Postgraduate Diploma

Bioinformatics and Big Data in Medicine

tech technological university

Postgraduate Diploma
Bioinformatics and
Big Data in Medicine

- » Modality: **online**
- » Duration: **6 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**
- » Target Group: **Graduates, Graduates and University graduates who have completed previously any of the degrees in the field of Social Sciences and Legal, Administrative and Businesss**

Website: **www.techtitute.com/us/school-of-business/postgraduate-diploma/postgraduate-diploma-bioinformatics-big-data-medicine**

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01
Welcome

The application of computing to the world of biology and medicine has meant an authentic revolution in both areas, positively influencing mass management of data, as well as in the improvement of strategies and treatments. And it is that Bioinformatics has become one of the scientific disciplines with the most expectations for the future and the which numerous companies have seen significant business opportunities. It is because of that the labor market demands, more and more frequently, the figure of versed in this area, as well as in *Big Data*, whjich also have managerial qualities to be able to manage successful big projects. And so that any graduate can meet this demand, TECH Technological University has designed this multidisciplinary and intensive program. It is a 100% online program thanks to which, in just 6 months, you will reach your more ambitious academic goals, making his way, in a specialized way, in a booming sector.

Postgraduate Diploma in Bioinformatics and Big Data in Medicine.
TECH Technological University

You have the best opportunity in the academic market to finally become an expert in Bioinformatics and Big Data in Medicine 100% online before you"

Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.

TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"

At TECH Technological University

Innovation

The university offers an online learning model that balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"Microsoft Europe Success Story", for integrating the innovative, interactive multi-video system.

The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

95% of TECH students successfully complete their studies

Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

+100000 executives prepared each year

+200 different nationalities

Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

+500 collaborative agreements with leading companies

Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.

Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.

Learn with the best

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.

At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"

TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:

Analysis

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.

Academic Excellence

TECH offers students the best online learning methodology. The university combines the *Relearning* methodology (the most internationally recognized postgraduate learning methodology) with Harvard Business School case studies. A complex balance of traditional and state-of-the-art methods, within the most demanding academic framework.

Economy of Scale

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a ground-breaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.

03
Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.

"We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level"

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

01

A Strong Boost to Your Career

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

70% of students achieve positive career development in less than 2 years.

02

Develop a strategic and global vision of the company

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional fields.

Our global vision of companies will improve your strategic vision.

03

Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

You will work on more than 100 real senior management cases.

04

You will take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

45% of graduates are promoted internally.

05

Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

You will find a network of contacts that will be instrumental for professional development.

06

Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different fields in companies.

20% of our students develop their own business idea.

07

Improve *soft skills* and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

Improve your communication and leadership skills and enhance your career.

08

You will be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified teachers from the most prestigious universities in the world: the TECH Technological University community.

We give you the opportunity to study with a team of world-renowned teachers.

04
Objectives

This program in Bioinformatics and Big Data in Medicine has been designed by TECH and its team of experts in order that the graduate who accesses it is able, in less than 6 months, to perfect their professional and managerial skills. That is why the objective of the program is to be able to provide you with all the information you need, as well as the academic tools that help you achieve it in the least time possible and guaranteed.

TECH designs each of its programs trying to guarantee the maximum possibility for the graduate to exceed their academic objectives in less than 6 months"

TECH makes the goals of their students their own goals too.
Working together to achieve them.

The **Postgraduate Diploma in Bioinformatics and Big Data in Medicine.** will enable the student to:

01 Understand the concept of computation

02 Break down a computer system into its various parts

03 Distinguish between the concepts of computational biology and bioinformatics computing

04 Master the most commonly used tools in the field

05 Determine future trends in computing

06 Analyze biomedical *datasets* using Big Data techniques

05
Structure and Content

TECH Technological University uses the best academic tools and the effective and innovative *Relearning* methodology in all of its programs In addition, it guarantees a series of minimum hours of additional material in different formats, so that students can not only contextualize the information developed in the syllabus, but also deepen in those aspects they consider more interesting or relevant for their work performance. All this is what makes programs such as this one the best in the market, thanks to which Businessmen can develop extensively and conscientiously, contributing to improve their professional future through a 100% online program.

In less than 6 months, you will have mastered the massive processing of medical data through the domain of structural and functional genomics, as well as transcriptomics"

Syllabus

The Postgraduate Diploma in Bioinformatics Image Analysis and *Big Data* in E-Health offered by TECH Technological University is an intensive and multidisciplinary program that will prepare the graduate to face the labor market and the most ambitious and complex projects in as bioinformatics and the telemedicine sector, with the guarantee of having the most up-to-date and complete knowledge.

The content of the program is designed to broaden the student's professional skills, through the mastery of the tools that are currently being used, both for research in the health sciences and for data management.

This is a program in which you will have 450 hours of the best theoretical, practical and additional material, with which you will be able to delve into the applications of this area and adapt your profile to the labor demand that currently exists in the professional sector.

This Postgraduate Diploma takes place over 6 months and is divided into 3 modules:

Module 1	Computation in Bioinformatics
Module 2	Biomedical Databases
Module 3	*Big Data* in Medicine: Massive Medical Data Processing

Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Diploma in Bioinformatics and Big Data in Medicine. Biomedical Images and Big Data Analysis completely online. Throughout the 6 months of the educational program, you will be able to access all the contents of this program at any time, allowing you to self-manage your study time.

A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.

Module 1. Computation in Bioinformatics

1.1. Central Dogma in Bioinformatics and Computing. Current State

1.1.1. The Ideal Application in Bioinformatics
1.1.2. Parallel Developments in Molecular Biology and Computing
1.1.3. Dogma in Biology and Information Theory
1.1.4. Information Flows

1.2. Databases for Bioinformatics Computing

1.2.1. Database
1.2.2. Data management
1.2.3. Data Life Cycle in Bioinformatics
    1.2.3.1. Use
    1.2.3.2. Modifications
    1.2.3.3. Archive
    1.2.3.4. Reuse
    1.2.3.5. Discarded
1.2.4. Database Technology in Bioinformatics
    1.2.4.1. Architecture
    1.2.4.2. Database Management
1.2.5. Interfaces for Bioinformatics Databases

1.3. Networks for Bioinformatics Computing

1.3.1. Communication Models. LAN, WAN, MAN and PAN Networks
1.3.2. Protocols and Data Transmission
1.3.3. Network Topologies
1.3.4. *Datacenter* Hardware for Computing
1.3.5. Security, Management and Implementation

1.4. Search Engines in Bioinformatics

1.4.1. Search Engines in Bioinformatics
1.4.2. Search Engine Processes and Technologies in Bioinformatics
1.4.3. Computational Models: Search and Approximation Algorithms

1.5. Data Display in Bioinformatics

1.5.1. Displaying Biological Sequences
1.5.2. Displaying Biological Structures
    1.5.2.1. Visualization Tools
    1.5.2.2. Rendering Tools
1.5.3. User Interface in Bioinformatics Applications
1.5.4. Information Architectures for Displays in Bioinformatics

1.6. Statistics for Computing

1.6.1. Statistical Concepts for Computing in Bioinformatics
1.6.2. Use Case: MARN *Microarrays*
1.6.3. Imperfect Data. Statistical Errors: Randomness, Approximation, Noise and Assumptions
1.6.4. Error Quantification: Precision and Sensitivity
1.6.5. Clustering and Classification

1.7. Data Mining

1.7.1. Mining and Data Computing Methods
1.7.2. Infrastructure for Data Mining and Computing
1.7.3. Pattern Discovery and Recognition
1.7.4. Machine Learning and New Tools

1.8. Genetic Pattern Matching

1.8.1. Genetic Pattern Matching
1.8.2. Computational Methods for Sequence Alignments
1.8.3. Pattern Matching Tools

1.9. Modelling and Simulation

1.9.1. Use in the Pharmaceutical Field: Drug Discovery
1.9.2. Protein Structure and Systems Biology
1.9.3. Available Tools and Future

1.10. Collaboration and Online Computing Projects

1.10.1. Grid Computing
1.10.2. Standards and Rules Uniformity, Consistency and Interoperability
1.10.3. Collaborative Computing Projects

Module 2. Biomedical Databases

2.1. Biomedical Databases
2.1.1. Biomedical Databases
2.1.2. Primary and Secondary Databases
2.1.3. Major Databases

2.2. DNA Databases
2.2.1. Genome Databases
2.2.2. Gene Databases
2.2.3. Mutations and Polymorphisms Databases

2.3. Protein Databases
2.3.1. Primary Sequence Databases
2.3.2. Secondary Sequence and Domain Databases
2.3.3. Macromolecular Structure Databases

2.4. Omics Projects Databases
2.4.1. Genomics Studies Databases
2.4.2. Transcriptomics Studies Databases
2.4.3. Proteomics Studies Databases

2.5. Genetic Diseases Databases. Personalized and Precision Medicine
2.5.1. Genetic Diseases Databases
2.5.2. Precision Medicine. The Need to Integrate Genetic Data
2.5.3. Extracting Data from OMIM

2.6. Self-Reported Patient Repositories
2.6.1. Secondary Data Use
2.6.2. Patients' Role in Deposited Data Management
2.6.3. Repositories of Self-Reported Questionnaires. Examples

2.7. Elixir Open Databases
2.7.1. Elixir Open Databases
2.7.2. Databases Collected on the Elixir Platform
2.7.3. Criteria for Choosing between Databases

2.8. Adverse Drug Reactions (ADRs) Databases
2.8.1. Pharmacological Development Processes
2.8.2. Adverse Drug Reaction Reporting
2.8.3. Adverse Reaction Repositories at European and International Levels

2.9. Research Data Management Plans. Data to be Deposited in Public Databases
2.9.1. Data Management Plans
2.9.2. Data Custody in Research
2.9.3. Data Entry in Public Databases

2.10. Clinical Databases. Problems with Secondary Use of Health Data
2.10.1. Medical Record Repositories
2.10.2. Data Encryption
2.10.3. Access to Health Data. Legislation

Module 3. *Big Data* in Medicine: Massive Medical Data Processing

3.1. *Big Data* in Biomedical Research

3.1.1. Data Generation in Biomedicine
3.1.2. *High-Throughput* Technology
3.1.3. Uses of High-Throughput Data. Hypotheses in the Age of *Big Data*

3.2. Data Pre-Processing in *Big Data*

3.2.1. Data Pre-Processing
3.2.2. Methods and Approaches
3.2.3. Problems with Data Pre-Processing in *Big Data*

3.3. Structural Genomics

3.3.1. Sequencing the Human Genome
3.3.2. Sequencing vs. Chips
3.3.3. Variant Discovery

3.4. Functional Genomics

3.4.1. Functional Notation
3.4.2. Mutation Risk Predictors
3.4.3. Association Studies in Genomics

3.5. Transcriptomics

3.5.1. Techniques to Obtain Massive Data in Transcriptomics: RNA-seq
3.5.2. Data Normalization in Transcriptomics
3.5.3. Differential Expression Studies

3.6. Interactomics and Epigenomics

3.6.1. The Role of Cromatine in Gene Expression
3.6.2. High-Throughput Studies in Interactomics
3.6.3. High-Throughput Studies in Epigenetics

3.7. Proteomics

3.7.1. Analysis of Mass Spectrometry Data
3.7.2. Post-Translational Modifications Study
3.7.3. Quantitative Proteomics

3.8. Enrichment and *Clustering* Techniques

3.8.1. Contextualizing Results
3.8.2. *Clustering* Algorithms in Omics Techniques
3.8.3. Repositories for Enrichment: Gene Ontology and KEGG

3.9. Applying *Big Data* to Public Health

3.9.1. Discovery of New Biomarkers and Therapeutic Targets
3.9.2. Risk Predictors
3.9.3. Personalized Medicine

3.10. *Big Data* Applied to Medicine

3.10.1. Potential for Diagnostic and Preventive Assistance
3.10.2. Use of *Machine Learning* Algorithms in Public Health
3.10.3. The Problem of Privacy

You will have additional material of great quality and in different formats to delve into the aspects of the agenda that interest you the most at your disposal"

06
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"

TECH Business School uses the 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"

This program prepares you to face business challenges in uncertain environments and achieve business success.

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

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. 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 business reality is taken into account.

" *You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments"*

The case method has been the most widely used learning system among the world's leading business 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, argue and defend their ideas and decisions.

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.

Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.

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 online business school is the only one in the world licensed to incorporate 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. With this methodology we have 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, markets, and financial 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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.

Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.

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%

3%

30%

15%

4%

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 senior management 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.

Our Students' Profiles

The Bioinformatics and Big Data in Medicine program is aimed at graduates, diploma graduates and university graduates who have previously completed any of the following degrees in the field of social and legal, administrative and economic sciences.

The diversity of participants with different academic profiles and from multiple nationalities makes up the multidisciplinary approach of this program.

The Postgraduate Diploma can also be taken by professionals who, being university graduates in any field, have two years of work experience in the field of telemedicine.

"A qualification with which you will be able to know to professionals with your same ambitions and objectives within the telemedicine sector"
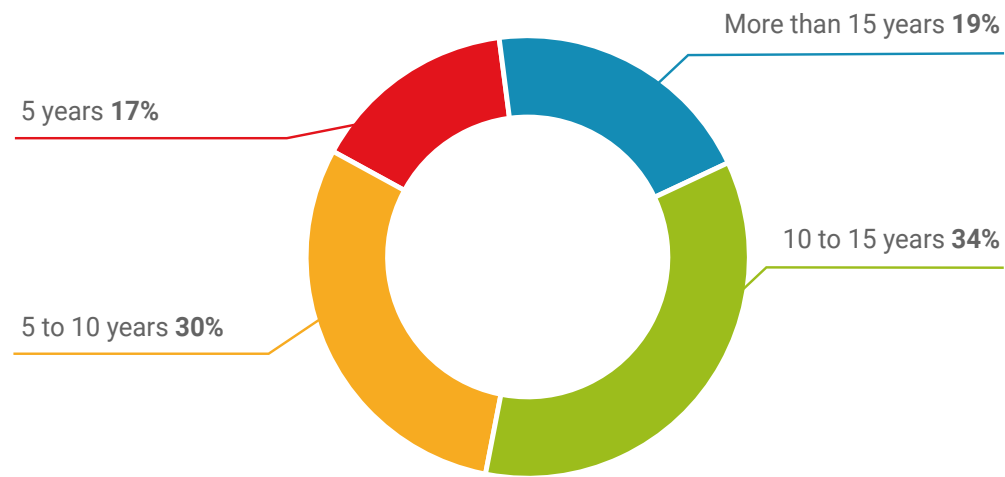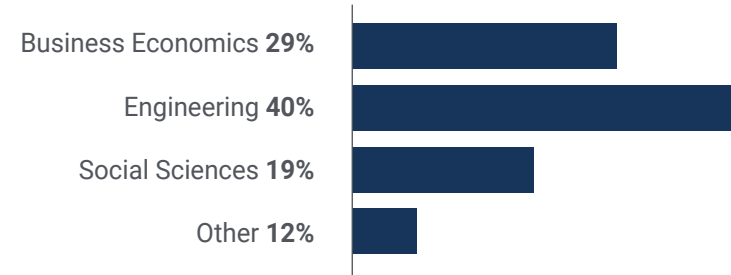
Average Age

Between **35** and **45** years old

Years of Experience

More than 15 years **19%**

5 years **17%**

10 to 15 years **34%**

5 to 10 years **30%**

Training

Business Economics **29%**

Engineering **40%**

Social Sciences **19%**

Other **12%**

Educational Profile

Industry **39%**

Services **22%**

Entrepreneurs **29%**

Other **10%**
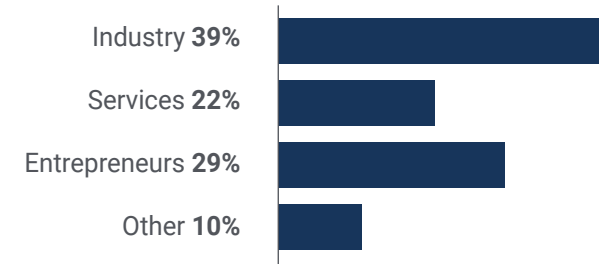
Geographical Distribution

USA **13%**

Spain **43%**

Mexico **27%**

Colombia **17%**
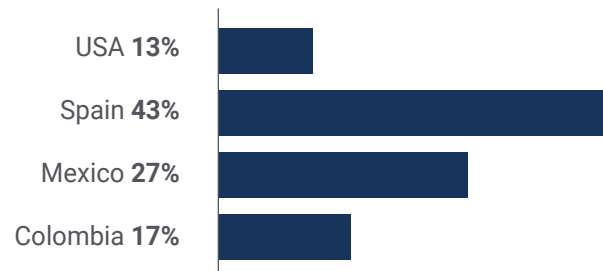
María Sagrario González

Big Data expert and coordinator of a Bioinformatics project in a private clinic

"My experience with this Postgraduate Diplomahas been totally recommendable, not only based on the quality of the content, but also on the attention that I have received from the teaching team. Thanks to all of this, I have been able to work on perfecting my skills, which has given me the confidence to develop my own Big Data project applied to the healthcare environment."

08

Course Management

For the elaboration of the teaching staff of this Postgraduate Diploma TECH has selected a list of professionals with a wide and extensive trajectory employment in the engineering and medicine sector. In this way, they combine the novelties of both areas in a single program, which will allow the businessman to know its ins and outs in detail, in order to be able to apply the business strategies that best suits you, increasing your chances of success.

The teaching team has selected real practical cases related to the field of business Telemedicine for this Postgraduate Diploma, so that you can work on improving your skills dynamically"

Management

Ms. Sirera Pérez, Ángela

- Biomedical Engineer expert in Nuclear Medicine and exoskeleton design
- Designer of specific parts for 3D printing at Technadi
- Technician in the Nuclear Medicine area of the University Clinic of Navarra
- Degree in Biomedical Engineering from the University of Navarra
- MBA and Leadership in Healthcare and Medical Technology Companies

Professors

Mr. Piró Cristobal, Miguel
- E-Health Support Manager at ERN Transplantchild
- Electromedical Technician. Electromedical Business Group GEE
- Data and Analysis Specialist - Data and Analysis Team. BABEL
- Biomedical Engineer at MEDIC LAB. UAM
- Director of External Affairs CEEIBIS
- Degree in Biomedical Engineering, Carlos III University of Madrid
- Master's Degree in Clinical Engineering Carlos III University of Madrid
- Master's Degree in Financial Technologies: Fintech Carlos III University of Madrid
- Training in Data Analysis in Biomedical Research. La Paz University Hospital

Ms. Ruiz de la Bastida, Fátima
- Data Scientist at IQVIA
- Area Specialist, Bioinformatics Unit, Jimenez Diaz Foundation Research Institute
- Oncology Researcher at the La Paz University Hospital
- Graduate in Biotechnology, University of Cadiz
- Master's Degree in Bioinformatics and Computational Biology, Autonomous University of Madrid
- Specialist in Artificial Intelligence and Data Analysis at the University of Chicago

Impact on Your Career

This program has been developed in such a way that any graduate who access it, you will be able to acquire a series of unique knowledge that will increase their chances of climbing job positions in any prestigious company of the telemedicine sector. It is a program designed to achieve career success and propel students' careers towards a prosperous future within Bioinformatics in the healthcare environment.

" *Thanks to this Postgraduate Diploma, you will be able to project your career towards relevant companies in the Medicine sector"*

Are you ready to take the leap?
Excellent professional development awaits you

TECH's Postgraduate Diploma in Bioinformatics and Big Data in Medicine is an intensive program that prepares the student to face challenges and business decisions in the field of Engineering and Bioinformatics in Medicine. His The main objective is to promote the personal and professional growth of the student. Helping students achieve success.

Those who wish to improve themselves, achieve a positive change at a professional level and interact with the best will find their place in this program.

You will be able to include in your curricular skills the mastery of data mining through the most sophisticated computing methods, an aspect that will make you stand out in any selection process.

Are you looking for a program that can give you access to a considerable salary increase? This Postgraduate Diploma will provide you with everything you need for it.

Time of Change

During the program	During the first year	After 2 years
18%	**60%**	**22%**

Type of Change

Internal Promotion **38%**

Change of Company **35%**

Entrepreneurship **27%**
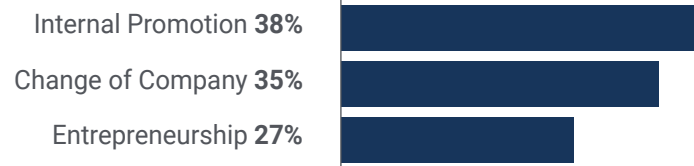
Salary Increase

The completion of this program represents a salary increase of more than **28%** for our students.

Salary before	A salary increase of	Salary after
$55,500	**28%**	**$71,000**

10 Benefits for Your Company

This Postgraduate Diploma prepares the graduate to assume complex situations within the business environment, thanks to the exhaustive work of their skills of leadership, as well as specialized knowledge in the area of Bioinformatics and *Big Data* in Medicine. In addition, it contributes to raising the talent of the organization, which will influence significantly and in the medium-long term in the improvement business strategies, as well as in achieving higher profits.

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"You will be able to reduce costs and increase the benefits of your company without affecting the quality of the service. What's more, you will work on perfecting the most effective strategies to improve it without it costing you more"

Developing and retaining talent in companies is the best long-term investment.

01

Growth of talent and intellectual capital

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

02

Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

Building agents of change

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

04

Increased international expansion possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.

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Project Development

05

The professional can work on a real project or develop new projects in the field of R & D or business development of your company.

Increased competitiveness

06

This program will equip students with the skills to take on new challenges and drive the organization forward.

11

Certificate

The Postgraduate Diploma in Bioinformatics and Big Data in Medicine guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"
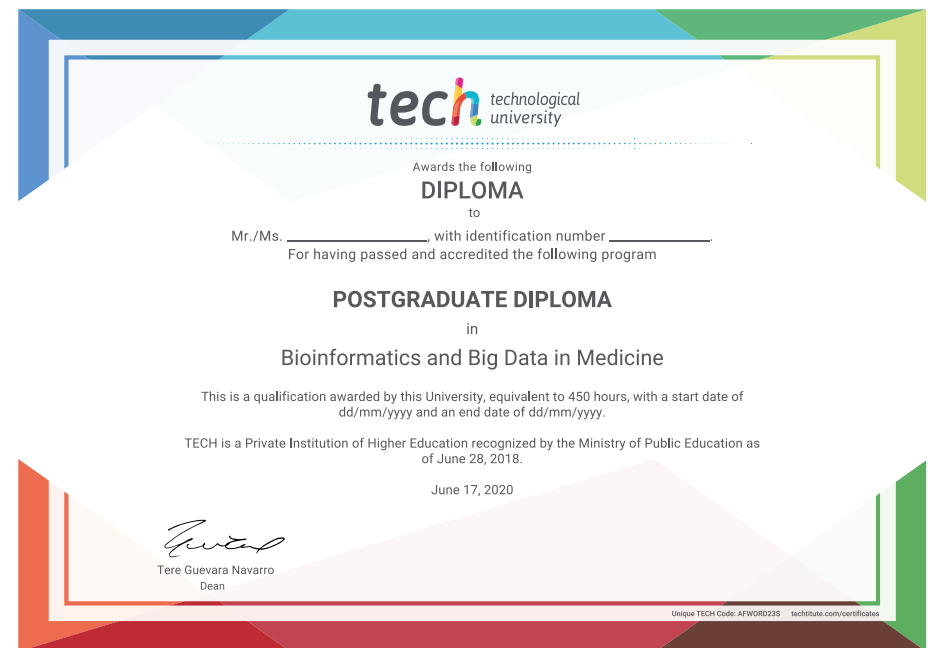
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After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Diploma in Bioinformatics and Big Data in Medicine**

Official Nº of hours: **450 h.**

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Awards the following

DIPLOMA

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Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Bioinformatics and Big Data in Medicine

This is a qualification awarded by this University, equivalent to 450 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

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*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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Postgraduate Diploma
Bioinformatics and
Big Data in Medicine

- » Modality: **online**
- » Duration: **6 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Postgraduate Diploma

Bioinformatics and
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