

HIGHER TECHNICAL INSTITUTE
ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

**EXPERIMENTAL VERIFICATION OF
OUTPUT VOLTAGE, CURRENT AND THE
SWITCHING FUNCTION OF POWER
ELECTRONICS**

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CHAPTER I

CHAPTER 1

INTRODUCTION:

Power electronics is that field of electronics which deals with the conversion and switching of electric energy for power applications. It is the technology that connects the two parts of electrical engineering parts. The electric power, and the electronics. Power electronics has to do with the whole field of electrical energy systems.

The main task of the power electronics is to control and convert electrical power, from one form to another.

Power electronics help to the development of the technology in our days. With the power electronic circuits we can have cheaper solutions, lighter, smaller solutions, with greater efficiency and more general availability. By the power electronics most of unsolved problems can be solved easily.

This experiment deals with the experimental verification of the power electronic circuits to see the difference between the theoretical, the experimental results of a power electronic circuit and the results in MATHCAD.