Your Name

Instructor Name

Course Number

Date

Title: Electricity

Electric engineering is the newest branch of engineering and is introduced around the end of the 19th century. It is about electrical technologies and its main focus on electricity, electrons, and electromagnetism. Electric engineering also covers concepts like control system, power, signal processing, and telecommunications.

An electrical engineer is the one who uses the concept of mathematics and physics of electricity, and electromagnetism and develops new equipment of electricity. The introduction of electricity to our lives has been done by electric engineering who analyses the concept of physic to make the basic elements that are necessary for the generation of electricity.

 The topic of electricity in physics is helpful for electrical engineering to evaluate the product, components and the general mechanism of the electric system. These topics will clear the concepts of electrical engineering in conducting research on developing electrical products.

The concept of electricity in physics guides electric engineer to understand the entire electric system which is the base of electric engineering. Electronic circuits, inductors, resistors, diodes, and transistors are the topics that are used in physics to explain electricity and these topics are the base of electric and electronic engineering.

 The electric charge has been explained in physics as a subatomic particle that can generate magnetic and electric power and after bringing the electric changes near to each other the can exert force. In Physics, this concept of electric force is explained with the help of Coulomb’s law. This law explains that on what the electric force depend and by using such concept the electric engineers can increase or decrease the intensity of electric force.

Physics says that electric current is the flow of charged particles and resistance oppose the flow of current. Information like this will help the students of electric engineers to design electric circuits which is the importance of electric engineer course.

Ohm’s law explains that the flow of charges in the shape of voltages is the same as the flow of water through a pipe. It says that current which is passing through a conductor must be equal to the voltage given to it and divide by the resistance of the medium through which it is flowing. The concept of ohm’s will help the students of electric engineering to fit series and parallel connection of voltages and will help to identify ways to minimize resistance. Thus the general public will get more current with less voltage.

The electric field indicates the ways a positive charge could move and this is a concept give in physics. This concept is important for power system engineers which are the sub-field of electric engineering. Power Engineers study the transmission of electric power. Without understanding the concept of the electric field the ways of transmission of electric power would not be possible to analyze.

However, the skills required for electric engineering includes the understanding of complex electric designs and the ability to build them up from scratch. The complex electric designs contain insulators and conductors and the understanding of these concepts is necessary to read the complex electric designs and to build them again.

In a nutshell, the concept of electricity in physics helps the student of electrical engineering to understand the core mechanism of an electric system. Electric engineering revolves around the concept of electric system and physics guides the students of Electric engineering to get the understanding of the electric world and helps to do new discoveries in this field. Thus without the knowledge of electricity, Electric Engineers are unable to use the concept of electromagnetics, electricity, and electronics to generate new electric devices. It is, therefore understanding of electricity is necessary for electric engineers.