

# Postgraduate Certificate Renal Replacement Therapy



## Postgraduate Certificate Renal Replacement Therapy

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedules at your own pace
- » Assessments: Online

Website: [www.techtitute.com/pk/medicine/postgraduate-certificate/renal-replacement-therapy](http://www.techtitute.com/pk/medicine/postgraduate-certificate/renal-replacement-therapy)

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# 01

# Introduction

The importance of Renal Replacement Therapy lies in its ability to improve the quality of life of patients. Thanks to technological advances, these procedures have evolved significantly, reducing serious complications that can affect the physical integrity of the individual. For this reason, it is essential for the specialist to know the most up-to-date techniques in this field in order to be at the medical forefront. In this context, TECH has developed this program, which enables the student to investigate the latest advances in the performance of hemodialysis or peritoneal dialysis. In addition, its 100% online methodology will enable you to complete your update from any mobile device connected to the Internet.





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*Thanks to this Postgraduate Certificate, you will identify the perfected techniques of hemodialysis and peritoneal dialysis techniques”*

In recent years, technological innovation has contributed to revolutionize renal replacement therapy, significantly improving the quality of life of individuals. In this line, the equipment used in hemodialysis has reached levels of development that allow them to be more efficient and compact, providing users with greater comfort and mobility during the clinical process. Given that these advances provide extensive benefits for patients, identifying them is essential for the specialist who wishes not to be left behind in the evolution of medicine.

Consequently, TECH has developed the Postgraduate Certificate in Renal Replacement Therapy, designed to provide specialists with a complete update on the subject in just 6 weeks. Throughout the educational period, you will delve into the latest techniques of hemodialysis and peritoneal dialysis, as well as the procedures to accurately manage the complications that arise throughout both processes. You will also delve into the sophisticated methods of applying hemodialysis in the home or frail patient.

This program is offered under a 100% online format, which allows professionals to adapt their learning to their daily schedules and responsibilities without time constraints. In addition, the program approach includes the implementation of the *Relearning* learning methodology, which provides physicians with a solid and lasting understanding of key concepts, based on your own pace of study.

This **Postgraduate Certificate in Renal Replacement Therapy** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Practical cases presented by specialists in Nephrology and Internal medicine
- ♦ 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 self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*With this qualification, you will update your knowledge in the use of different types of hemodialysis, such as high-flow, extended and incremental"*





*Thanks to this Postgraduate Certificate, you will know the up to date protocols to face with solvency the complexities that derive from Renal Replacement Therapy"*

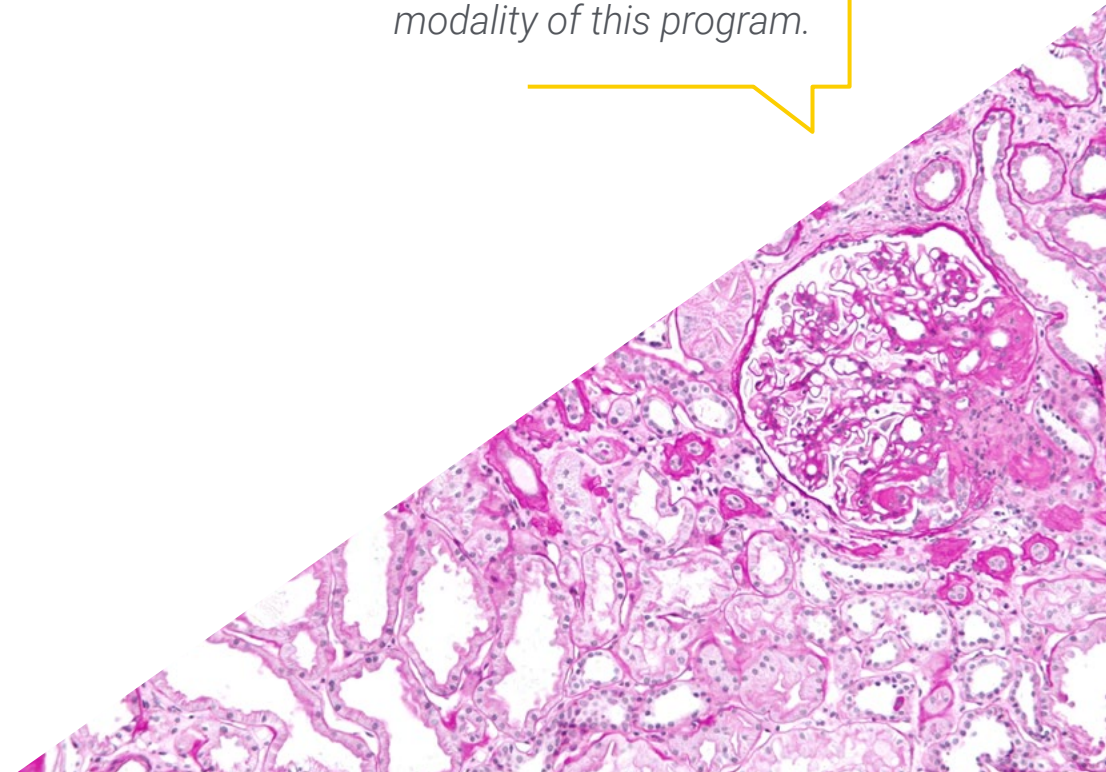
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn 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 during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Study in a dynamic and decisive way through state-of-the-art multimedia didactic supports.*

*Get up to date in Renal Replacement Treatment without leaving your home thanks to the 100% online modality of this program.*



# 02 Objectives

The main objective of this program is to provide physicians with the most up-to-date knowledge in Renal Replacement Therapy, in order to offer comprehensive care to patients with kidney disease. In this way, they will be able to place themselves at the forefront of Nephrology, enjoying the most innovative and effective educational methodology in the educational panorama.





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*You will apply in your daily practice the most up to date procedures, indications and contraindications of home hemodialysis”*

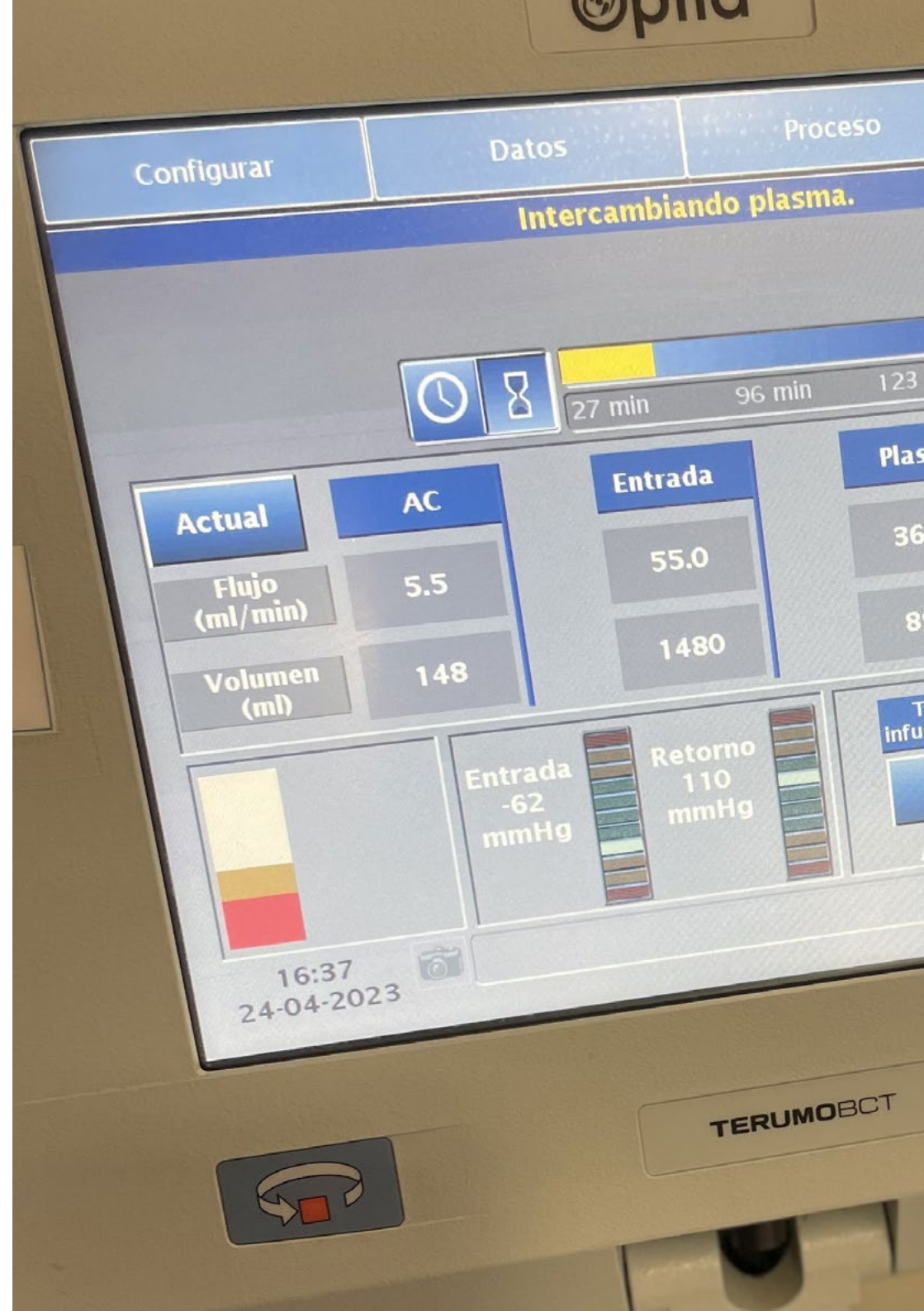


## General Objectives

- Care for patients with chronic kidney disease and its most frequent complications
- Care for patients with acute renal failure and its complications, as well as to understand the objective of initiating renal replacement therapy, its indications and management
- Have an overview of Nephrology as a specialty with its different branches of knowledge and a global approach to the patient
- Understand and learn the branches that are emerging within the specialty such as diagnostic and interventional nephrology, onconeurology, or cardioneurology



*In only 6 weeks, you will complete an update that will make you a leading professional in this medical field"*





## Specific Objectives

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- ◆ Know the best renal replacement technique for each patient, as well as the choice of the best vascular access in each case
- ◆ Know in depth the indications to start a hemodialysis program
- ◆ Understand the indications for initiating a home dialysis program in the form of home hemodialysis or peritoneal dialysis
- ◆ Understand that there are contraindications to continue a hemodialysis program and understand the need for collaboration with a palliative program to respond to patients who withdraw from a dialysis program





03

# Course Management

This program has a faculty composed of recognized specialists in the field of Nephrology. These professionals have advanced skills in the management of Renal Replacement Therapy, strengthened throughout excellent experiences in prestigious hospital centers. Therefore, the knowledge that the student will acquire will be in accordance with the most recent advances in this field.



A close-up photograph of a dialyzer, a device used in hemodialysis. It features several clear plastic tubes connected to a central black housing. The tubes are arranged in a row, and the housing has circular ports. The background is a dark blue gradient.

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*Get up to date in Renal Replacement Therapy  
from the hand of active specialists in the field"*



## Management



### **Dr. Ribas Closa, Andrés**

- ◆ Nephrologist at the Sant Jordi Clinic in Sant Andreu
- ◆ Nephrology Del Mar Hospital, Barcelona
- ◆ Expert in Clinical Ultrasound at the Francisco de Vitoria University
- ◆ Master's Degree in Infectious Diseases and Antimicrobial Treatment from the CEU Cardenal Herrera University
- ◆ Degree in Medicine from the Autonomous University of Barcelona



### **Dr. Angulo, Josep María**

- ◆ Head of Nephrology Service at Fundació Althaia in Manresa
- ◆ Head of Nephrology Service at the Hospital de Palamós
- ◆ Professor of Nephrology at the International University of Catalonia
- ◆ Former President of the Catalan Societies of Nephrology and Arterial Hypertension
- ◆ Specialization in Nephrology by the Hospital de Bellvitge
- ◆ Postgraduate degree in Basic Nephrology from the University of Minnesota.
- ◆ Degree in Medicine and Surgery from the University of Barcelona
- ◆ Member of: Spanish Society of Nephrology and Arterial Hypertension



## Professors

### Dr. Pascual Sánchez, Sergio

- ◆ Specialized in Nephrology at Consorci Sanitari Alt Penedès-Garraf
- ◆ Psychiatric Monitor at CPB (Serveis Salut Mental)
- ◆ Master's Degree in Neurobiology and Behavior from the Instituto Superior de Estudios Psicológicos (Higher Institute of Psychological Studies)
- ◆ Degree in Medicine from the Autonomous University of Barcelona
- ◆ Degree in Psychology from the Autonomous University of Barcelona

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*Take the step to get up to date  
on the latest developments in  
Renal Replacement Therapy”*

# 04

## Structure and Content

This Postgraduate Certificate offers a syllabus that covers relevant and up to date topics in the field of Renal Replacement Therapy, such as the latest criteria for the selection of the appropriate technique or the protocols for approaching complications in hemodialysis and peritoneal dialysis. Furthermore, its 100% online methodology will allow students to perfectly combine their professional obligations with their excellent medical update.



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*Update your professional profile in a dynamic and completely effective way, by means of didactic supports such as the interactive summary or the simulation of real cases”*



## Module 1. Renal Replacement Therapy

- 1.1. Choice of Technique
  - 1.1.1. Renal replacement Therapy indications
  - 1.1.2. Contraindications of Renal Replacement Therapy
  - 1.1.3. Choice of Treatment
- 1.2. Hemodialysis Vascular Access
  - 1.2.1. Arterio-Venous Fistula
  - 1.2.2. Prosthesis
  - 1.2.3. Central venous Catheter
  - 1.2.4. Choice of vascular access
- 1.3. Hemodialysis
  - 1.3.1. High-Flow Hemodialysis
  - 1.3.2. On-Line Hemodialysis. Indication, technique and adequacy of the same
  - 1.3.3. Extended hemodialysis and incremental hemodialysis
- 1.4. Peritoneal Dialysis
  - 1.4.1. Techniques, indications
  - 1.4.2. Contraindications of Peritoneal Dialysis. Complications
  - 1.4.3. Choice of Technique: APD or CAPD
- 1.5. Complications in Hemodialysis
  - 1.5.1. Hypotension.
  - 1.5.2. Arrhythmias in Hemodialysis Patients
  - 1.5.3. Allergy to the dialyzer
- 1.6. Complications in Peritoneal Dialysis
  - 1.6.1. PD catheter migration
  - 1.6.2. Peritonitis in the PD patient
- 1.7. Home Hemodialysis.
  - 1.7.1. Indications
  - 1.7.2. Technique and contraindications
  - 1.7.3. Origin of home hemodialysis. Future
- 1.8. Fragility in the Hemodialysis Patient
  - 1.8.1. Sarcopenia
  - 1.8.2. Undernourishment in the Hemodialysis Patient
  - 1.8.3. Physical Exercise and Hemodialysis





- 1.9. Anticoagulation in Hemodialysis
  - 1.9.1. Antivitamin K in Hemodialysis
  - 1.9.2. Contraindications
  - 1.9.3. Controversies in the Hemodialysis Patient
  - 1.9.4. NACOS
- 1.10. Withdrawal from the Hemodialysis Program
  - 1.10.1. Indications
  - 1.10.2. Palliative Care in Nephrology

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*Enroll in this program and enjoy the most advanced knowledge on Renal Replacement Therapy”*



# 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. 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 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 Renal Replacement Therapy guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.







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

This **Postgraduate Certificate in Renal Replacement Therapy** contains the most complete and up-to-date scientific on the market.

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

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

Title: **Postgraduate Certificate in Renal Replacement Therapy**

Official N° of Hours: **150 h.**



\*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.

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



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