

Postgraduate Certificate Pediatric Orthopedics





Postgraduate Certificate Pediatric Orthopedics

- » Modality: online
- » Duration: 6 weeks
- » Certificate: Tech Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-certificate/pediatric-orthopedics

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01

Introduction

Pediatric Orthopedics treats injuries and musculoskeletal disorders in children and adolescents, such as foot deformities, gait disturbances or hip dysplasia. As in other fields of medicine, an accurate and timely diagnosis helps to prevent and provide more accurate solutions. Therefore, with the progress made in recent years in the field of science and technology, there are many contributions that can be obtained and, therefore, know in this area of medicine. This TECH academic program offers a complete syllabus on Pediatric Orthopedics for specialists who wish to update their knowledge in this area of medicine. They will do it in a flexible and comfortable way thanks to the methodology and state-of-the-art technology offered by this virtual platform, completing the program in only 6 weeks.





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Thanks to this complete Postgraduate Certificate, you will contribute to the quality of life of pediatric patients thanks to innovative and effective treatments in Pediatric Orthopedics"

One of the most frequent concerns of parents is the health of their children. It is important to consult a specialist when deformities or problems are noticed when stepping or walking. A complete physical examination will allow us to assess the child's current condition and check joint mobility, identify areas of pain, check the stability of the joint, among other aspects.

Fortunately, health professionals can count on updating programs such as this one, exclusive to TECH, to keep up to date with advances in pediatric orthopedics. In this way, in a theoretical and practical way, they will be able to verify their knowledge and review the latest diagnostic and therapeutic methods available.

From a 100% online study dynamics, this program will allow them to delve into the ways of taking a clinical history and examination in children and adolescents, and they will study the methods of radiodiagnosis, as well as the different pathologies, characteristics of children's bone and bone growth, angular deformities, among many other relevant aspects for the specialist today.

There will be 6 weeks of study in which the doctors will be able to choose where, how and when to study because the *Relearning* methodology and the 100% online system provide flexibility and convenience to the study process. Theoretical and practical material will be distributed in different formats: detailed videos, interactive summaries, quick action guides, among others, which allow the assimilation and understanding of all the contents.

This **Postgraduate Certificate in Pediatric Orthopedics** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ◆ Developing practical cases presented by experts in Pediatric Orthopedics
- ◆ 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.
- ◆ Practical exercises where the self-assessment process can be carried out 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



You will delve into the etiopathogenesis of deformities in the lower limb axis"

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With the study of this program you will be able to differentiate and treat the osteomuscular pathology associated with normal child development”

You will delve into the complementary tests and radiological characteristics of bone growth.

TECH opens the doors to an exclusive learning alternative.

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

Its 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 immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby professionals must try to solve the different professional practice situations that arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.



02 Objectives

This program has been designed to meet the needs of the specialists in the health sector, who need to be up to date with the most recent advances, research and postulates in their area of work. As far as Traumatology is concerned, there are many advances, so the physicians with this program will be able to perform a detailed anamnesis and a complete, orderly and systematic examination of the pediatric patient in Pediatric Orthopedics. Among other skills that will be given thanks to the study of the most updated sections.





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TECH allows you to build a profile according to the needs of the moment”



General Objectives

- ◆ Knowing how to carry out a good assessment of the child, starting with the anamnesis, a tool that is often underused but essential, a structured and complete examination that, depending on the age, will have different perspectives
- ◆ Become familiar with the management of the different congenital and/or acquired alterations affecting the upper limb in growing patients.
- ◆ Delve into the complementary studies that help diagnose and make decisions, as well as the appropriate moment to perform them
- ◆ Manage therapeutic options, as well as the treatment schedule
- ◆ Apply different surgical techniques used to treat various pathologies
- ◆ Become familiar with the pathology, clinical presentation and management of the most common benign and malignant tumors of the upper extremity affecting children
- ◆ Recognize and manage the major diseases of the hip that affect children
- ◆ Manage the examination and diagnosis of hip pathology in children according to their age and the prevalence associated with it
- ◆ Review the most important pathologies that occur in pediatric orthopedics, as knowledge of them is the fundamental pillar of this specialty
- ◆ To learn about the latest advances in the treatment of these classic pediatric orthopedics diseases
- ◆ Specialize in the diagnosis, treatment and prognosis of orthopedic and traumatologic knee pathologies in children and their particular characteristics compared to adults





Specific Objectives

- ◆ Take a detailed medical history and a complete, orderly and systematic examination of pediatric patients
- ◆ Distinguish physiological from pathological development, as well as their radiological characteristics
- ◆ Learn the complementary tests and radiological characteristics of bone growth
- ◆ Learn the intricacies of the etiopathogenesis of deformities in the lower limb axis
- ◆ Anticipate and correct potential deformities
- ◆ Differentiate and know how to treat musculoskeletal pathologies associated with normal child development
- ◆ Apply the basics of fracture treatment in pediatric patients



You will achieve your goals under the guidance of the most specialized teachers who will accompany you throughout your academic journey"

03

Course Management

Thanks to TECH's interest in providing a high academic level teaching, this program is directed by a team of renowned teachers. Outstanding for offering in their current positions and in the course of their experience a significant contribution in the area of innovation towards learning processes. Therefore, the physicians will build a powerful professional background with this Postgraduate Certificate that will provide them with the latest scientific evidence in Pediatric Orthopedics.





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The teachers who direct this program have an active work profile in the health sector, which provides greater timeliness to each of the topics of study”

International Guest Director

Mininder Kocher is an internationally prominent pediatric orthopedic surgeon. His professional merits and results have been recognized with numerous awards, including the Kappa Delta award, considered the "Nobel Prize" in this surgical field. In addition, he practices as a specialist at Harvard Medical School.

The scientist also holds the title of Chief of the Division of Sports Medicine at Boston Children's Hospital. From this entity, he deals with different complex pathologies such as **joint injuries, Osteomyelitis, Hip Labral Rupture, Osteochondritis Dissecans or osteomyelitis, hip labral tears, osteochondritis dissecans or pigmented villonodular synovitis**, among others. His innovations in these areas of Orthopedic Medicine are reflected in more than 150 academic articles published in first impact indexed journals. He is also the author of more than 100 chapters in books and is the sole author of 4 books. His texts have become an indispensable reference for the medical community, highlighting his undeniable contributions to the industry.

Dr. Mininder Kocher's impact extends beyond the borders of the United States, as he serves as a **consultant and advisor to hospitals and universities in more than 20 countries**. Moreover, he has been listed as one of the best surgeons in the world on platforms such as US News & World Report, Castle Connolly, Top Doctors and Boston Magazine. Likewise, his skills and experiences have been the subject of attention in reference media such as the New York Times, Wall Street Journal, USA Today, Boston Globe, Chicago Tribune, Scientific American, among others.

Particularly committed to the rehabilitation of children and adolescent athletes, his comprehensive work in this area has been honored with such prominent awards as the **Von Meyer, Richard Kilfoyle, Angela Kuo and Arthur Heune awards**.



Dr. Kocher, Mininder

- Specialist in Orthopedic Surgery at Harvard Medical School
- PhD in Medicine from the University of Harvard
- Board Certified in General Practice by the American Board of Orthopaedic Surgery.
- Board Certified in Rehabilitation Practice by the American Board of Orthopaedic Surgery.
- Member of: Board of Directors of the American Academy of Orthopaedic Surgeons, American Orthopaedic Society for Sports Medicine, Pediatric Orthopaedic Society of North America, Herodicus Society, International Pediatric Orthopaedic Think Tank.

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Thanks to TECH you will be able to learn with the best professionals in the world"

Management



Dr. Palazón Quevedo, Ángel

- ♦ Head of the Orthopedic Surgery and Traumatology Department of the Niño Jesús University Hospital
- ♦ Medical Specialist at Clínica Santa Elena. Madrid
- ♦ Consultant Specialist, San Rafael Hospital. Madrid
- ♦ Collaborator the Board of Directors of SECOT
- ♦ **Doctorate course in Pediatrics with doctoral thesis project** *Long-term follow-up of surgically intervened hip dysplasias in childhood.*
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ COT via MIR physician at the University Hospital of San Juan de Alicante
- ♦ Member of SECOT and SEOP

Professors

Dr. Martínez Álvarez, Sergio

- ♦ Medical Specialist in Orthopedics and Traumatology
- ♦ Attending Physician of the Orthopedics and Traumatology Department of the Niño Jesús Pediatric University Hospital
- ♦ Head of the Upper Limb and Pediatric Hand Unit at the Hospital Universitario Infantil Niño Jesús.
- ♦ Specialist in Orthopedic Surgery and Traumatology at the Hospital Universitario de Princesa in

Dr. Ramírez Barragán, Ana

- ♦ Doctor Assistant Doctor at the Traumatology and Orthopedic Surgery Service of the Niño Jesús Hospital
- ♦ Specialist in Family and Community Medicine
- ♦ Specialist in Traumatology and Orthopedic Surgery
- ♦ PhD in Medicine from the University of Salamanca
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid



Dr. García Carrión, Alicia

- ◆ Medical specialist in Traumatology and Pediatric Orthopedic Surgery, CEMTRO La Clinica
- ◆ Specialist in Orthopedic Surgery and Traumatology at the Hospital San Carlos Clinical
- ◆ Collaborator in Educational programs in his specialty
- ◆ Degree in Medicine and Surgery from the University of Castilla La Mancha.

Dr. Egea Gámez, Rosa María

- ◆ Specialist Physician of the Orthopedics and Traumatology Department of the Niño Jesús Pediatric University Hospital
- ◆ Specialist in Orthopedic Surgery and Traumatology at the Amsterdam Hospital
- ◆ Specialist in Orthopedic and Trauma Surgery in the Traumatology
- ◆ Spine Research Unit at the Nuffield Orthopaedic Centre in Oxford
- ◆ Specialist in Orthopedic Surgery and Traumatology, Mostoles. University General Hospital
- ◆ Specialist in Orthopedic Surgery and Traumatology at Fundación from Alcorcón University Hospital
- ◆ Specialist in Orthopedic and Trauma Surgery in the Traumatology
- ◆ Postgraduate in Nurses Theatre and Physiotherapy in the Rey Juan Carlos University
- ◆ Teaching abroad. Netherlands Free University
- ◆ Professor at the University Francisco of Vitoria
- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid
- ◆ PhD in Medicine from the Rey Juan Carlos University
- ◆ Professional Master's Degree in Public Health and Epidemiology in Rey Juan Carlos University I of Madrid

04

Structure and Content

TECH has selected the most up-to-date topics for the content of this academic program. Due to the intervention of the most renowned professionals in Traumatology, a unique and exclusive teaching load has been chosen for the updating of specialists in Pediatric Orthopedics. It will be 6 weeks of study in which the most advanced exploration and diagnostic techniques will be addressed, as well as the most effective therapeutic methods. Thanks to the methodology and state-of-the-art technology, the students will reach the goal in a 100% online way, which provides the comfort and quality that today's physicians need.





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A syllabus developed by experts who have poured their most recent experiences results in the most complete learning”

Module 1. Pediatric Orthopedics

- 1.1. Clinical History of Children and their Examination
 - 1.1.1. The Examination of Infants
 - 1.1.2. The Examination of Teenagers
- 1.2. Radiodiagnostics
- 1.3. Characteristics of Children's Bones and Bone Growth
- 1.4. Angular Deformities
 - 1.4.1. Genu Varum
 - 1.4.2. Genu Valgum
 - 1.4.3. Recurvatum
 - 1.4.4. Antecurvatum
- 1.5. Torsional Deformities
 - 1.5.1. Femoral Anteversion
 - 1.5.2. Tibial Torsion
- 1.6. Length Discrepancy
- 1.7. Pediatric Lamenes
- 1.8. Apophysitis and Enthesitis
- 1.9. Pediatric Fractures
- 1.10. Pediatric Immobilizations and Orthoses
 - 1.10.1. Types of Immobilizations
 - 1.10.2. Duration of the Immobilizations





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This program contains the best formula to update your knowledge. Enroll now”

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.



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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"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gervas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

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 evaluate 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.



Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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.

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.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



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.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



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".



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.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



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.



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in 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 Pediatric Orthopedics guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by Tech Global 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 Pediatric Orthopedics** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **Tech Global University** via tracked delivery.

The Postgraduate Certificate issued by **Tech Global University** will express the qualification obtained in the Postgraduate Certificate diploma, and will meet the requirements commonly demanded by Employment Exchanges, competitive examinations and evaluation committees of professional careers.

Title: **Postgraduate Certificate in Pediatric Orthopedics**

Official N° of Hours: **150 hours**.



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



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