

Internship Program

Aviation Engineering





Internship Program
Aviation Engineering



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01

Introduction to the Program

With the arrival of Industry 4.0, the aerospace sector has been enriched by the incorporation of digital technologies offering new predictive maintenance methodologies. For example, systems based on artificial intelligence techniques provide several advantages such as early fault detection, optimization of inspection cycles, and reduction of operational costs. In this context, experts have the responsibility to handle the most innovative tools to contribute to the improvement of air transport system safety. To support them in this task, TECH introduces a pioneering program where students will integrate for 3 weeks into a prestigious institution specializing in Aviation Engineering.

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Thanks to this Internship Program, you will stand out for your mastery of the fundamentals of Aviation Engineering and make strategic decisions that contribute to the efficient development of the sector”





According to a new report by the International Air Transport Association, over 4.5 billion passengers were transported by air last year. At the same time, the organization projects that Aviation Engineering will continue to experience exponential growth of up to 35%. This situation presents numerous challenges regarding the maintenance, design, and operation of aircraft. For this reason, it is essential for professionals to stay at the forefront of the latest advancements in composite materials, hybrid propulsion, and process automation. Only by doing so will they be able to meet the industry's demands and ensure the efficiency of air operations.

With this in mind, TECH has created an innovative program that consists of a highly practical 120-hour Internship Program at a leading company in Aviation Engineering. During this 3-week experience, students will integrate into an experienced team to actively participate in real projects related to the creation, maintenance, and analysis of cutting-edge aeronautical systems. Thanks to this, graduates will gain advanced skills to improve the efficiency of air transport processes and contribute to the sustainable development of the sector. Additionally, they will strengthen their ability to rigorously apply current legal regulations and use state-of-the-art digital systems.

Furthermore, during this immersive experience, students will be supported by an assigned tutor. This professional will provide personalized advice to enhance their technical performance, resolve operational issues in real-time, and solidify their knowledge in high-demand collaborative environments. Thanks to this support, graduates will acquire a comprehensive understanding of how a modern aviation company operates, laying the foundation for highly qualified professional work tailored to the challenges of the global aviation field.

02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.

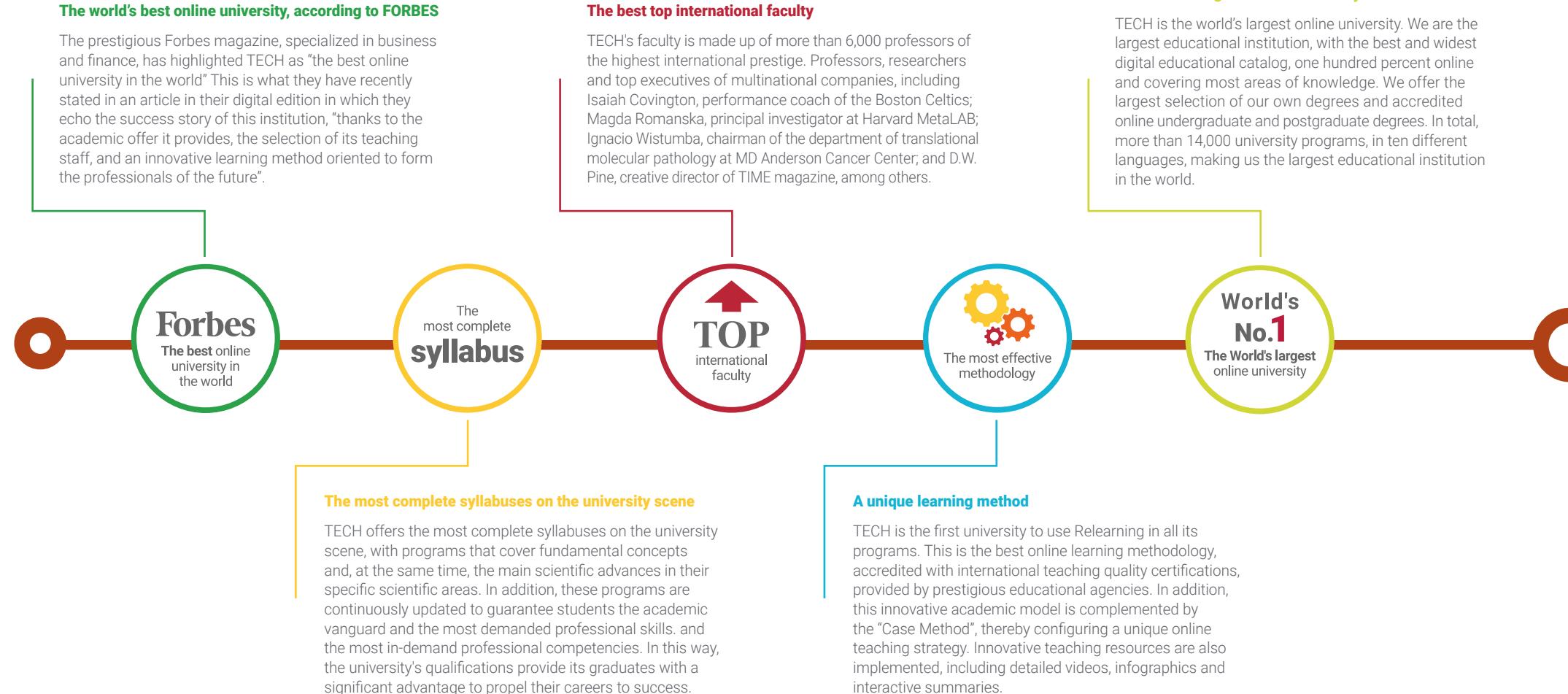
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TECH combines Relearning and the Case Method in all its university programs to guarantee excellent theoretical and practical learning by studying when you want and from wherever you want”



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Study at the largest online university in the world and ensure your professional success. The future begins at TECH”



The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.

03

Teaching Objectives

Through this exclusive Internship Program, specialists will stand out for their holistic understanding of the fundamentals of Aviation Engineering. At the same time, they will develop a set of advanced technical and operational skills to thrive in highly demanding professional environments. They will also master the use of the most modern tools for aircraft maintenance, inspection, and system analysis. Moreover, they will be able to accurately interpret complex documentation, apply sophisticated operational safety protocols, and even collaborate in the optimization of processes within manufacturing plants.



General Objectives

- Understand the fundamental principles of sustainability in Aviation and its impact on the sector's development
- Analyze international aviation regulations and the regulatory systems governing the industry
- Develop advanced security and protection strategies to ensure efficient airport operations
- Apply emerging technologies to optimize air navigation and improve operational efficiency
- Design strategic plans for the commissioning and optimization of airport infrastructures





Specific Objectives

- ◆ Evaluate the environmental impact of the aviation sector and strategies to reduce its carbon footprint
- ◆ Delve into the legal framework applicable to aircraft safety and operations on a global scale
- ◆ Develop sophisticated strategies for cost and resource optimization in the aviation industry
- ◆ Design safety and access control plans for various airport infrastructures
- ◆ Analyze crisis management protocols for events of unlawful interference
- ◆ Use air traffic management tools to optimize the safety and efficiency of operations
- ◆ Dive into the manufacturing and assembly processes of commercial and military aircraft
- ◆ Analyze key technological trends in the aviation industry and their application to operations

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You will have a comprehensive understanding of the principles of design, manufacturing, and certification of aircraft under current international standards”

04

Internship

The Internship Program in Aviation Engineering consists of an internship at a reputable company in the sector, lasting 3 weeks, Monday to Friday, with 8 consecutive hours per day of hands-on training alongside an assigned specialist. This internship will enable students to acquire advanced technical skills focused on both the design, operation, and maintenance of aviation systems.

In this highly practical program, the activities are aimed at the development and refinement of the competencies required for technical performance in highly demanding aviation environments. Moreover, the activities are tailored to provide specific training for professional practice in real operational conditions, prioritizing safety in procedures, technical accuracy, and high performance levels in advanced aviation systems.

Undoubtedly, this is a unique opportunity to learn while working in a company that represents the future of the sector, where real-time monitoring, performance optimization, and technological innovation are pillars of its professional culture.

The practical component will involve active student participation in performing the activities and procedures of each area of competence (learning to learn and learning to do), with the support and guidance of professors and fellow trainees who facilitate teamwork and multidisciplinary integration as cross-functional competencies for Aviation Engineering practice (learning to be and learning to relate).

The procedures described below will be the basis of the practical part of the Internship Program, and its realization will be subject to the center's own availability and workload, being the proposed activities the following:





Module	Practical Activity
Environmental Management in Aviation	Design lighter and more efficient aeronautical components
	Handle cutting-edge technologies that reduce fuel consumption, including composite materials or hybrid systems
	Evaluate the carbon footprint of ground operations and propose cutting-edge mitigation plans
	Create comprehensive sustainability audits in compliance with current international regulations and report key indicators such as CO2 emissions
Strategic planning for airport growth	Analyze the interaction between airport growth and surrounding urban development
	Propose zoning and land-use models compatible with airport operations
	Develop and implement predictive models for urban growth and air traffic to anticipate long-term impacts
	Rigorously apply regulations protecting against incompatible activities such as unauthorized construction, light pollution, or drone usage
Advanced air navigation techniques	Supervise the technical operation of ground-based radio aids and satellite navigation systems
	Perform inspection, calibration, and preventive maintenance tasks on equipment to ensure operational continuity
	Early identification of potential risks associated with air navigation in different flight phases (departure, en-route, approach, and landing)
	Run simulations to validate new navigation procedures in controlled conditions
Aerospace design, assembly, and maintenance	Participate in the structural, aerodynamic, and functional design of both aircraft and their components
	Implement electrical, hydraulic, propulsion, and avionics systems in accordance with current international standards
	Ensure compliance with quality standards and tolerances in each phase of assembly
	Validate aircraft conformity before entering service or after major repairs

05 Internship Centers

Below are some of the internship centers selected by TECH for this university program. However, if none of them meet your expectations or needs, TECH is committed to managing the formalization of an agreement with an entity that aligns with your preferences, ensuring a fully personalized experience.

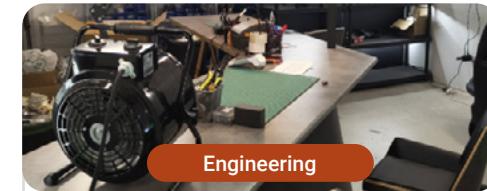
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You will undergo an Internship Program at a leading entity in the Aviation Engineering sector, where you will integrate into an experienced, multidisciplinary team”





The student will be able to do this program at the following centers:



Maxterdrone Calle Oslo

Country: Spain City: Madrid

Address: Calle Oslo 20, Las rozas

Drone design company aimed at the commercialization of transportation vehicles

Related internship programs:

- Aviation Engineering



Engineering

Maxterdrone Calle Copenague

Country

Spain

City

Madrid

Address: Calle Copenague 6, oficina 5,
Las rozas

Drone design company aimed at the
commercialization of transportation vehicles

Related internship programs:

- Aviation Engineering



Engineering

Avintair

Country

Spain

City

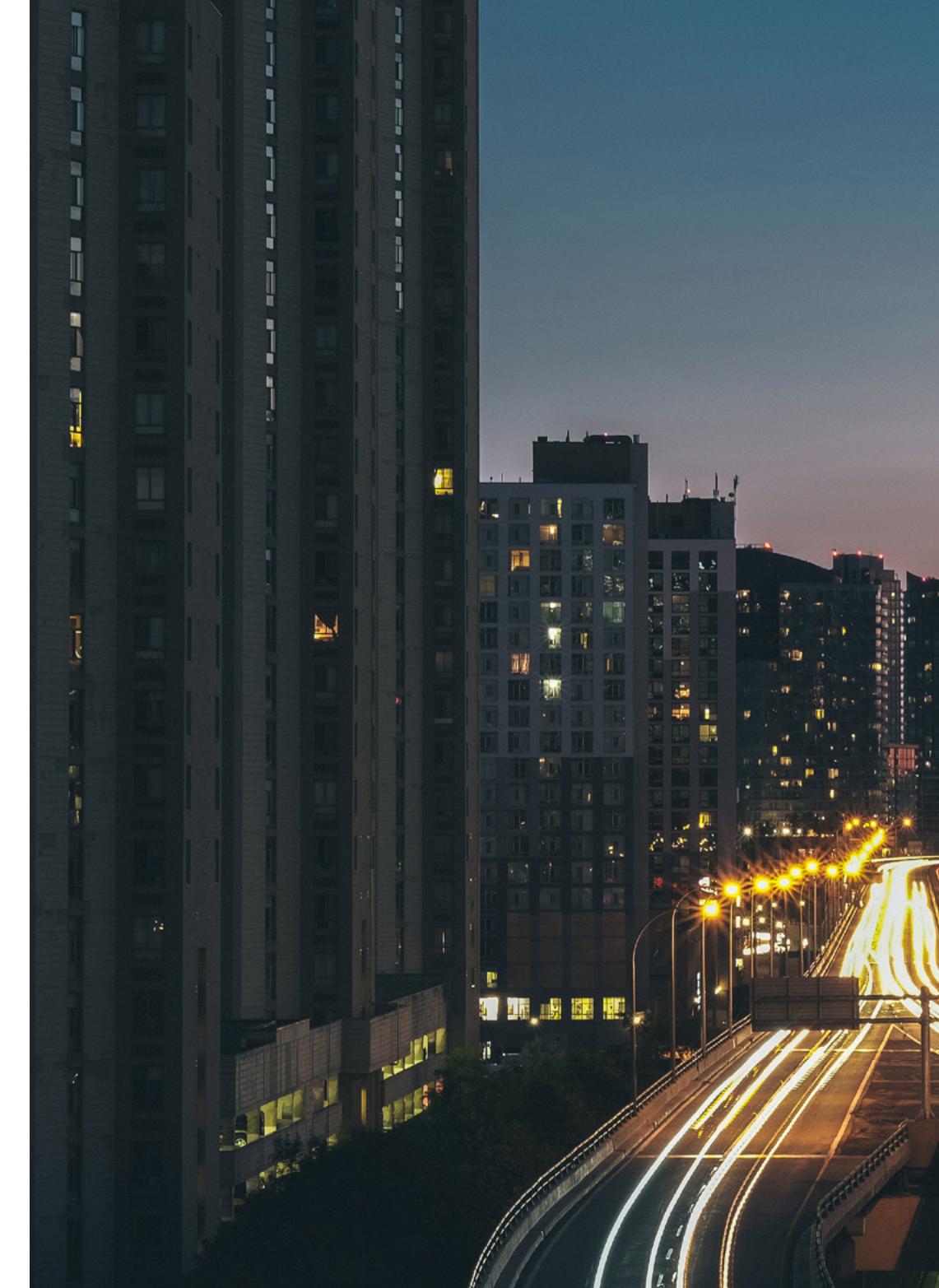
Barcelona

Address: Ctra. Bellaterra, sn Hangar 7B
(Aeropuerto de Sabadell) 08205 Sabadell

Aerospace company specializing in diagnosing technical and
administrative issues in aircraft

Related internship programs:

- Aviation Engineering





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Make the most of this opportunity to surround yourself with expert professionals and learn from their work methodology”

06

General Conditions

Civil Liability Insurance

The university's main concern is to guarantee the safety of the interns, other collaborating professionals involved in the internship process at the center. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

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

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



General Conditions of the Internship Program

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

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

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

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

4. CERTIFICATION: Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: The Internship Program shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

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

07 Certificate

This private qualification will allow you to obtain a diploma for the **Internship Program in Aviation Engineering** 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 private qualification from **TECH Global University** is a European continuing education and professional development program that guarantees the acquisition of competencies in its area of expertise, providing significant curricular value to the student who successfully completes the program.

Title: **Internship Program in Aviation Engineering**

Duration: **3 weeks**

Attendance: **Monday to Friday, 8-hour consecutive shifts**

Credits: **4 ECTS**



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

tech global
university
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