

INTERDISCIPLINARY APPROACHES of the WEB



<http://masterwebscience.org/>

« Interdisciplinary Approaches of the Web » master's programme

The « Interdisciplinary Approaches of the Web » master's program » will last two years and be aimed at students with a bachelor's degree in computer science, natural or social sciences who demonstrate an interest in the web and new technologies.

« Web Sciences », a field opened by Tim Berners-Lee at the beginning of 2000s, are constituted by a variety of disciplines relevant for the study of the web. We want to go beyond this interdisciplinarity to imagine a discipline that be transdisciplinary, forming a coherent body of knowledge, beyond the mere aggregation of different disciplines' points of view.

The experience we gained this year through workshops and seminars attended by researchers, students and entrepreneurs from various backgrounds shows that « social sciences of the web » must be a pillar for web sciences. The web, a social object, image or mirror of our society, represents a massive amount of easily collectible data. It calls for new methods in social sciences, and promises the emergence of a new field of study, supported by sciences of complex systems and social sciences. We want this field to be at the core of our training program.

The first year will be dedicated to acquiring a common body of knowledge. Preliminary courses will level the knowledge of students coming from various fields, and introduce to methods and approaches in research. The core curriculum will be courses in modeling of data, and “social sciences of the web” (including history, sociology, political sciences...). Students will then choose supplementary courses to deepen certain aspects of web sciences (web engineering, web and economics, ...). The « digital portfolios » should facilitate the professional integration of students, through an initiation to self-presentation techniques on the web.

The second year will essentially be devoted to personal work. Three projects in interdisciplinary pairs will be carried out through the year. Moreover, students will experiment different work environments during three short (three months) rotations. At least one of these internships will be in research, and one will be more applicative (e.g. in companies, governments...).

This year is aimed at preparing professional integration by allowing students to improve specific skills, develop projects and live different professional experiences.

We hope to open this training program in September 2009. We want to develop collaborations with similar initiatives existing at the European level ; open a transdisciplinary workspace in training, between academic and corporate worlds, research and its applications; give some keys for understanding the web and present society and their evolution.

Reference : *Science 2.0, Ben Shneiderman, Science vol 319, March 2008*

Sketch of the curriculum

Master's 1st year

Semester 1

UE: Introductory courses : 6 ECTS

- Mathematics and statistics, OR Concepts in social sciences
- Initiation to research

UE: Modelling complex systems: methods 6 ECTS

UE: Modelling complex systems: applications 6 ECTS

UE: Web and society – social sciences 6 ECTS

UE: History and controversies of the Web 6 ECTS

Semester 2

UE: professional integration 6 ECTS

- Digital portfolios
- English

UE Deepening 6 ECTS – 2 courses to be chosen among:

- Web engineering and development
- Digital economy
- Law and the web
- Ethics and the web
- Science, pedagogy and the web

Internship

18 ECTS

Master's 2nd year

Semester 3

UE: Seminar, interdisciplinary research project writing 6 ECTS

UE : Research article analysis 6 ECTS

UE : Interdisciplinary topic analysis 6 ECTS

Internship – 1st rotation

12 ECTS

Semester 4

UE : Web project 6 ECTS

Internship – 2nd rotation

12 ECTS

Internship – 3rd rotation

12 ECTS