

POWER ELECTRONICS

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P R E F A C E

The importance of “**POWER ELECTRONICS**” is well known in Electrical Engineering field.

This book has been written as per the latest syllabus of Anna University


The objective of this book is to provide basic concepts of Power semiconductor devices, single phase controlled rectifiers, Three phase controlled rectifiers, DC choppers, Inverters and AC-AC converters in a simple language with neat diagrams and waveforms.

Each chapter contains review questions to get complete knowledge of the subject.

The main aim of this book is to make the students to understand the concepts easily. This book makes the understanding of subject in a clear way and makes it more interesting.

 *Dr. N. Malmurugan*

 *Mrs. M. Inba Arasi*

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 *Dr. N. Malmurugan*

 *Mrs. M. Inba Arasi*

 *Mrs. M. Iswariya Lakshmi*



Thirumigu. M.G.BHARATHKUMAR

Founder & Chairman, Mahendra Educational Trust

Forward

"Computing in their capacity as a tool, computers will be but a ripple on the surface of our culture. In their capacity as intellectual challenge, they are without precedent in the cultural history of mankind".

-Edsger Dijkstra, 1972 Turing Award Lecture

The EEE Department seeks to educate engineers who will possess the basic concepts, tools, skills, and vision necessary to enhance the technological and economic competitiveness of society. This fact, combined with the undeniable impact of Electrical and Electronics Engineering on the modern world, demands an introductory college text book comparable with commonly-used textbooks in physics, chemistry, or biology. Accordingly, this book is intended to meet the need for an introductory college text in EEE. The distinctive feature of the book is that it has broader coverage of the field than is found in many texts that are currently in use.

I am delighted to note that the Principal of Mahendra College of Engineering Dr.N.Malmurugan along with Faculties of Electrical and Electronics Engineering Mrs.M.Inba Arasi and Mrs.M.Iswariya Lakshmi have written this book on **"POWER ELECTRONICS"** nicely, for the benefit of student community. They have accomplished this goal, and I trust their work will encourage and enlighten all who have an interest in Inverters, Converters and applications in the growing role on Electronics sector in the modern world.

M.G.BHARATHKUMAR

Founder & Chairman, Mahendra Educational Trust

**Dedicated
to
Our Family, Friends & Students**

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