



Industrial Engineering

PROGRAM WITH CLASSES 100% IN ENGLSH



As a **Global Industrial Engineer**, you will become a professional with an international vision who masters the skills required to design, manage and optimize global complex systems that produce goods and services through innovative operations that leverage technologies and engineering models. The Global Industrial Engineer will play a key role in maintaining and improving the competitiveness of organizations in a globalized setting, acting in a sustainable and socially responsible way with efficiency and effectiveness, applying the principles and methods of engineering analysis and design.

#### **ADMISSION PROFILE**

As a candidate for Industrial Engineering-Global, you should be interested in:

- Working collaboratively in socio-technical environments
- Critical and logical thinking
- Leadership capabilities and collaborative work.
- Management of digital and information technologies
- Analysis and synthesis capabilities
- Mathematics and Physics fundamentals

A graduate from the Industrial Engineering Global program will have extensive international employment opportunities in the industrial and service sectors, particularly in the areas of:

- Service Industry
- Process Engineering
- Lean Manufacturing
- Quality Assurance
- Process Improvement and Operational Excellence
- Supply Chain Management
- New Product Development
- Production Planning

## Why study at CETYS University?

We have more than six decades of experience training leading professionals, with 92% obtaining employment within a year of graduation.

76% of our teaching staff hold a doctoral degree as well as accredited professional experience.

The CETYS University School of Engineering is the most recognized in the region due to its linkages with leading companies in the industry.

#### WE LIVE FOR EDUCATIONAL QUALITY

**CETYS University's Engineering** programs are accredited by global quality evaluators and accreditors. At CETYS, your future is certain.











CETYS University is a non-profit institution sponsored by the Instituto Educativo del Noroeste, A.C. RVOE SEBS, August 2022: RVOE-BC-L066-M1/22, RVOE-BC-L044-M2/22, RVOE-BC-L059- M3/22. CETYS University is accredited by the Senior College and University Commission of the Western Association of Schools and Colleges, 985 Atlantic Avenue #100, Alameda, CA 94501, 510-748-9001. Note: Some accreditations vary by campus.

# We are making our way through new paths. Redirecting our efforts to further your future development.

# 202

HUMANIST: Recognizes students' different roles in society.



FLEXIBLE: The professor acts as a facilitator and the student builds his professional profile.



EXPERIENTIAL LEARNING: You learn, practice, and reflect on your impact on the world.

# **CURRICULUM**

# 1st SEMESTER

- The Human Being as a project
- Introduction to Engineering
- Programming Methods
- Differential Calculus
- Chemistry for Engineers

#### 3rd SEMESTER

- Elective on comprehensive development: block II
- Big data analytics
- Dynamics
- Probability
- Manufacturing of Materials
- Methods Engineering

#### 5<sup>th</sup> SEMESTER

- Elective on comprehensive development: block III
- Operations Research Models I
- Industrial Electronics
- Quality Engineering
- Industrial Management
- Elective I

#### 7<sup>th</sup> SEMESTER

- Ethics for society in the 21st century
- Simulation
- Engineering Economy
- Specialization I: Production Systems Engineering II
- Capstone Project I: Project Management
- Certification I: Design of Experiments

# 2<sup>nd</sup> SEMESTER

- Effective Communication
- Elective on comprehensive development: block l
- Engineering Design
- Integral Calculus
- Engineering Materials
- Statics

#### 4<sup>th</sup> SEMESTER

- Scientific Research
- Statistical Inference
- Electricity and Magnetism
- Differential Equations
- Numerical Methods
- Lean Manufacturing and Quality Management Systems

#### 6<sup>th</sup> SEMESTER

- Elective on comprehensive development: block IV
- Operations Research Models II
- Inventory Management
- Computer Manufacturing
- Production Systems Engineering I
- Elective II

#### 8<sup>th</sup> SEMESTER

- Global Competitiveness
- Innovation and New Product Development
- Supply Chain Management
- Specialization II: Industrial Engineering Topics
- Capstone Project II
- Certification II: International Quality Standards and Systems

Contact us for more information:



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