Postgraduate Certificate Philosophy of Science





## Postgraduate Certificate Philosophy of Science

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/humanities/postgraduate-certificate/philosophy-science

## Index



## 01 Introduction

This program will allow the student to engage in the analysis of problems arising from Science and its progress, from the standpoint of a competent philosopher, exploring how concepts have evolved and philosophical answers to the most relevant questions. It includes an intensive work program that will allow students to learn effectively and comfortably from their own computer. All this, with the reassurance provided by the most prestigious online university in the world.



A philosophical look at the most relevant issues arising from the relationship between Science and the human being, analyzed academically in a high-quality program for humanists"

## tech 06 | Introduction

This Postgraduate Certificate will take you through a very effective educational process that will teach you all the fundamental concepts and developments in the Philosophy of Science. Thus, you will learn how science is configured as a specific form of knowledge, learning about science methodology, its relationship with technique and the differences between the two. All this from a philosophical investigation of the interrelationship between science, the human condition and human progress.

This academic process aims to provide students with the professional and personal skills to practically apply their learning, being able to address contemporary problems and carry out a complete philosophical analysis of them.

This program will also teach students the most effective study methods for this subject.

If you seek self-improvement, to achieve a positive change at a personal level, to interact with the best and belong to a new generation of professionals capable of performing their work anywhere in the world, this may be the path for you.

A Postgraduate Certificate fully compatible with other work, personal, teaching or study commitments. Its system and teaching approach will flexibly adjust to student needs from beginning to end throughout the course. Consequently, the results are much more efficient, since the study will not become an unbearable burden, but rather, a stimulating and easy challenge to undertake and bring to fruition.

This **Postgraduate Certificate in Philosophy of Science** contains the most complete and up-to-date program on the market. The most important features include:

- Practical cases to apply the theoretical content to real life situations
- 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
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- Algorithm-based interactive learning system for decision-making in the situations that are presented to the student
- Special emphasis on practical learning
- All this will be complemented with theoretical lessons, questions to the expert, discussion forums on controversial issues and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

A very complete study that covers all the paradigms of indispensable knowledge for the contemporary philosopher"

#### Introduction | 07 tech

66

Study with the greatest University in the technological era to be part of an entity with a vocation of service, aware of current social needs, at a global level, and individual needs in particular" This Postgraduate Certificate is created to ensure you can study in a simple, efficient and flexible way, with the superior quality of an advanced academic program.

Study with the technical and human solvency of the largest Spanish-speaking, 100% online university in the world.

TECH University offers the most innovative, creative and unique offering, in a dynamic, talented and internationally recognized institution. With a space to exchange ideas, experience and reflections. Students will be able to share their learning experience, through forums and other collaborative tools, all 100% online.

TECH supports its students at all times thanks to an involved and committed teaching team. The teaching team transmits their expertise in their professional performance, working from a real, lively and dynamic context. TECH explores the student's critical side, their ability to the field things, their problem-solving skills, as well as their interpersonal skills.

# 02 **Objectives**

With this Postgraduate Certificate, you will be walked through the key concepts in the approach to this discipline, learning how to undertake analyses, dissertations, expositions, debates or publications on this subject, with the support of the most comprehensive knowledge, with which you will learn while enjoying the benefits of a specialization designed to optimize your work time to the maximum.

8C3HII



Acquire philosophical analysis tools and a philosophical understanding of science and apply them in your work with the assurance provided by the most comprehensive Postgraduate Certificate"

Objectives | 09 tech

## tech 10 | Objectives

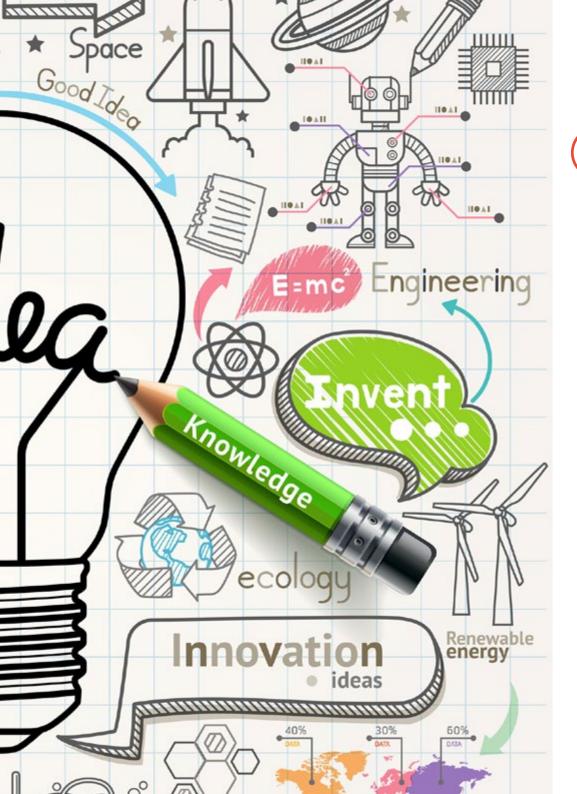


#### **General Objectives**

- Acquire a rigorous philosophical method, shaped by ordered thought and the capacity for dialog, putting this into practice
- Possess the adequate tools to study philosophical subjects
- Conduct fruitful scientific work
- Structure the various philosophical contents that will become evident
  in daily work environments
- Develop a mental structure and appropriate conceptual frameworks that structure philosophical criteria rooted in Christian tradition, including principles, methods and contents
- Shape students' specific identity as Christian thinkers

The profile of the humanistic professional has reached the highest levels of professionalism. Activate your competence growth and don't get left behind"





## Objectives | 11 tech



- Philosophically approach problems arising from science (from ancient to contemporary)
- Understand the evolution of the concepts used in science and how more and more accurate answers to scientific questions
- Understand the meaning of science in philosophy
- Differentiate between science and technique
- Explain the theoretical foundations and methodology of modern science as a specific form of knowledge production
- Explain the interrelation present in the theoretical foundations and methodology of modern sciences with technology
- Explain the influences of the theoretical foundations and methodology in modern sciences concerning the configuration of the world today

## 03 Structure and Content

This comprehensive Postgraduate Certificate will lead students to the acquisition of the most extensive knowledge in this field, bringing them closer to excellence. The syllabus has been designed to meet the criteria of high academic impact for this Postgraduate Certificate, incorporating new teaching approaches that aim to maintain the motivation and interest necessary to achieve the learning objectives.

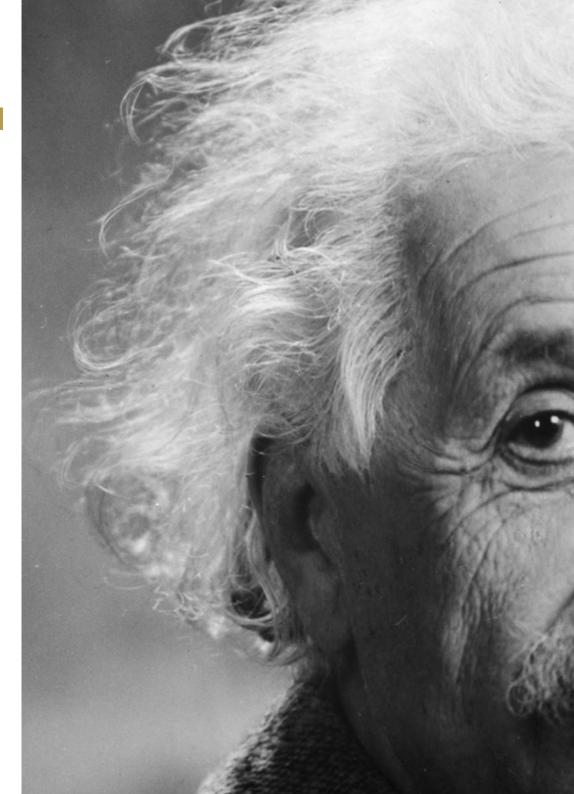
3 G A co theo

A complete journey through all the theoretical and practical learning necessary to know and understand this area of philosophical development"

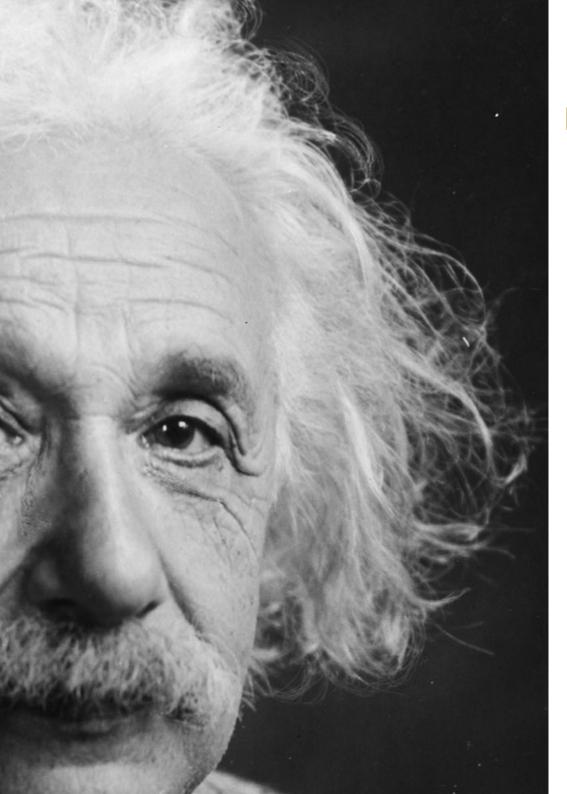
## tech 14 | Structure and Content

#### Module 1. Philosophy and Experimental Science

- 1.1. Science and its Features
  - 1.1.1. Starting with a Contemporary Definition of Science
  - 1.1.2. The Different Levels of Science
  - 1.1.3. Features of Experimental Sciences
- 1.2. Scientific Method and Models
  - 1.2.1. Possible Methods and Their Scope
  - 1.2.2. Building the Scientific Object: Concepts, Models, Statements and Theories
- 1.3. Philosophy in Science
  - 1.3.1. Not a Reflexion on Science, but on its Contents
  - 1.3.2. Philosophy and Physics
    - 1.3.2.1. Matter: Aristotle vs. Contemporary Science
    - 1.3.2.2. Movement Aristotle vs. Contemporary Science
    - 1.3.2.3. New Astronomy, New Metaphysics and the Opposition
    - 1.3.2.4. God and the World
  - 1.3.3. Philosophy and Biology
    - 1.3.3.1. What is Life?
    - 1.3.3.2. The Controversy over Spontaneous Generation: from Aristotle to Pasteur
  - 1.3.4. Philosophy and Chemistry1.3.4.1. Lavoisier and the Chemical Element1.2.4.2. The Material of Chemical Eratities
    - 1.3.4.2. The Metaphysics of Chemical Entities







#### Module 2. Philosophy of Science

- 2.1. Description and Brief History of Science and Technology
  - 2.1.1. Toward a Definition of Science
  - 2.1.2. Toward a Definition of Technique
  - 2.1.3. Brief History of Science, Technique and Technology
- 2.2. The Nature of Science
  - 2.2.1. Attitudes toward Science
  - 2.2.2. The Development of Philosophy of Science
  - 2.2.3. Main Current Trends in the Philosophy of Science
  - 2.2.4. Nature, Diversity and Complexity in Science
- 2.3. The Scientific Method
  - 2.3.1. Formal Methods in Science
  - 2.3.2. Pragmatism as Technological Criteria
  - 2.3.3. Discovery and Justification in Science
  - 2.3.4. Scientific Revolutions and Changes
- 2.4. Scientific and Technological Constructions
  - 2.4.1. Concepts, Statements and Scientific Theories
  - 2.4.2. Technology and World Transformation
- 2.5. The Value of Science and Technique
  - 2.5.1. Contemporary Discussions on Truth and Objectivity in the Sciences
  - 2.5.2. The Debate over Science and Values
  - 2.5.3. The End of Scientific Hegemony: Technology and Science

A very complete study that covers all the paradigms of indispensable knowledge for the contemporary philosopher"

# 04 **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 18 | Methodology

#### 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.

### Methodology | 19 tech



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

#### 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"

6

The case method has been the most widely used learning system among the world's leading Humanities 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 will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

## tech 20 | Methodology

#### **Relearning Methodology**

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 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.



#### Methodology | 21 tech

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 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.



## tech 22 | Methodology

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.

30%

10%

8%

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.

### Methodology | 23 tech



#### **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

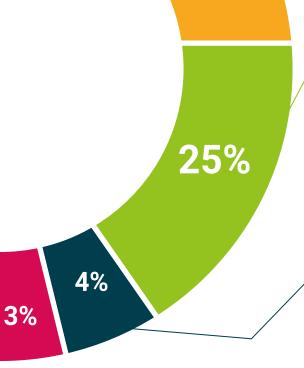
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.



20%

## 05 **Certificate**

The Postgraduate Certificate in Philosophy of Science guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



56 Successfully of receive your u

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

### tech 26 | Certificate

This **Postgraduate Certificate in Philosophy of Science** contains the most complete and up-to-date program on 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 exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Certificate in Philosophy of Science Official N° of Hours: 250 h.



\*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.

technological university Postgraduate Certificate Philosophy of Science » Modality: online » Duration: 12 weeks Certificate: TECH Technological University » » Dedication: 16h/week » Schedule: at your own pace » Exams: online

## Postgraduate Certificate Philosophy of Science

