Postgraduate Certificate
Visual Analysis Process (KEIM)

tech *technological university*

Postgraduate Certificate
Visual Analysis Process (KEIM)

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official Nº of hours: **150 h.**

Website: www.techtitute.com/information-technology/postgraduate-certificate/visual-analysis-process-keim

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01

Introduction

When working with data, visual representation and information is of utmost importance. In this comprehensive training, TECH will take students through the learning process necessary to learn how to give visual knowledge to what the data hides from us. A program that will provide students with the professional tools they need to achieve this, with the security of a specialist.

" *How to turn what the data gives us into visual information, in a high-level training program for professionals"*

Interactive visualization of information consists in the graphical representation of data by means of statistics, maps, diagrams or schemes with the objective of making the data visible to a given audience, but above all to bring out the relevant information hidden in the selected data set.

Visualization is present in any company, regardless of its size. This module is an introduction to the conceptual principles of the visualization discipline.

Students will be able to do storytelling with data to understand how to represent data and its visual representations.

KEIM's visual analysis process will be explained, which, starting from the academic world, shows how to apply Visual Analytics techniques to the business world.

Students will understand the different types of reports: strategic, operative and management, as well as the types of charts and their function, with a goal to place them in the role of the receiver of the message in order to make them understand that the receiver's vision should be the important one when configuring a data visualization.

This **Postgraduate Certificate in Visual Analysis Process (KEIM)** contains the most complete and up-to-date educational program in the market. The most important features of the training include:

- Practical case studies presented by experts
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection

A complete update that will provide you with the working capacity of a specialist in the field"

This training has the best teaching material available online or downloadable, to facilitate your study and effort management.

A highly efficient program that will allow you to advance efficiently in everything you will need in this area of work.

" *The most useful, practical and efficient learning systems in the international educational system, at your fingertips"*

The program's teaching staff includes professionals from sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

The objectives of this Postgraduate Certificate were established with a basis on realistic and necessary goals for a professional in the sector. Gradually, students will be able to verify their learning and progress in the mastery of the contents so that, at the end, they will have finished a complete process of professional growth.

"

The objective of this program is to provide an complete introduction to the conceptual principles of the visualization discipline"

General Objectives

- Learn how to do storytelling with data to understand how to represent data and its visual representations
- Understand the process of KEIM's visual analysis
- Understand the different types of reports: strategic, operational and management
- Understand the types of graphs and their application

A stimulating professional growth journey designed to keep you interested and motivated throughout the training"

Specific Objectives

- Understand how patterns found in a data set can be made visible in order to generate a common interpretation of the underlying reality
- Know the scalability of individual representations
- Understand the difference between Visual Analytics and information visualization
- Understand the process of KEIM's visual analysis
- Evaluate the different data visualization methods applicable according to the information to be conveyed

03
Course Management

Within the quality criteria that we apply in all our programs, this program offers you the opportunity to learn from the best, with a teaching staff of industry professionals who will invest their theoretical and practical knowledge to take you to the highest level of training. With the latest and most effective teaching methods on the online teaching market.

"Learn with the best and acquire the knowledge and skills you need to intervene in this area of development with total success"

Management

Mr. Galindo, Luis Ángel

- Senior High Performance Consultant with 16 years of experience
- Definition, development and implementation of a successful open innovation model, with +10% year-on-year revenue growth leveraged on innovative assets
- Definition, development and implementation of successful Digital Transformation Programs for more than 8 years and 700+ people leading a pioneering role in the industry
- Implementation of 20+ complex consulting projects worldwide for large companies in artificial intelligence, economic intelligence, cybersecurity, business development, digital transformation, risk assessment, process optimization and people management
- Expert in understanding customers and translating their needs into actual sales
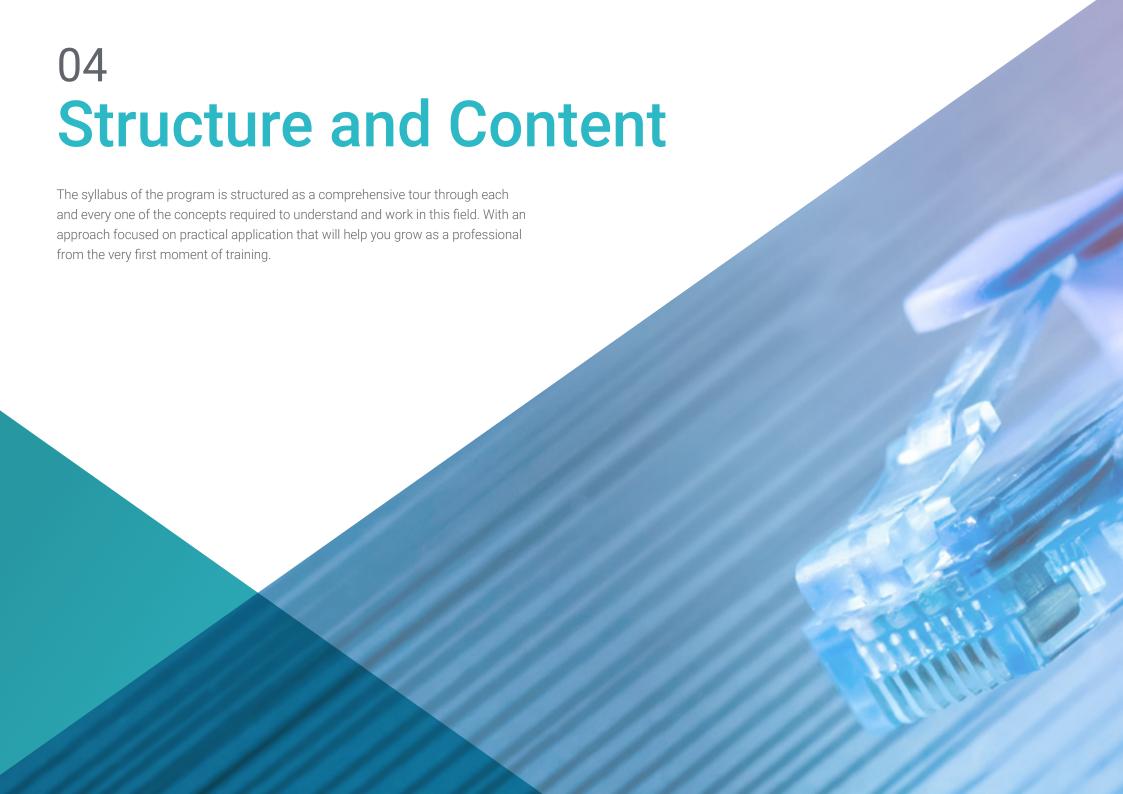
Professors

Ms. Olmedo, Asunta

- Creative Publicist Consultant Editing and graphic design
- Communication Technician Advertising and PR National Institute of Specialized Techniques
- Courses and workshops for Telefónica and the CAM
- Collaboration with different marketing and design companies (Imaginamass, Mibizpartners, WinWin consultants, We are Bold, Muebles Toscana, TeveoOnline, Bip Informáticos, The Mars Society)

- Copywriter in national and multinational advertising agencies, among other accounts: Santander Bank, Buena Vista, Canon, Coca-Cola, Maphre, Asisa, Prosegur, Camel, Ayuda en Acción, Casino Gran Madrid, La Razón, Amex, Airis, Rainbow
- Master's Degree in Graphic Design Tracor Training Center
- Community Manager Course (Community Manager Institute)
- UX and Usability Course (MiriadaX, Coursea, Factor Ideas)

```java
System.out.println("Start:");

class Test {
    public static void main(String [args]) {
        int 2y=AX;
        while (X>3,14) {
            System.out.print(i + "Program");
            i++;
            System.out.println("Replace");
            return getNumber();
                return sc.nextDouble();
        } else {
static double getNumber() {
    Scanner sc = new Scanner(System.in);
    System.out.println("Start:");
```

```java
void main(String [args]) {
    int 2y=AX;
    while (X>3,14) {
        System.out.print(i + "Program");
        i++;
out.println("Replace");
        return getNumber();
            return sc.nextDouble();
} else {
        public static double getNumber() {
            Scanner sc = new Scanner(System.in);
            System.out.println("Start:");

    class Test {
        public static void main(
```

04
Structure and Content

The syllabus of the program is structured as a comprehensive tour through each and every one of the concepts required to understand and work in this field. With an approach focused on practical application that will help you grow as a professional from the very first moment of training.

A syllabus that will show you all aspects of data processing, developed along topics prepared to guides you towards mastery of the subject"
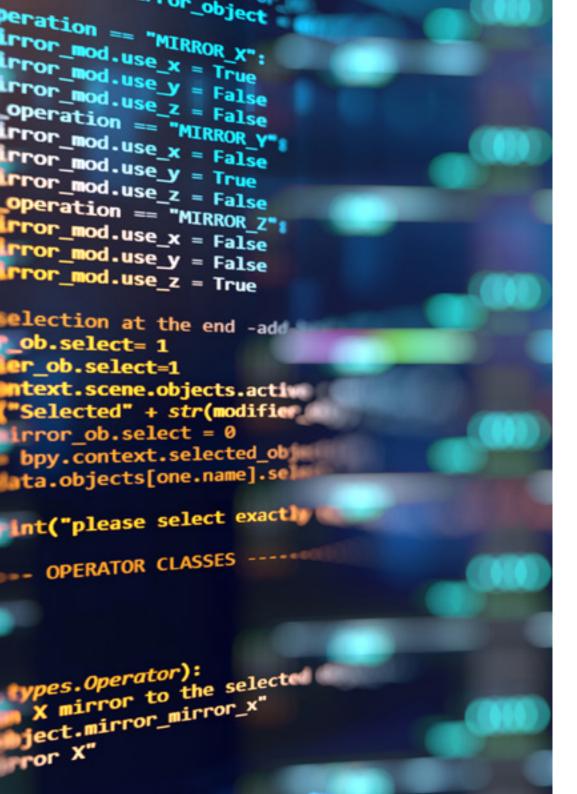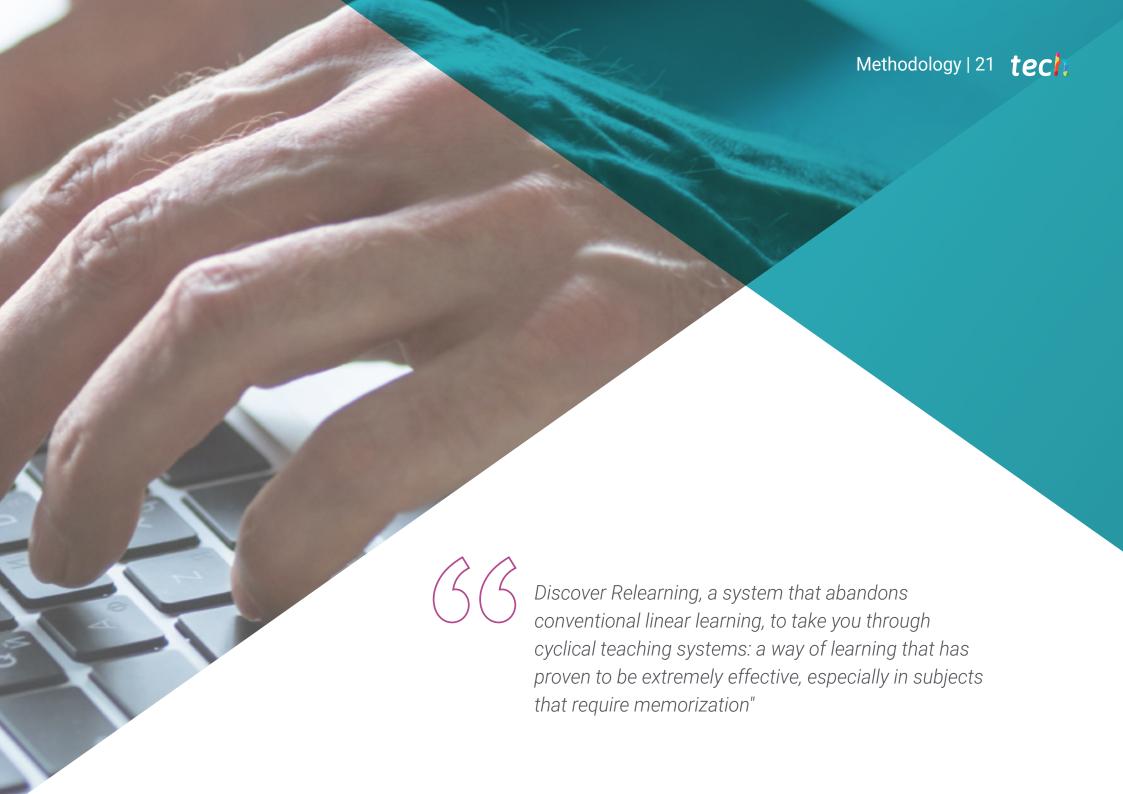
Module 1. Interactive Visualization of Data

1.1.   Introduction to the Art of Making Data Visible
1.2.   How to do *Storytelling* with Data
1.3.   Data Representation
1.4.   Scalability of Visual Representations
1.5.   Visual Analytics vs. *Information Visualization*. Understanding That Its Not The Same
1.6.   Visual Analysis Process (Keim)
1.7.   Strategic, Operative and Managerial Reports
1.8.   Types of Graphs and Their Application
1.9.   Interpretation of Reports and Graphs. Playing the Role of the Receiver
1.10.   Evaluation of Visual Analytics Systems

This training will allow you to advance in your career comfortably"

0?
Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

" *Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization*"

Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

"

At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"

You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

" *Our program prepares you to face new challenges in uncertain environments and achieve success in your career"*

The case method has been the most widely used learning system among the world's leading Information Technology schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.
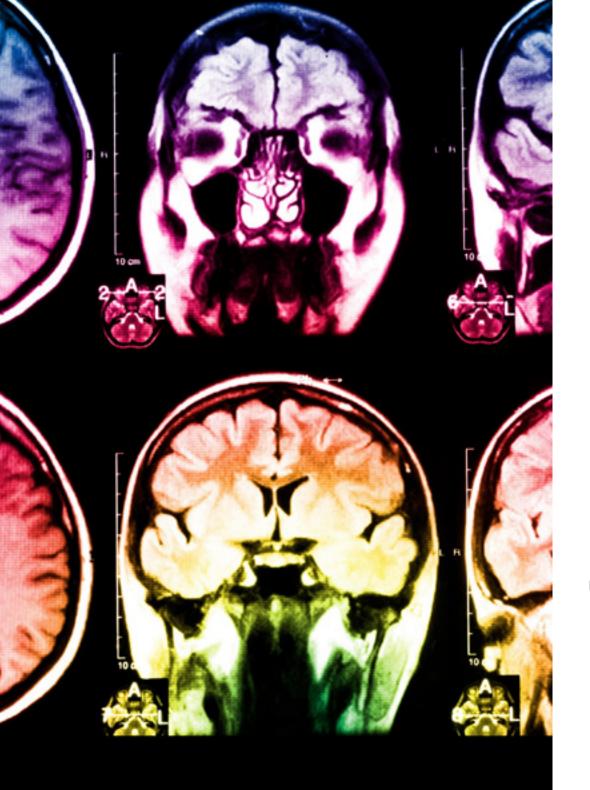
We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically. This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

30%

10%

8%

20%

25%

4%

3%

Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

06

Certificate

The Postgraduate Certificate in Visual Analysis Process (KEIM) guarantees, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this program and receive your university title without the hassle of travel or paperwork"

This **Postgraduate Certificate in Visual Analysis Process (KEIM)** contains the most complete and up-to-date educational program in the market.

After the student has passed the assessments, they will receive their corresponding Postgraduate Certificate issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exhanges, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in Visual Analysis Process (KEIM)**

Official Nº of Hours: **150 h.**

tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Visual Analysis Process (KEIM)

This is a qualification awarded by this University, equivalent to 300 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFWORD23S   techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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