Postgraduate Certificate
Naval Project Life Cycles

tech technological university

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Postgraduate Certificate

Naval Project Life Cycle

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

Website: **www.techtitute.com/in/engineering/postgraduate-certificate/naval-project-life-cycle**

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01

Introduction

Naval engineers need to possess a broad body of knowledge of Naval Project Life Cycles, as they are the basis for specialization in the field. TECH is committed to helping professionals in this aspect of the industry to boost their careers.

Knowing the life cycle of a project is fundamental in naval engineering. At TECH we want to offer you the best education so you can update your knowledge in the field”

The Postgraduate Certificate in Naval Project Life Cycle is a program of the highest academic level that aims to educate professionals in the field, enabling them to carry out their work with the highest quality and safety requirements. It is a very complete program, imparted by professionals with years of experience, and which includes the latest advances in the field.

The Postgraduate Certificate will present the scope of basic structural, outfitting and electrical engineering as the basis of detailed engineering. It will include the necessary requirements for documentation and mandatory calculations to obtain approval from shipowners, classification societies and the flag authority.

In the detailed engineering section, a vision is offered of the scope of this engineering stage and the importance of being fully aligned with the construction strategy of the shipyard and its facilities will be explained, as well, using 3D modeling tools and innovative virtual reality methodologies.

The Postgraduate Certificate aims to arouse student curiosity in design and production geared towards innovation and development, a crucial perspective to have in today's engineering for any engineer working on design. Students will also gain knowledge of shipyard management.

Moreover, special emphasis will be placed on the operation management stage, following the project life cycle, where operating flow lines will be explained, from delivering the vessel to the shipowner, through daily life and coexistence on board, to disposing of the vessel or craft. The strength and novelty of this program is its focus on a global perspective of the relation between the different stages of the project, which will help students design optimal, effective, profitable and innovative projects.

It should be noted that since this is a 100% online Postgraduate Certificate, students are not constrained by fixed schedules or commutes, but can access the contents at any time of the day, balancing their work or personal life with their academic life.

This **Postgraduate Certificate in Naval Project Life Cycle** contains the most complete and up-to-date program on the market. The most important features include:

- Case studies presented by experts in naval engineering
- 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
- Practical exercises where self-assessment can be used to improve learning
- Special emphasis on innovative methodologies in naval projects
- 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

The completion of this Postgraduate Certificate will place Naval Engineering professionals at the forefront of the latest developments in the sector"

This Postgraduate Certificate is the best investment you can make when selecting a refresher program on naval project life cycle. We offer you quality and free access to content"

The teaching staff includes professionals in naval engineering, who bring their experience to this training 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 training that is programmed to teach students 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 professional will be assisted by an innovative, interactive video system created by renowned and extensively experienced experts in naval project life cycle.

This program comes with the best educational material, providing you with a contextual approach that will facilitate your learning.

This 100% online program will allow you to combine your studies with your professional work. You choose where and when tostudy.

02

Objectives

The program in Naval Project Life Cycle is designed to facilitate professional performance so students acquire and know the main novelties in the field, which will allow them to practice their profession with the highest quality and professionalism.

Our goal is for you to become the best professional in your sector. And for this we have the best methodology and content"

General Objectives

- Possess an overall vision of all stages of the life cycle of a naval project
- Possess and understand knowledge that provides the basis for developing research ideas
- Conceive and develop appropriate technical and economical solutions for naval projects
- Develop the conceptual design that meets shipowner requirements, cost estimates and risk assessments
- Work and negotiate with shipowners from the point of view of design, define ship missions, and assist shipowners in defining ships according to the requirements
- Apply acquired knowledge and problem-solving skills in new environments related to Naval Engineering
- Solve complex problems and make responsible decisions
- Acquire the basis of scientific and technological knowledge applicable to Naval and Ocean Engineering and management methods
- Organize and lead multidisciplinary work groups in multilingual environments
- Acquire the fundamental knowledge of ship design, structure, machinery and on-board installations
- Know the scope of detailed engineering of structure, outfitting, electricity, flag authorization and air conditioning
- Know how to organize and control the processes of construction, repair, transformation, maintenance and inspection of naval projects
- Delve into shipyard management, having a global and current vision of all shipyard departments
- Acquire the knowledge of ship operations throughout the entire flow line
- Possess detailed knowledge of the latest trends in innovation and development in the naval market in all stages of the life cycle of projects, from the initial stages of design to operations and vessel or artifact scrapping

Join us and we will help you achieve professional excellence"

Specific Objectives

- Know the life cycle of naval projects
- Know the phases in the initial project definition stage, from market and feasibility studies, through bids and negotiations, to contract signing and contract follow-up
- Learn conceptual engineering
- Possess fundamental design criteria for the basic structural engineering necessary to approve projects
- Know the most innovative trends in structural engineering
- Identify the most innovative basic engineering structures and areas of outfitting engineering
- Know the necessary documentation requirements generated to be approved by shipowners, classification societies and flag authorities
- Work with detail engineering using new methodologies and virtual reality
- Know the latest strategies and trends in shipyard management
- Achieve a vision of innovation and development in the life cycle of naval projects

03

Course Management

TECH has professionals specialized in each area of knowledge, who pour their work experience into their training.

Our university employs the best professionals in all areas who share their knowledge to help you"

Management

Ms. López Castejón, María Ángeles

- Naval and Ocean Engineer School of Naval Engineering (ETSIN)
- 22 years of experience in Naval Engineering, Engineering and Shipyards
- Master's Degree in Occupational Risk Prevention Safety. MAPFRE
- PRL Auditor C.E.F
- Safety Coordinator
- C.A.P. University of Seville
- CCPC Co-Active Professional Certified Coach CTI
- Director of Marine Projects at SENER INGENIERIA Y SISTEMAS, S.A.
- Certified Professional Coach

Professors

Mr. De Vicente Peño, Mario

- Naval and Ocean Engineer School of Naval Engineering (ETSIN)
- Master's Degree at UPM: Numerical Simulation in Engineering with ANSYS
- 16 years of experience in Naval Engineering and Classification Society
- Associate Professor of Structures and Shipbuilding at UPM, (ETSIN): Official Degree Courses: Finite Element Models in Ship Structures (1C), Master Frame Calculation (2C), MAERM Topics: Structural Design (1C), Structural Analysis of Offshore Platforms (2C)
- Director of Marine Projects at SENER INGENIERIA Y SISTEMAS, S.A.
- ETSIN Associate Professor

Mr. Fiorentino, Norberto Eduardo

- Naval Engineer Buenos Aires Technology Institute (ITBA)
- Master's Degree in Environmental Management Postgraduate Course in Ship Construction, Repair and Maintenance
- 26 years of experience in academic management and university teaching
- 13 years of experience in Naval Engineering
- 9 years of experience as a Technical Fleet Manager
- 6 years of experience as an Engine Section Chief in Shipyard Engineering
- Director of Marine Projects at SENER INGENIERIA Y SISTEMAS, S.A.
- Director of the Naval Engineering Department at ITBA

Mr. Labella Arnanz, José Ignacio

- Naval and Ocean Engineer School of Naval Engineering (ETSIN)
- Master's Degree in Financial Management. CEF
- Master's Degree in Senior Accounting CEF
- Master's Degree in Commercial Management and Marketing GESCO ESIC
- NACE CIP I and II
- General Manager at DEL MONTE SERVICIOS INDUSTRIALES, a company specialized in surface treatment, protection and insulation in the naval sector
- 24 years of experience in Naval and Industrial Engineering, Production and Maintenance
- 11 years of experience in General Management

Mr. Martín Sánchez, José Luis

- Naval and Ocean Engineer, School of Naval Engineering (ETSIN)
- Master's Degree in Integral Project Management
- 26 years of experience in Naval Engineering
- Director of Marine Projects at SENER INGENIERIA Y SISTEMAS, S.A.

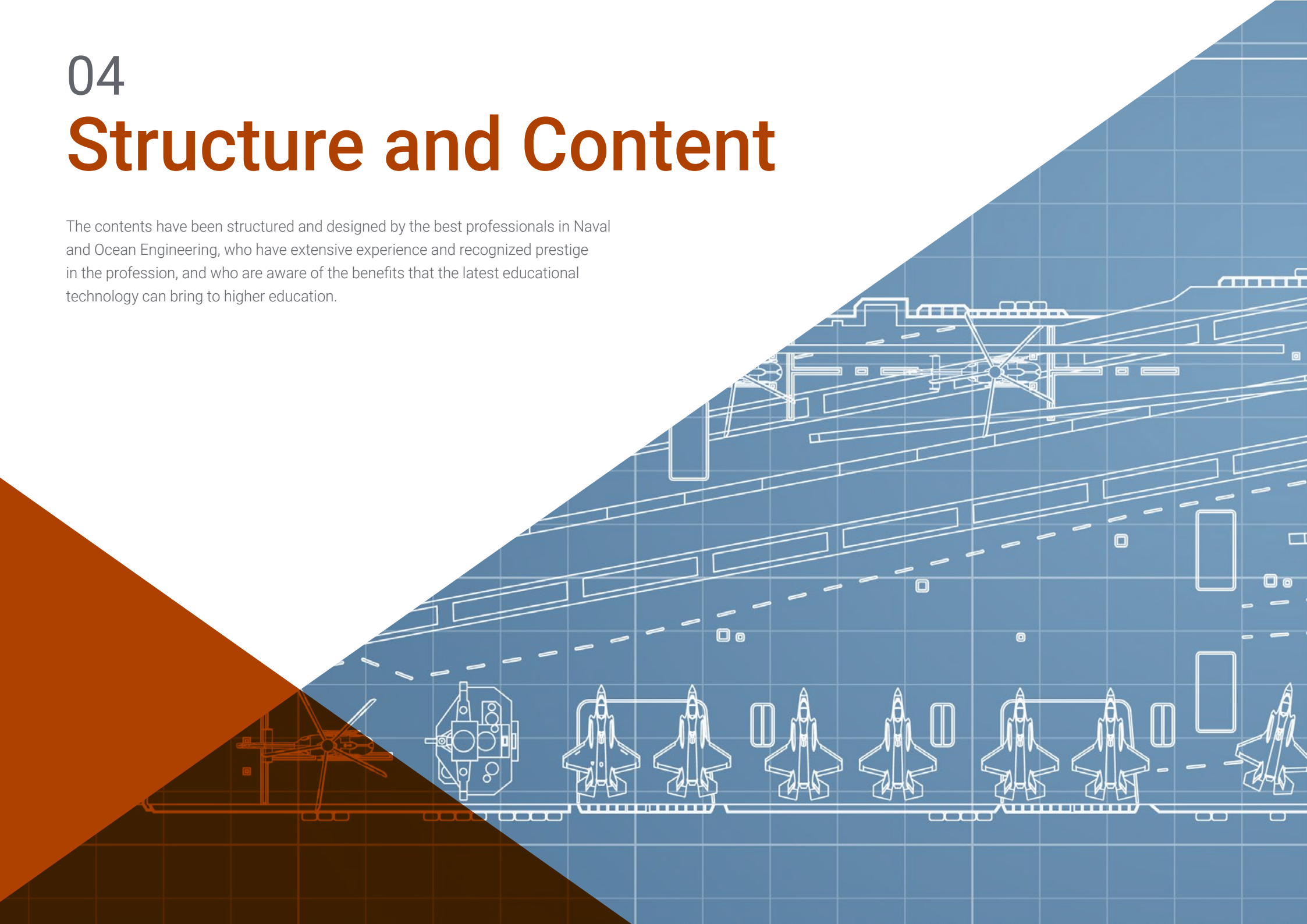
Mr. Sánchez Plaza, Carlos

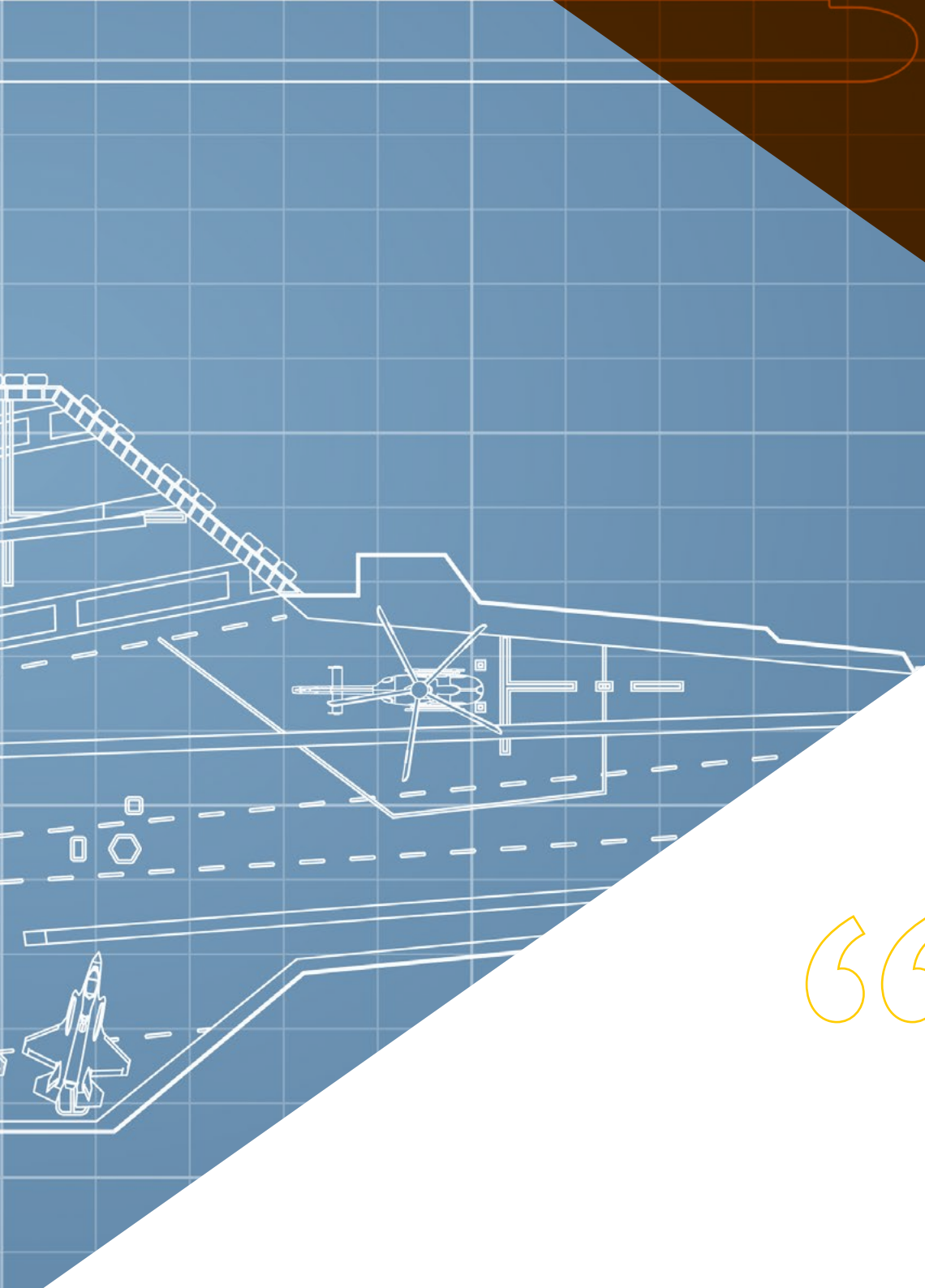
- Naval and Ocean Engineer School of Naval Engineering (ETSIN)
- 26 years of experience in Naval Engineering
- PADE, Senior Management Plan, IESE (University of Navarra)
- COO Deoleo
- Fishing and Merchant Fleet Management Specialist
- Member of the Bureau Veritas Naval Technical Committee

04

Structure and Content

The contents have been structured and designed by the best professionals in Naval and Ocean Engineering, who have extensive experience and recognized prestige in the profession, and who are aware of the benefits that the latest educational technology can bring to higher education.





We have the most complete and up-to-date academic program on the market. We strive for excellence and for you to achieve it too"

Module 1. The Life Cycle of Naval Projects

1.1. The Life Cycle of Naval Projects
- 1.1.1. The Lifecycle
- 1.1.2. Stages

1.2. Negotiation and Feasibility
- 1.2.1. Viability Analysis: Generating Alternatives
- 1.2.2. Budgets
- 1.2.3. Negotiation
- 1.2.4. Contracts and Execution

1.3. Conceptual Engineering
- 1.3.1. Conceptual Design
- 1.3.2. General Provisions
- 1.3.3. Technical Specifications
- 1.3.4. Relevant Conceptual Project Information

1.4. Basic Engineering Structures
- 1.4.1. Structural Systems
- 1.4.2. Calculation Methodologies
- 1.4.3. Beam Vessel Theory

1.5. Basic Machinery and Electrical Engineering
- 1.5.1. Propulsion
- 1.5.2. Services
- 1.5.3. Electricity

1.6. Development Engineering
- 1.6.1. Construction Strategy and Manufacturing Constraints
- 1.6.2. 3D Modeling and Operations

1.7. Production and Maintenance
- 1.7.1. Construction Strategies
- 1.7.2. Budget and Planning
- 1.7.3. Production Organization
- 1.7.4. Outsourcing
- 1.7.5. Purchasing and Logistics Management
- 1.7.6. Quality Control
- 1.7.7. Monitoring and Control
- 1.7.8. Delivery and Commissioning

1.8. Shipyard Management
- 1.8.1. Strategy
- 1.8.2. Sizing and Investments
- 1.8.3. Human Resources and Training
- 1.8.4. Auxiliary Industry
- 1.8.5. Plant Maintenance and Reliability
- 1.8.6. Financial Management
- 1.8.7. Quality
- 1.8.8. The Environment
- 1.8.9. Occupational Hazard Prevention
- 1.8.10. Continuous Improvement and Excellence

1.9. Operation
- 1.9.1. Departure from the Shipyard
- 1.9.2. Start of Operations
- 1.9.3. Ports
- 1.9.4. Scrapping

1.10. Innovation and development
- 1.10.1. R&D&I in New Technologies
- 1.10.2. R&D&I Engineering
- 1.10.3. R&D&I in Energy

A comprehensive and multidisciplinary educational program that will allow you to excel in your career, following the latest advances in the field of Naval Engineering"

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.

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"

Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"

You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

> *Our program prepares you to face new challenges in uncertain environments and achieve success in your career"*

The case method is the most widely used learning system in the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

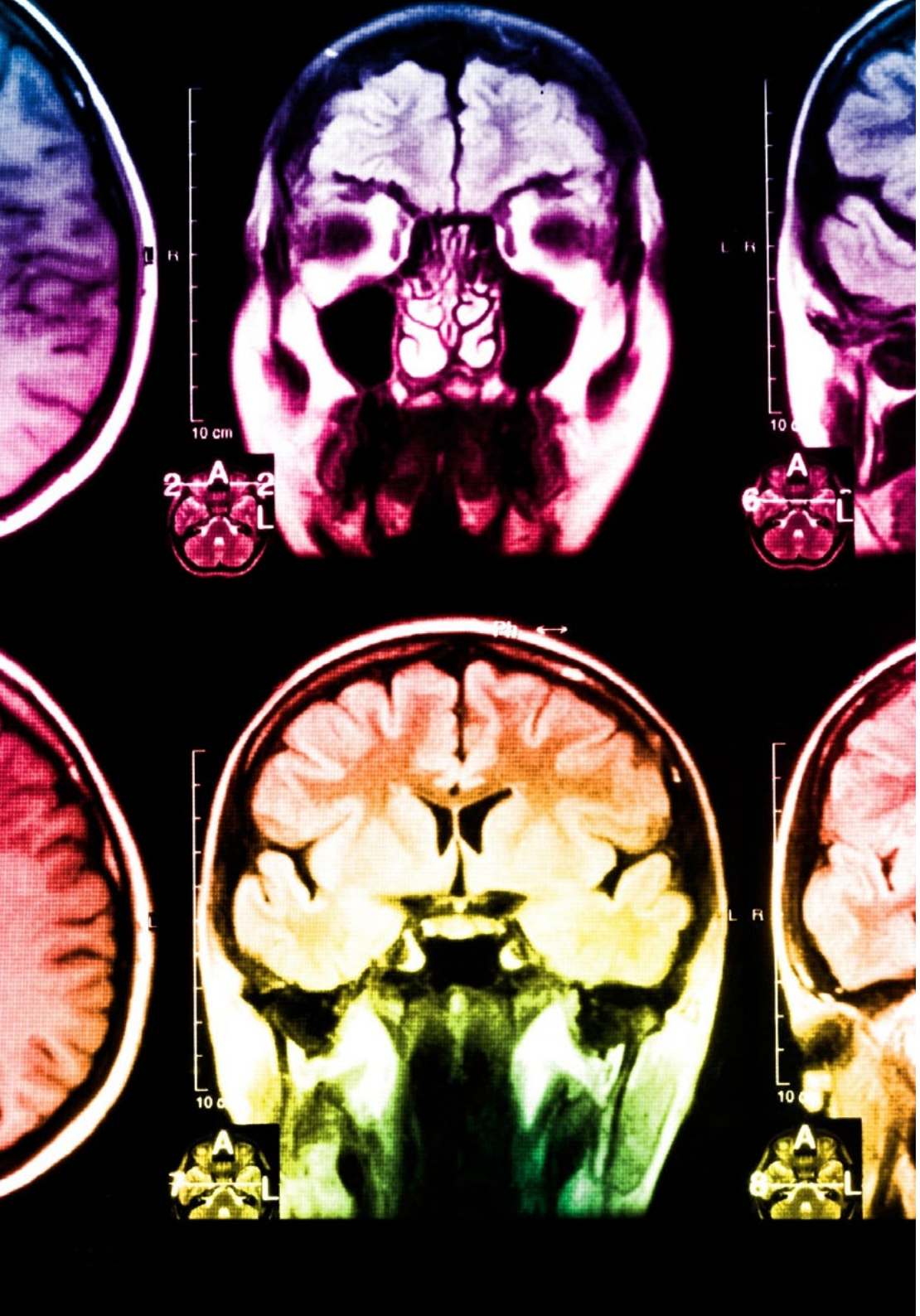
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



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. This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

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.

Classes

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

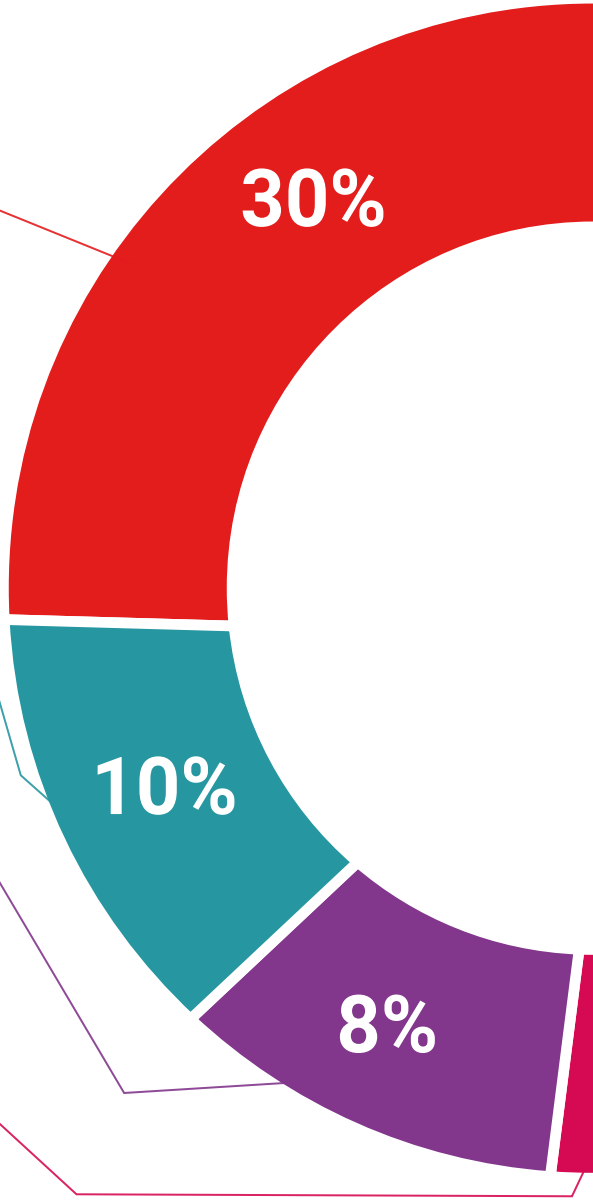
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

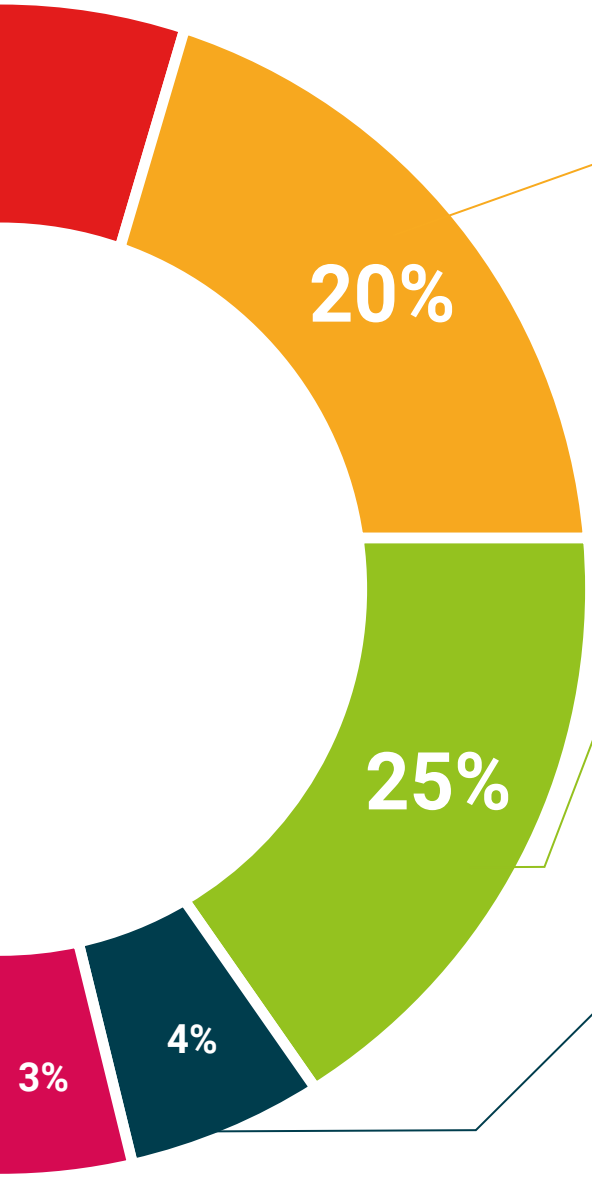
Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.

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.





Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.

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".

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.

06

Certificate

The Postgraduate Certificate in Naval Project Life Cycles guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in Naval Project Life Cycles** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH 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 Naval Project Life Cycle**

Official N° of Hours: **150 h.**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Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Naval Project Life Cycles

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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Postgraduate Certificate

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