

# Postgraduate Certificate Science and Philosophy



## Postgraduate Certificate Science and Philosophy

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

Website: [www.techtitute.com/us/humanities/postgraduate-certificate/science-philosophy](http://www.techtitute.com/us/humanities/postgraduate-certificate/science-philosophy)

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# 01

# Introduction

Science, under the scrutiny of philosophy is a generator of ideas and thoughts that can be the engine of interest in the secondary classroom if approached in the right way. This Postgraduate Certificate will allow you to use this interest in a didactic approach of maximum effectiveness in the teaching of this subject. An essential Postgraduate Certificate for the most up-to-date teachers.





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*One week of high quality training that will allow you to approach the work in the classroom, in the area of Science and Philosophy, with the most effective tools in the current teaching market"*

This program addresses philosophy and its relationship to science in an intense, yet fully accessible approach, always with a special focus on the teacher. Students can expect to gain a complete body of knowledge of the most fundamental philosophical themes, from the most purely theoretical and metaphysical to the most practical and active human issues.

In today's job market, professionals from other fields who complement their training with master's degrees in thinking and argumentation are highly valued and sought after. The philosopher's ability to see things from a different perspective, to think, as the Anglo-Saxons would say, outside the box, is a fundamental asset in the world of work.

Personally, philosophy helps us to see things, as the great Spinoza said, *subspecies aeternitatis*, that is, through a prism of eternity, knowing that in the great context of the world and the universe our actions are both relevant and insignificant.

The role of philosophy as a consolatory discipline before the evils and misfortunes of this world has always been fundamental and, moreover, it allows us to better understand our nature, our actions, our morality, our being. In short, philosophy helps us to grow as people, to mature as individuals, to become more responsible citizens and to improve our work performance.

Throughout the program, students will have the opportunity to access the most important developments in philosophy applied to teaching. Guided by a very complete but very specific syllabus, students will acquire the knowledge and routines required to teach this subject or those applicable to other areas of life.

An opportunity created to add enormous value to students' CV.

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

- ◆ The latest technology in online teaching software.
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand.
- ◆ Practical cases presented by practising experts.
- ◆ State-of-the-art interactive video systems.
- ◆ Teaching supported by telepractice.
- ◆ Continuous updating and recycling systems.
- ◆ Autonomous learning: full compatibility with other occupations.
- ◆ Practical exercises for self-evaluation and learning verification.
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- ◆ Communication with the teacher and individual reflection work.
- ◆ Content that is accessible from any fixed or portable device with an Internet connection
- ◆ Complementary documentation banks are permanently available, even after the course.



*A Postgraduate Certificate designed to turn the subject of philosophy in the secondary school classroom into a process of personal growth"*

“*Training with TECH - Technological University, will allow you to learn with the best training systems, enjoying the most developed and interactive online resources”*

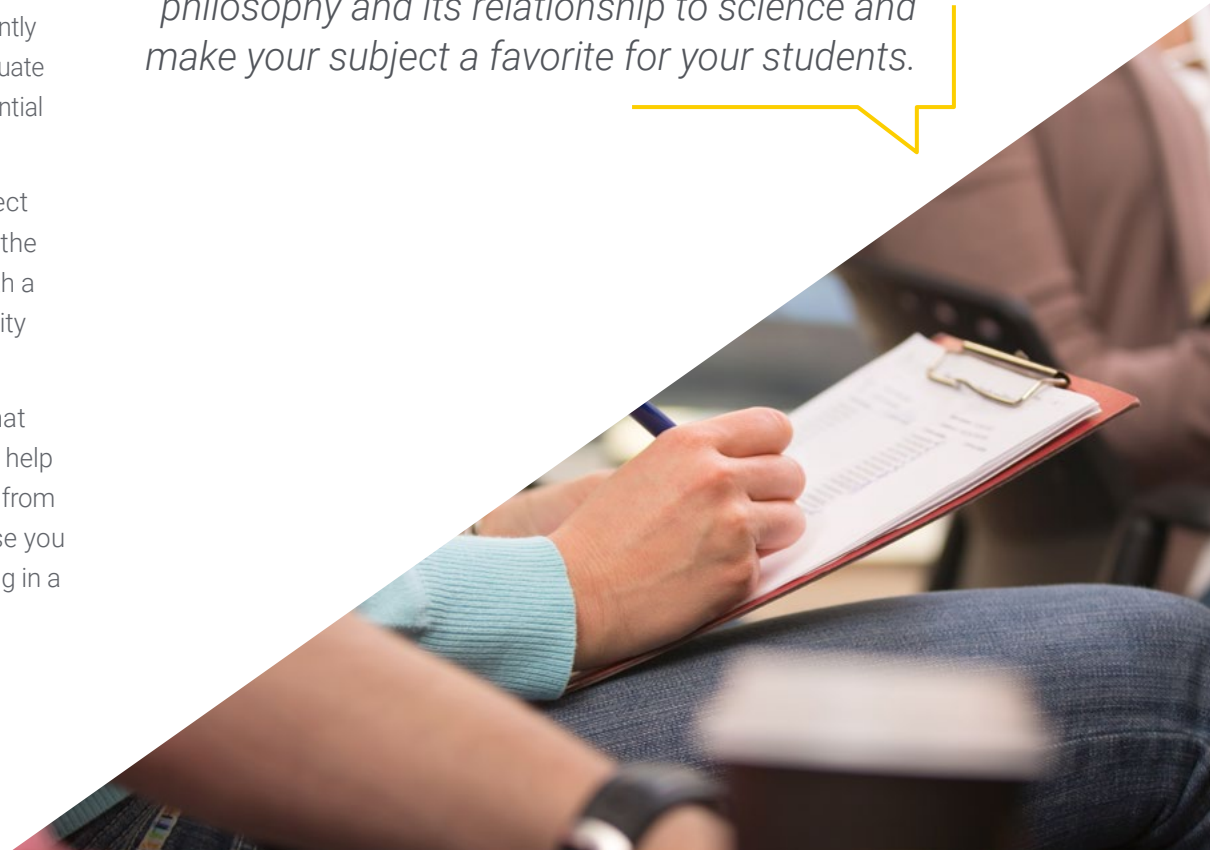
Our teaching staff is made up of philosophy professionals and active specialists. In this way, we ensure that we provide you with the educational update we are aiming for. A multidisciplinary team of trained and experienced professionals who will efficiently develop the theoretical knowledge, but, above all, will put at the service of the Postgraduate Certificate the practical knowledge derived from their own experience: one of the differential qualities of this training.

The effectiveness of our methodological design enhances mastery of the subject matter. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. In this way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your education.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, with the help of an innovative interactive video system, and by means of telepractice and learning from an expert, you will be able to acquire the knowledge as if you were facing the case you are learning at that moment. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

*In just a few weeks, you will master the contents of this Postgraduate Certificate, created to allow you to achieve your goals in a short period of time.*

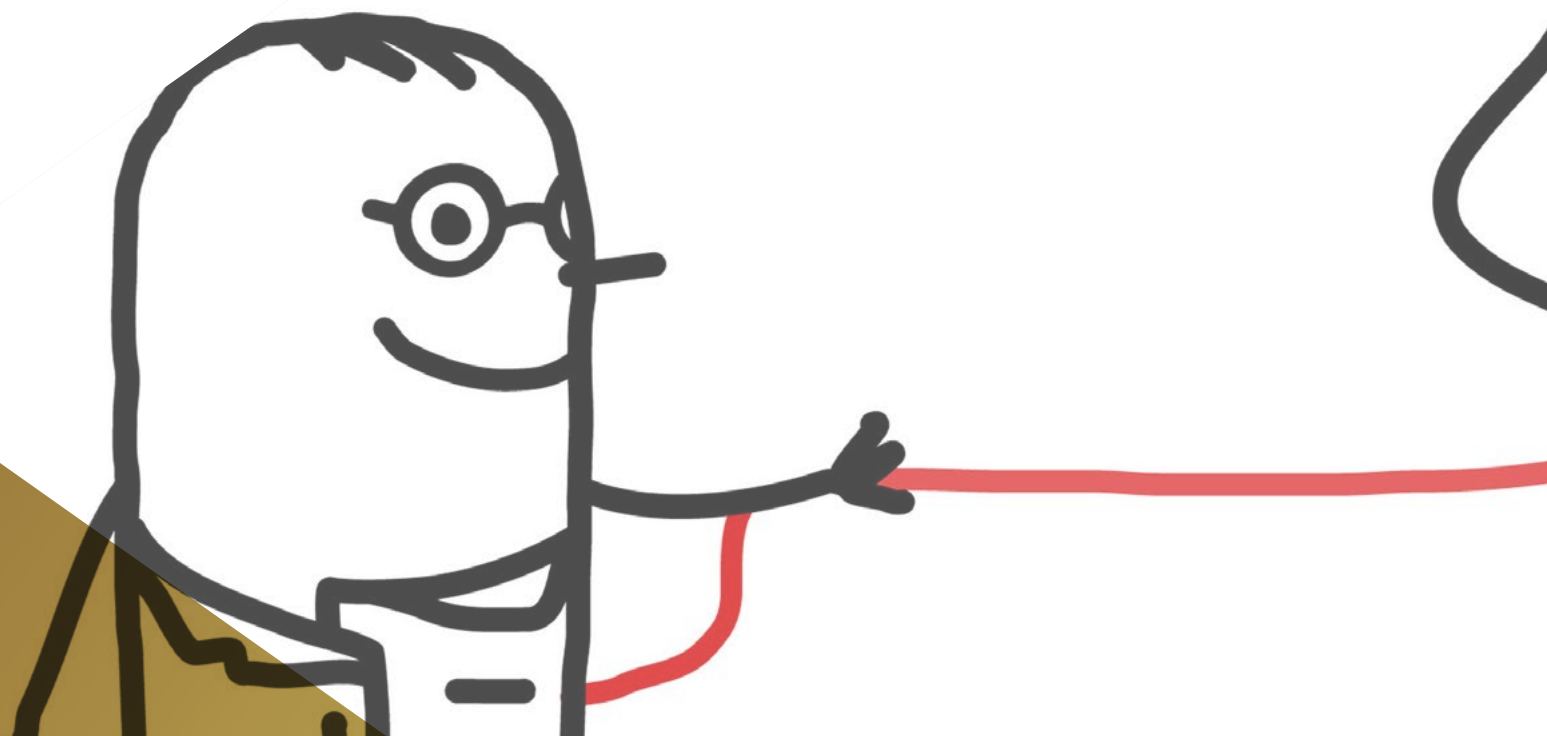
*Learn how to convey knowledge about philosophy and its relationship to science and make your subject a favorite for your students.*



02

# Objectives

The objective of all teaching courses is to contribute to the increase of quality in all educational areas. With our Postgraduate Certificate in Science and Philosophy, this pursuit reaches excellence with a program created to make this subject one of the most complete and interesting in the training program of any teacher. An exclusive opportunity to train with the most prestigious online university in the world.







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*Our goal is to give you the theoretical knowledge and practical tools necessary to make your philosophy teaching practice an enriching, interesting and quality process"*



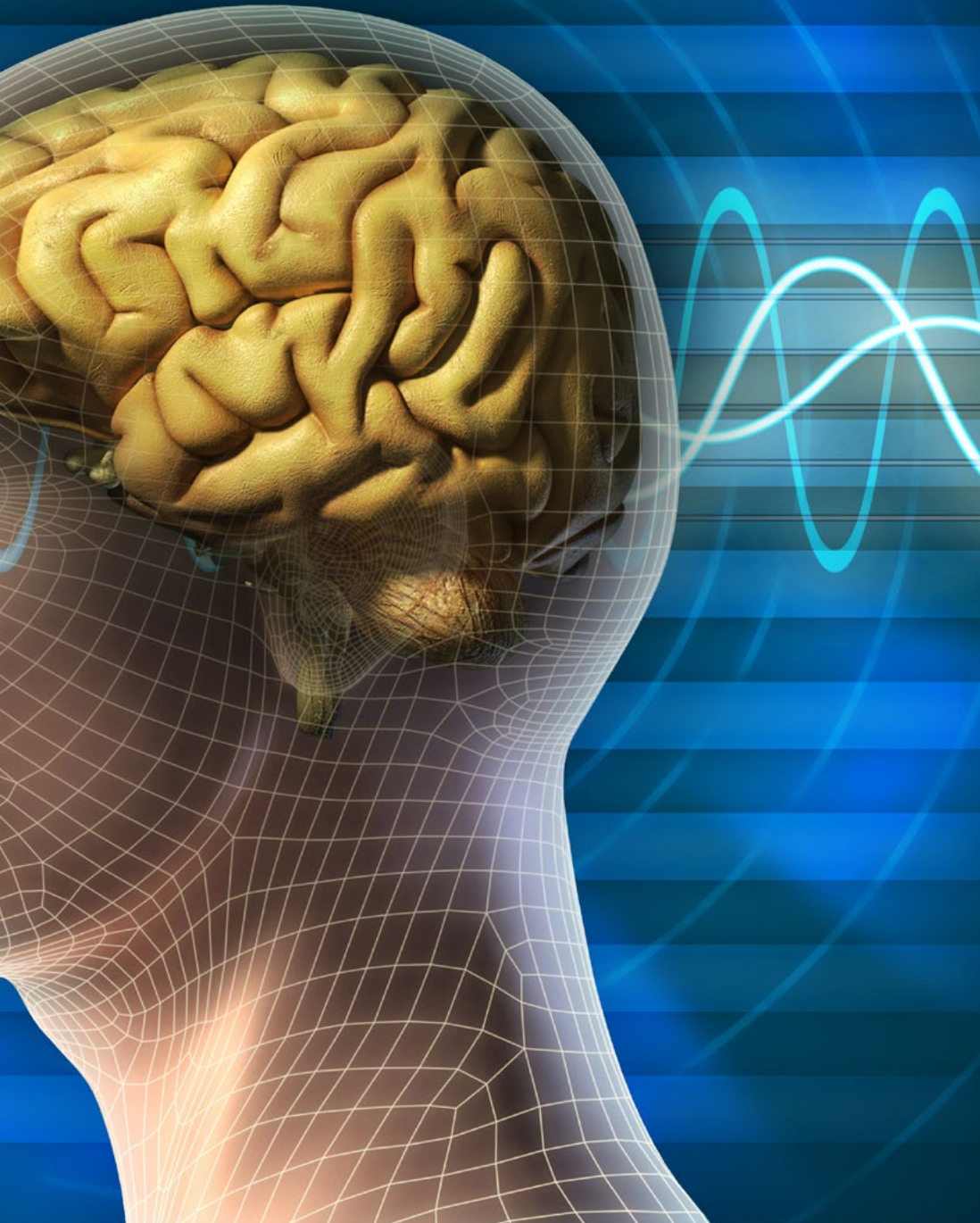
## General Objectives

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- ◆ Possess advanced skills delving into research in the different branches of Philosophy, according to the student's choice of specialty
- ◆ Develop a high reflective and critical capacity in philosophical questions and topics, both from a historical and systematic point of view, in order to provide students with a clear understanding of the topics within current schools of thought, which will also be useful for research
- ◆ Master the methodological bases and knowledge that allow for the integration of multiple bodies of philosophical knowledge in a personal work project
- ◆ Have a fluent command of interdisciplinarity, as a basic element of philosophical reflection in its essential openness to other fields of culture and knowledge, and in the development of a reflective understanding of the conceptual foundations of these other fields







## Specific Objectives

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- ◆ Provide the student with the elements of judgment to evaluate the importance of the development of scientific and technical knowledge in society
- ◆ Provide students with conceptual tools to critically elucidate the impact of science and technology on our understanding of the natural and social environment
- ◆ Provide the student with the basic knowledge to understand the structure of scientific knowledge
- ◆ Provide the student with the categories and concepts to distinguish scientific knowledge from other forms of knowledge
- ◆ Provide the student with the necessary concepts to critically understand scientific rationality
- ◆ Provide students with the necessary knowledge to reflect on the epistemic and ethical values of science
- ◆ Provide students with a conceptualization that allows them to evaluate and assess the importance of ethical values in the development of science and technology
- ◆ Provide the student with tools and categories to analyze the new forms of humanism
- ◆ Provide students with the knowledge necessary to understand the links between science, technology and society
- ◆ Facilitate conceptually the understanding of STS studies and their reflection on the importance of teaching ethical values

03

# Course Management

The Postgraduate Certificate in Science and Philosophy has been designed and developed by a group of experts in this area, with long teaching and research experience. Through your mentorship, this Postgraduate Certificate will become a great learning experience. Total quality guarantee.

PHOTO



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*The experience of the Postgraduate Certificate professors is one of the keys to our success: from their own experience they will accompany you in your acquisition of competences"*

## Management



### Dr. Agüero, Gustavo

- ◆ PhD in Philosophy, National University of Cordoba, Argentina
- ◆ Professor of Introduction to Philosophical Thought, Faculty of Languages, UNC
- ◆ Director of the Research Group GRASP 08 on Philosophy of Language, Mind and Education Secretariat of Science and Technology, UNC
- ◆ Director of the Research Group on Philosophy of Law, National University of San Luis

## High School

### Ms. Testa, Ana

- ◆ Degree in Philosophy, National University of Cordoba, Argentina
- ◆ Specialist in the areas of Science, Technology and Society
- ◆ Professor of Philosophy of Education and Philosophy Teaching, Faculty of Philosophy and Humanities, UNC
- ◆ Member of the Research Group GRASP 08 on Philosophy of Language, Mind and Education (directed by Dr. Gustavo A. Agüero) Secretariat of Science and Technology at UNC



HOPE IS  
A WAKING DREAM.

ARISTOTLE



# 04

# Structure and Content

The Postgraduate Certificate syllabus is designed to gradually cover all the essential topics in the learning of this subject: from the knowledge of the theoretical philosophy to the most current part. Psychology shelled in all its aspects, in a complete approach and totally focused on its application in practice.





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*Boost your CV to another level, improving your chances in the job market or your on-the-job training”*





- 1.2. Scientific knowledge, technique and technology
  - 1.2.1. Common Sense and Knowledge
  - 1.2.2. Doxa and Episteme
    - 1.2.2.1. Appearance and reality
    - 1.2.2.2. Truth and falsehood
    - 1.2.2.3. Senses and experience
    - 1.2.2.4. Explanation and justification
  - 1.2.3. Knowledge of the Natural World
    - 1.2.3.1. Laws and Regularities
  - 1.2.4. Knowledge of the Social World
    - 1.2.4.1. Meanings and senses
  - 1.2.5. Theoria, Praxis and Techne
    - 1.2.5.1. Contemplation and action
    - 1.2.5.2. Doing and acting
    - 1.2.5.3. The Reasons
    - 1.2.5.4. The causes
  - 1.2.6. Technical knowledge
    - 1.2.6.1. Science and technology
    - 1.2.6.2. Rationality
    - 1.2.6.3. Means and Purposes
    - 1.2.6.4. Instrumental Rationality
  - 1.2.7. The Intervention of New Technologies
    - 1.2.7.1. Represent
    - 1.2.7.2. Intervene
    - 1.2.7.3. Knowing what and knowing how
- 1.3. Epistemology of Science
  - 1.3.1. Introduction: Philosophy and Science
  - 1.3.2. Scientific Knowledge
    - 1.3.2.1. Observation
    - 1.3.2.2. The Data
    - 1.3.2.3. Experience
    - 1.3.2.4. Seeing and Believing and Inferring
  - 1.3.3. Scientific Hypotheses
    - 1.3.3.1. The problem of induction
      - 1.2.3.1.1. Expanding knowledge
    - 1.3.3.2. Justification
  - 1.3.4. Explain and Predict
    - 1.3.4.1. Asymmetry explanation prediction
      - 1.3.4.1.1. Explanation models
      - 1.3.4.1.2. Methodological monism
      - 1.3.4.1.3. Methodological Pluralism
  - 1.3.5. Explain and Understand
    - 1.3.5.1. Explanation and Causality
      - 1.3.5.1.1. Methodological Individualism
      - 1.3.5.1.2. Methodological Holism
  - 1.3.6. Social sciences and the explanation of human action
    - 1.3.6.1. Human action and meaning
    - 1.3.6.2. Interpreting and understanding
    - 1.3.6.3. Social Practices and Meaning
  - 1.3.7. The reasons and causes in explanation of the action
    - 1.3.7.1. Subjects
    - 1.3.7.2. Agents
    - 1.3.7.3. Freedom
    - 1.3.7.4. Determinism
- 1.4. Scientific Rationality
  - 1.4.1. Introduction: Science as a rational enterprise
  - 1.4.2. Rationality and scientific progress: Internal and external factors in the evaluation of scientific theories
    - 1.4.2.1. Synchronic and diachronic analysis of scientific change
      - 1.4.2.1.1. Context of discovery and justification
  - 1.4.3. The Realist conception of science
    - 1.4.3.1. Progress in science
    - 1.4.3.2. Progress as intertheoretical accumulation
  - 1.4.4. Rupture and discontinuity in the development of science

- 1.4.5. Paradigm
  - 1.4.5.1. Normal Science
  - 1.4.5.2. Scientific Community
- 1.4.6. Tensions and Anomalies
  - 1.4.6.1. Disagreement and the scientific community
- 1.4.7. Scientific Change
  - 1.4.7.1. Paradigmatic crisis and scientific change
  - 1.4.7.2. Scientific revolution
- 1.4.8. Social Science and Paradigms
  - 1.4.8.1. Pre-paradigmatic science and proto-science
- 1.4.9. Epistemological Relativism
  - 1.4.9.1. Relativism and objectivism
- 1.5. Science and Ideology
  - 1.5.1. The polysemy of the concept of ideology
  - 1.5.2. Objectivity and Ideology
    - 1.5.2.1. Is objectivity possible?
  - 1.5.3. Ideology and Truth
  - 1.5.4. The Limits of Relativism
  - 1.5.5. Conceptual Frameworks and Relativism
  - 1.5.6. The Interaction between Science and Ideology
  - 1.5.7. The influence of ideology on the cognitive process
  - 1.5.8. Scientism as Ideology
  - 1.5.9. The Limits of Understanding and the Limits of Science
- 1.6. Science and values
  - 1.6.1. Norms, Virtues and Epistemic Values
    - 1.6.1.1. Epistemic values
    - 1.6.1.2. The normative nature of epistemic values
  - 1.6.2. Science and Ethical Values
    - 1.6.2.1. The distinction made value
  - 1.6.3. Modes of Scientific Rationality
    - 1.6.3.1. From classical technology to modern technology
  - 1.6.4. Scientific rationality as instrumental rationality
  - 1.6.5. Scientific Rationality as Practical Rationality
  - 1.6.6. Rationality as a means-end strategy
    - 1.6.6.1. Science and good reasons
    - 1.6.6.2. Techno-scientific rationality and its problems
  - 1.6.7. The Distinction between Ends and Values
    - 1.6.7.1. Criticism of the instrumental model
  - 1.6.8. Reasons and Good Reasons
    - 1.6.8.1. How good reasons are determined
      - 1.6.8.1.1. Evidence and justification
  - 1.6.9. Good Reasons Are Reliable
    - 1.6.9.1. Epistemic reliability as instrumental rationality
- 1.7. Technology and Nature
  - 1.7.1. Human life as a product of technology
  - 1.7.2. The impact of technology on societies
  - 1.7.3. Understand where we are
  - 1.7.4. Technoscience and Humanism
  - 1.7.5. Nature and Artificiality
  - 1.7.6. Progress and Utopia
  - 1.7.7. Dehumanize Nature?
    - 1.7.7.1. A soulless world
  - 1.7.8. A new configuration of the human?
    - 1.7.8.1. Human nature without nature
- 1.8. From Technique to Technology
  - 1.8.1. The Concept of Technology
  - 1.8.2. The Relation between Technology and Science
    - 1.8.2.1. Technology as applied science
  - 1.8.3. The Intellectual Idea of Technology
  - 1.8.4. Philosophical presuppositions of the transition from technique to technology
  - 1.8.5. Technological practice
    - 1.8.5.1. The dimensions of technological practice
  - 1.8.6. Technology and Public Policy
  - 1.8.7. Technology and Culture



- 1.8.7.1. The Concept of Culture
- 1.8.8. Technoscientific Decisions and the Environment
- 1.8.9. Technoscientific Decisions and Health
- 1.9. Social Studies of Science
  - 1.9.1. Introduction: Studies in Science, Technology and Society
  - 1.9.2. Towards a Social Study of Scientific Knowledge
    - 1.9.2.1. The social utility of science
    - 1.9.2.2. Production and social use of science
  - 1.9.3. A Critique of the Inherited Conception of Science
  - 1.9.4. From Rationalism to Social Constructivism
    - 1.9.4.1. What is constructivism?
    - 1.9.4.2. Scientific realism vs. constructivism
  - 1.9.5. Macrosocial Approaches
    - 1.9.5.1. Strong programs in Sociology of Science
  - 1.9.6. Microsocial Approaches
    - 1.9.6.1. Laboratory studies
  - 1.9.7. Science and Technology as Social Practices
  - 1.9.8. Different Concepts of Practices
    - 1.9.8.1. Concepts as rules
    - 1.9.8.2. Concepts, rules and practices
- 1.10. Science, Technology and Society (STS) and Teaching Values
  - 1.10.1. Knowledge Society and Education
    - 1.10.1.1. Knowledge society and information society
    - 1.10.1.2. New challenges for education
  - 1.10.2. Education as Technology
  - 1.10.3. The Importance of Teaching Values
    - 1.10.3.1. Epistemic values
    - 1.10.3.2. Moral values
    - 1.10.3.3. The development of ethical understanding
  - 1.10.4. Teaching to Give Reasons
    - 1.10.4.1. Beliefs and reasons
    - 1.10.4.2. The Importance of Justification
  - 1.10.5. Beyond the Dichotomy of Teaching Content and Skills and Teaching

## Values

- 1.10.6. Teaching Values from an CTS Perspective
  - 1.10.6.1. Epistemic values
  - 1.10.6.2. Moral values
  - 1.10.6.3. The development of ethical understanding
- 1.10.7. Teaching Values and Educational Contexts
  - 1.10.7.1. The Classroom as a Community of Inquiry
  - 1.10.7.2. Dialogue and exchange for values education
- 1.10.8. Studies in STS as Teaching Resources at School
- 1.10.9. The Classroom as a Community of Inquiry
  - 1.10.9.1. Creativity Development
  - 1.10.9.2. Teaches values and collaborative work



*A development of the relationship between philosophy and science created for the secondary school teacher, which will enable you to master specific knowledge in this interesting field of knowledge”*

05

# 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.

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*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.*



*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*”

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.



## 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.



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.





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.





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



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*Include in your training a Postgraduate Certificate in How and Why to Teach Philosophy: an added value of high qualification for the philosophy teacher"*



This **Postgraduate Certificate in Science and Philosophy** 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 Science and Philosophy**

Official N° of Hours: **150 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.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
online training  
development languages  
classroom



## Postgraduate Certificate Science and Philosophy

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