

# Postgraduate Diploma

Aquatic Physiotherapy for  
Pathologies of the Extremities  
and Therapeutic Swimming





## Postgraduate Diploma Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming

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

Website: [www.techtute.com/us/physiotherapy/postgraduate-diploma/postgraduate-diploma-aquatic-physiotherapy-pathologies-extremities-therapeutic-swimming](http://www.techtute.com/us/physiotherapy/postgraduate-diploma/postgraduate-diploma-aquatic-physiotherapy-pathologies-extremities-therapeutic-swimming)

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01

# Introduction

Specializing in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming is a unique opportunity to give your career the boost it needs and educate yourself in a sector with high demand for professionals.





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*Physiotherapists at the highest level must update their knowledge with training courses such as this one, where they will find the main novelties in the field"*

Water is a medium that, due to its characteristics, offers the opportunity to work in a more favorable environment. Its properties suggest a very broad field of action, and there are many patients who can benefit from this work methodology. Patients describe the sensation of being able to perform elements of work that, out of the water, seem more complex to perform.

The aquatic environment offers an interesting variability in these proposals, but it is necessary to master the characteristics of the environment to know how to use it and not oversaturate and overstimulate the patient. This Postgraduate Diploma offers a broad knowledge of the key elements, deepening in these aspects, to be able to successfully develop an aquatic Physiotherapy program.

The teachers who will develop the content of this Postgraduate Diploma are active professionals who introduce the aquatic environment in the development of their recovery and prevention programs. This is why they will be able to guide, through the proposal of different clinical cases, to exemplify the aspects that provide quality work in the water.

A unique opportunity to specialize in a booming sector with this high-level education.



*If you want to improve your daily practice, do not hesitate to broaden your knowledge through this Postgraduate Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming"*

This **Postgraduate Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming** contains the most complete and up to date educational program on the market. The most important features include:

- » The development of case studies presented by experts in Aquatic Physiotherapy for Pathologies of Extremities and Therapeutic Swimming
- » The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- » New developments on Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming
- » Practical exercises where self-assessment can be used to improve learning
- » Special emphasis on innovative methodologies in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming
- » 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

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*This Postgraduate Diploma is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming, you will obtain a Postgraduate Diploma from TECH Technological University"*

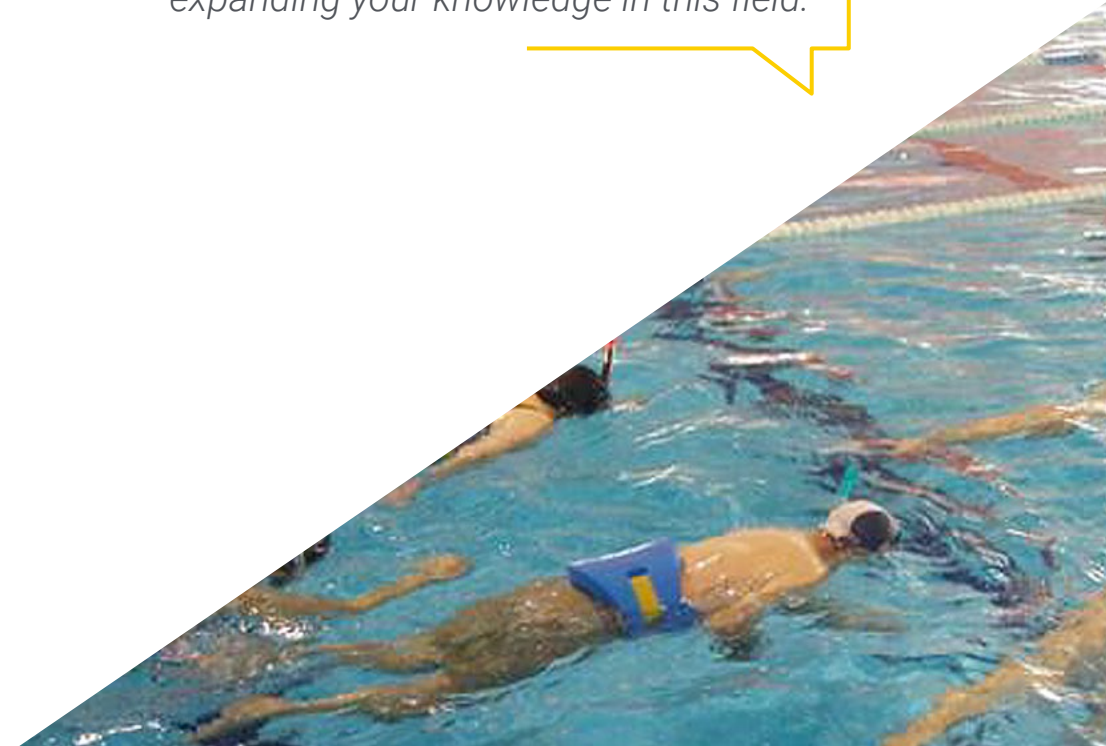
It includes in its teaching staff professionals belonging to the field of Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming, who pour into this education the experience of their work, in addition to leading specialists from renowned societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow physiotherapists situated and contextual learning, i.e. a simulated environment that will provide immersive training programmed to train for 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, the Physiotherapist specialized in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming will have the help of an innovative system of interactive videos made by recognized experts in the field of Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming and with great experience.

*Use the best educational methodology to continue your specialization in the field of Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming.*

*This 100% online Postgraduate Postgraduate Diploma will allow you to combine your studies with your professional work while expanding your knowledge in this field.*





# 02 Objectives

The Postgraduate Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming is oriented to facilitate the performance of the highest level professional dedicated to Physiotherapy with the latest advances and newest treatments in the sector.







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*To become one of the best Physiotherapists specialized in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming you can't miss the opportunity to study this Postgraduate Diploma with us"*



## General Objectives

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- » Promote the specialization of aquatic physiotherapy
- » Describe the basics of working in the aquatic environment
- » Establish the necessary assessment for the correct development of the programs and their subsequent reevaluation
- » Design aquatic physiotherapy sessions taking into account the characteristics of the different types of users



*This Postgraduate Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming is a high-level education that will allow you to increase your success in your professional practice"*





## Specific Objectives

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### Module 1. Approach to Upper and Lower Extremity Pathology

- » Exemplify the different types of exercise that can be performed in the aquatic environment
- » Detail the type of work that takes place in the aquatic Physiotherapy session and the components that define it
- » Specify the necessary considerations before, during and after in-water work
- » Identify the different elements that facilitate progress when working in water
- » Apply strategies for the treatment and prevention of upper extremity pathologies
- » Apply strategies for the treatment and prevention of lower extremity pathologies

### Module 2. Pregnant and Aquatic Environment

- » Up to date knowledge on the structural, physiological and psychological effects of pregnancy
- » Identify the main benefits of physical activity in pregnant women
- » Detail the benefits for pregnant women of working in the aquatic environment
- » Define the indications and contraindications of aquatic work for pregnant women
- » Exemplify typologies of in-water work for pregnant women
- » Apply strategies for aquatic treatment of pregnant women
- » Exemplify typologies of postpartum work in the aquatic environment
- » Apply strategies for postpartum treatment in the aquatic environment

### Module 3. Therapeutic Swimming

- » Define the different aquatic programs that are carried out in the aquatic environment
- » Define what therapeutic swimming is and its working components
- » Apply strategies for the treatment and prevention of spinal pathology
- » Identify the aquatic environment as a safe environment for spinal pathology prevention work
- » Explain the relevant aspects in the elaboration of the therapeutic swimming program



03

# Course Management

The program includes in its teaching staff leading experts in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming, who pour into this education the experience of their work. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.





*Leading professionals in the field have come together to teach you the latest advances in the treatment of Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming"*

## Management



### Dr Mur, Esther

- ♦ Ph.D. In Physical Activity and Sport Sciences from the University of Barcelona
- ♦ Official Master's Degree in Physical Activity and Sport at INEFC Barcelona, Universidad de Barcelona
- ♦ Graduate in Physical Activity and Sport Sciences from INEFC of Barcelona
- ♦ Postgraduate Certificate in Physiotherapy from the Blanquerna University School of Nursing and Physiotherapy (Ramon Llull University)
- ♦ Physiotherapist on staff at the CEM Marítim (Thalassotherapy center) of the Claror Foundation
- ♦ Coordinator of the "Aquatic Physiotherapy-UFAE" working group of the College of Physiotherapists of Catalonia
- ♦ Lecturer at the School of Health Sciences Tecnocampus Mataró-Maresme Foundation (Pompeu Fabra University)

## Professors

### Dr Cirera, Eva

- » Ph.D. in Anthropology and Communication, Universitat Rovira i Virgili (URV) Tarragona
- » Instructor Course Original Nordic Walking. Marko Kantaneva
- » Seminar "Apraxia in adult patients with left hemisphere lesion" Roberta Ghedina
- » Normal Movement-Introduction to the Bobath Concept, Andrés Lloves
- » Advanced Course "Kinaesthetics in health care" Rosmarie Suter and Mercedes Fernández
- » Respiratory Physiotherapy in Pediatrics. SEFIP

### Dr Irati Azkargorta, Galarza

- » Physiotherapy degree Universitat Autònoma de Barcelona (Barcelona) 2011 2015
- » Professional Master in Pelvic Floor Reeducation FUB Escola de Formación Continua (Manresa ,Barcelona) 2015 2016
- » Low Pressure Fitness hypopressive coach (Barcelona) 2015

### Ms. Piernas, Anna

- » Coordination of Aquatic Activities
- » Swimming instructor
- » Professional Master's Degree in Management, Family, Educational and Sports Conflict Resolution. Open University of Catalonia



**Dr. Mesalles, Jordi**

- » Postgraduate Certificate in Physiotherapy from Ramon Llull University. Escola EUIFN Blanquerna, Barcelona
- » Nurse at Ramon Llull University. Escola EUIFN Blanquerna. Course: 1º, Barcelona
- » I work as a physiotherapy graduate in the 1st F.C. soccer team. Barcelona

**Dr Subirach, Carola**

- » Physiotherapist at SURA (co-responsible for the aquatic therapy project), Barcelona
- » Physiotherapist at OWings (center specialized in ostomized people and abdominoperineal dysfunctions), Barcelona
- » Physiotherapist at RAP Centro de Reeduación Abdominopelviana of Barcelona
- » Physiotherapist and Coordinator of the Health Area of the Centre Esportiu Municipal Marítim de la Fundació Claror, Barcelona, (specialty: aquatic physiotherapy) Teaching field
- » Associate Professor of Urogynaecological Physiotherapy at the Tecnocampus University of Mataró, Barcelona



# 04

## Structure and Content

The structure of the contents has been designed by the best professionals in the field of Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming, with extensive experience and recognized expertise in the profession, backed by the volume of cases reviewed, studied and diagnosed, and with extensive knowledge of new technologies applied to orthopedics.





“

*This Postgraduate Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming contains the most complete and up to date scientific program on the market”*



## Module 1. Approach to Upper and Lower Extremity Pathology

- 1.1. Amplitude of Motion (AMD)
  - 1.1.1. Activate
  - 1.1.2. Passive
- 1.2. Strength
- 1.3. Proprioception
- 1.4. Central Stability
- 1.5. Applicability/Transferability of the Gesture
- 1.6. Closed and Open Kinetic Chain
  - 1.6.1. Stability-instability
  - 1.6.2. Concentric and Eccentric Work
  - 1.6.3. Depth and Progression
- 1.7. Relevant Aspects of Aquatic Physiotherapy Treatment
  - 1.7.1. Pre-session Considerations
- 1.8. Work Progression
  - 1.8.1. Phases
  - 1.8.2. Difficulty
- 1.9. Structure of the Upper Extremity Session
  - 1.9.1. Work Objectives
- 1.10. Structure of the Lower Extremity Session
  - 1.10.1. Work Objectives

## Module 2. Pregnant and Aquatic Environment

- 2.1. Characteristics of the Pregnant Woman
  - 2.1.1. Morphological
  - 2.1.2. Physiology
  - 2.1.3. Psychology
- 2.2. Physical Activity and Pregnancy
  - 2.2.1. Benefits of Physical Activity
  - 2.2.2. Indications for Physical Activity
  - 2.2.3. Contraindications to Physical Activity
- 2.3. Indications for the Aquatic Physiotherapy Session
  - 2.3.1. General Recommendations for Starting Aquatic Physical Therapy
- 2.4. Work Objectives for Pregnant Women in the Aquatic Environment
- 2.5. Structure of the Session for Pregnant Women in the Aquatic Environment
- 2.6. Contraindications to Aquatic Physiotherapy
  - 2.6.1. Reevaluation
- 2.7. Warning Signs
- 2.8. Characteristics of Postpartum
  - 2.8.1. Morphological
  - 2.8.2. Physiology
  - 2.8.3. Psychology
- 2.9. Indications for Postpartum Aquatic Physiotherapy Session
- 2.10. Structure of the Postpartum Aquatic Physiotherapy Session
  - 2.10.1. Work Objectives



### Module 3. Therapeutic Swimming

- 3.1. Definition
  - 3.1.1. Aquatic Programs
  - 3.1.2. Benefits of Working in the Aquatic Environment
- 3.2. Basic Aquatic Motor Skills
- 3.3. Prevention
  - 3.3.1. Style Assessment
  - 3.3.2. Postural Control and Awareness Work
- 3.4. Spine Work Objectives in the Aquatic Environment
- 3.5. General Spinal Work
  - 3.5.1. Aspects to take into Account
- 3.6. Structure of the Therapeutic Swimming Session
  - 3.6.1. Work Objectives
  - 3.6.2. Periodicity
- 3.7. Cervicodorsal Component
  - 3.7.1. Aspects to take into Account
  - 3.7.2. Practical Examples
- 3.8. Lumbar Component
  - 3.8.1. Aspects to take into Account
- 3.9. Postural Scoliosis
  - 3.9.1. Aspects to take into Account
- 3.10. Structural Scoliosis
  - 3.10.1. Aspects to take into Account



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

06

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.







“

*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## 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. Physiotherapists/kinesiologists 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. Gérvas, 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 of professional physiotherapy 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. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist 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.



*The physiotherapist/kinesiologist will learn through real cases and by solving 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 we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for 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 our 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 really 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.



#### Physiotherapy Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. 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 them as many times as you want.



#### 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 unique multimedia content presentation training system 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 Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming guarantees, in addition to the most rigorous and up to date education, access to a Postgraduate Diploma issued by TECH Technological University.



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



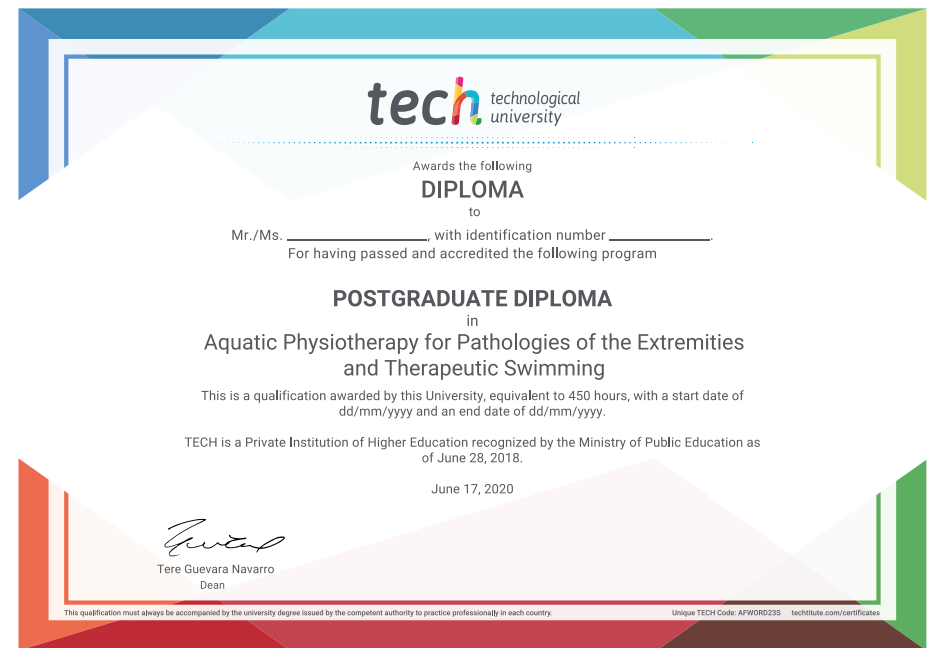
This **Postgraduate Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming** contains the most complete and up to date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the **Postgraduate Diploma**, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Aquatic Physiotherapy for Pathologies of the Extremities and Therapeutic Swimming**

Official N° of Hours: **450 h.**



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

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

**tech** technological  
university

**Postgraduate Diploma**  
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