ITER Data Fusion Lab

An interdisciplinary project in Physics, Data Science and Environmental Sustainability

Educational Objectives

- Clearly understand the functioning of ITER nuclear fusion
- Use data analysis and digital tools to explore realistic energy scenarios
- Critically reflect on the environmental, ethical and technological impact of fusion energy

Methodologies Used

Inquiry-Based Learning

Project-Based Learning

Service Learning

Data Storytelling

Achieved Results

Exploratory data analysis (EDA)

Predictive models (linear regression)

Clear and interactive data visualisations

Comparison with real Eurostat and pwiDB (IAEA) data

Complete materials available on GitHub:
https://github.com/cveronic/iter-data-fusion-lab

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Student's blog

https://www.ecomentality.it

School's site

https://www.liceocalini.edu.it

MOOC's site

scuolafutura.pubblica.istruzione.it
EFT Lombardia – Scuola futura – PNRR
Le Équipe Formative Territoriali promuovono azioni di formazione del personale docente...

https://scuolafutura.pubblica.istruzione.it/

This educational activity is officially included in the national MOOC of ScuolaFutura - Ministry of Education and Merit: "Sensors, graphs and discoveries: playing and exploring data at school" (ID path: 257576).

Liceo Scientifico "A. Calini" of Brescia in collaboration with ITER Organization and ScuolaFutura