AMITY GLOBAL INSTITUTE

MODULE SYLLABUS

Course	Bachelor of Science Honours in Computer Science (Games Development) (University of London)
Module Title	Numerical Mathematics
Module Syllabus No. (if any)	CM1015
Syllabus / Content / Learning Outcomes	This module helps you hone your skills in thinking abstractly. It also introduces you to many of the standard continuous models used to help understand and design computational systems. Through this module, you will develop the fundamental numerical mathematical tools that will support you throughout the BSc programme. Particular attention is paid to notions of experimentation, reasoning, and generalisation. By taking this module, you will learn a wide range of the numerical mathematical concepts and techniques that underpin Computer Science. In particular, you will study number systems, special functions, graphing and linear algebra.
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	One two hour unseen written examination and coursework Coursework 50% and Written examination 50% 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.
Skills for Maximising Learning Outcomes	Reading and research
Dates of Examinations, Major Assessments and Assignments	Please refer to www.london.ac.uk exam tables If your effective date of registration is: • 1 October, you will take your first examination(s) in March of the following year, • 1 April, you will take your first examination(s) in September of the same year.
Topics covered	• Number bases and modular arithmetic. • Sequences and Series • Graph Sketching and Kinematics • Angles, Triangles and Trigonometry • Trigonometric functions • Exponential and logarithmic functions • Calculus: Limits and differentiation • Vectors and Matrices • Linear Transformations • Introduction to Combinatorics and Probability