Internship Program

Data Science Management (DSO, Data Science Officer)

tech global university

tech global university

Internship Program

Data Science Management
(DSO, Data Science Officer)

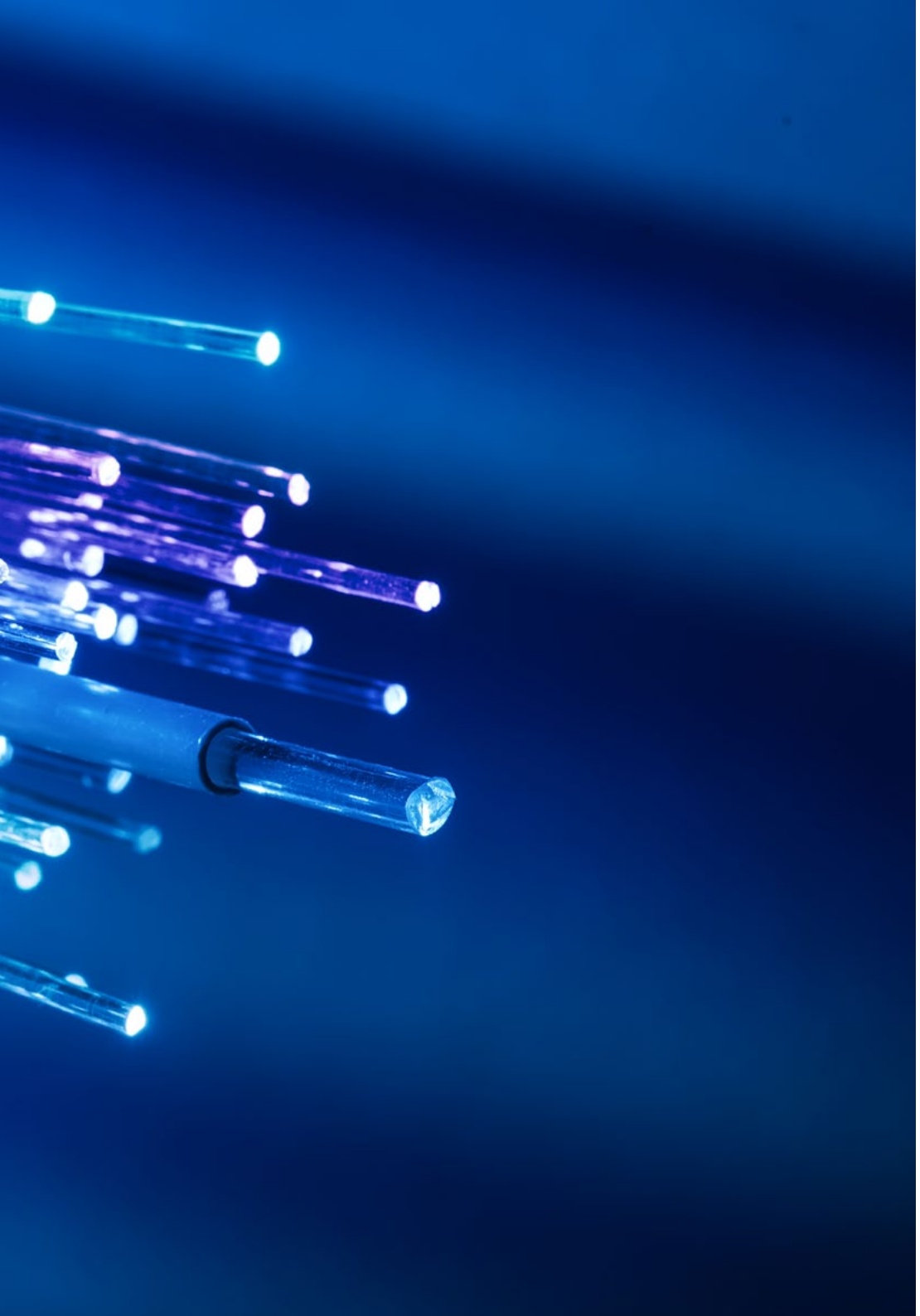
Index

01

Introduction

The explosion in the amount of data that has occurred in recent years has led to a growing demand for professionals specialized in the field of Data Science Management. This discipline combines Data Science with business management, enabling organizations to make the most of their data to make informed, strategic decisions. For Data Science professionals to make the most of these career opportunities, they need to stay at the forefront of the most sophisticated technological tools (such as Machine Learning with Artificial Neural Networks). In order to support them with this task, TECH presents a program in which, during 3 weeks, the specialists will carry out an internship in a reference institution in this field.

> *Thanks to this revolutionary Internship Program, you will master the most advanced technological tools in the field of Data Science Management and provide top quality services"*



With the advent of Industry 4.0, the field of Data Science Management has been significantly enriched by the implementation of emerging Artificial Intelligence technologies. For example, Data Mining allows professionals to analyze data and extract valuable information that can be used to make predictions, make decisions and even automate processes. In the face of these advances, specialists need to update their knowledge and skills frequently to handle the most sophisticated tools. Only in this way will professionals be able to optimize their practice and develop efficient and scalable data management systems.

In this context, TECH presents an innovative program consisting of a 120-hour internship in a reference company in the field of Data Science Management. During 3 weeks, students will join a team of top-level specialists, with whom they will perform tasks such as the design and development of Intelligent Systems. In this way, graduates will be up to date with the latest techniques in Data Management and Manipulation. They will also acquire advanced skills to master sophisticated technological tools such as Machine Learning. Thanks to this, graduates will experience a considerable leap in quality in their professional careers.

During their stay, students will be supported by an assistant tutor, whose mission will be to ensure compliance with all the requirements for which this Internship Program has been designed. On this basis, the graduates will work with total guarantee and security in the handling of the most sophisticated computer technology. In tune with this, students will perfect their skills and achieve excellence in their professional work.

02

Why Study an Internship Program?

With the exponential growth of data in the digital world, there is an increasing demand for professionals who can analyze, interpret and make evidence-based decisions. To take advantage of these job opportunities, professionals need to acquire a competitive advantage that differentiates them from other candidates. For this reason, TECH is launching this revolutionary Internship Program, which will allow students to delve into the latest innovations in the field of Data Science Management through a 120-hour internship at a leading professional institution. In addition, students will have access to a first class institution, equipped with the most modern information technology to perform their work with guaranteed success.

> *Through this Internship Program, you will reach a high level of skill in data forecasting and become a recognized expert in the Data Science sector"*

1. Updating from the Latest Technology Available

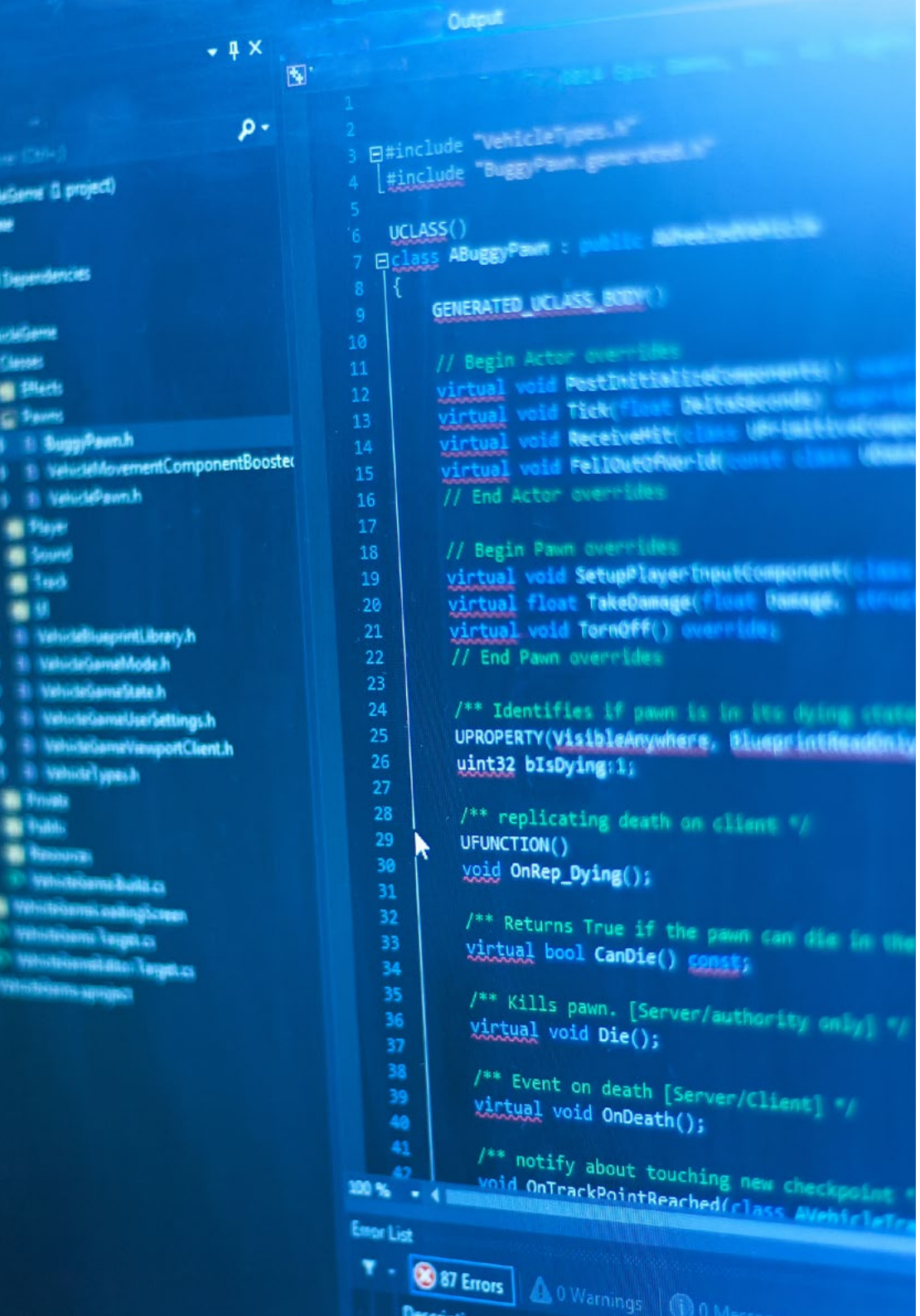
Technology plays a fundamental role in the field of Data Science Management, as it provides experts with the necessary tools and platforms to collect, store, process, analyze and visualize large volumes of data. Aware of this, TECH presents this Internship Program that will allow students to handle the most innovative information technology to perform their professional tasks with maximum efficiency.

2. Gaining In-depth Knowledge from the Experience of Top Specialists

Throughout this practical period, a large team of professionals will guide students in order to help them get the most out of the academic experience. In addition, these experts will transfer to the graduates the latest techniques in subjects such as Graphical Representation for Data Analysis. In addition, a specially appointed tutor will help students to enhance their skills and ensure that their stay at the institution is highly rewarding.

3. Entering First-Class Environments

TECH carefully chooses all available centers for the realization of its Internship Programs. Thanks to this effort, students will have access to reference institutions in the field of Data Science Management. In this way, they will be able to experience first-hand the routine of a work environment that requires precision, rigor and meticulous attention, always applying the latest advances in their work approach.



4. Putting the Acquired Knowledge into Daily Practice from the Very First Moment

The academic environment is full of pedagogical programs that do not fit well with the daily demands of specialists and require long hours of study. In this context, TECH proposes a new learning approach, completely practical, that will allow graduates to lead cutting-edge projects in the field of Data Science Management and become valuable intangibles for companies.

5. Expanding the Boundaries of Knowledge

TECH has agreements with international companies, which gives students the flexibility to choose where to complete their internship from a wide variety of organizations. In this way, graduates will broaden their horizons beyond national borders, enjoying an enriching opportunity both professionally and personally.

You will have full practical immersion at the center of your choice"

03

Objectives

Thanks to this comprehensive program, graduates will have a solid understanding of the principles of Data Science. Likewise, students will develop advanced skills to effectively handle innovative tools such as Machine Learning, Data Mining or Neural Networks. Likewise, they will incorporate to their usual procedures the most avant-garde techniques for the design and development of Intelligent Systems. In this way, this Internship Program will allow graduates to significantly optimize their work and thus raise their professional horizons.

General Objectives

- Analyze the benefits of applying data analytics techniques in each department of the company
- Develop the basis for understanding the needs and applications of each department
- Generate specialized knowledge to select the right tool
- Propose techniques and objectives in order to be as productive as possible according to the department

Specific Objectives

- Determine the creation of scorecards and KPIs according to the department
- Generate specialized knowledge to develop predictive analytics
- Propose business and loyalty plans based on market research
- Apply statistical, quantitative and technical knowledge in real situations
- Determine the best practices for data management according to its typology and uses
- Establish data access and reuse policies
- Ensure security and availability: information availability, integrity and confidentiality
- Examine data management tools using programming languages
- Identify what IoT (*Internet of Things*) is and IIoT (*Industrial Internet of Things*)
- Examine the different IoT *Cloud* platforms: general purpose, industrial, open source
- Determine the main features of a *Dataset*, its structure, components and the implications of its distribution in modeling
- Develop skills to solve practical cases using data science techniques
- Establish the most appropriate general tools and methods for modeling each *Dataset* based on the preprocessing performed
- Demonstrate critical analysis of the results obtained after applying preprocessing or modeling methods
- Implement algorithms used for data preprocessing
- Demonstrate the ability to interpret data visualization for descriptive analysis
- Develop advanced knowledge of the different existing data preparation techniques for data cleaning, normalization and transformation
- Apply dynamic regression models and apply the methodology for the construction of such models from observed series
- Address the spectral analysis of univariate time series, as well as the fundamentals related to periodogram-based inference and interpretation
- Estimate the probability and trend in time series for a given time horizon

Thanks to this practical period, you will master Machine Learning to develop the most sophisticated algorithms and computational models"

04

Educational Plan

This Internship Program's Internship Program in Data Science Management consists of a practical stay in a prestigious institution, lasting 3 weeks, from Monday to Friday with 8 consecutive hours of work with an associate specialist. This experience will allow students to update their knowledge in a real work scenario, integrating into a multidisciplinary work team composed of experts with extensive professional experience in Data Science.

In this training proposal, of a completely practical nature, the activities are aimed at developing and perfecting the skills necessary for the provision of data collection and customer acquisition services, and are oriented towards specific training for the exercise of the activity.

Undoubtedly, this is an ideal opportunity for graduates to enjoy contextual learning in a state-of-the-art technological scenario, where they will be able to appreciate the reality of a profession full of challenges. At the same time, students will incorporate into their daily practice the latest trends in areas such as Management, Data and Information Manipulation. In this sense, students will acquire advanced competencies that will allow them to maximize their productivity and work performance. In this way, they will provide their clients with excellent quality services.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other training partners to facilitate teamwork and multidisciplinary integration as transversal competencies for programming praxis (learning to be and learning to relate).

The procedures described below will be the basis of the practical part of the course, and their implementation will be subject to the center's own availability and workload, the proposed activities being the following:

You will learn firsthand the reality of working in the area, in a demanding and rewarding environment"

Module	Practical Activity
Device Management and IoT Platforms as a Basis for Data Science	Manage IoT sensors and devices
	Work with OSI model protocols
	Work with Cloud *platforms for IoT and IIoT*
	Delve into data management models using open data
	Implement IIoT security strategies
	Develop IoRT (*IInternet of Robotics Things) protocols*
Use of Data Science Tools	Conduct data analysis in different contexts
	Learn in detail the types of analysis through practice
	Use the extraction of information from a *Dataset*
	Approach the *Dataset from the base to its exhaustive handling*
	Put into practice the balancing in the *Dataset*
Design and Development of Intelligent Systems and Data Intensive Systems	Work in data processing and transformation
	Use classification algorithms
	Implement the main strategies of linear regression, logistic regression and non-linear models
	Implement *Bagging algorithms*
	Work in relational, document and network models
	Use databases for data storage and retrieval management
	Know in detail the data coding formats

Module	Practical Activity
Practical Application of Data Science in Business Sectors	Practical application of data science in the various sectors of the company
	Address the different phases and elements of data analytics
	Development of data analytics applied to a department within the enterprise
	Approach of different cases through strategies, prediction and campaign management
	Master time series
	Understand time series schemes in detail
	Apply basic *forecast methods*
	Master residual analysis

Be educated in an entity that can offer you all these opportunities, with an innovative academic program and a human team capable of developing you to the maximum"

05

Where Can I Do the Internship Program?

In its commitment to provide high quality academic itineraries, TECH has carefully selected the most prestigious international centers so that graduates can carry out their Internship Program in first class work environments. The on-site stay has a duration of 3 weeks, where the practical period is divided into 8-hour days from Monday to Friday. During this experience, students will have the support of an assistant tutor who will ensure compliance with the objectives for which this program was designed.

Experience a leap in quality in your professional career thanks to this intensive internship, which will provide you with the most innovative software for graphing and data analysis"

The student will be able to do this program at the following centers:

Ogilvy Barcelona

Country
Spain

City
Barcelona

Address: Calle Bolivia 68-70, 08018, Barcelona

Ogilvy is a pioneer in Pervasive Advertising, Marketing and Corporate Communications.

Related internship programs:
- Artificial Intelligence in Design
- Personal Brand Construction

Make the most of this opportunity to surround yourself with expert professionals and learn from their work methodology"

06

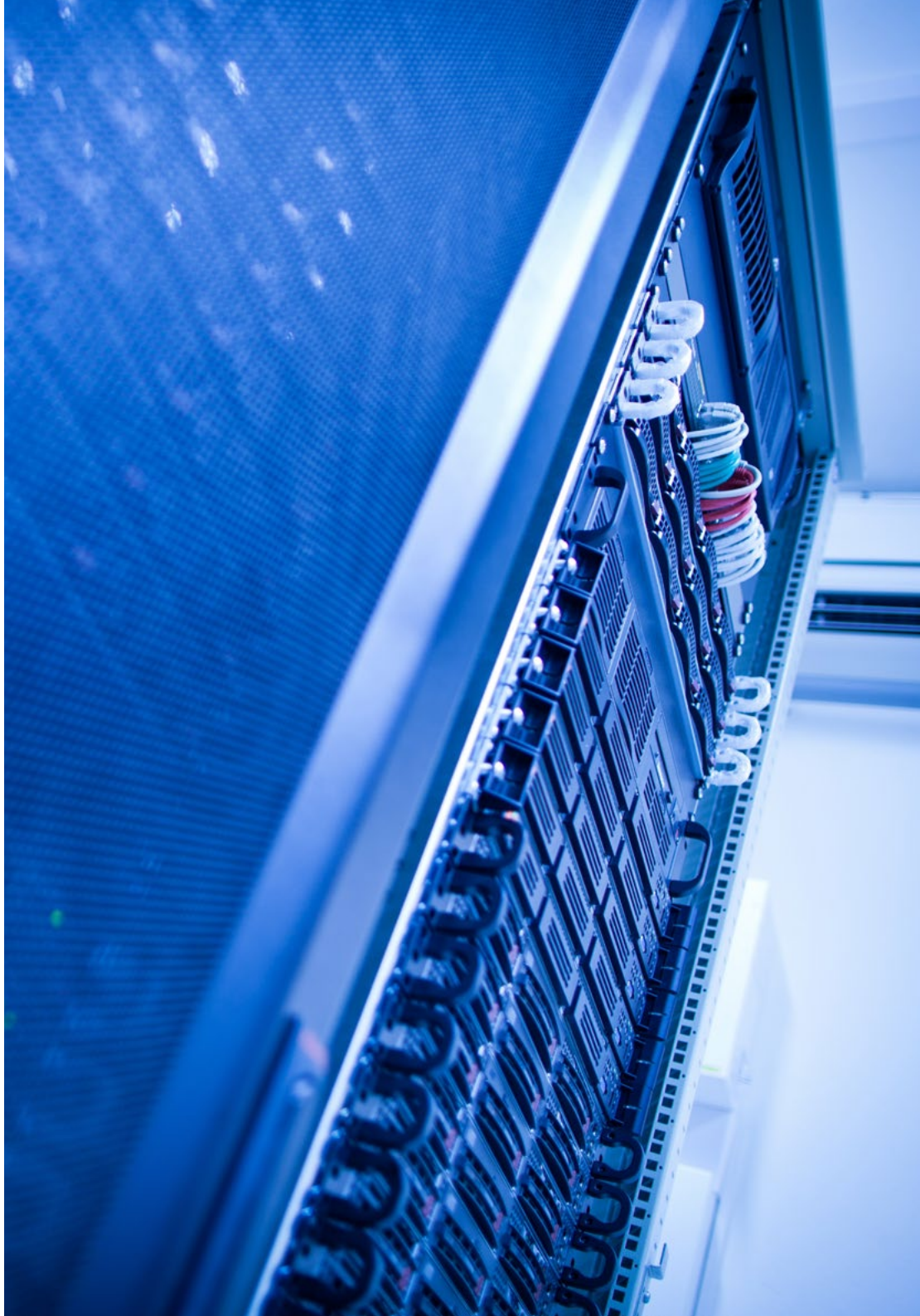
General Conditions

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the Internship Program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship program agreement shall be as follows:

1. TUTOR: During the Internship Program, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor, whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: The Internship Program shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. 3.- DOES NOT INCLUDE: The Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

07

Certificate

This private qualification will allow you to obtain a **Hybrid Professional Master's Degree diploma in Data Science Management (DSO, Data Science Officer) from TECH Global University**, the world's largest online university.

Tech Global University is an official European University publicly recognized by the Government of Andorra ***(official bulletin)***. Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **Tech Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Internship Program in Data Science Management (DSO, Data Science Officer)**

Duration: **3 weeks**

Attendance: **Monday to Friday, 8-hour shifts, consecutive shifts**

Accreditation: **4 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Internship Program in Data Science Management (DSO, Data Science Officer)

This is a private qualification of 120 hours of duration equivalent to 4 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates

tech global university

Internship Program

Data Science Management
(DSO, Data Science Officer)

Internship Program
Data Science Management (DSO, Data Science Officer)

tech global university