

# AMITY GLOBAL INSTITUTE

## MODULE SYLLABUS

Course	Bachelor of Science Honours in Computer Science (Games Development) (University of London)
Module Title	Games Development
Module Syllabus No. (if any)	CM3030
Syllabus / Content / Learning Outcomes	<p>This module will introduce you to i) industry standard tools for game development, such as game engines, and ii) the process of game development, including prototyping and playtesting. You will undertake a short series of game development projects, each lasting a set number of weeks and with a specific brief. For each project, you will propose a game that fits the brief, and then you will implement it. You are expected to deliver the proposed game and document it thoroughly. Through this process, you will develop an awareness of intended audience and the use of media for documentation.</p> <p>Contemporary video game production draws on a range of techniques from artificial intelligence (AI) to perform tasks such as controlling virtual agents and generating novel game content. This module will also introduce crucial game AI concepts. Compared to mainstream AI, the emphasis is less on optimal problem solving and more on entertaining the player with limited computational resources. This module gives students practical experience of programming game AI systems and an understanding of the relevant theory.</p>
No. of Teaching Hours	Contact Hours – Lectures, Seminars & online activity (22 x 3) = 66 Independent Preparation, pre-reading and analysis = 84 TOTAL = 150
Teaching Methods	Lectures, tutorials, case-studies analysis, research journals and group discussion.
Assessment Methods and Weightages	<p>One two hour unseen written examination and coursework</p> <p>Coursework 50% and Written examination 50%</p> <p>At least 35% in each element of summative assessment and a combined weighted average of at least 40%, subject to the application of rules for compensation.</p>
Skills for Maximising Learning Outcomes	Reading and research
Dates of Examinations, Major Assessments and Assignments	<p>Please refer to <a href="http://www.london.ac.uk">www.london.ac.uk</a> exam tables</p> <p>If your effective date of registration is:</p> <ul style="list-style-type: none"> <li>• 1 October, you will take your first examination(s) in March of the following year,</li> <li>• 1 April, you will take your first examination(s) in September of the same year.</li> </ul>
Topics covered	<ul style="list-style-type: none"> <li>• Introduction to game development, the games industry and game engines</li> <li>• Creating sprite based 2D</li> <li>• Scripting game interaction</li> <li>• 2D physics and collision</li> <li>• Game Design</li> <li>• Developing a Game project</li> <li>• State Machines</li> <li>• Pathfinding</li> <li>• Behaviour Trees</li> <li>• Recap and review</li> </ul>

Note: All Information provided to Amity will be kept strictly confidential except for those required under statutory requirements and by government authorities and relevant university partners and accreditation bodies as part of the regulatory or course requirements.