

In the Name of God



Shahid Chamran University of Ahvaz

Fundamental of Electrical Engineering II (3 Credits)

Fall 2021 (1400-01)

Instructor	Hossein Farzin, PhD
Office	Second Floor, Electrical Engineering Department
Contact	Farzin.hossein@gmail.com, farzin@scu.ac.ir
Text Book	P. C. Sen, “Principles of Electric Machines and Power Electronics”, Third Edition, Wiley, 2015.
Reference Books	S. J. Chapman, “Electric Machinery Fundamentals” McGraw-Hill, 2005. A. E. Fitzgerald, C. Kingsley, S. D. Umans, & B. James, “Electric Machinery” McGraw-Hill, 2003.
Online Course URL	meeting.scu.ac.ir/fee2-001/
Course Objective	Introducing the fundamentals of magnetic circuits, transformers and major types of electric machines
Topics	Magnetic Circuits
	Inductance and Core Loss
	Single Phase Transformers
	Introduction to Three Phase Systems
	Three Phase Transformers
	DC Machinery Fundamentals
	Different Types of DC Machines
	DC Motors Starting and Speed Control
	Introduction to Induction and Synchronous Machines
Introduction to Special-purpose Motors	
Grading	
Homework + Quiz	4 points
Mid-Term Exam	7 points (Date to be announced)
Final Exam	9 points (22 Dey 1400)
Total	20 points