

POST-GRADUATE OPPORTUNITIES

Companies in France and internationally (start-ups, R&D, big four Web companies, etc.) are interested in **NLP** and the encoding of textual and multimedia information (sound and text), which leads to a multitude of applications: machine translation, human-machine dialogue, automatic summarisation, opinion detection, E-learning (e.g., automatic generation of exercises for language learning), automatic text simplification, etc.

NLP MASTER GRADUATES - WHAT HAVE THEY BECOME?

YEVGENI BERZAK (2010)

PhD, post-doc at MIT, Cambridge, Massachusetts

CÉDRIC BEUZIT (2012)

Project Manager at Success Software Services, Ho Chi Minh

MARIA BORITCHEV (2017)

PhD at Inria, Nancy

ANNA CURREY (2016)

PhD at University of Edinburgh

NICOLAS FEUILLET (2013)

Senior NLP Data Scientist at Rakuten, Paris

LAURINE HUBER (2018)

PhD at Loria-Olki, LUE, Nancy

KASEY KENNINGTON (2011)

Assistant Professor, Boise University, Boise Idaho

ANDREAS KIRKEDAL (2011)

Senior Speech Research Scientist, Copenhagen

MARTIN KROON (2016)

PhD at Leiden University

ANGELIKI LAZARI (2012)

Researcher at Deep Mind, London

ALICE LEUNG (2016)

Computer technician RealSelf, Seattle

JIRKA MARŠÍK (2013)

Computer technician Oracle, Prague

PIERRE MERCURIALI (2016)

PHD at Loria, Nancy

SARA VAN DE MOOSDIJK (2014)

Solution Architect at IA Amazon, Melbourne

SHASHI NARAYAN (2011)

Research Scientist at Google AI, London

SAI QIAN (2009)

Researcher at Jiangxi Academy of Sciences, China

CAMILLE SAUDER (2013)

Linguist engineer at Yseop, Paris

APPLY, SAVE THE DATES!

ACADEMIC-YEAR ORGANISATION

- Beginning of the academic year: beginning of September
- 1st year, 1st semester: September to January
- 1st year 2nd semester: January to June
- 2nd year, 1st semester: September to February
- 2nd year, 2nd semester: internships in industry or laboratories between February and September

The master consists of theoretical and practical coursework all throughout the program. A supervised small-group project is completed during the first year, and a more important group project is carried out the second year. An optional internship may be taken on between the first and second year.

STUDYING IN NANCY

Nancy is a university city which is very diverse and offers high-quality educational programs. Situated in the culturally-rich Lorraine region, there are many natural parks and outdoor activities close by.

Ideal geographic location

- > 1.5 hours from Paris and Strasbourg by the TGV train
- > Close proximity to the German, Belgium, and Luxembourg borders
- > 1 hour by car from the Vosges Mountains (ski, hiking...)

A State-of-the-art campus

- > totally renovated in 2019
- > at walking distance from the center-city, and from the famous Stanislas Square
- > 10 minutes by foot from the train station

Active student-life

- > Crous Lorraine (scholarships, room and board, healthcare)
- > Leasure activities: concert venues, big events, museums, theaters, cinemas
- > Sports with the SUAPS (University Service of Physical Activities and Sports)

And also, in order to better accommodate international students:

- > Welcome to Nancy service at the University of Lorraine
- > Survival Guide of past NLP masters students
- > ESN Association (International Exchange Erasmus Student Network)

INFORMATION AND STUDENT APPLICATION



IDMC

Pôle Herbert Simon
13, rue Michel Ney | CO 40075
F-54037 Nancy Cedex
P. 03 72 74 16 24

idmc-contact@univ-lorraine.fr
idmc-master-tal@univ-lorraine.fr

Head of the master

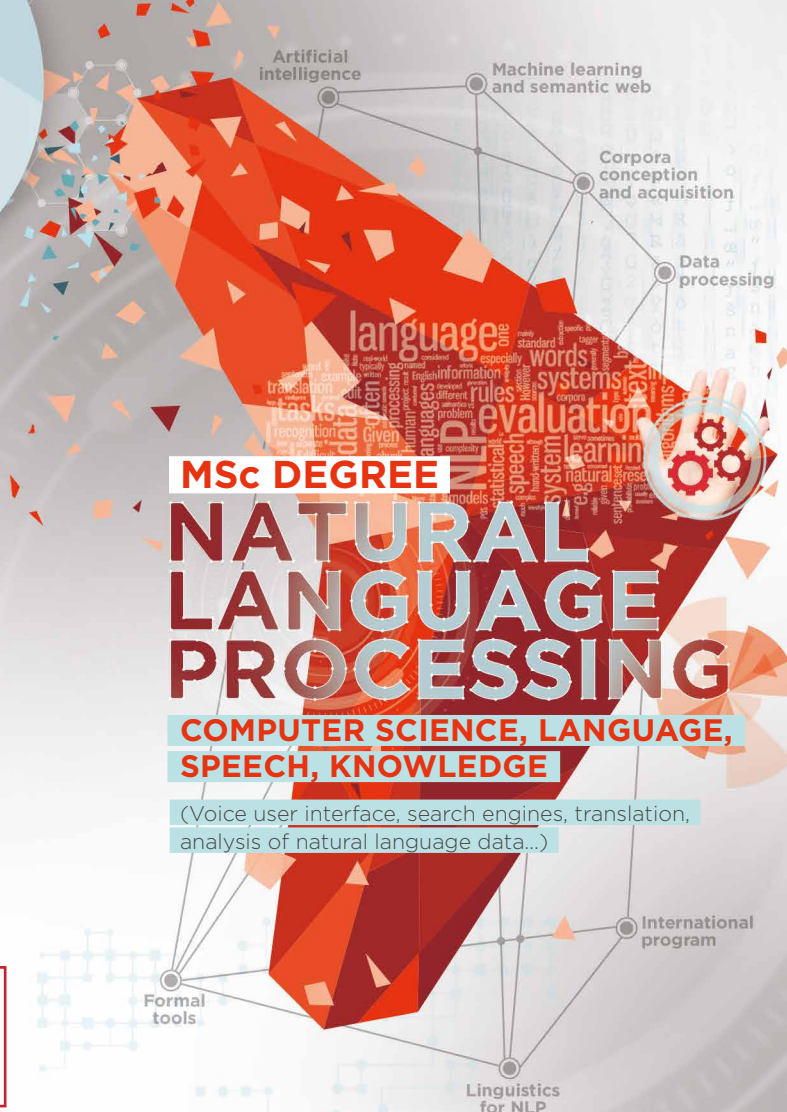
maxime.amblard@univ-lorraine.fr

NLP master's Secretary

karine.weisse@univ-lorraine.fr
P. 03 72 74 16 22

www.idmc.univ-lorraine.fr

Facebook.com/IDMC.Nancy - Twitter.com/IDMC_Nancy



MSc DEGREE

NATURAL LANGUAGE PROCESSING

COMPUTER SCIENCE, LANGUAGE, SPEECH, KNOWLEDGE

(Voice user interface, search engines, translation, analysis of natural language data...)



INSTITUT UNIVERSITAIRE DU NUMÉRIQUE



HIGHLIGHTS

MASTER OF SCIENCE DEGREE

120 ECTS CREDITS
(European Credits Transfer System)

INDUSTRY AND RESEARCH ORIENTED DEGREE

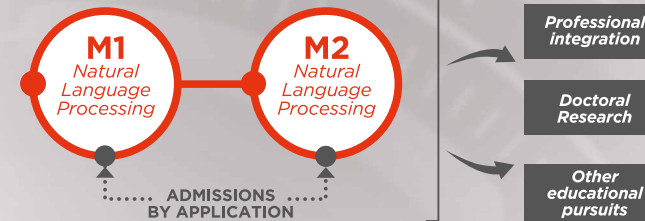
TUITION FEES
€330 UE citizen
(€3 770 otherwise)

DURATION: 1-2 years

LANGUAGE: English

LOCATION
Nancy
(1h30 train ride from Paris)

PROGRAM ORGANISATION



ABOUT THE PROGRAM

At the intersection of information technology, mathematics, linguistics, and artificial intelligence, **Natural Language Processing** is a rapidly expanding scientific domain, with increasing opportunities in industry, research, and teaching...

With the explosion of digital information, it has become an important issue to train future computer engineers and researchers capable of making use of data, just as much for commercial purposes (e-commerce, recommendation systems, automatic summary, and multi-lingual translations) as for social applications (e-learning, opinion detection, behavior prediction, etc.).

Studying NLP involves the study of:

- **linguistics**: what rules define a language?
- **computer science**: how to program models that convert textual data to numerical data and vice versa?

It also involves diving into:

- **Artificial intelligence**: from probabilities and statistics to neural networks and machine learning,
- **Formal methods**: formal language theory, logic, linguistic formalisms,
- **Human and social sciences**: integrating concepts from these domains into the development of current technologies.

ADMISSIONS REQUIREMENTS

Admission by an application if you have a Bachelor's Degree (180 ECTS) in NLP or related to NLP: computer sciences, mathematics, linguistics, AI, ...

Applications are examined in January, March, May, June and August every year. Note that the jury carefully consider the motivation.

Places are limited.

Go to
institut-sciences-digitales.fr/application-process-nlp-master-degree/

NANCY NLP MASTER DEGREE: AN INTERNATIONALLY ORIENTED PROGRAM

Conducted entirely in English, the **MSc Degree in NLP** is just as accessible for French as for international students.

Each year, the entering class is composed of equal numbers of non-francophones coming from countries all over the world, which creates an ongoing cultural exchange.

The program also welcomes students from two Erasmus Mundus programs created by the European Union:

- the Language and Communication Technology (LCT) Master
- And the EMLex Master's in Lexicography

Students in the **NLP** program may take advantage, on a selective basis, of a study abroad semester during the first year of the program, as a part of our Erasmus agreements with Dublin, Trento, Malta, Budacrest, and Osnabruck.

Students also have the opportunity to carry out their 2nd year, 2nd semester internship in a company or laboratory abroad.



COURSEWORK

Mathematics and Computer Science

Logics, probability, statistics, algorithms, programming, software engineering

Artificial Intelligence

Speech processing, Knowledge-Based Reasoning, Semantic Web, Natural Language Analysis and Generation, Neural Networks, Data Science, Recommendation Systems

Linguistics, Social Sciences and Humanities

Linguistics, language sciences, lexicology, lexical resources, language communication, ethics and laws

From theory to practice

- 1 year-long project on an open research question during Master 1
- 1 year-long project during Master 2
- 6 months of internship in the second year of the master's
- 1 optional internship between the 1st and 2nd year

WHY ENROLL IN THE NLP MSc DEGREE?

- > Recognized and renowned program that offers interdisciplinary skills in high demand by industry, research and the academic world, in France and internationally
- > Exciting and booming scientific domain
- > International program: classes in English, students coming from all over the world
- > Link with 4 laboratories of computer science and humanities and social sciences: ATILF, INRIA-NGE, LORIA, MSHL
- > Internships in industry or in a laboratory

4 COMPUTER SCIENCE, HUMANITIES AND SOCIAL SCIENCES RESEARCH LABORATORIES LINKED TO THE UNIVERSITY

ATILF - Analysis and Information Processing of the French Language (UMR 7118)

INRIA - Nancy Grand-Est

LORIA - Lorraine Laboratory of Information technology Research and its Applications (UMR 7503)

MSHL - House of Humanitary Sciences of Lorraine