

H8DG: Data Governance

Module Code:	H8DG
Long Title	Data Governance APPROVED
Title	Data Governance
Module Level:	LEVEL 8
EQF Level:	6
EHEA Level:	First Cycle
Credits:	5
Module Coordinator:	Sophie Flanagan
Module Author:	ORLA LAHART
Departments:	School of Computing
Specifications of the qualifications and experience required of staff	Master's and/or PhD degree in computing or cognate discipline. May have industry experience also.
Learning Outcomes	
<i>On successful completion of this module the learner will be able to:</i>	
#	Learning Outcome Description
LO1	Analyse the concepts of data governance, data management and data strategies and critically evaluate them in the context of organizational data policies, processes and procedures.
LO2	Comprehend the regulatory and legislative requirements around data management and stewardship, synthesize their implications for organisational data management, processes and procedures, and apply their implications for the collection, storage, use and dissemination of organizational data resources.
LO3	Comprehend the ethical underpinnings of good data governance, in the context of an overall framework for data management and apply the resultant framework to emerging areas of technological development
LO4	Analyse the range of internal and external stakeholders concerned with the design and implementation of an effective data governance strategy. Comprehend and evaluate the role and responsibilities across different organizational levels and functional areas related to the data management and governance functions such as Chief Data Officer.
LO5	Apply a range of tools and techniques for the effective governance, management integrity and security of data resources in an organizational context and evaluate their application in the context of specific case studies and scenarios.
Dependencies	
Module Recommendations	
No recommendations listed	
Co-requisite Modules	
No Co-requisite modules listed	
Entry requirements	Use programme level text

H8DG: Data Governance

Module Content & Assessment			
Indicative Content			
Introduction to Data Governance Course overview; Purpose of Data Governance; Evolving role of data in a modern organisation; Data risks; Costs, Benefits and ROI from data holdings; Relationship to other course modules.			
Concepts and Definitions To cover the scope of Data Governance along with an explanation of other related concepts such as Data Strategies, Principles and Frameworks. Will consider Data Governance from Strategic, Functional and Operational/Technical levels within an organisation.			
Stakeholders, Roles and Responsibilities To include information on the range of stakeholders (internal, external) that an organisation should be aware of as well as a more detailed exposition of the roles and responsibility of a range of data professional roles within an organisation.			
Data Protection Legislation and Regulatory environment An outline of the key legislative and regulatory measures across a range of jurisdictions and the role of data protection authorities. Evaluate the implications of legislation for data professionals as well as illustrative Case Studies.			
Ethical considerations for data analytics Rationale for studying ethical considerations in Data Governance together with exposition of ethical dilemmas, frameworks and case studies for addressing them.			
Data Governance – contemporary case studies A range of contemporary data governance issues covering data protection, usage of social media data and technical area. A guest speaker with expertise in the area will make a keynote presentation (subject to availability).			
Assessment Breakdown			%
Coursework			100.00%
Assessments			
Full Time			
Coursework			
Assessment Type:	CA 1	% of total:	30
Assessment Date:	n/a	Outcome addressed:	1,2
Non-Marked:	No		
Assessment Description: Group assignment where each team has to argue a proposition related to the items covered in the first part of the course in a debate style format.			
Assessment Type:	CA 2	% of total:	70
Assessment Date:	n/a	Outcome addressed:	1,2,3,4,5
Non-Marked:	No		
Assessment Description: Application of learning from course to analyse a case study organisation and design a data governance framework and strategy through the preparation of a report and infographic.			
No End of Module Assessment			
No Workplace Assessment			
Reassessment Requirement			
Coursework Only <i>This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.</i>			
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H8DG: Data Governance

Module Workload				
Module Target Workload Hours 0 Hours				
Workload: Full Time				
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	Weekly Lecture	24	Every Week	24.00
Tutorial	Weekly Lab	12	Every Week	12.00
Independent Learning	Research	89	Every Week	89.00
Total Weekly Contact Hours				36.00

Module Resources	
Recommended Book Resources	
<p>Harkish Sen. (2019), Data Governance, 1. 6, Technics Publications, p.208, [ISBN: 1634624785].</p> <p>Mike Loukides,Hilary Mason,Dj Patil. (2018), Ethics and Data Science, 5, [ISBN: 9781492078227].</p> <p>Dama International. DAMA-Data Management Body of Knowledge, 2nd. 17, p.628, [ISBN: 9781634622349].</p>	
Supplementary Book Resources	
<p>Katherine O'Keefe,Daragh O'Brien. (2018), Ethical Data and Information Management, Kogan Page, p.344, [ISBN: 0749482044].</p> <p>Rupa Mahanti. (2019), Data Quality: Dimensions, Measurement, Strategy, Management and Governance, Quality Press, p.526, [ISBN: 9780873899772].</p>	
Supplementary Article/Paper Resources	
<p>Fiesler, Casey; Proferes, Nicholas. (2018), "Participant" Perceptions of Twitter Research Ethics, Social Media + Society, Vol. 1, Issue 4, p.14, [ISSN: 2056-3051], http://journals.sagepub.com/doi/10.1177/2056305118763366</p> <p>Samuel, Gabrielle Derrick, Gemma E. van Leeuwen, Thed. (2019), The Ethics Ecosystem: Personal Ethics, Network Governance and Regulating Actors Governing the Use of Social Media Research Data, Minerva, 57, [ISSN: 15731871], https://doi.org/10.1007/s11024-019-09368-3</p> <p>Siau, Keng Wang, Weiyu. (2020), Artificial Intelligence (AI) Ethics, Journal of Database Management, 31, [ISSN: 1063-8016].</p> <p>Kemper, Jakko Kolkman, Daan. (2019), Transparent to whom? No algorithmic accountability without a critical audience, 22.</p> <p>Hand, David J.. (2018), Statistical challenges of administrative and transaction data, Journal of the Royal Statistical Society. Series A: Statistics in Society, 121, [ISSN: 1467985X].</p>	
Other Resources	
<p>[Website], Myles Suer, ITIL, and Roger Nolan (2015).. (2015), Using COBIT 5 to Deliver Information and Data Governance, 2015, https://www.isaca.org/resources/news-and-trends/newsletters/cobit-focus/2015/using-cobit-5-to-deliver-information-and-data-governance#:~:text=COBIT%20establishes%20seven%20enablers,IT%20costs%2C%20benefits%20and%20risk</p> <p>[Website], Chrisden Hart. (2018), new-european-union-data-law-gdpr-impacts -are-felt-by-largest-companies-google-facebook, https://www.forbes.com/sites/chrisdenhart/2018/05/25/new-european-union-data-law-gdpr-impacts-are-felt-by-largest-companies-google-facebook/#71dc3af4d367</p> <p>[Website], Association of Computing Machinery. (2018), ACM Code of Ethics and Professional Conduct, Association of Computing Machinery, https://www.acm.org/code-of-ethics</p> <p>[Website], Committee on Professional Ethics of the American Statistical Association. (2018), Ethical Guidelines for Statistical Practice, American Statistical Association, https://www.amstat.org/asa/files/pdfs/EthicalGuidelines.pdf</p> <p>[Website], IEEE. IEEE Code of Ethics, IEEE, https://www.ieee.org/about/corporate/governance/p7-8.html</p> <p>[Website], UK Government. (2018), Data Ethics Framework, UK Government, https://www.gov.uk/government/publications/data-ethics-framework/data-ethics-framework</p> <p>[Website], UK Government. (2018), Data Ethics Workbook, UK Government, https://www.gov.uk/government/publications/data-ethics-workbook/data-ethics-workbook</p> <p>[Website], European Union. (2016), General Data Protection Regulation (GDPR), European Union, https://eur-lex.europa.eu/eli/reg/2016/679/oj</p> <p>[Website], Fairness, Accountability, and Transparency in Machine Learning. Principles for Accountable Algorithms and a Social Impact Statement for Algorithms, Fairness, Accountability, and Transparency in Machine Learning, https://www.fatml.org/resources/principles-for-accountable-algorithms</p> <p>[Website], How To Break Anonymity of the Netflix Prize Dataset, https://www.securityfocus.com/news/11497</p> <p>[Website], Google. Artificial Intelligence at Google: Our Principles, Google, https://ai.google/principles</p> <p>[Website], Daisuke Wakabayashi. (2018), California Passes Sweeping Law to Protect Online Privacy, New York Times, https://www.nytimes.com/2018/06/28/technology/california-online-privacy-law.html</p> <p>[Website], The Trustees of Princeton University. (2020), Princeton Dialogues on AI and Ethics Case Studies, https://aiethics.princeton.edu/case-studies/</p> <p>[Website], Commission of the EU. (2020), Data protection as a pillar of citizens' empowerment and the EU's approach to the digital transition - two years of application of the General Data Protection Regulation, Commission of the EU, https://ec.europa.eu/info/sites/info/files/en_act_part1_v6_1.pdf</p> <p>[Website], Jamie Carter. (2016), Beyond the Atlantic: Data privacy laws around the world, TechRadar, https://www.techradar.com/news/world-of-tech/beyond-the-atlantic-data-privacy-laws-around-the-world-1322682</p>	
Discussion Note:	