



North South University
Department of Electrical and Computer Engineering
Summer 2018
EEE363: Electrical Machines

Course Number and Title: EEE363 Electrical Machine
EEE363L Electrical Machine Laboratory

Credits: 3+1=4 Credits

Type: Required, Engineering, Lecture+Lab

Prerequisites: EEE211, MAT350

Contact Hours: Lecture 3 hours/week, Lab 3 hours/week

Section : 3

Course Instructor : Dr. Shohana Rahman Deeba

Office : SAC 1010B

Class Time : MW 1:00-2:30 PM

Lab Time : W 2:40PM-4:10 PM

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Course Description

This introductory course will give fundamental concepts of the major electrical machines. Emphasis will be given to the basic working principles of several machines such as DC and AC machines. The course will also cover the basic principles and applications with relevant mathematics of Transformers.

Course Objectives

After successfully completing this course students should be able to:

- Explain the operation of DC and AC Machines.
- Choose proper machines for a given application
- Design electrical systems with machines

Course Contents

- **Transformer**
- **Induction Motor**

- **Synchronous Motor and Generator**
- **DC Motor and Generator**

Text Books

1. Electric Machinery and Transformers, Charles I. Hubert, 4th edition.
2. Electric Machinery Fundamentals, Stephen J Chapman, 3rd/4th edition.
3. Electric Machinery Fundamentals, Erving L Kosow, 2nd edition.

Assessments

- Midterm- 30%, Final- 40%, Quiz- 15%, Assignment - 10%, Attendance- 5%, Total- 100%

Grading NSU standard grading policy