

Direction

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Secretariat

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Duration Credits

2 Years 120 ects

Presentation

Data Science integrates the multidisciplinary paradigms and methods necessary to address the complex challenges of our hyperconnected information ecosystem. Every day, vast amounts of data are generated from numerous sources such as commercial transactions, social media interactions, medical records, sensor readings, and IoT devices. Through the integrative analytics in Data Science pipelines, we can derive crucial inferences that enable us to extract knowledge from data and support informed decision-making. The Master's in Data Science at Universidade Lusófona de Lisboa (MCiD) is the ideal educational complement for candidates who, after completing a degree in Computer Engineering, Statistics, Physics, Mathematics, Management, Economic and Financial Sciences, or related areas, wish to pursue a graduate degree. This academic path aims to achieve a higher level of specialisation and provide access to more prominent professional positions. The MCiD offers a comprehensive introduction to Data Science, providing solid training both in foundational principles and cutting-edge techniques for data analysis and engineering. Additionally, it addresses the necessary knowledge in privacy, security, and ethics, essential for handling data in compliance with current logiclation. Candidates are evaluated on the

universidade LUSÓFONA



CENTRO UNIVERSITÁRIO LISBOA



escola de comunicação, arquitetura, artes e tecnologias da informação

STUDY PLAN

1st Year / Common Core

| 1º Semestre | ects | 2° Semestre | ects |
|--|------|---|------|
| Applied Programming for Data Science | 7 | Advanced Data Science | 7 |
| Fundamentals of Statistics for Data Science | 7 | Information Visualization | 7 |
| Introduction to Data Science | 7 | Introduction to Social Networks | 7 |
| Orientation Seminar | 2 | Topics in Data Engineering for Data Science | 7 |
| Privacy, Security and Ethics in Data Science | 7 | Tutoring Seminar | 2 |

2nd Year / Common Core

| 1º Semestre | ects | 2° Semestre | ects |
|---|------|--------------------------------------|------|
| Fundamentals of Natural Language Processing | 7 | Dissertation Seminar or Project Work | 30 |
| Option I | 7 | | |
| Option II | 7 | | |
| Project Seminar | 2 | | |
| Topics on Machine Learning and its Applications | 7 | | |