

Postgraduate Certificate Vascular Malformations and Neurosurgical Stroke Treatment



Postgraduate Certificate Vascular Malformations and Neurosurgical Stroke Treatment

- » Modality: Online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/medicine/postgraduate-certificate/malformations-neurosurgical-stroke-treatment

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01

Introduction

With this high-level intensive program you will learn to identify the different types of vascular malformations and their differences in morphology and bleeding risk. You will also delve into defining the role of neurosurgery in the treatment of both hemorrhagic and ischemic stroke. A unique opportunity to specialise and stand out in a high-demand professional field.





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A comprehensive program that will help you keep up to date with the latest techniques in Neurosurgery”

The Postgraduate Certificate in Vascular Malformations and Neurosurgical Stroke Treatment is an updated compilation of the pathologies that require study and treatment by Neurosurgery. The application of diagnostic and therapeutic algorithms enhances student learning and synthesizes the flow of information to facilitate its practical application in the student's environment.

Vascular malformations comprise a broad spectrum of malformative vascular pathology with varying degrees of bleeding risk, and whose treatment is determined precisely by the likelihood of hemorrhage. Classifications of vascular malformations are dynamic and help to understand the pathophysiology and possible therapeutic implications of each type of entity. Each topic focuses on the different types of vascular malformations, the different classifications proposed and the therapeutic indications, especially highlighting how the risk of hemorrhage and the natural history modify the therapeutic approach, as well as the treatment modality indicated in each subtype. Based on this approach, arteriovenous and cavernomatous malformations, dural fistulas both intracranial and spinal, carotid-cavernous fistulas, venous angiomas and telangiectasias are treated.

The second part of the program is focused on identifying the role of neurosurgical treatment in the treatment of strokes, framed within the hospital care of stroke patients. The indications for surgery in the treatment of patients with hemorrhagic stroke are a subject under constant revision according to the updating of the therapeutic guidelines for patients with hemorrhagic stroke, which is also conditioned by the application of the newest and less invasive surgical treatments in this group of patients. On the other hand, the treatment of ischemic strokes currently benefits from the channeling of diagnosis and treatment through the Stroke Code and Stroke Units, and patients with this pathology may require neurosurgical techniques with specific indications such as by-pass surgery or decompressive craniectomy.

For this reason, this Postgraduate Certificate is the most intensive and effective educational program on the market in this field. A high level of training that will allow you to become one of the most up-to-date professionals in the sector, in a field with a high demand for professionals.

This **Postgraduate Certificate in Vascular Malformations and Neurosurgical Stroke Treatment** is the most comprehensive and up-to-date educational program on the market. The most important features of the program include:

- ◆ The development of case studies presented by experts in international cooperation of the peoples of the world.
- ◆ The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice.
- ◆ News on Vascular Malformations and Neurosurgical Treatment of Stroke
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Emphasis on innovative methodologies in International Cooperation
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work.
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



Expand your knowledge through this Postgraduate Certificate that will allow you to specialize with a view to achieving excellence in this field"

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This Postgraduate Certificate is the best investment you can make when selecting a refresher program for two reasons: in addition to updating your knowledge of Neurosurgery, you will obtain a qualification endorsed by TECH"

The teaching staff includes professionals from the International Cooperation sector, who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training experience designed to train for real-life situations.

The design of this program is centered around Problem-Based Learning, in which the medical professional will resolve professional practice situations that may arise throughout the program. For this purpose, the specialist will be assisted by an innovative interactive video system created by renowned and experienced experts in Vascular Malformations and Neurosurgical Treatment of Stroke.

Do not hesitate to take this training with us. You will find the best teaching material with virtual lessons.

This 100% online course will allow you to combine your studies with your professional work while increasing your knowledge in this field.



02

Objectives

The Postgraduate Certificate in Vascular Malformations and and Neurosurgical Stroke Treatment is aimed at aiding the professional Postgraduate Certificate performance with the latest advances and most innovative treatments in the sector.



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Thanks to this Postgraduate Certificate you will be able to specialize in Neurosurgery and learn about the latest advances in the field”



General Objectives

- ◆ Acquire more in-depth knowledge of the speciality, with a practical approach to help professionals apply the information learned in their clinical practice, focusing on the latest diagnostic and therapeutic guidelines and the most recent scientific evidence.
- ◆ Learn the latest surgical techniques that have been implemented in recent years along with the knowledge of technological development in multiple areas of Neurosurgery



Allowing you to complete your training in a context that connects you to the professional world. Are you ready to start your project”





Specific Objectives

- ◆ Learn to identify the different types of vascular malformations and their differences in morphology and bleeding risk
- ◆ Describe the different therapeutic modalities in the management of vascular malformations, understanding the need for a multidisciplinary approach and the possibility of combining different treatments.
- ◆ Define the role of neurosurgery in the treatment of both hemorrhagic and ischemic stroke, providing examples that help to understand the indications for surgery and its role in the overall therapeutic management required for this type of patient.

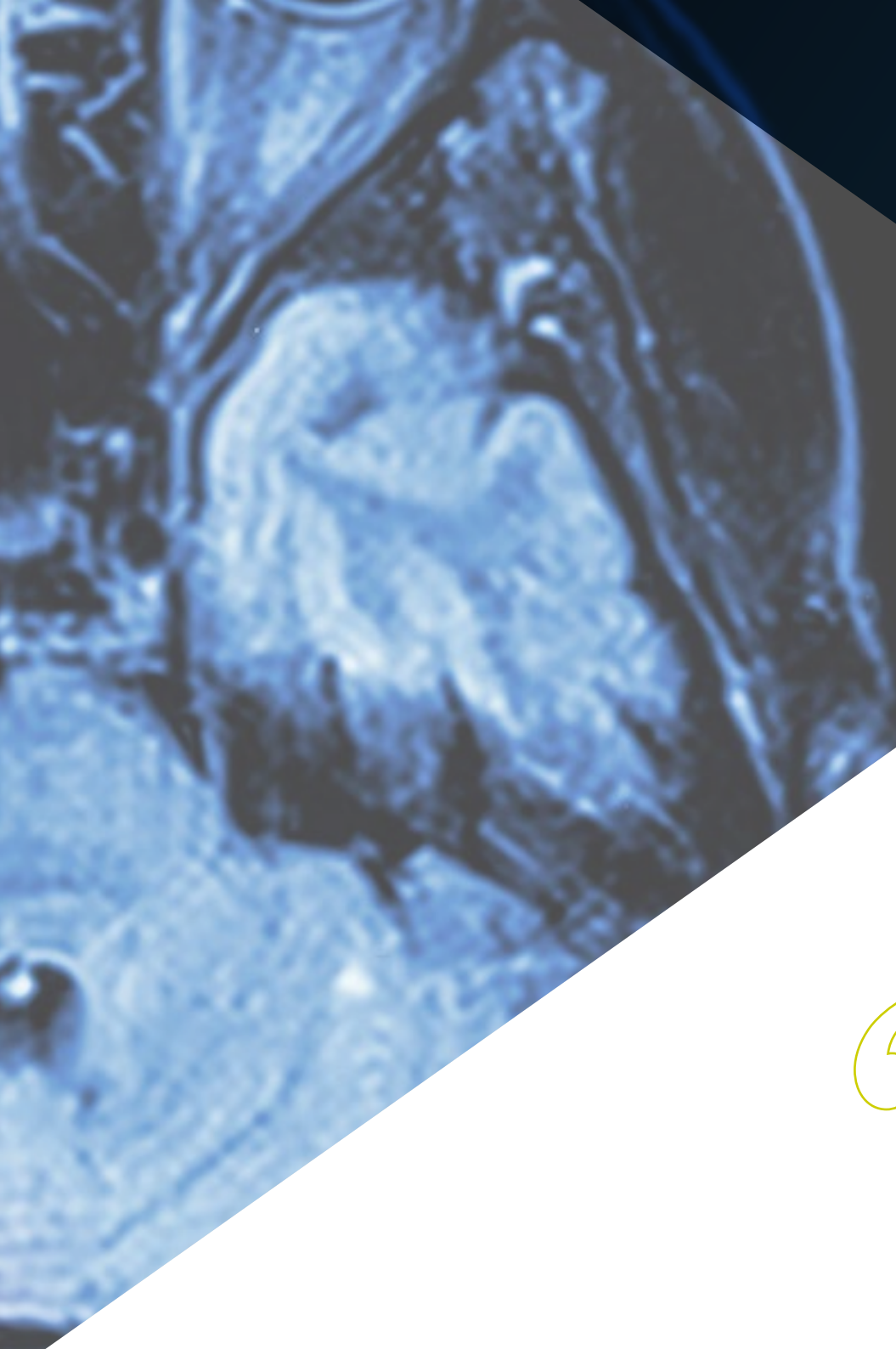


03

Course Management

The program includes in its teaching staff leading experts in Neurosurgery, who bring to this training the experience from their work. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.





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Leading experts in Neurosurgery have joined forces to share all their knowledge in the field with you”

Management



Dr. Fernández Carballal, Carlos

- ◆ Head of the Spinal Pathology Section. Neurosurgery Service
- ◆ Gregorio Marañón General University Hospital
- ◆ Associate Neurosurgery Professor. Faculty of Medicine. Complutense University of Madrid
- ◆ PhD in Surgery from the Autonomous University of Madrid Faculty of Medicine, obtaining the qualification of outstanding cum laude.
- ◆ Member of the Spanish Society of Neurosurgery, Member of the Neurorachis Society, Member of the Spanish Society of Functional Neurosurgery (SENE)
- ◆ Master's Degree in Medical and Clinical Management from the Spanish Distance University (UNED).
- ◆ Degree in Medicine (University of Navarra, 1999)

Professors

Dr. Valera Melé, Marc

- ◆ Neurosurgery Department. Gregorio Marañón General University Hospital
- ◆ Degree in Medicine from the Clinical Hospital of Barcelona.

Dr. Iza Vallejo, Begoña

- ◆ Neurosurgery Department. Gregorio Marañón General University Hospital
- ◆ Degree in Medicine from the Faculty of Medicine at the University of the Basque Country.
- ◆ Master's Degree in Neurological Oncology. CEU Cardenal Herrera University



04

Structure and Content

The structure of the content has been designed by the best professionals in the Neurosurgery sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to teaching.





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This Postgraduate Certificate in Vascular Malformations and Neurosurgical Stroke Treatment is the most comprehensive and up-to-date scientific program on the market”

Module 1. Vascular Pathology II. Vascular Malformations and Neurosurgical Treatment of Stroke

- 1.1. Arteriovenous Malformations: Clinical Features, Natural History, and Classification
- 1.2. Therapeutic Approaches in the Treatment of Arteriovenous Malformations
 - 1.2.1. Surgery
 - 1.2.2. Radiosurgery
 - 1.2.3. Endovascular Treatment
- 1.3. Cavernomatous Malformations
- 1.4. Venous Angiomas and Telangiectasias
- 1.5. Classification and Management of Intracranial Dural Arteriovenous Fistulas
- 1.6. Spinal Dural Fistulas Classifications and Treatment
- 1.7. Carotid–Cavernous Fistulas
 - 1.7.1. Treatment Options in Carotid-Cavernous Fistulas
- 1.8. Surgical Indication for Hemorrhagic
- 1.9. Current Status of Neurosurgical Treatment in Ischemic Stroke
 - 1.9.1. Indications for Decompressive Craniectomy in Ischemic Stroke





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A unique, key, and decisive training experience to boost your professional development”

05

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

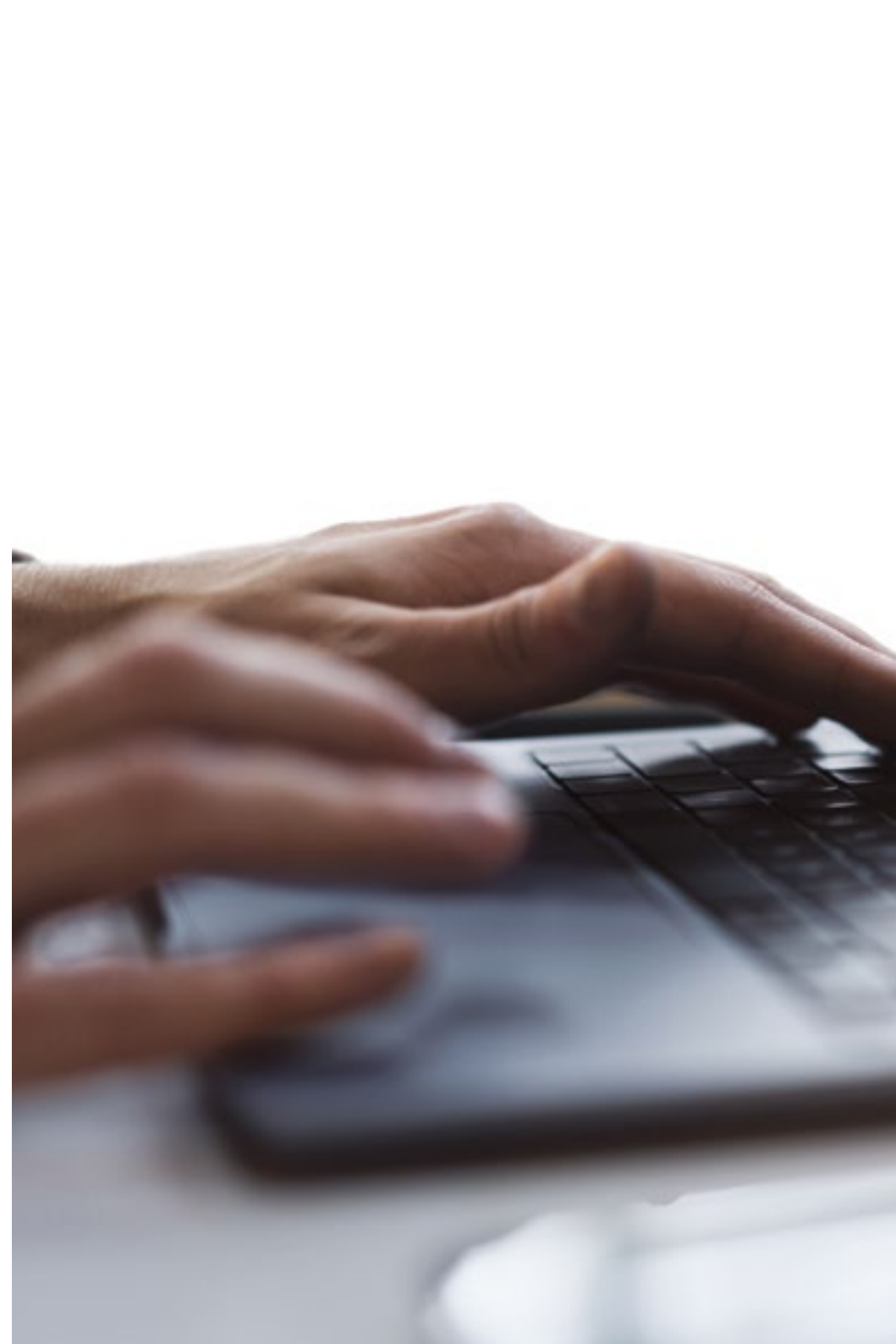
In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

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TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

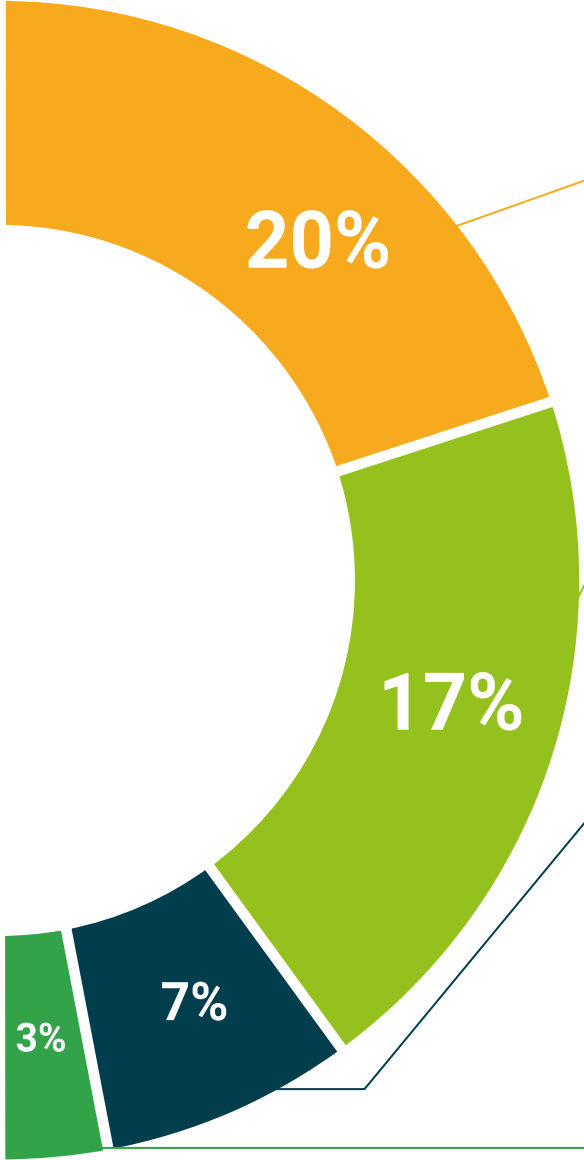
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



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 for future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



06 Certificate

The Postgraduate Certificate in Vascular Malformations and Neurosurgical Stroke Treatment guarantees, in addition to the most accurate and up-to-date knowledge, access to a Postgraduate Certificate issued by TECH Global University.



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*Successfully complete this training program
and receive your university certificate without
travel or laborious paperwork”*

This private qualification will allow you to obtain a **Postgraduate Certificate in Vascular Malformations and Neurosurgical Stroke Treatment** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

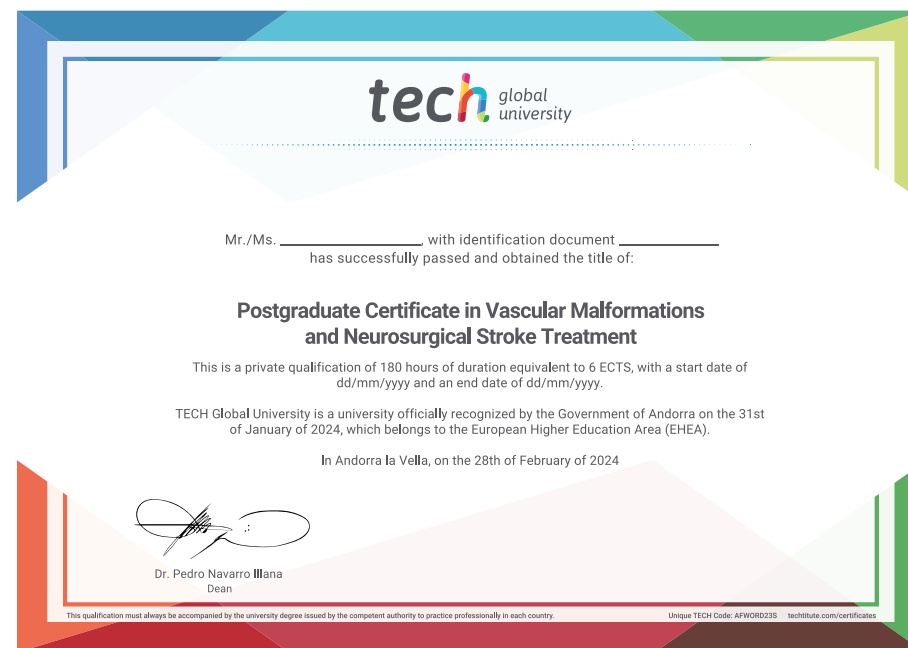
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Vascular Malformations and Neurosurgical Stroke Treatment**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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

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



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and Neurosurgical Stroke
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