

# Postgraduate Certificate Instrumentation and Orchestration





## Postgraduate Certificate Instrumentation and Orchestration

- » 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/instrumentation-orchestration](http://www.techtitute.com/us/humanities/postgraduate-certificate/instrumentation-orchestration)

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# 01

# Introduction

Instrumentation and Orchestration are crucial areas in Music, as they allow composers to give life to their works and create different sonorities and emotions in the audience. That is why this program is designed to provide specialized preparation in the techniques and tools necessary for the realization of scores and the management of an orchestra. To this end, students will develop skills for the interpretation and critical evaluation of musical works. But the best thing is that this academic opportunity is 100% online, using the Relearning pedagogical methodology to favor the students' performance and adapting to the students' needs in order to organize their academic resources.





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*Get all the keys to the technical and idiomatic characteristics of the instruments of a symphony orchestra”*

The ability to choose and combine musical instruments to produce a piece, as well as the ability to assign musical parts to specific instruments in an orchestra, is fundamental to any composer. Not surprisingly, all this allows you to produce musical pieces with a rich variety of sounds and textures.

The Postgraduate Certificate in Instrumentation and Orchestration has been created to provide enrollees with a solid preparation in these areas. The program focuses on the theoretical and practical fundamentals of Instrumentation and Orchestration, including techniques of harmony, counterpoint, textures and styles. Students will also classify musical instruments by type and determine the layout of an orchestra.

This academic opportunity is 100% online, allowing students to access the program materials from home or anywhere. In fact, thanks to the *Relearning* pedagogical methodology they will advance even faster during the educational experience, being extremely efficient. In addition, the program offers maximum flexibility for students to organize their academic and study resources. With these characteristics, the Postgraduate Certificate in Instrumentation and Orchestration is the perfect choice for those seeking to develop specialized skills in the Instrumentation and Orchestration of musical works.

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

- ♦ The development of practical cases presented by experts in Instrumentation and Orchestration
- ♦ The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Stand out in the creation of musical works thanks to your skills enhanced with this title"*

“

*Establish the arrangement of the orchestra according to the type of instruments”*

*Trace the historical evolution of the piano and its importance in the orchestra through dynamic interactive resources.*

*Submit yourself to useful case studies with which you will assimilate each and every one of the roles of the instruments.*

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

Its multimedia content, developed with the latest educational technology, will provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.



# 02 Objectives

The Postgraduate Certificate has been designed to meet the growing need for highly specialized preparation in the field of musical composition, specifically in the technique of Orchestration and Instrumentation. The main objective of the program is to provide students with a complete vision of the theory and practice of these fields, focusing on the aspects that will allow them to develop advanced skills in the creation of arrangements and scores for orchestras.







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*If you achieve the objectives, you will aurally distinguish all musical instruments both individually and together”*



## General Objectives

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- ♦ Understand the characteristics and sound possibilities of the instrument
- ♦ Adopt an adequate position of the body with respect to the instrument, which makes possible and favors the action of the arm-arm-hand set on the keyboard
- ♦ Enable the students to combine the different orchestral instruments in reduced format
- ♦ Learn the organization and functioning of all the chords used during the period of tonal harmony practice
- ♦ Apply tuning procedures and techniques for one of the three strings of the central A of the piano based on intervention plans with quality and safety criteria





## Specific Objectives

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- Know the technical and idiomatic characteristics of the instruments that make up a symphony orchestra
- Distinguish aurally the different musical instruments, both individually and together
- Analyze the instrumentation of specific passages
- Acquire identification skills in terms of time and musical genre



*Enroll now and master  
the instrumentation of  
specific passages”*

# 03

## Structure and Content

The need for specialization in the area of Instrumentation and Orchestration has led TECH to design a Postgraduate Certificate in this discipline. The program focuses on providing students with the most complete vision possible of the techniques and tools necessary to analyze, create and conduct an orchestra, ranging from individual instrumentation to the combination of instruments in a full orchestra. Through the program, graduates will have the opportunity to develop an in-depth knowledge of the theoretical and practical foundations of this area. And in only 150 hours of academic coursework.



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*A syllabus that reflects the orchestra's beginnings and the post-Beethoven era”*

## Module 1. Instrumentation and Orchestration

- 1.1. The Orchestra
  - 1.1.1. What is an Orchestra?
  - 1.1.2. What Instruments Make Up an Orchestra?
  - 1.1.3. Beginnings of the Orchestra
  - 1.1.4. Baroque Orchestra
  - 1.1.5. Classical Orchestra
  - 1.1.6. Beethoven Orchestra
  - 1.1.7. Post-Beethoven Orchestra
  - 1.1.8. Contemporary Orchestra
- 1.2. Stringed Instruments
  - 1.2.1. What are the String Instruments?
  - 1.2.2. Tessitura
  - 1.2.3. Special Mention to the Piano
  - 1.2.4. String Quartet
  - 1.2.5. Roles of the String Instruments in the Orchestra
- 1.3. Woodwind Instruments
  - 1.3.1. What are the Woodwind Instruments?
  - 1.3.2. Woodwind Quintet
  - 1.3.3. Tessitura
  - 1.3.4. Roles of the Woodwind Instruments in the Orchestra
- 1.4. Brass Wind Instruments
  - 1.4.1. What are Brass Wind Instruments?
  - 1.4.2. Tessitura
  - 1.4.3. Roles of Brass Wind Instruments in the Orchestra
  - 1.4.4. Types of Brass Wind Instruments: Conical Drill and Cylindrical Drill
- 1.5. Chamber Formations
  - 1.5.1. What are Chamber Formations?
  - 1.5.2. What is Chamber Music?
  - 1.5.3. Origins of Chamber Ensembles
  - 1.5.4. Most Frequent Chamber Ensembles
- 1.6. Percussion
  - 1.6.1. What are the Percussion Instruments?
  - 1.6.2. Classification of the Percussion Instruments
  - 1.6.3. Types of Percussion
    - 1.6.3.1. Patch Percussion
    - 1.6.3.2. Sheet Percussion
    - 1.6.3.3. Small Percussion
  - 1.6.4. Percussion Function
- 1.7. Harp and Guitar
  - 1.7.1. Brief Description of the Harp
  - 1.7.2. Origins of the Harp
  - 1.7.3. Brief Description of the Guitar
  - 1.7.4. Origins of the Guitar
  - 1.7.5. Role of the Harp in the Orchestra
  - 1.7.6. Role of the Guitar in the Orchestra
- 1.8. Keyboard Instruments
  - 1.8.1. What are the Keyboard Instruments?
  - 1.8.2. Characteristics of the Keyboard Instruments
  - 1.8.3. Piano in the Orchestra
  - 1.8.4. Historical Evolution of the Piano
- 1.9. Soloist Instruments in the Orchestra
  - 1.9.1. What is a Solo Instrument and What is its Function?
  - 1.9.2. What are the Solo Instruments?
  - 1.9.3. The Most Important Solo Instruments in the 15th-16th centuries
  - 1.9.4. Today's Most Important Solo Instruments
- 1.10. The Arrangement in the Orchestra
  - 1.10.1. Stringed Instruments
  - 1.10.2. Woodwind Instruments
  - 1.10.3. Brass Wind Instruments
  - 1.10.4. Percussion



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*You will only need a device with an Internet connection to launch your career with the most complete and up-to-date Instrumentation and Orchestration syllabus”*

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.





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*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.



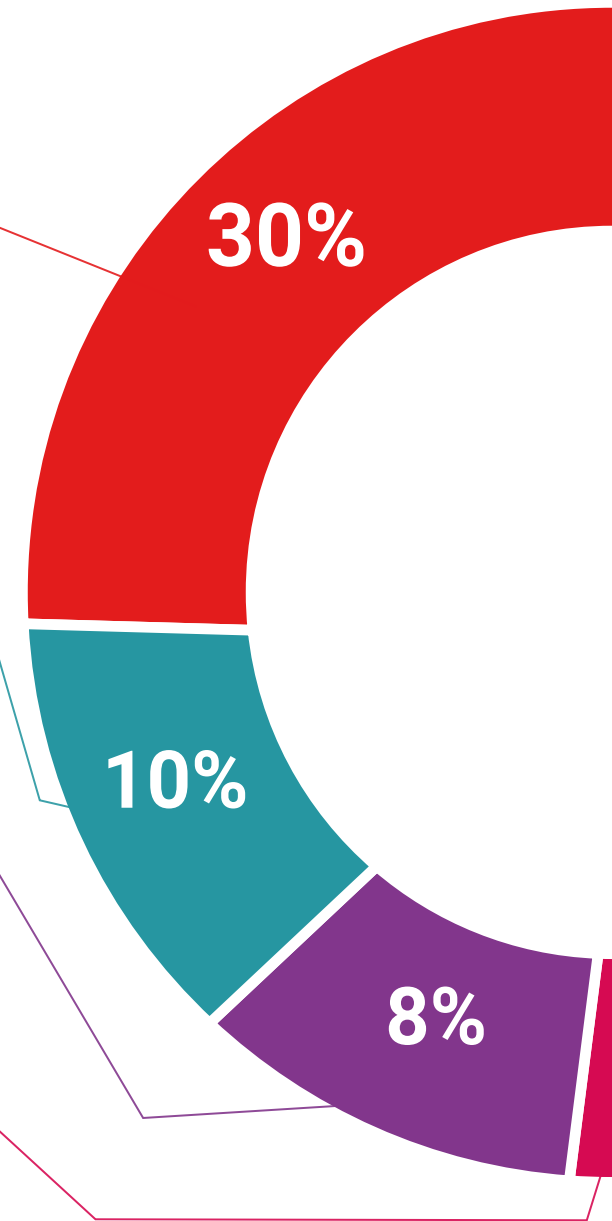
#### Practising Skills and Abilities

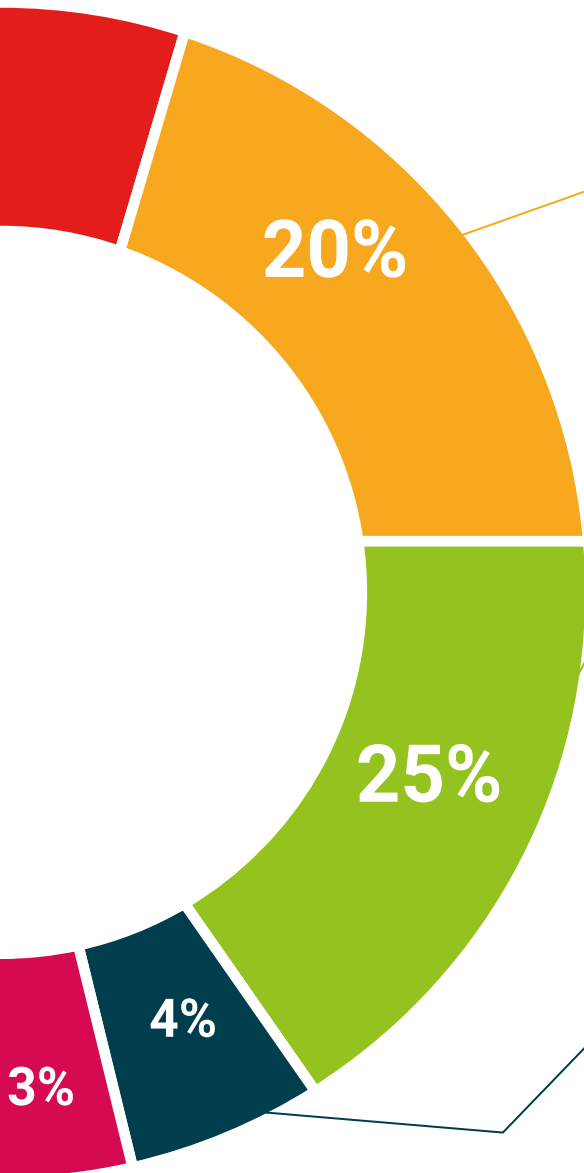
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### 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.



05

# Certificate

The Postgraduate Certificate in Instrumentation and Orchestration 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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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This **Postgraduate Certificate in Instrumentation and Orchestration** 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 Instrumentation and Orchestration**

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  
development language  
virtual classroom



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