

## King Fahd University of Petroleum & Minerals Department of Electrical Engineering



## **EE201**

## **Electric Circuits**

Laboratory Manual

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## **Preface**

The **EE 201**: **Electric Circuits** Lab is designed to help students understand the basic principles of electric circuits as well as giving them the insight on design, simulation and hardware implementation of circuits. The main aim is to provide hands-on experience to the students so that they are able to put theoretical concepts to practice.

Each experiment consists of two parts, 'simulation' and 'hardwired'. Computer simulation is stressed upon as it is a key analysis tool of engineering design. "Multisim Electronics Workbench" software is used for simulation of electric circuits.

Students will also carry out a design experiment in addition to the ten experiments provided in this lab manual. Students will be given a specific design problem, which after completion they will verify using the simulation software.