and application, as well as the analysis of anatomy, proportions, and gestures essential for creating realistic characters. You then progress to mastering industry-standard digital sculpting tools, showcasing proficiency in manipulating virtual clay to sculpt various forms, facial expressions, and intricate details. Advanced modelling techniques, such as polygonal modelling and subdivision surfaces, are integrated, with special attention given to crafting stylised characters with unique design elements and exaggerated features.			

Year 3 (Level 6)

Module Title	Level	Credit	Core/ Option
Games Studio Practice 3 Games Studio Practice 3 is the third professional practice unit, where you collaborate to design, create, and test a game as a member of a multidisciplinary team consisting of a mix of students from both the Computer Games Design and Computer Games Art courses. This may be either a new and original game or with the agreement of the entire team the development of an earlier iteration of a game from Games Studio Practice 2. This is the production phase of the game development cycle, focussing on two main elements: technical prototyping and the creation of a vertical slice. These components are essential for refining the game's technical aspects and showcase its main features and quality to potential stakeholders This Unit requires you to reflect upon your personal professional practice within a studio environment by understanding the connection between the team decision making and industry trends and the potential stakeholder expectations. As this unit is about professional practice you will work to a contract which is tailored to your role in the team with an element of negotiated deliverables	6	30	Core
Final Year Project and Professional Portfolio Curation The Games Final Year Project and Professional Portfolio Creation unit guides you through a structured process aimed at developing your skills and showcasing your abilities in games art and design. For the Final Year Project, it begins with the identification of a topic of interest and the definition of project scope, and objectives aligned with academic and personal interests. Subsequent stages involve conducting a literature review to identify gaps for meaningful contributions, proposing the project, and planning timelines, milestones, and resource allocation. For the creation of a professional Games Art and Games Design portfolio, you reflect on your journey and develop the ability to curate a range of projects showcasing your skills and versatility, including personal projects, in your unique style. Demonstrating the design or artistic process with clear project descriptions, technical skills, and design principles, they craft a cohesive brand with a consistent theme, creating a strong portfolio.	6	60	Core

	6	30	Option
Games Creatures Design and Modelling This unit offers a comprehensive exploration of game creature design and modelling, focusing on preparing you for success in the gaming industry. It begins with an examination of the importance of unique creature designs in video games, analysing successful examples to understand your impact. You then progress through concept art and ideation stages, honing your ability to cultivate a visual narrative for your creature designs. The curriculum delves into advanced 3D modelling and digital sculpting techniques, emphasising sculpting organic forms and creating intricate details to bring creatures to life.	6	30	Option
Organic 3D Environments This Unit explores the intricate world of creating immersive natural landscapes within the context of game development. You will explore various aspects of terrain generation, mastering techniques to generate realistic and diverse landscapes. You will learn how to seamlessly tile textures to cover vast areas, ensuring a visually cohesive environment. Additionally, you will discover the art of crafting lifelike foliage and trees to populate 3D worlds, enhancing both aesthetics and gameplay immersion. Through hands-on projects and practical exercises, you will gain proficiency in developing organic 3D environments that captivate players and enhance overall gaming experiences.	6	30	Option

Who teaches this course?	You will be taught by a team of experts in the field. Some will be full time members of staff, and some will be lecturer practitioners, who will teach you whilst also working in industry.
What will learning look like?	You will engage in interactive workshop style lectures, skills-based workshops, guided groupwork and studio practice. The teaching and learning strategy is grounded in a practical approach, emphasising the acquisition of essential practical, creative, and technical skills, through interactive workshop style lectures and skills based workshops

	Games Studio Practice Units will align with the game development cycle. In the first year, you'll focus on planning and production, followed by production and testing in the second year, and pre-launch and launch activities in the third year. There are also live sessions which are recorded for later usage. Assessment on the course includes formative feedback to you throughout the development of your work and summative assessment when submitting tasks. The type of work you will be submitting are. ***Portfolios*** Require you to maintain a portfolio showcasing your work throughout the program. Encourage reflection on the evolution of your skills and projects. Evaluate the portfolio as a comprehensive representation of your growth and capabilities. ***Developer Logs*** Used in Games Studio Practice units, focusing on your application of skills and contribution in a simulated studio environment. In a variety of other units, it will be used in documenting your background research and assessing ability to address challenges commonly faced in game development. ***Collaborative Projects*** Group projects that mimic the collaborative nature of game development studios. Assessing a final product, teamwork, and the ability to integrate diverse skill sets within the team. Continuous assessment methods are integrated to monitor your progress, ensuring that you consistently demonstrate understanding and application of skills throughout the course. This commitment to ongoing improvement contributes to your readiness for the ever-evolving demands of the game development industry. Overall, the course is a comprehensive and strategic approach to preparing you for a successful and fulfilling career in the games industry.
By the end of the course, you will be able to:	*Knowledge:* • Acquire a thorough systematic knowledge and understanding of the 3D art development pipeline, frameworks and

	workflows underpinning creative and technical art game development. • Gain in-depth knowledge of industry trends, best practices, and emerging technologies within the game art field. • Develop a robust understanding of the various stages of computer game art pipeline, from planning and pre-production to launch. *Understanding:* • Demonstrate a deep comprehension of practical, creative, and technical aspects relevant to computer game art. • Understand how to analyse and solve complex problems commonly encountered in real-world game development scenarios. • Grasp the intricacies of collaborative teamwork within a studio environment, including effective communication and the integration of diverse skill sets. *Application:* • Apply acquired systematic knowledge and understanding to successfully plan, develop, and produce a game, demonstrating proficiency in each stage of the game development life cycle. • Showcase practical application of skills through the creation of a polished and thoroughly tested game prototype. • Utilise nuanced and highly effective communication and presentation skills to articulate design choices and respond adeptly to feedback. • Demonstrate the ability to work collaboratively within a high functioning team, integrating learned skills to address challenges typical of a professional game development studio. • Develop a comprehensive portfolio that serves as a tangible representation of your applied skills and progression throughout the course.
Student Support	Academic Mentors are available throughout your degree studies to discuss all matters relating to student well-being and academic

	support and the Careers Team will also support you in discussions around your potential or preferred career direction. You will also be supported by: - Unit leader for each unit - School support staff - Personal Academic Mentors - Careers Team - Technical support with IT and software - Canvas – a versatile online learning environment - Induction and ongoing re- induction sessions - Student Staff Course Boards - Library and Learning Resources
Our approach to employability is to:	This degree is designed to enhance your employability in the dynamic field of computer game art. Over the three-year period, the curriculum prioritizes hands-on learning, ensuring you acquire practical, creative, and technical skills essential for success. Through project-based assessments, you will actively apply these skills in simulated real-world scenarios, providing you with a tangible and industry-relevant skill set. Real-world relevance is a cornerstone of the course, with exposure to industry case studies and challenges. This approach aligns your skills directly with the demands of the game development field, offering you valuable insights into industry practices and preparing you for the challenges professionals face. The course further immerses you in a studio-like environment during dedicated practice modules, fostering collaborative efforts, teamwork, and problem-solving abilities. This exposure ensures you are familiar with the dynamics of a professional game development studio, enhancing your adaptability in real-world work settings. As you progress through the program, you will build a comprehensive portfolio showcasing your skills and completed projects. This portfolio serves as a tangible representation of your growth and capabilities, making you a compelling candidate for potential employers in the game industry. Effective communication and presentation skills are emphasized throughout the course. You will have opportunities to present and demonstrate your projects at various stages, honing your ability to articulate design choices and respond effectively to feedback. Collaborative learning is encouraged through group projects, providing you with firsthand experience in working within a team and integrating diverse skill sets. The evaluations of individual

	contributions to group projects ensure you develop the collaborative skills crucial for success in professional settings. Exposure to industry-style challenges and scenarios such as “Search for a Star” and “The Rookies” enhances your preparedness for the professional game development landscape. By facing challenges similar to those encountered in the industry, you will graduate with the confidence and skills necessary to thrive in the competitive field of game development. .

Our Commitments

Sustainability

University for the Creative Arts (UCA) is committed to sustainable development and reducing the environmental impact of activities through our teaching, research and day to day operations. Our courses align to Education for Sustainable Development as defined by UNESCO (2019): *‘Education for Sustainable Development empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity. It is about lifelong learning and is an integral part of quality education. ESD is holistic and transformational education which addresses learning content and outcomes, pedagogy and the learning environment. It achieves its purpose by transforming society’.*

Equality, Diversity and Inclusion

“Equality, diversity and inclusion are fundamental to our commitment to the extraordinary creativity of our staff and students. In the UK the standards we are required to adhere to are embodied in the 2010 Equality Act. Equally important is how these standards are evidenced through the values and behaviours of the University and the individuals of which it is comprised. As well as compliance with these standards we should in my opinion all be exemplars and role models. In terms of everyday actions, this means we should treat others with respect and dignity, and value your contributions because of, and not despite, our differences. I am personally committed to diversity and in this regard the University has the highest expectations of every employee and student alike”.
Professor Bashir Makhoul, President & Vice-Chancellor, University for the Creative Arts.

Overall methods of assessment	Written exams:	Practical exams:	Coursework:
Level 0	%	%	100%
Level 4	%	%	100%
Level 5	%	%	100%
Level 6	%	%	100%

Indicative course learning hours	Independent:	Structured:	Placement or Live Professional Activity:
Level 0	%	%	0%
	hours	hours	0 hours
Level 4	60%	40%	0.0%
	hours	hours	0 hours
Level 5	60%	40%	0.0%
	hours	hours	0 hours
Level 6	70%	30%	0.0%
	hours	hours	0 hours

Additional Course Costs	You are expected to have the basic tools such as drawing pads digital tablets
Equipment/materials recommended	We recommend that you bring at least one 1TB hard drive to back up your work. We provide network storage, plus access to the Adobe Suite, and an equipment store on each campus. Your own laptop capable of running the software used on the course is recommended.
Visits	Visits to galleries, museums and film production studios and facilities can take place as part of a unit of study or for a year group. Advance notice would be given of any associated costs