

AMITY GLOBAL INSTITUTE

MODULE SYLLABUS

Course	Master of Science Data Science Awarded by Teesside University
Module Title	Interactive Visualisation
Module Syllabus No. (if any)	CIS4014-N
Content	<p>Dynamic, interactive visualisations enable the reader to explore the data for themselves through a variety of perspectives. Static visualisations are excellent for print medium but are restricted to showing a single perspective and do not handle multidimensional datasets well.</p> <p>Using an interactive graphic, the reader can zoom in on sections of the data which are of interest, explore more than one dimension at a time, and sort and filter to discover new patterns and themes within the data. Particularly useful is the ability to provide a macro/micro view of the same data, i.e., a big picture view of the full dataset from which the reader can then 'drill down' into the lower-level detail.</p> <p>This module uses the JavaScript libraries such as Data-Driven Documents (D3js) for creating animated, dynamic graphics for the web, and looks at other alternatives available.</p>
No. of Teaching Hours	12 X3hrs=36 hours
Teaching Methods	Lectures are supported by laboratory-based practical's. Lectures include on-line, interactive demonstrations. Practical's are used to enhance the acquisition of key skills
Assessment Methods and Weightages	70% coursework 30% Presentation
Skills for Maximising Learning Outcomes	Reading and Research
Dates of Examinations, Major Assessments and Assignments	See University Academic Calendar
Recommended Text	Data visualization with D3 4.x cookbook 9781786468253 Zhu, Nick 2017 - 2nd ed
Additional Reference Texts (if any)	
Additional Remarks (if any)	

No.	Learning Outcomes/Aims
1	Analyse the context of the visualisation and make appropriate design choices for a given audience.
2	Evaluate the effectiveness of the technologies and techniques employed.
3	Reflect on team and individual performance to further develop learning.
4	Demonstrate an understanding of advanced features of software visualisation libraries to create interactive charts embedded within a graphical user interface.
5	Analyse a data visualisation problem and design a detailed solution.
6	Evaluate the effectiveness of the technologies and techniques employed.
7	Work effectively as a member of a team and then present and defend work in a professional manner.
8	Act autonomously in the production and deployment of an interactive solution in response to a detailed brief.

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.