

Electrical Principles



Printable Workbook included in the DVD



3G eLEARNING

ELECTRICAL PRINCIPLES



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Electrical Principles

A good grasp of first principles is essential before you embark on further studies in electrical engineering or electronics. These book introduce fundamental electrical and electronic principles, starting with the nature of electricity itself and progressing to more advanced concepts such as the properties of semiconductor materials used to construct complex integrated circuits. The topics dealt with will include circuit analysis, direct and alternating current and electromagnetism. Electricity because in our life the electrical goods play an important role. Hence the students must know about this source and how it is applied. Electricity is one type of energy. All matter whether solid, liquid or, gaseous consists of minute particles known as Atoms. According to modern Research electric current means flow of electron. So, we need to know about the Atom. Generally, the materials used for electrical works divided into three types. There are called conductors insulators and Semiconductors. The materials which conduct the current from one place to other place are called conductors, the materials do not conduct current i.e. it resists the current are called Insulator and the materials which have half of the properties of these two are called semiconductors. It conducted only a very low value of current for this purpose conductor and insulators are widely used in Electrical department whereas semiconductors are used in Electronics department.

The Book comes with a companion DVD for rich learning experience, which includes:

1. E-Book with further reading and learning links
2. Interactive E-lecture of each chapter. E-lectures are expressive, informational, entertaining and persuasive, it uses the tool of self-exploration, which makes it easy to learn and understand each topic in detail. It is very informative as concrete details are provided and also entertaining, as graphics and other visuals are provided to make the learning process more interactive..
3. Video Lecture of each chapter, which explains each topic in detail with examples, animations, images and text and makes it easy to understand the topics in easier, simpler and better way.
4. Huge Database of Interactive Assessments for each chapter, which is also printable
5. Further reading and learning links for each topic
6. Glossary and Notes for each chapter to understand each chapter with to the point information
7. The DVD also includes a printable workbook, which walks through with a various sets of questions and choices and assists in completing the curriculum. The workbook covers; Learning Objectives, Essential Concepts, Matching Definitions, Study Problem, Questions, Fill in the Blanks and Answers.
8. Review Questions for each chapter are also given in the DVD, which are also printable

The DVD is also a useful tool for teachers to teach with digital resources in classroom and do a great job of illustrating skills and techniques that are otherwise difficult to explain.

