

CTESP | CURSO TÉCNICO SUPERIOR PROFISSIONAL



APLICAÇÕES INFORMÁTICAS PARA CIÊNCIAS DE DADOS

Direction

TIAGO ANDRÉ CUNHA REIS

Number of Semesters

4

ECTS

120

About

Considering the revolution inherent in the concept of Industry 4.0, it has become necessary to prepare future professionals in this area to be able to deal with multidisciplinary environments and to explore data in order to identify patterns and phenomena through data so that they can contribute to complex industrial processes and the growing integration that is inherent

in them in order to keep up with future trends in this sector. In line with this pressing need, over the last five years there has been a generalised adaptation of the various study cycles with their origins in computer science, as well as the creation of new study cycles aimed at developing applications based on data science, artificial intelligence, pattern analysis and recognition and the storage and processing of big data. The TeSP course in Computer Applications for Data Science is supported by interdisciplinary teaching geared towards practical application and professionalisation, with the aim of providing solid skills in the areas of computer science, mathematics and statistics, which allows for the integration of theoretical and practical knowledge, essential for carrying out activities inherent in the design of information systems, processing and analysing data with a view to introducing added value into processes where these systems are fundamental.

Course Plan

Course Structure

1º Ano / No Branch

[Data Communications and Computer Networks](#) 6 ECTS | [Object-Oriented Programming](#) 4 ECTS | [Algorithms and Data Structures](#) 5 ECTS | [Data Science Foundations](#) 4 ECTS | [English](#) 3 ECTS | [Introduction to Operating Systems](#) 4 ECTS | [Probabilities and Statistics](#) 6 ECTS | [Soft Skills for Technology](#) 4 ECTS | [Structured Programming](#) 4 ECTS | [Data Center Technology](#) 6 ECTS | [Data Communication Bases](#) 4 ECTS | [Discrete Mathematics](#) 4 ECTS | [Statistics for Data Science](#) 6 ECTS |

2º Ano / No Branch

[Advanced Data Science](#) 5 ECTS | [Analysis and Treatment of Multivariate Data](#) 5 ECTS | [Data Warehouse and Business Intelligence](#) 6 ECTS | [Innovation and Entrepreneurship](#) 3 ECTS | [Storage for Big Data](#) 5 ECTS | [Web Interfaces for Data Management](#) 6 ECTS | [Traineeship](#) 30 ECTS |