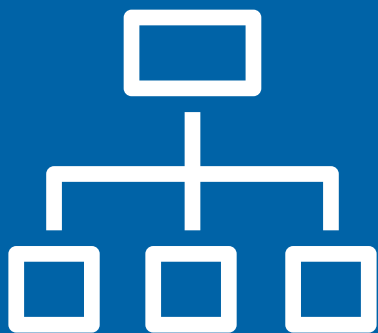# Data Science & Digital Humanities

The University of Vienna invests heavily in the field of Data Science and Digital Humanities. With 19 new professors, it pools a high number of experts in digitisation and research on digital transformation of society across faculty boundaries. These professorships were advertised in November 2018 and will be appointed in the coming one to two years. Funding is channelled through an increase in the university budget.

A significant increase in funding enables the University of Vienna to specifically invest in 73 new professorships and tenure track professorships in the coming years. It therefore sets interdisciplinary, interconnected and future-oriented priorities across faculties: Data Science and Digital Humanities and other socially relevant areas such as Health and Microbiome, Society and Communication, Molecular Biology and Cognitive Neuroscience as well as Materials and Quantum Science.

Collection of data as a global phenomenon

Through progressive digitisation in all areas of life, we produce data on a daily basis that will enable us to continuously develop new applications in business, industry, medicine, communication or in yet unknown areas. The global phenomenon of collecting data and the large amount of data pose new questions to the field of data science: What can this discipline do for other research areas? How does it contribute to the understanding of (societal) processes of digitisation? And what methods and models are necessary to visualise these processes?

19 new professors – two new master's programmes

To find answers to these questions, we need data science that works and provides education and information beyond its borders. The University of Vienna is ready to face these new challenges, thereby appointing 19 new professors in the field of Data Science and Digital Humanities. These professors will strengthen the interdisciplinary cooperation between the faculties. In addition, they allow for additional courses in the field of digitisation. It is planned to establish master's programmes in Data Science and Digital Humanities. There is a clear need for it: Society needs graduates who have the necessary skills to deal with the challenges of digital change.

Networked thinking and interdisciplinarity as success factors

The University of Vienna is proud to have, among others, two ERC grants, five FWF START Prizes and four FWF thematic doctoral programmes and special research programmes that can be thematically assigned to the field of data science. The interdisciplinary research platform Data Science@Univie has been in place since 2018 and covers methodology and application in the research fields of finance and industry 4.0, astronomy and medicine. A new focus is on the digital humanities. In doing so, the humanities and social sciences work with digital analysis methods.

The aim is to use innovative, dynamic processes such as digitisation through networks and interdisciplinarity for academic research in a sustainable way.

New professorships

- Business Analytics
- Quantitative Risk Management
- Digital Media Theory and Aesthetics
- Digital Philology
- Technosciences, Materiality and Digital Cultures
- Computational Communication Science
- Chemical Bioinformatics Network Analysis
- Data Science in Astrophysics
- Computational Terminology and Machine Translation
- Digital Education and Learning
- Security and Privacy
- Computational Medicine
  (in cooperation with the Medical University of Vienna)

Tenure track professorships

- Machine Learning (2 positions)
- Statistical Machine Learning
- Partial Differential Equations in the Applied Sciences
- Data-Driven Partial Differential Equations
- In silico Metabolism for Drug Discovery
- Physical Chemistry
- Algebraic Topology