

Data Governance and Ethics

Lead with integrity through ethical data management in business



Master ethical data management and regulatory compliance

Gain the skills to handle data responsibly while ensuring legal compliance and ethical practices in business operations.

This module delves into managing data within strict legal and ethical frameworks. You'll learn to assess various methods for acquiring, storing and transforming data, while understanding the complexities of data governance. It also equips you with strategies for managing business data ethically and effectively.

Additionally, the course covers the integration of artificial intelligence in data analysis, so you'll understand both the legal implications and technical requirements. It prepares future leaders to navigate the digital business landscape with a strong focus on ethical and societal responsibilities.

Learning objectives

This module emphasises responsible data management, covering legal, ethical and regulatory frameworks. Students will develop skills to handle data ethically, assess frameworks, and grasp the influence of artificial intelligence in data analysis. Here's what you'll accomplish:

Assess and critically compare regulatory processes for data acquisition, storage and transformation.

Map data flows to identify access rights and analyse data manipulation techniques.

Evaluate how data management affects security, confidentiality, and sustainability.

Critically analyse business data ethics and create responsible data management strategies.

Enhance the transparency and explainability of AI-driven data insights.

Criteria — are you eligible?

- **Language proficiency:** Minimum C1 English proficiency, plus 2 years' work or education in an English-speaking environment. IELTS: 6.0; TOEFL PBT: 600; TOEFL CBT: 200; TOEFL iBT: 100
- **Education:** Relevant EQF Level 6 qualification required (eg STEM, economics). Without this you will have an interview and assessment to evaluate certifications, qualifications or professional experience.
**EQF levels explained*
- **Residency:** This EU-funded programme is open to all EU nationals with a passport or valid ID from one of the 27 EU countries.

Data Governance and Ethics

Open doors with ethical data management and compliance skills

This course is perfect for tech enthusiasts, data scientists, IT professionals and business analysts. It's an excellent fit for those pursuing roles like data manager, compliance officer, IT consultant, or AI specialist. Graduates will gain the expertise to manage data responsibly, ensuring legal compliance across diverse sectors.

A revolutionary online learning experience

This entirely online module blends cutting-edge teaching techniques with expert guidance. Students participate in live lectures, independent study and lab work. Core approaches include problem-based learning, gamification, and flipped classroom methods.

Advanced technologies like artificial intelligence enrich the digital learning environment, creating a highly interactive and immersive experience that fosters both deep comprehension and practical abilities. The course concludes with a proctored test and a final exam, each contributing 50% of the grade, ensuring thorough mastery of the content.

Time commitment

- Classroom and demonstrations: 24 hours
- Practical work/tutorials: 24 hours
- Independent learning: 77 hours
- Total: 125 hours

Credit points

- 5 ECTS

Full course content

Subjects covered

Data Governance and Ethics is a 5 ECTS module delivered over 4 hours per week for 12 weeks. An indicative schedule of topics to be addressed each week is outlined below:

● Introduction to Data Governance (DG)

- Overview of data governance
- Importance and objectives of data governance in contemporary organisations

● Big Data Management Principles

- Data lifecycle management
- Principles of data quality, data provenance and data generation
- Understanding master data and its importance
- Methods for assessing and improving data quality

● Data Integrity and Security

- Techniques and practices for ensuring data integrity
- Data security challenges and strategies
- Implementing master data management and data quality processes

● DG Frameworks

- Examining policies, principles, rules, and procedures
- Different operating models
- Implementation challenges and best practices

● Data Architecture and Metadata Management

- Designing data architecture tailored to enterprise needs
- Using metadata to enhance data governance and usage
- Integrating metadata management tools into enterprise IT infrastructure

● Data Risk Management

- Understanding data-related risks
- Roles, responsibilities, and maturity levels in risk management
- Assessing risks related to data
- Managing risks related to data confidentiality and security

● Implementing Data Governance for Business Value Creation

- Aligning data governance with business strategy
- Identifying stakeholders and responsibilities
- Developing data governance policies and standards
- Utilizing data for predictive analysis and decision-making
- Use cases of data analytics to enhance business processes
- Strategies for monetizing data and creating new business models

● Ethical Concepts and Frameworks

- Introduction to ethics in data management
- Ethical principles, standards, and practice

● Privacy, Analytics, and Ethics

- Balancing analytics ambitions with privacy laws and ethical standards
- Case studies

● Ethics and AI

- Ethical considerations in AI and ML
- Mitigating biases and ensuring fairness

● Governance of AI and Advanced Analytics

- Emerging trends and challenges in AI governance
- Regulatory and ethical frameworks for AI

● Business Data Ethics and Future Trends

- Applying ethical principles in business data analytics
- Future trends in data governance and ethics