

Postgraduate Certificate

Multiple Intelligences in Mathematics





Postgraduate Certificate Multiple Intelligences in Mathematics

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 4 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/education/postgraduate-certificate/multiple-intelligences-mathematics

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 18

05

Methodology

p. 22

06

Certificate

p. 30

01

Introduction

Mathematics goes beyond numbers. This discipline allows problem solving, musical creation or obtaining an advanced spatial vision. All of these areas are among the Multiple Intelligences advocated by Edward Gardner and can be brought to the classroom through different methodological proposals. For this reason, TECH has created this 100% online program that provides the teaching professional with the most advanced knowledge about the different types of intelligences, the learning landscape and the variety of didactic activities to be able to apply it with students. All, in addition, with an innovative pedagogical material, elaborated by a specialist in high capacities and which can be accessed comfortably from any device with internet connection.



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This 100% online and innovative Postgraduate Certificate will allow you to create from start to finish programs based on enhancing the Multiple Intelligences of your students”

A priori, Logical-mathematical intelligence prevails in people who master this discipline. However, there are up to 8 types of Multiple Intelligences, according to Howard Gardner's theory, all of them areas that can be enhanced in the classroom, within the subject of Mathematics itself.

That is why it is necessary that the teacher who teaches this subject knows in depth the different theories about Multiple Intelligences and the possibility of empowerment and development in schools. For this reason, TECH offers the professional this Postgraduate Certificate in Multiple Intelligences in Mathematics in 100% online mode, which can be accessed comfortably 24 hours a day, from any electronic device with an Internet connection.

Students who enter this program will have the excellent opportunity to delve into the landscape of learning mathematics, design activities that promote the educational growth of their students and learn about the main theories on intelligences. All this, in addition, with innovative pedagogical material that will allow you to acquire a dynamic and simple learning process with a theoretical-practical approach.

Furthermore, thanks to the *Relearning* system, based on the repetition of key content, students will advance naturally through the syllabus, without having to dedicate a large number of hours to study or memorization.

In this way, TECH offers teachers an unparalleled opportunity to improve their teaching work and obtain the maximum potential from their students through a flexible Postgraduate Certificate that is perfectly compatible with the most demanding daily responsibilities. All this, in only 6 weeks and with the best teaching team in this area.

This **Postgraduate Certificate in Multiple Intelligences in Mathematics** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Didactics of Mathematics in Secondary and High School
- ♦ The graphic, schematic and practical contents of the book provide technical and practical information on those disciplines that are essential for professional practice
- ♦ Practical exercises where the selfassessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Explore when and where you want the theories of Anderson and Krathwohl and Churches on Bloom's Taxonomy"

“

You will be able to work effectively on Logical-Mathematical Intelligence with your high school students thanks to this program”

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.

Thanks to this program you will be able to design activities based on the double-entry matrix of Bloom's Intelligences.

With no classroom attendance or scheduled classes, you will be able to combine your daily activities with a quality program.



02

Objectives

The objective of this Postgraduate Certificate is to provide, over a period of 6 weeks, the most current and rigorous information and under the maximum scientific rigor on Multiple Intelligences in Mathematics. A goal that will be possible to achieve thanks to the syllabus taught by a team specialized in this field and with an interdisciplinary approach. In addition, the case studies will give a plus to the practical approach of this program and will allow the teacher to apply the most appropriate learning strategies according to the characteristics of their students.



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The multiple didactic resources will allow you to approach the Multiple Intelligences in Mathematics in a much more dynamic way”



General Objectives

- Know the different types of innovative learning methodologies in education applied to Mathematics
- Know how to apply the different types of innovative learning methodologies in education to Mathematics
- Know how to discern which is the most appropriate innovative learning method for a group of students studying mathematics in High School
- Learn to design a didactic unit using the different methodologies of innovation in mathematics education



Get into Bloom's Taxonomy applied to mathematics and make your students excel in their mathematical learning"





Specific Objectives

- ♦ Be aware of the different ICT resources related to mathematical learning landscapes
- ♦ Learn about types of learning
- ♦ Explore the research group as a type of cooperative learning applied to mathematics
- ♦ Find out what mathematics learning landscapes are
- ♦ Study Bloom's taxonomy applied to mathematics
- ♦ Understand what the modified Bloom's taxonomy applied to mathematics is
- ♦ Learn about Howard Gardner's Multiple Intelligences applied to mathematics
- ♦ Know what linguistic intelligence is and its role in the mathematics learning system
- ♦ Know what logical-mathematical intelligence is and its role in the mathematics learning system
- ♦ Know what spatial intelligence is and its role in the mathematics learning system
- ♦ Know what musical intelligence is and its role in the mathematics learning system
- ♦ Know what bodily and kinesthetic intelligence is and its role in the mathematics learning system
- ♦ Know what intrapersonal intelligence is and its role in the mathematics learning system
- ♦ Know what interpersonal intelligence is and its role in the mathematics learning system
- ♦ Know what natural intelligence is and its role in the mathematics learning system
- ♦ Know what existential intelligence is and its role in the mathematics learning system
- ♦ Learn to design a mathematics learning landscape
- ♦ Learn to apply mathematical learning landscapes
- ♦ Oversee a mathematics activity using learning landscapes

03

Course Management

TECH has brought together in this Postgraduate Certificate a multidisciplinary team of professionals with a wide teaching vocation. Their experience in this field and their deep knowledge of high abilities and innovative methodologies guarantee students access to an advanced syllabus on Multiple Intelligences in Mathematics. In addition, thanks to the proximity of teachers, they will be able to resolve any doubts that may arise regarding the syllabus of this program.





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A team of specialists versed in high abilities and education will be responsible for bringing you the most advanced knowledge about Multiple Intelligences”

International Guest Director

Doctor Jack Dieckmann has been an outstanding Senior Mathematics Advisor, who has focused on the revision of curricular materials to strengthen language development in Mathematics. In fact, his expertise has encompassed the evaluation and improvement of educational resources, supporting the integration of effective classroom practices. In addition, he has held the position of Director of Research at Stanford University, where he has been dedicated to documenting the effectiveness of learning opportunities offered by Youcubed, including Jo Boaler's online courses on mathematical mindsets and other research-based materials.

In addition, throughout his career, he has held key roles at renowned institutions. Therefore, he has served as Associate Director of Curriculum at the Center for Assessment, Learning and Equity (SCALE), where he has led the Mathematics team in the development of performance assessments, demonstrating his ability to innovate in educational assessment and apply advanced teaching techniques.

In this sense, at the international level, Dr. Jack Dieckmann has been recognized for his impact on mathematics education, through his scientific participation in multiple activities. He has also obtained significant merits in his field, participating in conferences and consultancies in countries such as China, Brazil and Chile. As such, his work has been crucial for the implementation of best practices in mathematics teaching, and his experience has been instrumental in advancing mathematics education globally.

In this way, his further research has focused on "language for mathematical purposes", especially for students of English as a second language. In turn, he has continued to contribute to mathematics education through his work at Youcubed, as well as his consulting activities globally, demonstrating his position as an outstanding leader in the field.



Dr. Dieckmann, Jack

- Director of Research at Youcubed at Stanford University, San Francisco, United States
- Associate Director of Stanford's Center for Assessment, Learning and Equity (SCALE)
- Instructor at the Stanford Teacher Education Program (STEP)
- International Teaching Consultant in countries such as China, Brazil and Chile
- Ph.D. in Mathematics Education at Stanford GSE in 2009

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

Management



Mr. Jurado Blanco, Juan

- ♦ Secondary School Teacher and Industrial Electronics Expert
- ♦ Mathematics and Informatics teacher in Compulsory Secondary Education at Santa Teresa de Jesús School in Vilanova and Geltrú.) Spain
- ♦ Expert in High Abilities
- ♦ Industrial Technical Engineer with Specialization in Industrial Electronics

Professors

D. De la Serna, Juan Moisés

- ♦ Psychologist and Writer expert in Neurosciences
- ♦ Writer specializing in Psychology and Neurosciences
- ♦ Author of the Open Chair in Psychology and Neurosciences
- ♦ Scientific disseminator
- ♦ PhD in Psychology
- ♦ Degree in Psychology. University of Seville
- ♦ Master's Degree in Neurosciences and Behavioral Biology Pablo de Olavide University, Seville
- ♦ Expert in Teaching Methodology. La Salle University
- ♦ University Specialist in Clinical Hypnosis, Hypnotherapy. National University of Distance Education - UNED
- ♦ Diploma in Social Graduate, Human Resources Management, Personnel Administration. University of Seville
- ♦ Expert in Project Management, Administration and Business Management Federation of Services U.G.T
- ♦ Trainer of Trainers. Official College of Psychologists of Andalusia

Dr. Sánchez García, Manuel

- ♦ Teacher of Compulsory Secondary Education
- ♦ Mathematics teacher in Compulsory Secondary Education at Santa Teresa de Jesús School in Vilanova i la Geltrú
- ♦ Vocational Training and Language Teaching
- ♦ Health Biology Specialty
- ♦ Master's Degree in Teacher Training for Compulsory Secondary and High School Education
- ♦ Degree in Biology

04

Structure and Content

This Postgraduate Certificate consists of a syllabus designed to offer the professional the most advanced knowledge on Multiple Intelligences applied to the subject of mathematics. In order to achieve this learning, numerous pedagogical resources (video summaries, detailed videos, essential readings, diagrams) will allow you to delve into the learning landscape and the main theories about the different types of intelligence in just 6 weeks. A set of elements that will allow you to design activities to enhance these intellectual skills in your students.





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A syllabus that will allow you to create a Learning landscape applied to mathematics with total success”

Module 1. The Mathematics Learning Landscape

- 1.1. What are Learning Landscapes Applied to Mathematics?
 - 1.1.1. The Horizontal Axis of the Learning Landscape Matrix: Bloom's Taxonomy
 - 1.1.2. The Vertical Axis of the Learning Landscape Matrix: Multiple intelligences
 - 1.1.3. The Learning Landscape Matrix
 - 1.1.4. Supplements to the Learning Landscape
 - 1.1.5. Example of a Learning Landscape
- 1.2. Bloom's Taxonomy applied to Mathematics
 - 1.2.1. Bloom's Taxonomy, Thinking Skills (1956) and Mathematics
 - 1.2.2. Review of Bloom's Taxonomy (Anderson and Krathwohl, 2001) and Mathematics
 - 1.2.3. Bloom's Taxonomy for the Digital Age (Churches, 2008) and Mathematics
- 1.3. Multiple Intelligences applied to Mathematics
 - 1.3.1. Linguistic Intelligence applied to Mathematics
 - 1.3.2. Logical-Mathematical Intelligence applied to Mathematics
 - 1.3.3. Spatial Intelligence applied to Mathematics
 - 1.3.4. Musical Intelligence Applied to Mathematics
 - 1.3.5. Body and Kinesthetic Intelligence applied to Mathematics
 - 1.3.6. Intrapersonal Intelligence applied to Mathematics
 - 1.3.7. Interpersonal Intelligence applied to Mathematics
 - 1.3.8. Natural Intelligence applied to Mathematics
 - 1.3.9. Existential Intelligence applied to Mathematics
- 1.4. Designing a Learning Landscape in Mathematics
 - 1.4.1. Context of the Curricular Content to be Worked On
 - 1.4.2. Gamification
 - 1.4.2.1. Game Elements
 - 1.4.2.2. Narrative
 - 1.4.3. Design of Activities
 - 1.4.3.1. Bloom Double-Entry , Intelligences Matrix
 - 1.4.3.2. Determination of Itineraries
 - 1.4.3.3. Designing Activities for Each Itinerary
 - 1.4.3.4. Assessment
 - 1.4.3.5. Design of the Genially Graphical Environment



- 1.5. Example of a Learning Landscape Applied to Mathematics
 - 1.5.1. Context of the Curricular Content to be Worked On
 - 1.5.2. Gamification
 - 1.5.2.1. Narrative
 - 1.5.2.2. Game Elements
 - 1.5.3. Design of Activities
 - 1.5.3.1. Bloom Double-Entry, Intelligences Matrix
 - 1.5.3.2. Designing Activities for Each Itinerary
 - 1.5.3.3. Assessment
 - 1.5.3.4. Design of the Graphical Environment: Final Result



Enter when and where you want into the 8 types of Multiple Intelligences advocated by Howard Gardner”

05

Methodology

This training program offers 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.





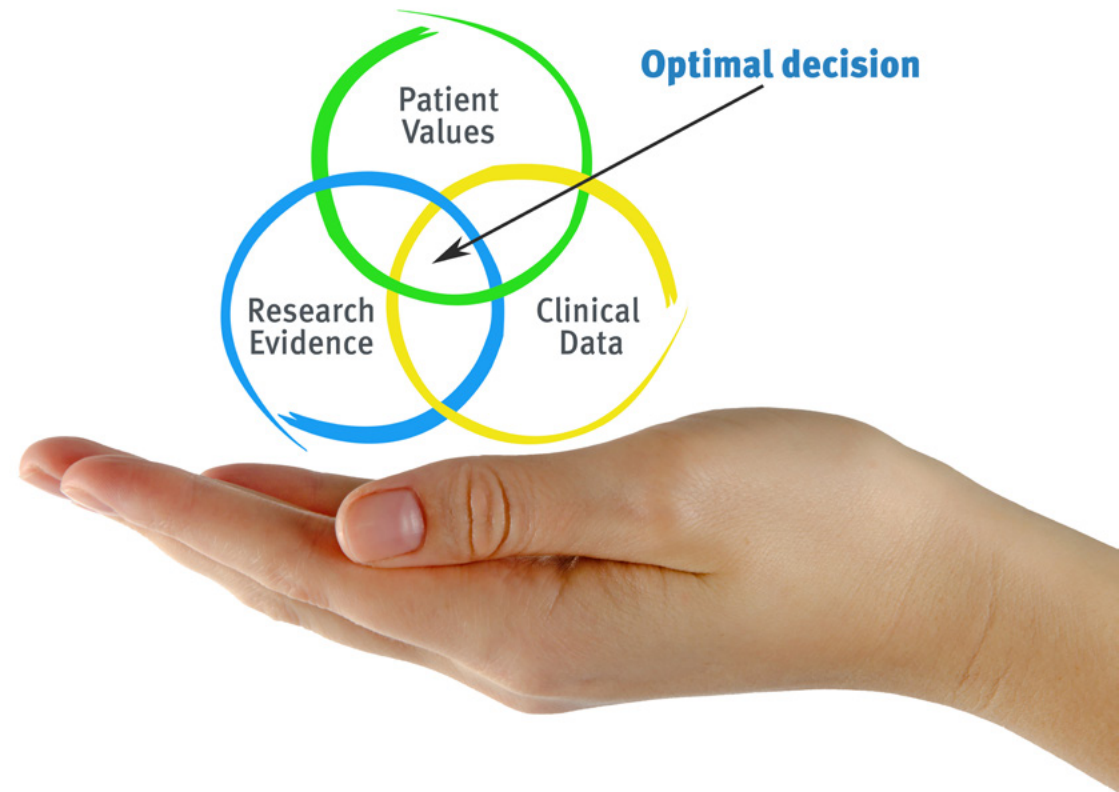
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.



It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.

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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. Educators 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 is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
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.

Our University is the first in the world to combine case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



Educators 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 have trained more than 85,000 educators with unprecedented success in all specialties. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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 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 specialist educators 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.



Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your 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 exclusive multimedia content presentation training Exclusive 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 your goals.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence 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 Multiple Intelligences in Mathematics guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in Multiple Intelligences in Mathematics** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Certificate in Multiple Intelligences in Mathematics**

Modality: **online**

Duration: **6 weeks**

Accreditation: **4 ECTS**



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



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