

AMITY GLOBAL INSTITUTE

MODULE SYLLABUS

Course	Bachelor of Science Honours in Computer Science (Web and Mobile Development) (University of London)
Module Title	Programming with Data
Module Syllabus No. (if any)	CM2015
Syllabus / Content / Learning Outcomes	This module will show you how to work with data: getting data from a variety of sources, visualizing data in compelling, informative ways, processing data to make it useful and shareable, and reasoning with data to test hypotheses and make parameterised predictions. The module will also introduce you to a new language and programming environment that is well-adapted to languages for these applications.
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: <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Setting up the programming environment • Control structures, functions and comprehensions. • Data-driven programming • Visualising data • Descriptive statistics • Getting data • Processing data: cleaning, normalizing, and scaling • Classification with K-nearest neighbours • Bayes' theorem and naïve Bayes classification • Clustering

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.