

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

STATISTICAL ANALYSIS AND FORECASTING OF THE
POWER CONSUMPTION OF THE INDUSTRIAL SECTOR
IN CYPRUS

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Statistical Analysis and Forecasting of the power consumption of the industrial sector in Cyprus.

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SUMMARY

In this project, first we will see subjects about energy, power, and production- distribution -consumption of electrical energy, etc. Because when dealing with subjects like forecasting of energy you must have knowledge of the subject. So the reader of this project will be able to acquire a general background about electrical energy (this will also help in understanding the need for forecasting), identify the need for forecasting.

After we will see subjects about the forecasting method and analyze the statistical data that are needed in order for someone to say with certainty if the attempted forecast is correctly performed and whether or not it will resemble the true ones (future true values of power consumption).

Therefore we explain the statistical analysis in depth in order to provide information to help the reader to understand the results. Next we will present the tables, we discuss the results, we make our comments, and we have our conclusions. Also the results will be charted for better visual understanding.

Finally we will see another forecasting method with multiple linear regression, also we will present the tables, and we discuss the results. We make our comments and we have our conclusion.

For all the above the reader must have additional knowledge about the statistical analysis and forecasting method. Therefore we try to offer general background about them.

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