DIGITAL HUMANITIES

MASTER

EPFL
ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

The Master of Science in Digital Humanities offers a unique and interdisciplinary study plan that encompasses data acquisition and analysis, audio and image processing, machine learning and pattern recognition, data visualization, and digital culture. The originality of the program is that the acquisition, organization, analysis and visualization of data focus on cultural, historical, and social media corpora.

Metamedia Center's iPad app at the Montreux Jazz Festival in 2014, © Alain Herzog / EPFL

Michel Benard, Google Zurich: "We are always looking for Computer Science engineers and graduates. Among them, these with a Master of Science in Digital Humanities are of great interest to us."

Interdisciplinary crossroad of opportunities

At the intersection of computer science, engineering, humanities, and social sciences, the Master of Science in Digital Humanities forms a new class of professionals who are able to analyze and interact with rich cultural, historical, and social media data. These skills are in high demand in academia, cultural institutions, and in the corporate sector.

According to McKinsey, we will face a shortage of millions analysts and managers who can analyze (big) data and make decisions based on the results. Graduates with a Master of Science in Digital Humanities have the scientific rigor necessary to develop new algorithms and systems, and to understand their impact in a broader social and cultural context.

Jutta Kaht, Secquaero (CH): "There is a need to merge technical expertise with humanities. Everywhere there is a pattern to be discovered."

Project-oriented learning

The aim of the Master of Science in Digital Humanities program is to merge theoretical learning with practical and project-oriented training asked for by today's businesses, academia, and the public sector.

Students have the opportunity to work on a variety of existing projects such as the Archives of the Montreux Jazz Festival, the Venice Time Machine, and research involving other corpora. These projects allow them to acquire the skills necessary to make sense of socially produced data.
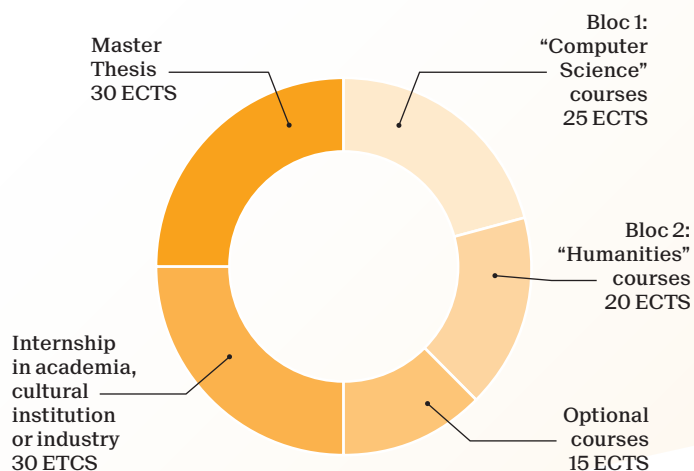
Projects in Digital Humanities involve a wide range of techniques and tools from the computer and communication sciences fields that are at the core of challenging new applications such as: extracting and analyzing human behavioral patterns using social network data; building an immersive setup to recreate the authentic audio-visual experience of past concerts from the Montreux Jazz Festival archives; conducting layout analysis over millions of digitized newspaper articles from the last 2 centuries; or creating a smartphone app to identify paintings or details in paintings using deep learning techniques.

The Master of Science in Digital Humanities enables students to interact with professionals from different academic and non-academic backgrounds. It allows them to transfer their skills into a successful career in the private or public sector.

Master of Science in
DIGITAL HUMANITIES

2-year program – 120 ECTS

Master Thesis 30 ECTS

Bloc 1: "Computer Science" courses 25 ECTS

Bloc 2: "Humanities" courses 20 ECTS

Internship in academia, cultural institution or industry 30 ETCS

Optional courses 15 ECTS

Study plan

	ECTS
Bloc 1: "Computer Science"	**25**
Applied data analysis	6
Computational social media	4
Digitalisation and visualisation	4
Introduction to digital humanities	4
Pattern classification and machine learning	7

	ECTS
Bloc 2: "Humanities"	**20**
Data corpora	4
Digital culture	5
Distant reading	5
SHS: Introduction to project	3
SHS: Project	3

Group of optional courses: 15 ECTS
Divided in 2 orientations: Audio-visual Media and Spatial Digital Humanities that gather courses from a wide range of EPFL sections such as Computer Science, Communication Systems, Electrical Engineering, Microengineering, Mathematics, Civil Engineering, Architecture, Environmental Engineering, Management of Technology and Entrepreneurship, and of course from the College of Humanites.

CAREER PROSPECTS

In this growing field, many opportunities in cultural institutions in Switzerland and abroad are available. A graduate of the Master of Science in Digital Humanities will be an asset in institutions like BnF Biblissima, Harvard Library, the Swiss National Library, national and international museums and the archives of International Organisations.

Moreover, the graduates will have access to jobs in companies like Facebook, Google, and Microsoft, and will have opportunities to work in companies like Nespresso, Cisco, or for radio and television networks.

ADMISSIONS

Admission to the Master will be on a case-by-case basis (sur dossier). Students will be evaluated based on their academic curricula, which include knowledge of statistics and advanced programming skills, and a demonstrable interest in the broader field of humanities and social sciences.

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