

# Hybrid Professional Master's Degree

## Clinical Nutrition in Pediatrics





## Hybrid Professional Master's Degree Clinical Nutrition in Pediatrics

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months.

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Website: [www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-clinical-nutrition-pediatrics](http://www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-clinical-nutrition-pediatrics)



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01

# Introduction

The constant scientific and technological evolution has led more and more medical sciences to apply innovative procedures in Pediatric Clinical Nutrition. In this way, in recent years there have been numerous advances in areas such as Nutrigenomics and Nutrigenetics, among others, leading to a revolution in this health discipline.

In response to this reality, TECH has designed this program which brings together the latest trends in the specialty from both theoretical and practical perspectives.

Its study model is distinctive because, first, it devotes 1,500 hours to the theoretical and practical study of these advances and, in a second phase, enables a clinical practice of the highest rigor. This last teaching process will take place in a prestigious healthcare institution, equipped with the latest resources and a professional team of excellence.



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*This Hybrid Professional Master's Degree unifies, like no other program, the advances in Clinical Nutrition in Pediatrics that you so desire to update your professional practice"*

The high incidence of Diabetes and Obesity in children has forced researchers in Clinical Nutrition in Pediatrics to search for new clinical procedures for the management and recovery of their patients. For this reason, this medical field is currently undergoing constant renewal and new work methodologies are continually appearing, making the professional work of specialists more complex. Keeping up with the times is a challenge and, to do so, everyone demands educational programs that help them develop a better understanding and greater skills in addressing eating disorders and specific nutritional requirements.

TECH, aware of this context, has created a program whose study model is pioneering in its type. As a result, this Hybrid Professional Master's Degree in Clinical Nutrition in Pediatrics offers a learning option marked by two well-differentiated stages. Initially, the doctor will study theoretically all the advances in this health sector, dedicating 1,500 hours of academic analysis to the contents provided in a 100% online and interactive platform. From there, you can reinforce your knowledge through multimedia resources such as infographics, videos, and interactive summaries. Relearning, a rigorous methodology that will allow you to master all subjects with greater flexibility and speed, is the main teaching tool.

Then, in a second study phase, the specialist will have a 120-hour clinical internship in an international reference hospital. That process will be organized from Monday to Friday, until completing 3 weeks, in which you will have access to the most modern technologies and assistance protocols. The stay has a face-to-face character and differs from others in the educational scenario by allowing direct contact of the doctor with real patients from the very first moment. In addition, the entire practical phase will be advised by leading experts and an assistant tutor. In this way, the student's educational progress will be properly monitored and they will be able to focus on specific areas to improve their skills with the highest level of rigor and exigency.

This **Hybrid Professional Master's Degree in Clinical Nutrition in Pediatrics** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of more than 100 clinical cases presented by professionals in Clinical Nutrition in Pediatrics
- 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
- Comprehensive systematized action plans for the main pathologies.
- Presentation of practical workshops on procedures, diagnosis, and treatment techniques in nutritional requirements pediatric patients
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Practical clinical guides on approaching different pathologies
- All of this will be complemented by 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
- Furthermore, you will be able to carry out a clinical internship in one of the best hospital centers



*With 1,500 hours of theoretical learning and 120 hours of clinical practice you will be ready to face the most modern challenges in the field of Clinical Nutrition in Pediatrics"*

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*This program is everything you need to become a cutting-edge specialist, capable of managing complex endocrinological conditions such as Diabetes, from a nutritional point of view”*

In this Master's proposal, with a vocational nature and hybrid learning modality, the program is aimed at updating Clinical Nutrition in Pediatrics and professionals who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in an educational way to integrate theoretical knowledge into practice, and the theoretical-practical elements will facilitate knowledge update and decision-making in patient management.

Thanks to their multimedia content developed with the latest educational technology, they will allow the medical professional to obtain situated and contextual learning, i.e. a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the professional 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.

*In the theoretical phase of this program you will have access to the latest concepts and interventional protocols of Clinical Nutrition in Pediatrics.*

*For 3 weeks of intensive, practical, on-site training, you will apply modern methodologies for the treatment of severe gastroenterophageal pathologies in childhood.*



02

## Why Study this Hybrid Professional Master's Degree?

Through this Hybrid Professional Master's Degree, all those who wish to update their knowledge in Clinical Nutrition in Pediatrics will have the opportunity to do so in a theoretical and practical way. This is only possible thanks to the design of the educational model implemented by TECH where the doctor will study modern concepts from a 100% online learning platform and then learn how to execute them efficiently in a face-to-face, practical and immersive 3-week stay.



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TECH, the world's largest digital university, puts in your hands the most comprehensive update on advances in Clinical Nutrition in Pediatrics”

### **1. Updating from the Latest Technology Available**

With this program, TECH delves into the use of modern protocols and care tools for the care of patients with specific nutritional requirements. All this knowledge will be acquired in a theoretical and practical way, based on an in-depth analysis of the most advanced devices and a subsequent application of their handling specificities.

### **2. Gaining In-depth Knowledge from the Experience of Top Specialists**

Throughout this program, the specialist will have a team of excellent teachers who will provide personalized guidance at all times. These professors have chosen the contents of the syllabus based on their daily practical experiences, providing the program with an in-depth analysis of the most common problems encountered in daily work practice.

### **3. Entering First-Class Clinical Environments**

In a second stage of this program, TECH has foreseen the needs of its students in terms of the management of the most complex technological tools in the health field that studies Clinical Nutrition in Pediatrics. For this reason, it has planned a practical on-site stay where the students will handle the most complex devices and develop rigorous procedures.



#### 4. Combining the Best Theory with State-of-the-Art Practice

During the 3 weeks of clinical training included in this Hybrid Professional Master's Degree, physicians will intervene and diagnose real patients. This is possible thanks to the innovative learning methodology that promotes the link with the daily work practice from the very first moment. In this way, the specialist will be focused on developing practical skills, rather than mastering cumbersome theoretical content.

#### 5. Expanding the Boundaries of Knowledge

TECH has a large number of contacts, agreements and collaborations that make it the largest educational institution in the digital context. All these relationships have led to the most prestigious hospitals joining this educational program. In this way, the students who attend this program will have access to internationally renowned institutions.

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*You will have full practical immersion at the center of your choice"*

03

# Objectives

This study program aims, among other goals, that the physician acquires the most complete update on the main novelties in Clinical Nutrition in Pediatrics. For this purpose, you will have at your disposal the most comprehensive learning methodology, conformed by TECH, which offers maximum guarantees for the specialist's continuous improvement and preparation. Based on the knowledge contained in this syllabus, with two well-differentiated parts, the healthcare professional will achieve success and apply the highest quality care.





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*With just one click you can enroll in the most complete Hybrid Professional Master's Degree in the educational market and get up-to-date on new developments in the sector of infant feeding"*



### General Objective

- Healthcare professionals enrolled in this program will have at the click of a button the most up-to-date content related to Clinical Nutrition in Pediatrics. At the same time, you will have the opportunity to consolidate this knowledge through two distinct educational stages. On the one hand, the most innovative theoretical and online protocols will be presented. You will then learn how to apply them on-site, through a highly successful in-person, immersive clinical practice in a world-class medical facility. With both teaching strategies, the specialist will acquire a much broader profile and international prestige.

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*With just one click you can enroll in the most complete Hybrid Professional Master's Degree in the educational market and get up-to-date on new developments in the sector of infant feeding"*





## Specific Objectives

### **Module 1. New Developments in Food**

- Review the basics of a balanced diet in the different stages of the life cycle, as well as in exercise
- Manage food databases and composition tables
- Review the chemical composition of foods, their physicochemical properties, their nutritional value, their bioavailability, their organoleptic characteristics and the modifications they undergo as a result of technological and culinary processes
- Describe the composition and utilities of new foods
- Explain basic aspects of food microbiology, parasitology, and toxicology related to food safety
- Analyze the operation of milk banks
- Explain the new developments and available evidence on probiotics and prebiotics in infant feeding

### **Module 2. Current Trends in Nutrition**

- Review the new dietary guidelines, nutritional objectives, and recommended dietary allowances (RDA)
- Explain the proper reading of new food labeling
- Incorporate phytotherapy as a coadjuvant treatment in clinical practice
- Identify and classify foods, food products, and food ingredients
- Review current trends in premature infant nutrition
- Explain the latest evidence on food allergies and intolerances

**Module 3. Clinical Nutrition and Hospital Dietetics**

- Assess and calculate nutritional requirements in health and disease at any stage of the life cycle
- Analyze the different methods for assessing nutritional status
- Interpret and integrate anthropometric, clinical, biochemical, hematological, immunological, and pharmacological data in the patient's nutritional assessment and dietary-nutritional treatment
- Manage the different types of nutritional surveys to assess food intake
- Evaluate and maintain adequate hygiene and food safety practices, applying current legislation BORRAR
- Evaluate and prescribe physical activity as a factor involved in nutritional status

**Module 4. Physiology of Infant Nutrition**

- Update the drug-nutrient interaction and its implication in the patient's treatment.
- Identify the relationship between nutrition and immune status
- Define the fundamental of nutrigenetics and nutrigenomics
- Review the psychological bases and biopsychosocial factors that affect human eating behavior
- Explain the relationship of physiology and nutrition in the different stages of infant development
- Describe the main malabsorption syndromes and how they are treated

**Module 5. Artificial Nutrition in Pediatrics**

- Perform nutritional assessment in pediatrics
- Reflect on the role of human milk as a functional food
- Describe new formulae used in infant feeding
- Incorporate the different techniques and products of basic and advanced nutritional support related to pediatric nutrition into clinical practice
- Evaluate and monitor the supervision of children on nutritional support

**Module 6. Infant Malnutrition.**

- Predict patients' nutritional risk
- Early detection and evaluation of quantitative and qualitative deviations from the nutritional balance due to excess or deficiency
- Identify children at nutritional risk who are eligible for specific support
- Identify children suffering from malnutrition
- Describe the correct nutritional support for a malnourished child
- Classify the different types of malnutrition and their impact on the developing organism
- Identify the appropriate nutritional therapy for pediatric patients with chronic pulmonary pathology

**Module 7. Childhood Nutrition and Pathologies**

- Analyze the implications of nutrition in the growth process and in the prevention and treatment of different childhood pathologies
- Explain current trends in the nutrition of infants with delayed intrauterine growth and the implication of nutrition on metabolic diseases
- Reflect on the etiology, repercussions, and treatment of childhood obesity
- Explain the nutritional treatment of the most common deficiency diseases in our environment
- Define the role that fats play in children's diets
- Assess the psychological and physiological aspects involved in eating disorders in young children
- Review the pathogenesis and update the treatment of inborn errors of metabolism
- Identify exclusion foods in the diets of children with celiac disease
- Identify dietary factors related to bone metabolism
- Explain managing children with gastroesophageal reflux
- Describe the main malabsorption syndromes and how they are treated



### Module 8. Childhood Nutrition and Pathologies

- Identify the repercussion that a pregnant and lactating mother's nutrition has on the intrauterine growth and evolution of new-borns and infants
- Describe the nutritional requirements in the different periods of childhood
- Calculate child and adolescent athlete dietary needs and risks
- Reflect on new trends and models in infant feeding
- Reflect and identify risk factors in school and adolescent nutrition
- Identify eating behavior disorders
- Explain the treatment of dyslipidemias and the role that nutrition plays in their genesis and treatment
- Manage diabetic children's diet
- Assess the nutritional support of children with cancer in different situations
- Reflect on the role of nutrition in autistic children
- Review the rationale for dietary support of acute diarrhea
- Describe the management of nutritional support in inflammatory diseases
- Reflect on the relationship between constipation and infant nutrition
- Define the dietary management of children with nephropathy
- Review the dietary management of oral cavity pathologies in children
- Explain the implications that nutrition can have in the treatment of liver diseases

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# Competencies

By completing this educational program in its entirety, the student will have the theoretical and practical skills necessary to address complex conditions such as Diabetes and Childhood Obesity. From the deep mastery of these fields you will become a leading specialist, with international prestige.



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*You will incorporate into your daily professional practice a deep understanding of the nutrition of hospitalized children, according to the most current criteria that science has referred to this subject"*



## General Skills

- Apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study
- Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- Communicate their conclusions and the ultimate knowledge and rationale behind them in a clear and unambiguous way to reach both specialized and non-specialized audiences
- Acquire the learning skills that will enable further studying in a largely self-directed or autonomous manner in order to continue updating knowledge over time

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*Don't miss the opportunity to become a world-class specialist in the use of therapeutic nutritional techniques based on Immunonutrition and Nutrigenomics”*





## Specific Skills

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- ◆ Describe balanced nutrition at different stages of the life cycle, as well as exercise to prevent deficits and deficiencies
- ◆ Contrast nutritional requirements in health and disease situations at any stage of the life cycle to adapt to the patient accordingly
- ◆ Determine nutritional objectives and recommended nutrient intakes (RDA) to establish healthy recommendations for our patients
- ◆ Develop skills in reading and understanding food labeling to identify the most appropriate foods to advise our patients
- ◆ Design an adjuvant treatment based on phytotherapy as an additional resource in the nutritional support of patients
- ◆ Question the different methods of assessment of nutritional status in order to select the most appropriate one for the subject under study
- ◆ Interpret all data in the nutritional assessment of the patient in order to make a proper nutritional diagnosis
- ◆ Define food hygiene practices based on current legislation in order to prevent food-related complications
- ◆ Analyze the importance of nutrition in the growth process in childhood in order to detect problems or pathologies related to deficiencies or deficits
- ◆ Examine nutritional requirements at different stages of childhood in order to adapt them to the needs of children
- ◆ Calculate of the nutritional needs and risks of children and adolescent athletes in order to guarantee adequate growth and development
- ◆ Manage current trends in new-born nutrition in order to advise parents
- ◆ Master the operation of milk banks in order to advise parents of children with specific needs
- ◆ Screen children at nutritional risk in order to apply targeted support to those at risk
- ◆ Apply an evaluation and monitoring plan for children on nutritional support to determine their adequacy
- ◆ Analyze the differences between probiotic and prebiotic foods in order to determine their application in the infant stage
- ◆ Develop a correct nutritional support for the malnourished child in order to reverse this situation and avoid later complications
- ◆ Describe the etiology, repercussions and treatment of childhood obesity in order to detect, prevent and treat when necessary
- ◆ Address the psychological and physiological aspects involved in feeding disorders in young children in order to prevent and identify complications in their development and growth
- ◆ Determine the correct dietary management of the diabetic child to ensure proper development and growth and to avoid complications
- ◆ Implement the nutritional support of the oncological child in different phases of the disease in order to avoid complications and comorbidities

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# Course Management

The teachers of this program have been carefully selected by TECH. These experts have put together an innovative and complete syllabus that brings together the latest intervention techniques and the most comprehensive technologies for the care of patients in need of adequate Pediatric Clinical Nutrition. In addition, the program includes a second phase, in which the student will have a direct exchange with highly prestigious specialists in their natural working environment. With the help of all these professionals, the TECH graduates will be able to obtain competitive positions where they will be distinguished by their rigor in the diagnosis and therapeutic care of their patients.



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*TECH and its professors will provide you with access to a personalized educational guide according to your interests and learning needs”*

## Management



### **Ms. Aunión Lavarías, María Eugenia**

- Pharmacist and Clinical Nutrition Expert
- Author of the reference book in the field of Clinical Nutrition Dietary Management of Overweight in the Pharmacy Office(Editorial Médica Panamericana)
- Pharmacist with extensive experience in the public and private sector.
- Pharmacist in Valencia Pharmacy
- Pharmacy Assistant in the British pharmacy and health and beauty retail chain Boots, UK.
- Degree in Pharmacy and Food Science and Technology from the University of Valencia.
- Head of Postgraduate Certificate Dermocosmetics in the Pharmacy Office



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## Educational Plan

This educational program is distinguished from others in the market by its in-depth syllabus. The latter has a large number of educational modules in which a wide range of topics are examined. These include the approach to specific pathologies such as Obesity and Diabetes and the necessary procedures to combat them during childhood. At the same time, it includes the latest techniques in the nutritional field of hospitalized children or oncological diseases that require personalized attention. All these contents will be accessible from TECH's innovative, 100% online and interactive platform.



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*In its theoretical phase, this program is not subject to pre-established schedules or timetables so that you can study wherever and whenever you want"*

## **Module 1. New Developments in Food**

- 1.1. Molecular Foundations of Nutrition
  - 1.2. Update on Food Composition
  - 1.3. Food Composition Tables and Nutritional Databases
  - 1.4. Phytochemicals and Non-Nutritive Compounds
  - 1.5. New Food
    - 1.5.1. Functional Nutrients and Bioactive Compounds
    - 1.5.2. Probiotics, Prebiotics, and Symbiotics
    - 1.5.3. Quality and Design
  - 1.6. Organic food
  - 1.7. Transgenic Foods
  - 1.8. Water as a Nutrient
  - 1.9. Food Safety
    - 1.9.1. Physical Hazards
    - 1.9.2. Chemical Hazards
    - 1.9.3. Microbiological Hazards
  - 1.10. New labelling and consumer information BORRAR
  - 1.11. Phytotherapy Applied to Nutritional Pathologies

## **Module 2.** Current Trends in Nutrition

- 2.1. Nutrigenetics.
  - 2.2. Nutrigenomics
    - 2.2.1. Fundamentals
    - 2.2.2. Methods
  - 2.3. Immunonutrition
    - 2.3.1. Nutrition-Immunity Interactions
    - 2.3.2. Antioxidants and Immune Function
  - 2.4. Physiological Regulation of Feeding: Appetite and Satiety
  - 2.5. Psychology and Nutrition
  - 2.6. Nutrition and the Circadian System. Timing is the Key
  - 2.7. Update on Nutritional Objectives and Recommended Intakes
  - 2.8. New Evidence on the Mediterranean Diet



### **Module 3. Clinical Nutrition and Hospital Dietetics**

- 3.1. Management of Hospital Nutrition Units
  - 3.1.1. Nutrition in the Hospital Setting
  - 3.1.2. Food Safety in Hospitals
  - 3.1.3. Planning and Managing Hospital Diets. Dietary Code
- 3.2. Hospital Basal Diets
  - 3.2.1. Pediatric Basal Diet
  - 3.2.2. Ovo-Lacto-Vegetarian and Vegan Diet
  - 3.2.3. Diet Adapted to Cultural
- 3.3. Therapeutic Hospital Diets
  - 3.3.1. Uniting Diets
  - 3.3.2. Personalised Menu's
- 3.4. Bidirectional Drug-Nutrient Interaction

### **Module 4. Physiology of Infant Nutrition**

- 4.1. Influence of Nutrition on Growth and Development
- 4.2. Nutritional Requirements in the Different Periods of Childhood
- 4.3. Nutritional Assessment in Children
- 4.4. Physical Activity Evaluation and Recommendations
- 4.5. Nutrition During Pregnancy and its Impact on the New-born
- 4.6. Current Trends in the Premature New-born Nutrition
- 4.7. Nutrition in Lactating Women and its Impact on the Infant
- 4.8. Nutrition of New-borns with Intrauterine Growth Delay
- 4.9. Breastfeeding
  - 4.9.1. Human Milk as a Functional Food
  - 4.9.2. Process of Milk Synthesis and Secretion
  - 4.9.3. Reasons for it to be Encouraged

- 4.10. Human Milk Banks
  - 4.10.1. Milk Bank Operation and Indications
- 4.11. Concept and Characteristics of the Formulae Used in Infant Feeding
- 4.12. The Move to a Diversified Diet. Complementary Feeding During the First Year of Life
- 4.13. Feeding 1–3-Year-Old Children
- 4.14. Feeding During the Stable Growth Phase: Schoolchild Nutrition
- 4.15. Feeding in Adolescence: Nutritional Risk Factors.
- 4.16. Child and Adolescent Athlete Nutrition
- 4.17. Other Dietary Patterns for Children and Adolescents: Cultural, Social, and Religious Influences on Children's Diets
- 4.18. Prevention of Nutritional-Based Diseases from Infancy: Objectives and Guidelines.

### **Module 5. Artificial Nutrition in Pediatrics**

- 5.1. Concept of Nutritional Therapy in Pediatrics
  - 5.1.1. Evaluation of Patients in Need of Nutritional Support
  - 5.1.2. Indications
- 5.2. General Information about Enteral and Parenteral Nutrition
  - 5.2.1. Enteral Paediatric Nutrition
  - 5.2.2. Parenteral Paediatric Nutrition
- 5.3. Dietary Products Used for Sick Children or Children with Special Needs
- 5.4. Implementing and Monitoring Patients with Nutritional Support
  - 5.4.1. Critical Patients
  - 5.4.2. Patients with Neurological Pathologies
- 5.5. Artificial Nutrition at Home
- 5.6. Nutritional Supplements to Support the Conventional Diet
- 5.7. Probiotics and Prebiotics in Infant Feeding

**Module 6. Infant Malnutrition**

- 6.1. Childhood Malnutrition and Undernutrition
  - 6.1.1. Psychosocial Aspects
  - 6.1.2. Pediatric Assessment
  - 6.1.3. Treatment and Monitoring
- 6.2. Nutritional Anemias
  - 6.2.1. Other Nutritional Anemias in Childhood
- 6.3. Vitamin and Trace Element Deficiencies
  - 6.3.1. Vitamins.
  - 6.3.2. Trace Elements
  - 6.3.3. Detection and Treatment
- 6.4. Fats in Infant Diets
  - 6.4.1. Essential Fatty Acids
- 6.5. Childhood Obesity.
  - 6.5.1. Prevention
  - 6.5.2. Impact of Childhood Obesity
  - 6.5.3. Nutritional Treatment

**Module 7. Childhood Nutrition and Pathologies**

- 7.1. Nutrition of Children with Oral Pathologies
  - 7.1.1. Major Childhood Oral Pathologies
  - 7.1.2. Repercussions of These Alterations on the Child's Nutrition
  - 7.1.3. Mechanisms to Avoid Related Malnutrition
- 7.2. Nutrition of Infants and Children with Gastroesophageal Reflux
  - 7.2.1. Repercussions of These Alterations on the Child's Nutrition
  - 7.2.2. Mechanisms to Avoid Related Malnutrition
- 7.3. Nutrition in Acute Diarrhea Situation
  - 7.3.1. Repercussions of These Alterations on the Child's Nutrition
  - 7.3.2. Mechanisms to Avoid Related Malnutrition
- 7.4. Nutrition in Children with Celiac Disease
  - 7.4.1. Repercussions of These Alterations on the Child's Nutrition
  - 7.4.2. Mechanisms to Avoid Related Malnutrition

- 7.5. Nutrition in Children with Inflammatory Bowel Disease
  - 7.5.1. Repercussions of These Alterations on the Child's Nutrition
  - 7.5.2. Mechanisms to Avoid Related Malnutrition
- 7.6. Nutrition in Children with Digestive Malabsorption Syndrome
  - 7.6.1. Repercussions of These Alterations on the Child's Nutrition
  - 7.6.2. Mechanisms to Avoid Related Malnutrition
- 7.7. Nutrition in Children with Constipation
  - 7.7.1. Nutritional Mechanisms to Prevent Constipation
  - 7.7.2. Nutritional Approaches for Treating Constipation
- 7.8. Nutrition in Children with Liver Disease
  - 7.8.1. Repercussions of These Alterations on the Child's Nutrition
  - 7.8.2. Mechanisms to Avoid Related Malnutrition
  - 7.8.3. Special Diets

**Module 8. Childhood Nutrition and Pathologies**

- 8.1. Feeding Difficulties and Disorders in Children Small
  - 8.1.1. Physiological Aspects
  - 8.1.2. Psychological Aspects
- 8.2. Eating Disorders
  - 8.2.1. Anorexia
  - 8.2.2. Bulimia
  - 8.2.3. Others
- 8.3. Inborn Errors of Metabolism
  - 8.3.1. Principles for Dietary Treatment
- 8.4. Nutrition in Dyslipidemias
  - 8.4.1. Nutritional Mechanisms to Prevent Dyslipidemias
  - 8.4.2. Nutritional Approaches for Treating Dyslipidemias
- 8.5. Nutrition in Diabetic Children
  - 8.5.1. Repercussions of Diabetes on the Child's Nutrition
  - 8.5.2. Mechanisms to Avoid Related Malnutrition
- 8.6. Nutrition in Autistic Children
  - 8.6.1. Repercussions of These Alterations on the Child's Nutrition
  - 8.6.2. Mechanisms to Avoid Related Malnutrition



- 8.7. Nutrition in Children with Cancer
  - 8.7.1. Repercussions of Disease and Treatments in the Child's Nutrition
  - 8.7.2. Mechanisms to Avoid Related Malnutrition
- 8.8. Nutrition in Children with Chronic Pulmonary Pathology
  - 8.8.1. Repercussions of These Alterations on the Child's Nutrition
  - 8.8.2. Mechanisms to Avoid Related Malnutrition
- 8.9. Nutrition in Children with Nephropathy
  - 8.9.1. Repercussions of These Alterations on the Child's Nutrition
  - 8.9.2. Mechanisms to Avoid Related Malnutrition
  - 8.9.3. Special Diets
- 8.10. Nutrition in Children with Food Allergies and/or Intolerances
  - 8.10.1. Special Diets
- 8.11. Childhood and Bone Pathology Nutrition
  - 8.11.1. Mechanisms for Good Bone Health in Childhood

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*This program includes a large number of educational modules through which you will master the main nutritional pathologies affecting newborns, children and adolescents”*

07

# Clinical Internship

With the support of an assistant tutor who will supervise their progress at all times, the doctor will be able to develop a first class practical and in-person stay. This educational moment, integrated by TECH with professionalism, distinguishes the Hybrid Professional Master's Degree in Clinical Nutrition in Pediatrics from any other program on the market.



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*This program will allow you to practice in a renowned hospital, where the best medical technology prevails in relation to Clinical Nutrition in Pediatrics"*

For this program TECH has foreseen the realization of a face-to-face and intensive internship in a hospital center of international prestige. The specialists will also have the opportunity to choose the facility that best suits their geographical location, in this way accessing centers that are governed by the most rigorous international standards. The educational process is comprised of 3 weeks, 8 consecutive hours, Monday through Friday.

During this period of time, the specialist will exchange knowledge with experienced experts and get up to speed under the close supervision of a designated tutor. In this way, you will acquire the most detailed and up-to-date vision of a health branch that is in full evolution.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the medical practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the internship, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:





<b>Module</b>	<b>Practical Activity</b>
<b>Current Trends in Clinical Nutrition in Pediatrics</b>	Periodically examine the basis of physiological regulation of feeding, appetite and satiety in children and adolescents
	Apply techniques for the analysis of pediatric patients based on Nutrigenetics and Nutrigenomics
	Incorporate transgenic foods into contemporary dietary approaches to children and adolescents
	Implement immunonutrition strategies for the management of pediatric patients with nutritional deficiencies
<b>Nutritional Treatment in Pediatric Gastroenterology</b>	Implement techniques such as the dosed and gradual introduction of the allergenic food into the diet of children and adolescents with different types of intolerances
	Indicate to the pediatric patient the use of substitute foods for products such as diet
	Perform diagnostic and nutritional evaluations in esophagogastric disorders
	Improve symptoms of irritable bowel syndrome, intestinal transit problems, bloating and flatulence through low FODMAP (fermentable oligosaccharides, disaccharides, monosaccharides and polyols) diets.
<b>Pediatric dietary approach to endocrine pathologies</b>	Identify childhood and juvenile obesity and determine its dietary or surgical treatment
	Recognize the etiology, repercussions, and treatment of childhood obesity
	Explore nutritional requirements in situations of metabolic stress
	Recommend the use of blood glucose controlling medications or insulin injections in the diabetic child and adolescent.
	Monitor an adequate diet and the practice of physical exercise according to each patient's age.
	Diagnose dysphagia by means of dynamic swallowing studies or endoscopic evaluation, and assess the surgical treatment of this pathology
<b>Hospital Nutrition in Pediatrics</b>	Manage and anticipate the complications of bidirectional drug-nutrient interactions between drugs and nutrients
	Evaluate the nutritional status of inpatients and prescribe appropriate diets
	Evaluate the relevance of enteral (tube feeding) or parenteral (directly into the bloodstream) nutrition in pediatric patients who need assistance in swallowing food
	Apply the DASH diet and prescribe it as a treatment in cardiovascular disease
	Manage the nutritional support of the oncological child in different phases of the disease and other chronic pathologies

## Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



## General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

**1. TUTOR:** During the Hybrid Professional Master's Degree, students will be assigned two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and educational.

**2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

**3. ABSENCE:** If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the educational tutor.

**4. CERTIFICATION:** Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

**7. DOES NOT INCLUDE:** The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their educational tutor for any questions or recommendations in this regard. The educational tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

## Where Can I Do the Clinical Internship?

In order to ensure that the specialists are properly up-to-date, TECH has arranged for them to carry out their clinical internships in internationally renowned hospitals. The selected facilities have the best healthcare resources, as well as a wide range of professional staff. In this way, the physician will have the opportunity to learn the major complexities that this health field faces today, applying their work tools on real patients and under an attentive personalized advice.



“

Develop a world-class professional career after  
completing this innovative Hybrid Professional Master's  
Degree program tailored to your educational needs”



The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



Medicine

### Hospital HM Nou Delfos

Country Spain City Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Aesthetic Medicine
- Clinical Nutrition in Medicine



Medicine

### Hospital HM Regla

Country Spain City León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Update on Psychiatric Treatment in Minor Patients



Medicine

### Hospital HM Nuevo Belén

Country Spain City Madrid

Address: Calle José Silva, 7, 28043, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- General and Digestive System Surgery
- Clinical Nutrition in Medicine



Medicine

### Hospital HM Sanchinarro

Country Spain City Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

### Policlínico HM Las Tablas

Country Spain City Madrid

Address: C. de la Sierra de Atapuerca, 5, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Nursing in the Traumatology Department
- Diagnosis in Physiotherapy



Medicine

### Policlínico HM Gabinete Velázquez

Country Spain City Madrid

Address: C. de Jorge Juan, 19, 1º 28001, 28001, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Clinical Nutrition in Medicine
- Aesthetic Plastic Surgery



Medicine

### Policlínico HM Moraleja

Country Spain City Madrid

Address: Pº de Alcobendas, 10, 28109, Alcobendas, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Rehabilitation Medicine in Acquired Brain Injury Management



Medicine

### Policlínico HM Distrito Telefónica

Country Spain City Madrid

Address: Ronda de la Comunicación, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Optical Technologies and Clinical Optometry
- General and Digestive System Surgery



### Policlínico HM Sanchinarro

Country: Spain      City: Madrid

Address: Av. de Manoteras, 10,  
28050, Madrid

Network of private clinics, hospitals and specialized centers  
distributed throughout Spain.

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Related internship programs:

- Clinical Nutrition in Pediatrics



### Centro Médico Villanueva de la Cañada

Country: Spain      City: Madrid

Address: C. Arquitecto Juan de Herrera, 2,  
28691 Villanueva de la Cañada, Madrid

Medical center with services in the main clinical specialties  
and diagnostic tests

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Related internship programs:

- Clinical Nutrition in Pediatrics
- Primary Care Clinical Ultrasound

09

# 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. Gérvás, 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.



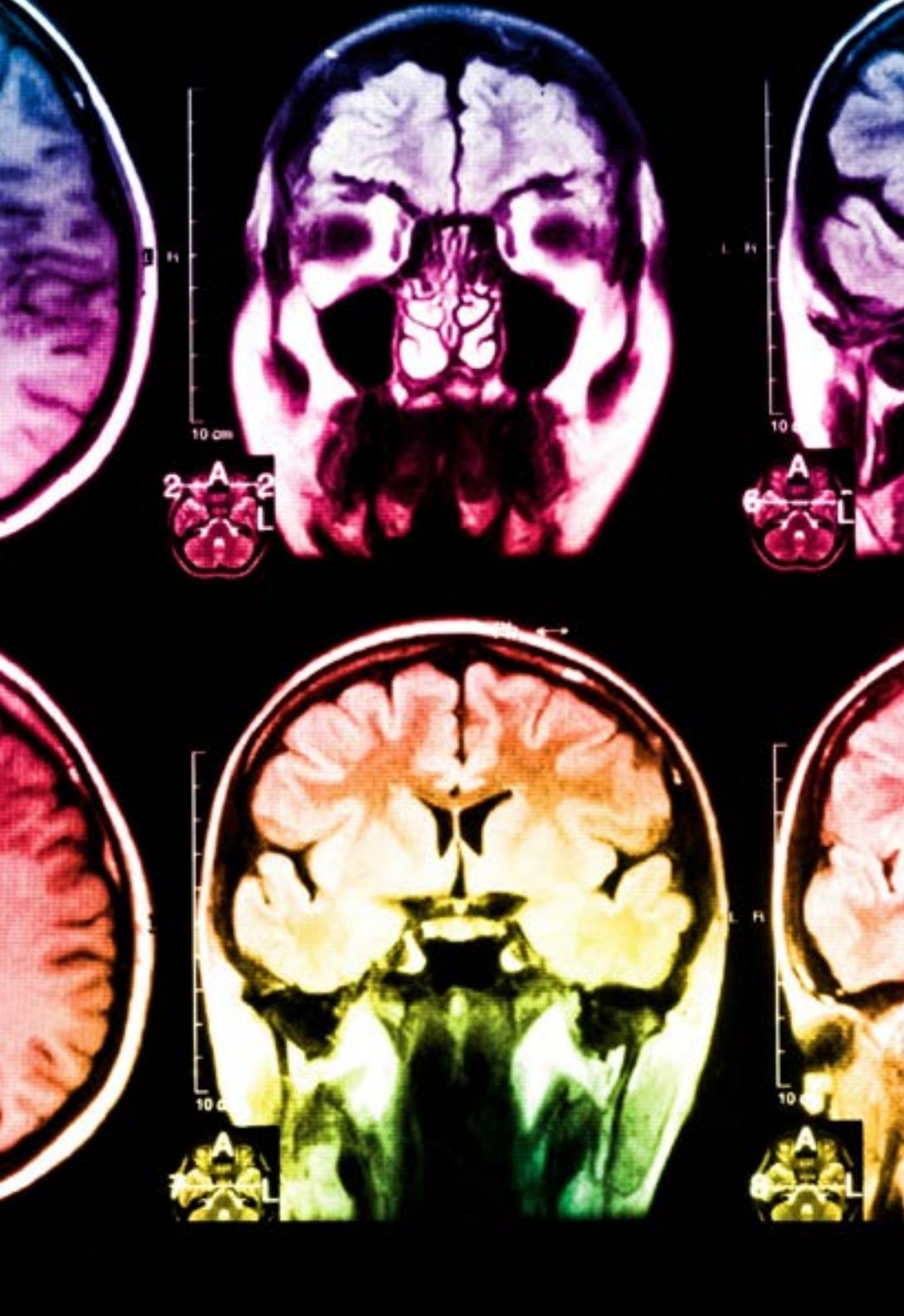
## Relearning Methodology

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

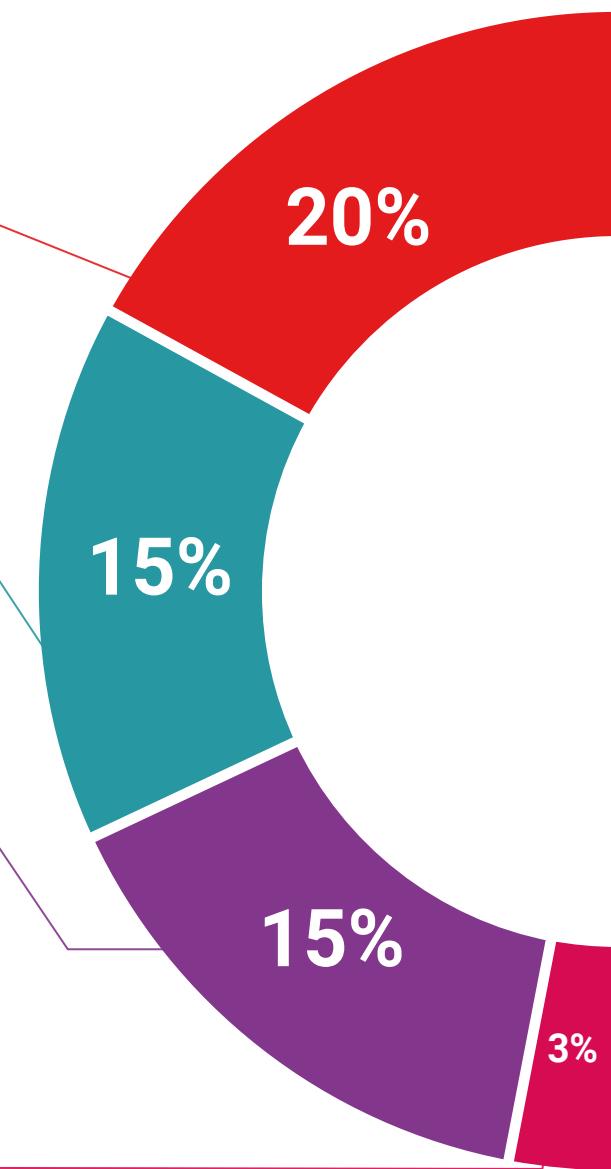
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

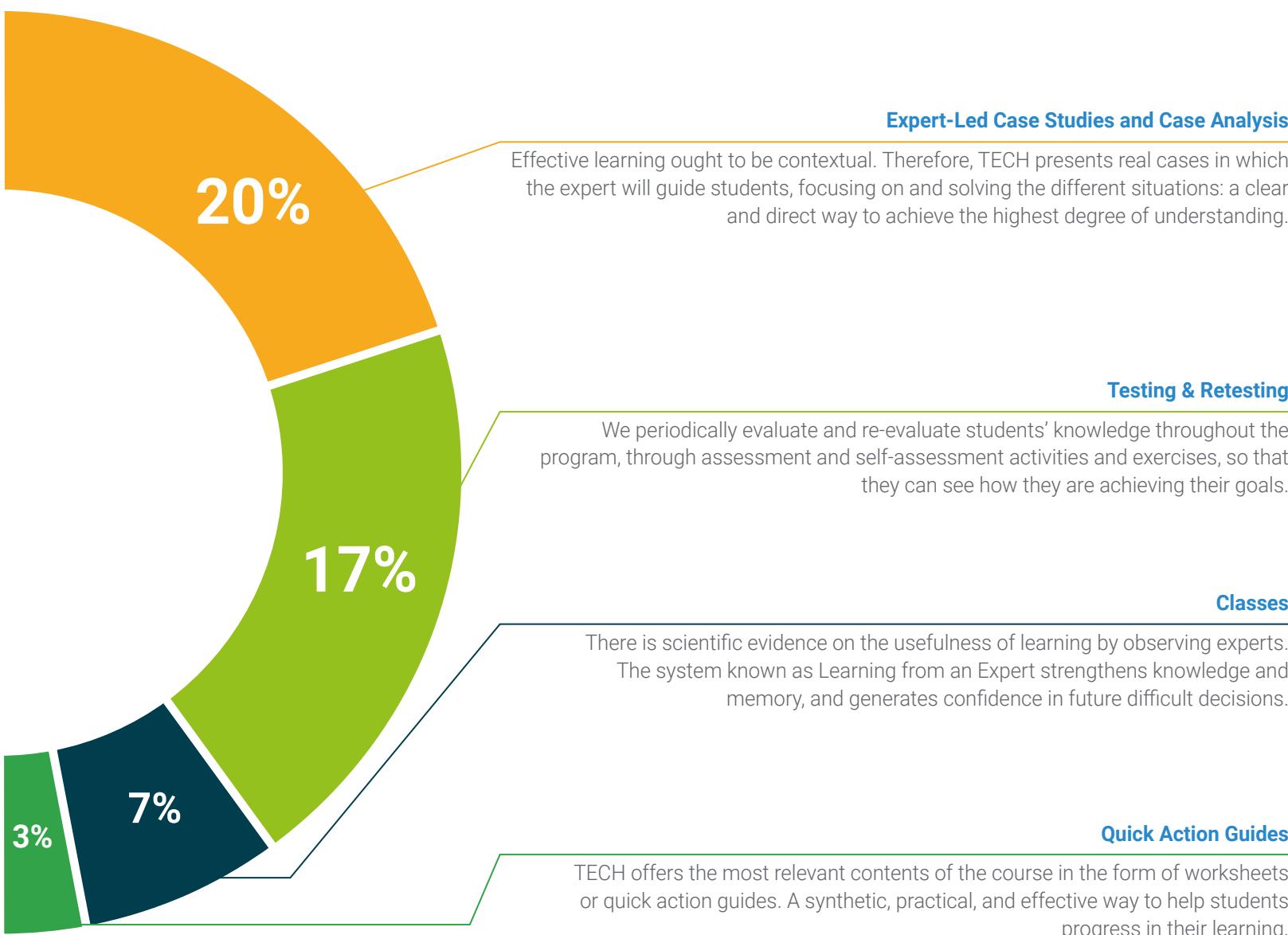
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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.





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# Certificate

The Professional Hybrid Master's Degree in Clinical Nutrition in Pediatrics guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree diploma issued by TECH Technological University.



“

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

This **Hybrid Professional Master's Degree in Clinical Nutrition in Pediatrics** 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 **Hybrid Professional Master's Degree in Clinical Nutrition in Pediatrics** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the **Hybrid Professional Master's Degree in Clinical Nutrition in Pediatrics**, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees. information.



Title: **Hybrid Professional Master's Degree in Clinical Nutrition in Pediatrics**

Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months.**

Certificate: **TECH Technological University**

Teaching Hours: **1,620 hours.**

Distribuzione generale del Programma			
Corsi	Insegnamento	Ore	Codice
1º	New Developments in Food	150	OB
1º	Current Trends in Nutrition	150	OB
1º	Clinical Nutrition and Hospital Dietetics	150	OB
1º	Physiology of Infant Nutrition	150	OB
1º	Artificial Nutrition in Pediatrics	150	OB
1º	Infant Malnutrition	150	OB
1º	Childhood Nutrition and Pathologies	150	OB
1º	Childhood Nutrition and Pathologies	150	OB

Tipi di Insegnamento		Ore
Obbligatorio (OB)	Opzionale (OP)	1.500
Tirocinio Esterno (TE)		0
Tesi di Master (TM)		120
		<b>Totalle 1.620</b>

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



Hybrid Professional Master's  
Degree

Clinical Nutrition in Pediatrics

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months.

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

# Hybrid Professional Master's Degree

## Clinical Nutrition in Pediatrics

