Manuel Cobos Robles

Industrial Engineer







Industrial Engineer specialized in Energy Engineering with experience in renewable energy projects implementation, as well as skills in the Python programming language and PLC programming. Proficient in Spanish and English, intermediate knowledge of Portuguese and basic French.



DomtesolEnergy Engineer internship

Malaga, Spain

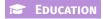
- > Design and installation of photovoltaic systems of different sizes and complexities.
- > Coordination of projects, including planning, budget management, vendor selection, and supervision of installation team work.
- > Development of customized solutions to meet specific client needs, including systems with storage batteries, and grid-connected systems.

Universidad de Malaga

September 2022 — September 2023

Malaga, Spain

- Automation Engineer internship
- ➤ Installation of a sensor system in an aerothermal heat pump.
- ➤ Integration of sensor data with Simatic S7-1500 PLC, incorporating Modbus RTU and TCP/IP protocols.
- > Development of a program in TIA Portal v17 for real-time data visualization on a HMI screen and storage in a database.



Bachelor in Industrial Engineering

Sept. 2017 — Sept. 2023

Specialization in Energy Engineering

- > Universidad de Malaga
- ➤ Universidad de Sevilla (Mobility program)
- ➤ Universidade Federal Fluminense (Mobility program)

Malaga, Spain Seville, Spain Rio de Janeiro, Brazil

***** Training & Certification

Python Data Structures: University of Michigan.

Renewable Energy Futures: University of Colorado Boulder.

Climate Change: Carbon Capture and Storage: University of Edinburgh.

AZ LANGUAGES

English: Cambridge B2. Spanish: Native. French: Basic. Portuguese: Intermediate.



Design of a Cogeneration System in a Hospital

The objective of this project was to design a Combined Heat and Power system in a hospital to improve energy efficiency while meeting the hospital's energy demand requirements and reducing energy costs. Using as its main energy generation source natural gas.

Engine simulation

Simulation and analysis of an internal combustion engine. Utilizing engine simulation software, different situations where analyzed. Diverse combustion efficiencies, compression ratios and several fuels (gasoline, diesel, ethanol, methanol). The objective was to assess how these factors influence engine parameters, like temperature, pressure, power, and torque.



Programming Language: Matlab, Mathematica, Python, C++, 上TEX.

Engineering Software: EES, Fluent, Engine Simulation, Autocad, Cype, PVsyst.

Databases/Technologies: MySQL, Anaconda, Visual Studio.

Office Suite: Microsoft Excel, Microsoft Word.

Soft skills: Communication, independent, responsible, organised.