

# AMITY GLOBAL INSTITUTE

## MODULE SYLLABUS

Course	Bachelor of Science Honours in Computer Science (University of London)
Module Title	Data Science
Module Syllabus No. (if any)	CM3005
Syllabus / Content / Learning Outcomes	By taking this module, you will gain a data science skillset. With these skills, you will be able to write computer programs that can read, process and analyse textual and numerical data. You will be able to generate plots and interactive visualisations of data. You will understand how to apply statistical methods to the interpretation of results. You will be able to use data analysis in the decision-making process. You will also learn about a range of application domains for data science.
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 <a href="http://www.london.ac.uk">www.london.ac.uk</a> exam tables If your effective date of registration is: <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 and development environment</li> <li>• Working with different types of data</li> <li>• Correlation and regression</li> <li>• Distributions and significance</li> <li>• Processing text data</li> <li>• Decision making based on data analysis: from correlation to causation</li> <li>• Introduction to data visualisation</li> <li>• Time-series data visualisation</li> <li>• Scientific data visualisation</li> <li>• Case studies: different contexts for data analysis</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.