

## DESIGN OF AN INTERFACE FOR BASIC COMPENSATION ANALYSIS IN ELECTRICAL ENERGY

Öğr. Gör. Hakan Aydoğan  
Uşak Üniversitesi, Uşak  
[hakan.aydogan@usak.edu.tr](mailto:hakan.aydogan@usak.edu.tr)

Öğr. Gör. Mehmet Feyzi Özsoy  
Uşak Üniversitesi, Uşak  
[mehmetfeyzi.ozsoy@usak.edu.tr](mailto:mehmetfeyzi.ozsoy@usak.edu.tr)

Prof. Dr. Faruk Aras  
Kocaeli Üniversitesi, Kocaeli  
[faruk.aras@kocaeli.edu.tr](mailto:faruk.aras@kocaeli.edu.tr)

### Abstract

Motors featured inductive property and capacitors featured capacitive property consume reactive energy in alternating current circuits in electrical energy systems. A compensation system is needed to reduce the reactive energy. A course named "Special Installations" involves the compensation and its details and calculations in Electricity Programme in Technical Vocational Colleges. In this study, an educational interface on a basic compensation calculation in electrical energy systems has been designed so that related students can easily observe the compensation calculation by its variables.

**Keywords:** Compensation, interface, electrical energy, education.