Internship Program
Electronic Systems Engineering

Accreditation/Membership

ASEE American Society for Engineering Education

tech global university

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Internship Program

Electronic Systems Engineering

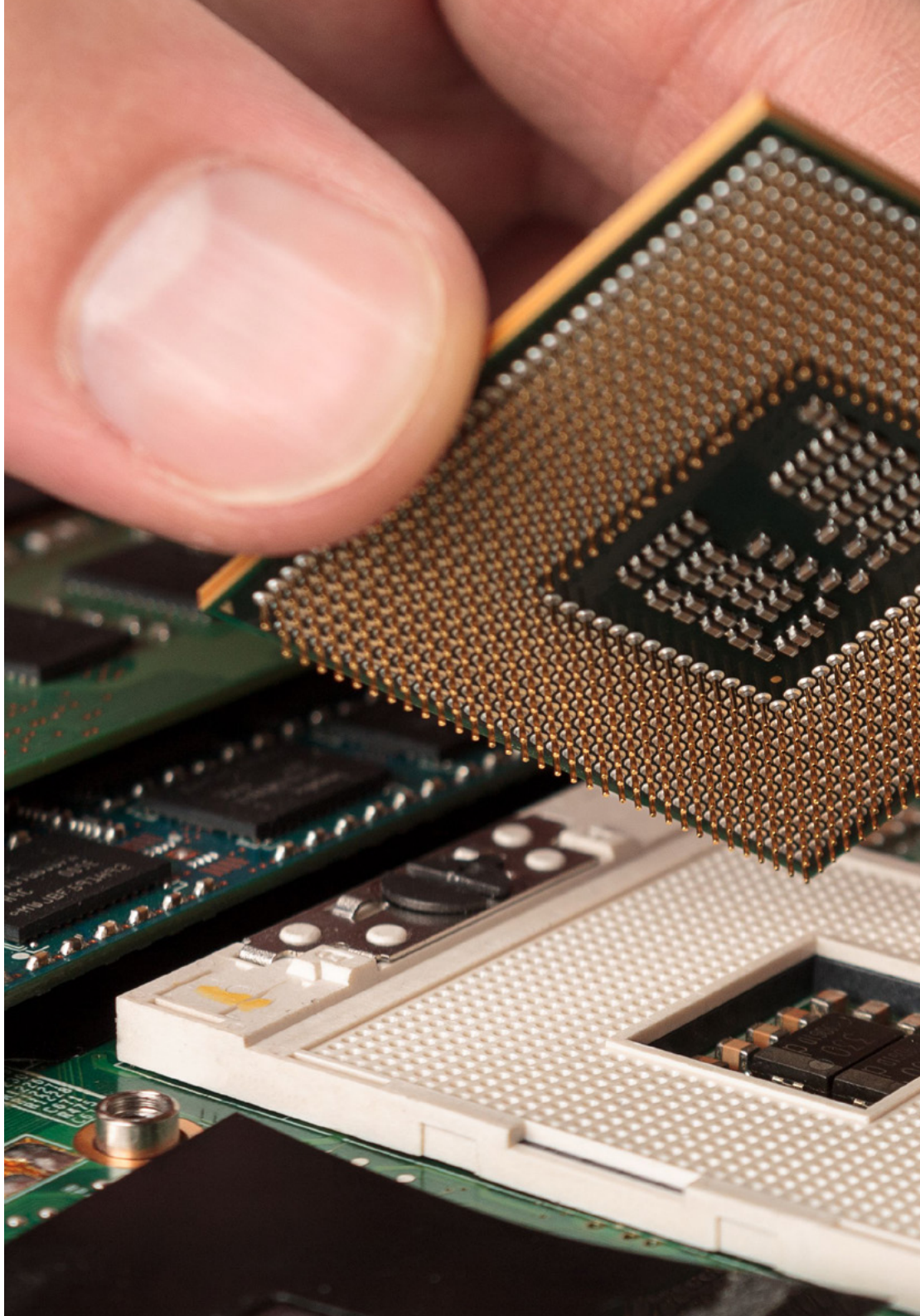
Index

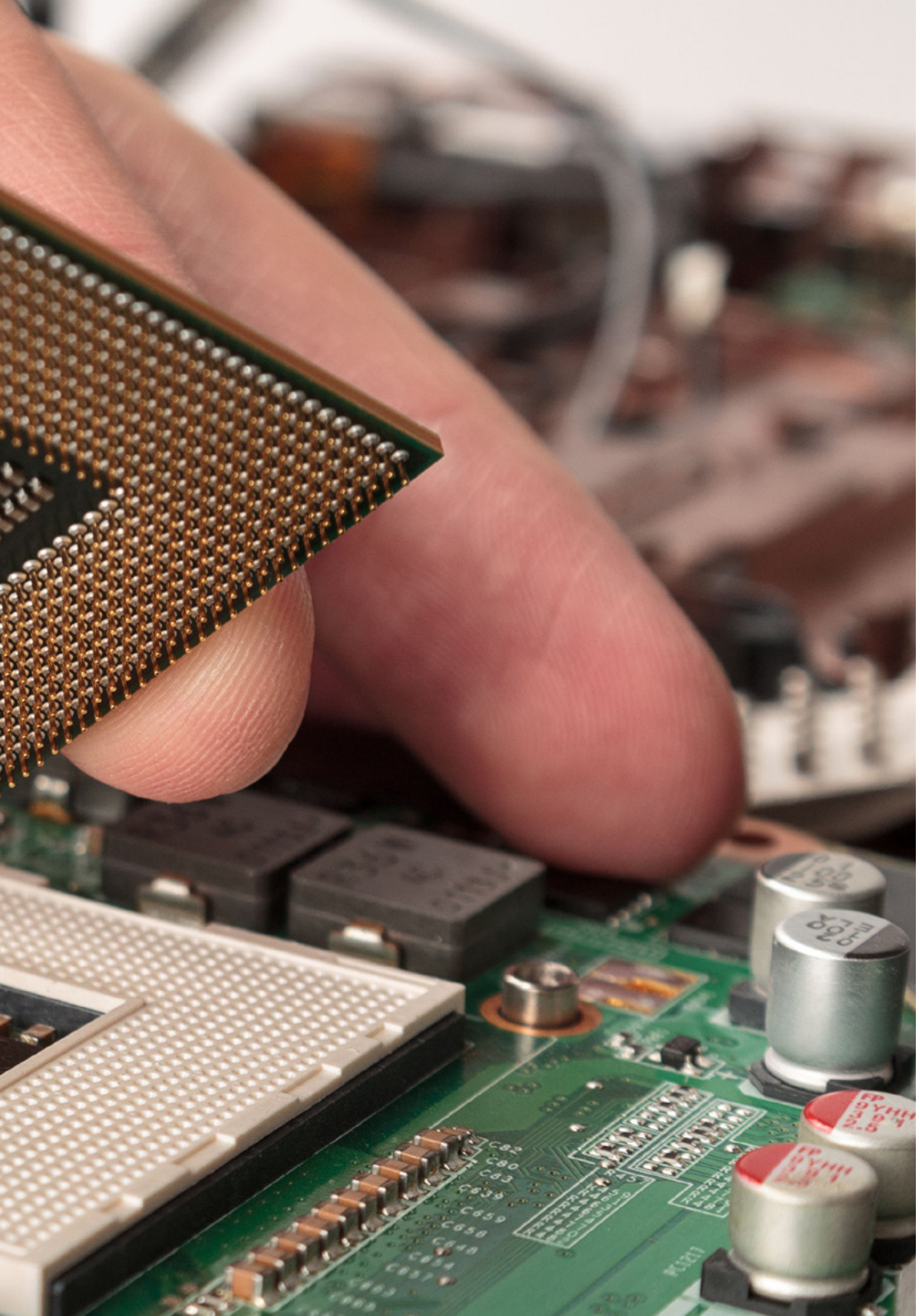
01

Introduction to the Program

The growing dependence on digital technologies is driving the demand for highly skilled professionals in Electronic Systems Engineering. According to the International Telecommunication Union, approximately 5.5 billion people, or 68% of the global population, use the Internet, reflecting a significant increase in global connectivity. This phenomenon highlights the urgent need for specialists capable of designing, implementing, and optimizing advanced electronic infrastructures. In response to this demand, TECH has developed a university program that integrates hands-on practice in collaboration with prestigious entities. Furthermore, the applied methodology allows professionals to tackle real-world challenges in cutting-edge technological environments, ensuring comprehensive preparation aligned with global industry trends.

> *A comprehensive and 100% online program, exclusive to TECH, with an international perspective backed by our membership in the American Society for Engineering Education"*





Electronic Systems Engineering is a cornerstone of contemporary technological development, enabling the design, implementation, and optimization of systems that integrate electronic components and software to solve complex problems. Today, this discipline is critical in sectors such as telecommunications, industrial automation, robotics, and smart devices, where the efficiency and reliability of electronic systems determine the success of innovative projects.

In this context, the curriculum at TECH Global University delves into fundamental areas such as microelectronics and embedded systems, facilitating the understanding and application of integrated circuits, sensors, processors, and specialized software. Thanks to this approach, professionals will develop advanced skills in the design and optimization of electronic systems, hardware programming, component integration, and performance analysis, enabling them to tackle technological projects with precision and efficiency.

TECH Global University's methodology is delivered in a hands-on manner, in collaboration with prestigious entities that feature advanced technology, ensuring that professionals face real and complex challenges from the very beginning of the process. During this experience, a specialized tutor will accompany each stage, guiding and resolving doubts, ensuring in-depth and contextualized learning.

Thanks to TECH's membership in the **American Society for Engineering Education (ASEE)**, its students gain free access to annual conferences and regional workshops that enrich their engineering education. Additionally, they enjoy online access to specialized publications such as Prism and the Journal of Engineering Education, enhancing their academic development and expanding their professional network on an international scale.

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.

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"

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

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

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.

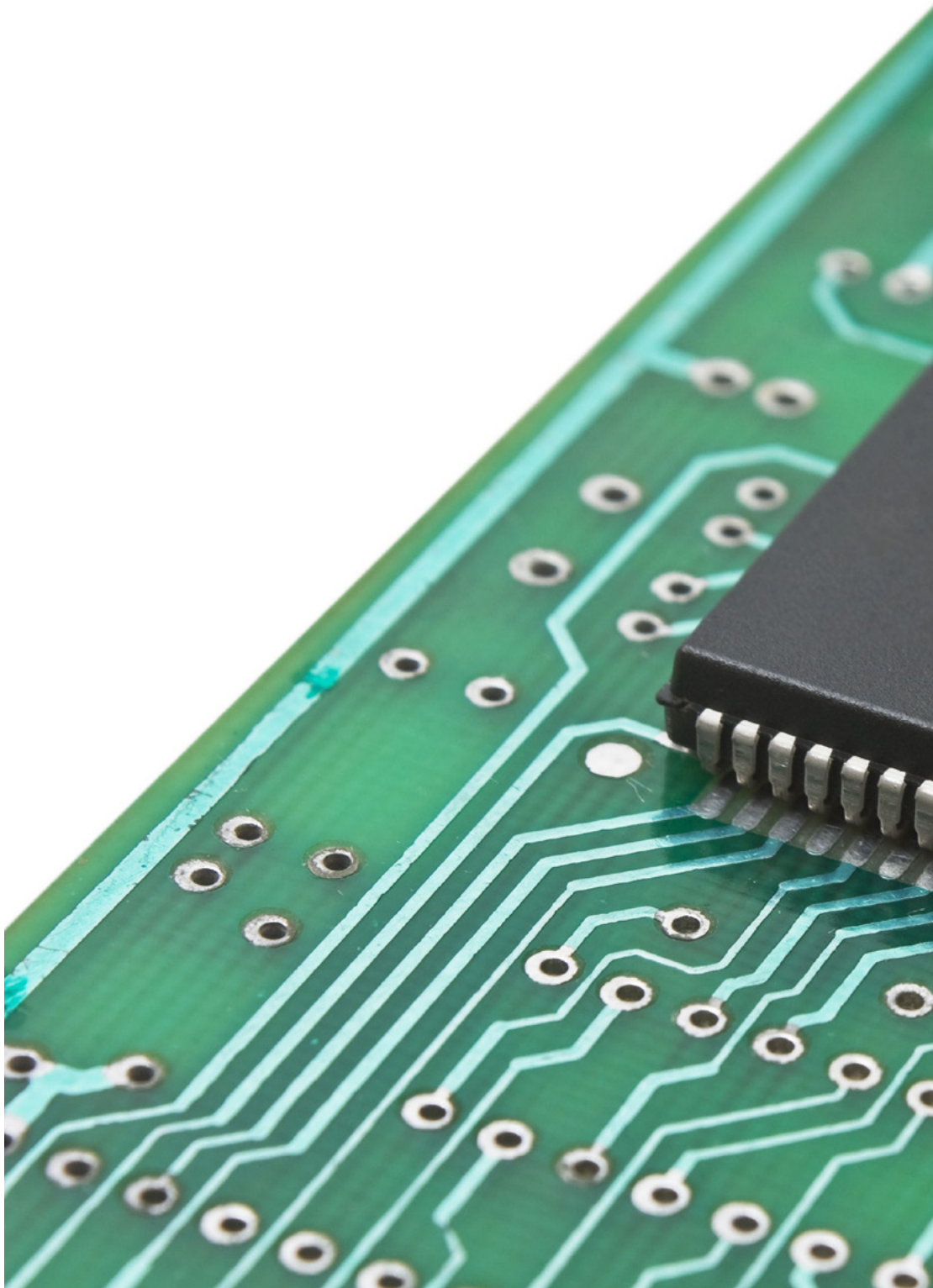
03

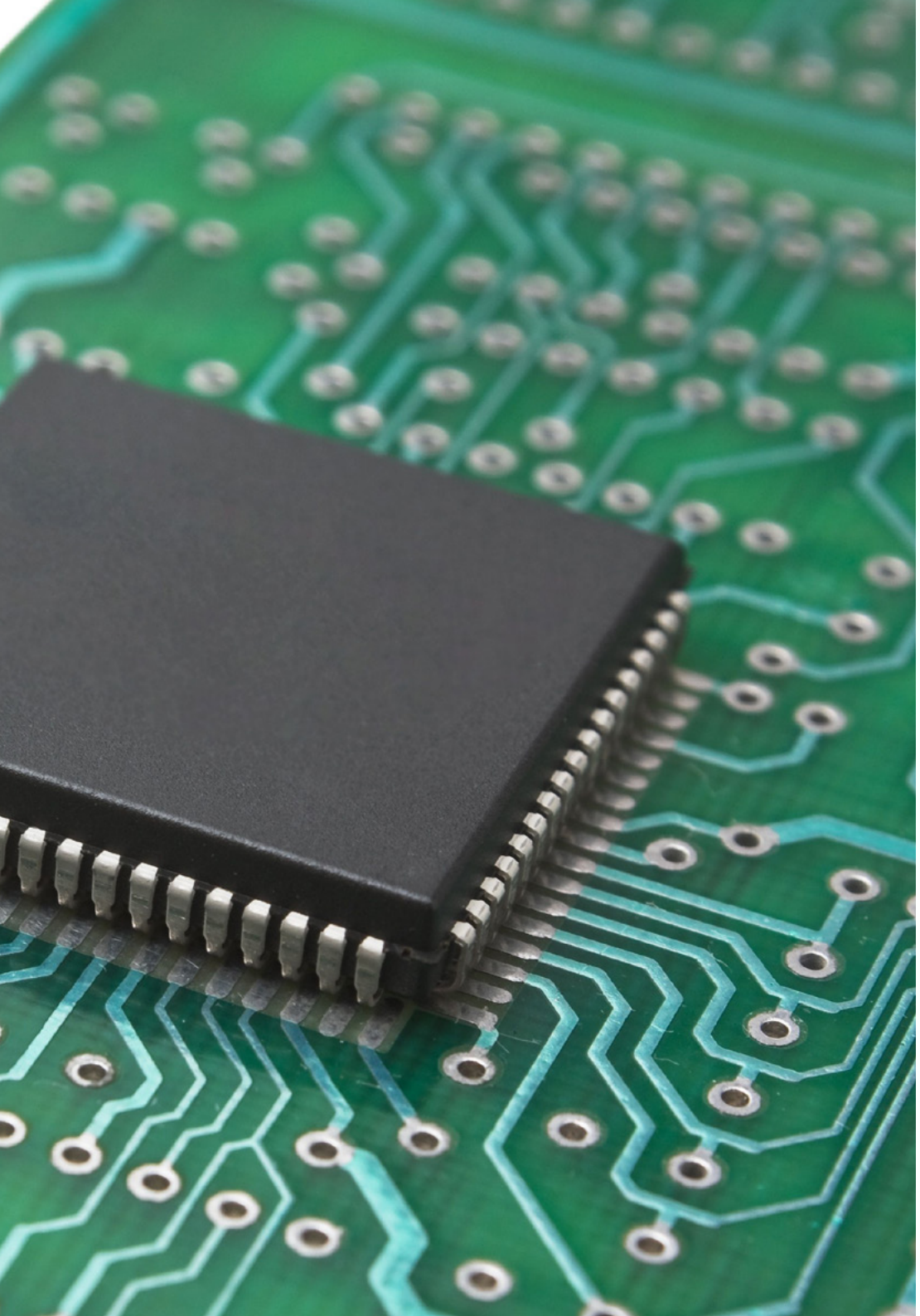
Teaching Objectives

This university program's primary goal is to provide professionals with key knowledge in Electronic Systems Engineering. Through this practical experience, graduates will enhance their expertise in power electronic converters and digital processing while also developing skills applicable in the design, implementation, and optimization of electronic systems. Furthermore, they will benefit from guidance by specialized tutors and access to advanced technology, enabling them to face real-world challenges and effectively apply the knowledge they have gained.

General Objectives

- Acquire advanced knowledge in the design, development, and optimization of electronic systems
- Master the use of microelectronics, instrumentation, and sensors for industrial and scientific applications
- Implement efficient solutions in digital processing and embedded systems
- Understand and apply energy conversion technologies and energy efficiency in electronic systems





Specific Objectives

- Design and implement embedded systems for industrial and commercial applications
- Apply design methodologies for creating advanced electronic circuits
- Understand the principles of manufacturing and designing integrated circuits
- Design and implement measurement and control systems based on high-precision sensors
- Analyze and design electronic converters to optimize energy efficiency in industrial systems
- Apply digital signal processing algorithms in communication and control systems
- Develop electronic devices for medical monitoring and diagnosis
- Implement technological solutions for optimizing energy consumption in smart grids
- Develop and integrate communication protocols in industrial automation systems
- Apply marketing strategies and market positioning for electronic products

04
Internship

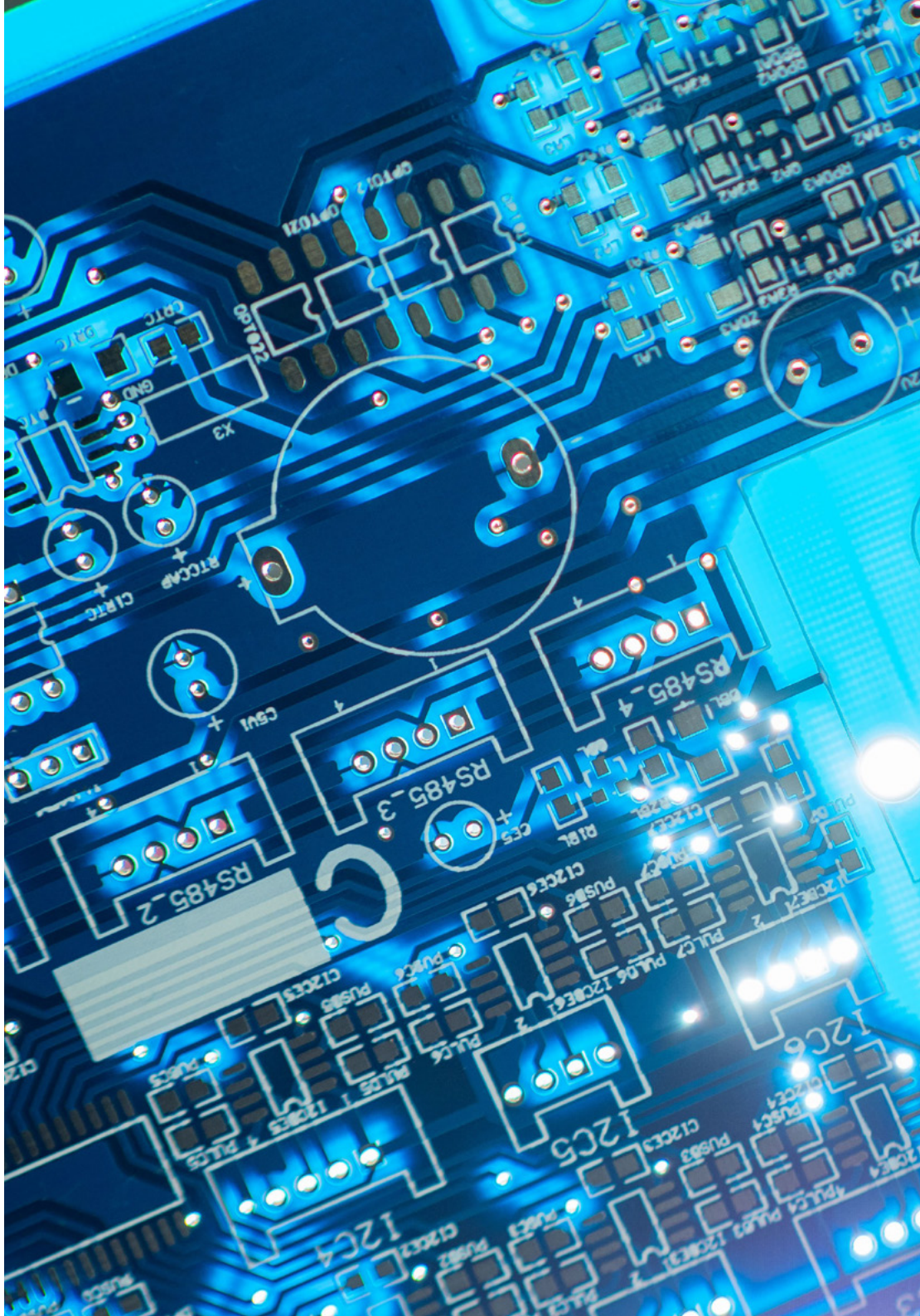
The practical training period of this Electronic Systems Engineering university program consists of an intensive stay at a renowned institution. This experience will allow graduates to learn in a real-world environment, alongside leading professionals in the field, applying knowledge in the design, implementation, and optimization of advanced electronic systems.

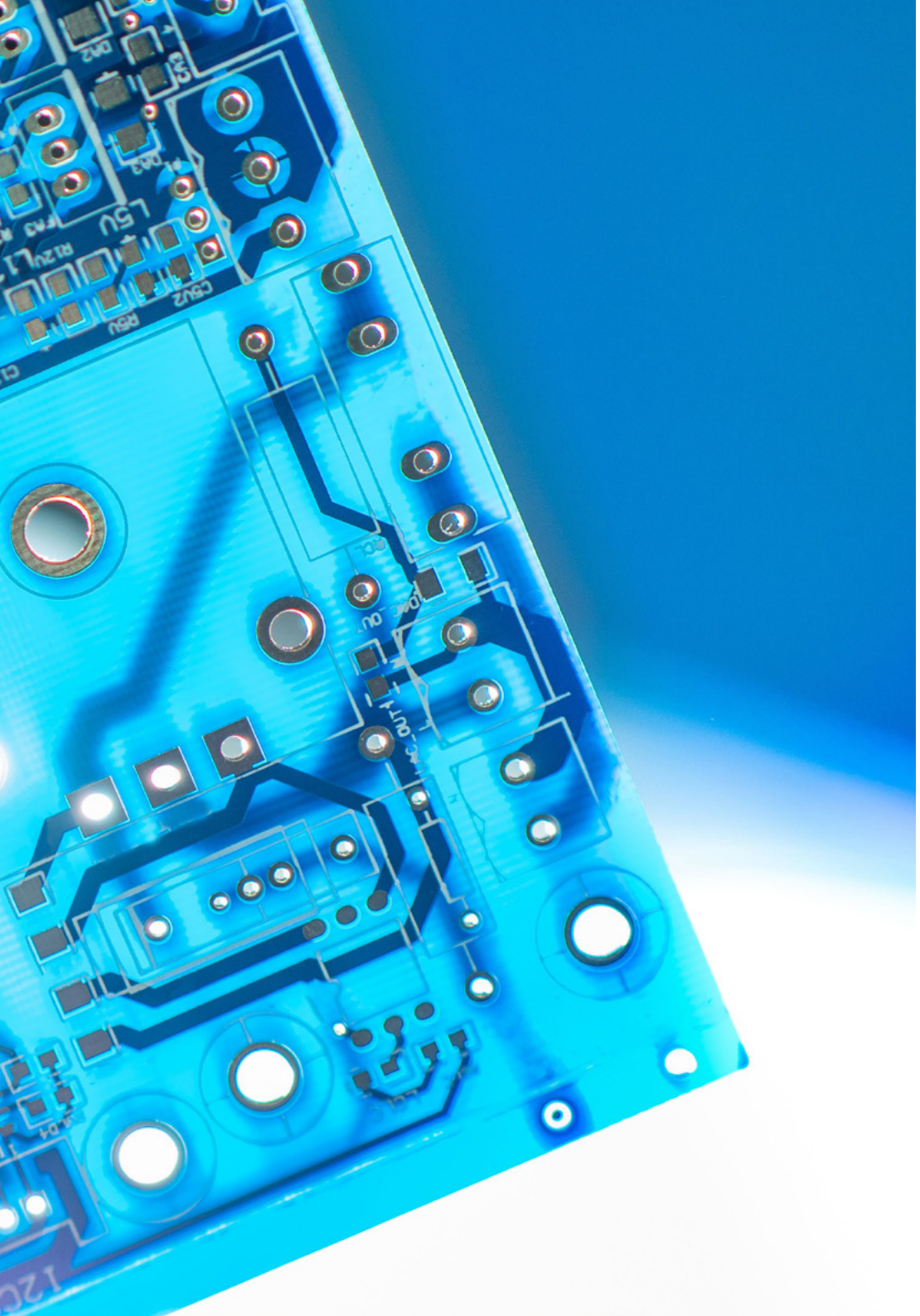
In this training proposal, each activity is designed to strengthen and refine the key competencies required for specialized practice in this field. In this way, the professional profile will be enhanced, driving a strong, efficient, and highly competitive performance.

In this way, this university program presents a unique opportunity for professionals to train in a technologically advanced environment. Moreover, they will have the chance to integrate the knowledge gained into practical scenarios and with state-of-the-art equipment, enabling them to refine and optimize their skills in a dynamic and highly specialized context.

The practical component will involve the active participation of the student, performing activities and procedures in each area of competence (learning to learn and learning to do), with guidance and support from professors and fellow trainees who will facilitate teamwork and interdisciplinary integration as transversal skills for 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
Design and Implementation of Embedded Systems	Analyze the evolution and characteristics of embedded systems
	Compare different families of microprocessors and their applications
	Describe the internal structure of a microprocessor and its operation
	Examine buses, logic levels, and inputs/outputs in electronic systems
Explore Principles and Applications of Advanced Microelectronics	Analyze the differences between microelectronics and conventional electronics
	Examine properties and behavior of semiconductors
	Design and evaluate circuits with diodes in various configurations
	Interpret characteristics and applications of analog and digital circuits
Use of Instrumentation and Sensors for Measurement and Control Systems	Evaluate the accuracy and reliability of measurements in electronic systems
	Classify instruments based on their functionality and control variables
	Analyze the behavior of regulated systems in open-loop and closed-loop configurations
	Apply accuracy, repeatability, and linearity criteria to optimize instrumentation
Addressing Power Electronics Conversion Systems	Implement energy conversion systems using power electronics for industrial applications
	Analyze the different types of converters and their characteristic parameters in electronic circuits
	Design uncontrolled single-phase AC/DC rectifiers to optimize energy efficiency
	Implement controlled single-phase rectifiers using thyristors for power conversion applications

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 facilitating the formalization of an agreement with an entity that aligns with your preferences, ensuring a fully personalized experience.

This academic opportunity will provide you with the chance to join nationally recognized institutions, where you will apply your knowledge"

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

SERMICRO SAU

Country
Spain

City
Madrid

Address: C/ Pradillo, 50. 28002, Madrid

ICT Group that provides solutions to help businesses drive their business strategies through technology

Related internship programs:

Mechanical Engineering

SERMICRO Laboratorio

Country
Spain

City
Madrid

Address: C. Franklin, 32, 28906 Getafe, Madrid

ICT Group that provides solutions to help businesses drive their business strategies through technology

Related internship programs:

- Electronic Systems Engineering

Cloen

Country
Spain

City
Valencia

Address: Calle Martin El Humano 28 - 46930 Quart de Poblet, Valencia

A technology company dedicated to the development, manufacturing, and marketing of home products

Related internship programs:

- Electronic Systems Engineering

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 course of the internship at the 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 internship department at TECH so that the assignment of the chosen center can be confirmed.

7. 3.- 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 inElectronic Systems 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.

TECH is a member of the **American Society for Engineering Education (ASEE)**, a society composed of leading international figures in engineering. This distinction strengthens its leadership in academic and technological development in engineering.

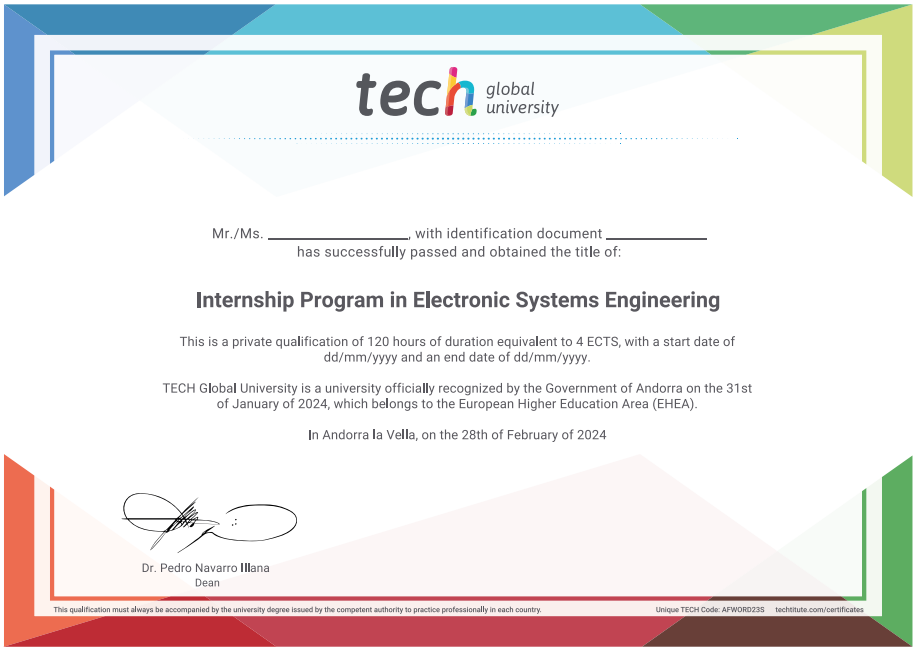
Accreditation/Membership

Title: **Internship Program in Electronic Systems Engineering**

Duration: **3 weeks**

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

Credits: **4 ECTS**



tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Internship Program in Electronic Systems Engineering

This is a private qualification of 120 hours of duration equivalent to 4 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
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

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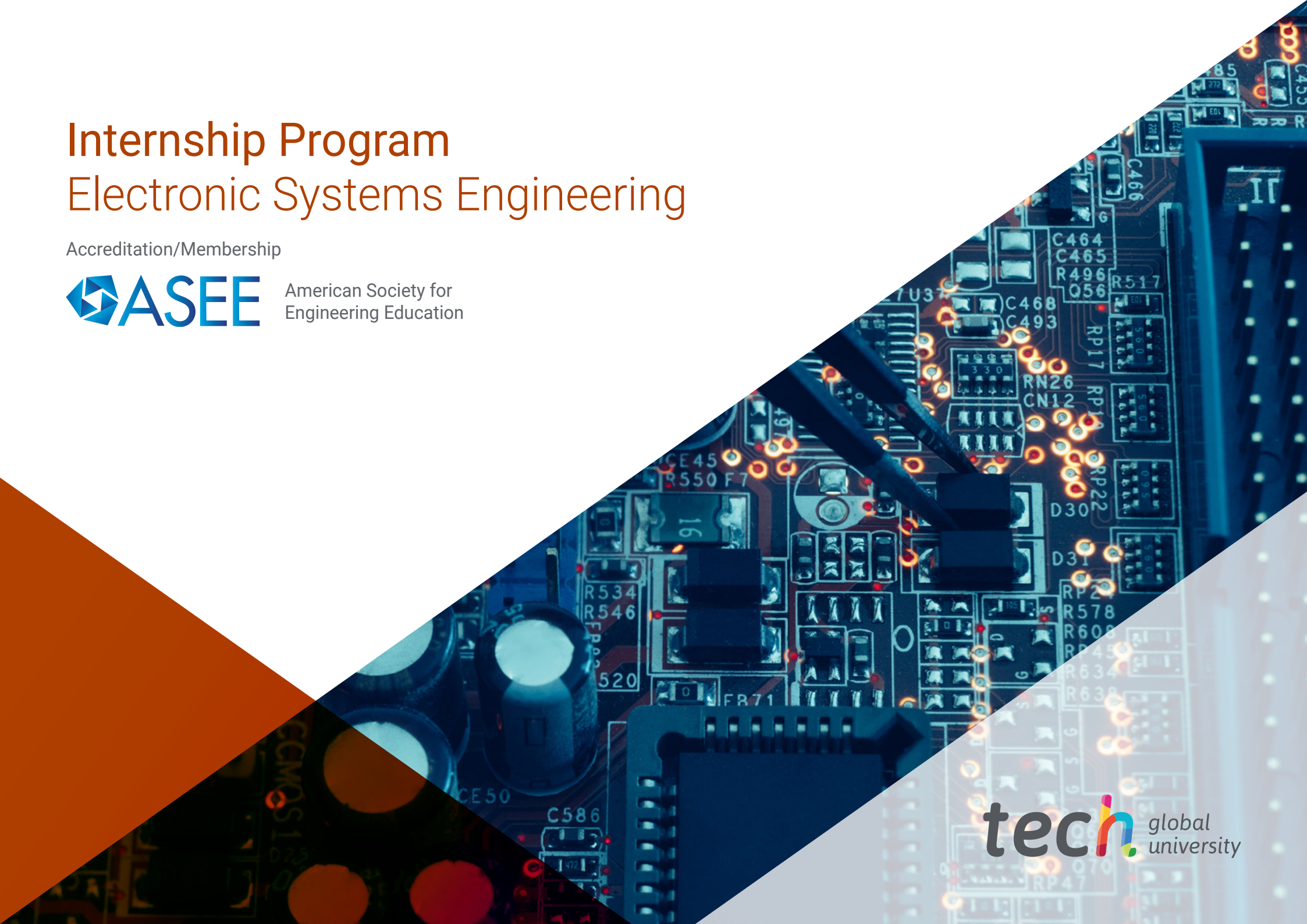

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