

In the Name of God



دانشگاه شهید چمران اهواز  
Shahid Chamran University of Ahvaz

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Electrical Machines I (2 Credits)

Fall 2020 (1399-00)

<b>Instructor</b>	<b>Hossein Farzin, PhD</b>
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<b>Text Book</b>	P. C. Sen, "Principles of Electric Machines and Power Electronics", Third Edition, Wiley, 2015.
<b>Reference Books</b>	S. J. Chapman, "Electric Machinery Fundamentals" McGraw-Hill, 2005. A. E. Fitzgerald, C. Kingsley, S. D. Umans, & B. James, "Electric Machinery" McGraw-Hill, 2003.
<b>Online Course URL</b>	meeting.scu.ac.ir/emf1-991/
<b>Course Objective</b>	Introducing the fundamentals of magnetic circuits, principles of electromechanical energy conversion, and DC machines
<b>Topics</b>	Magnetic Circuits
	Inductance and Sinusoidal Excitation
	Electromechanical Energy Conversion Process
	Mechanical Force & Torque In Electromagnetic Systems
	DC Machinery Fundamentals
	DC Generators
	DC Motors
DC Motors Starting and Speed Control	
<b>Grading</b>	
<b>Homework + Quiz</b>	4 points
<b>Mid-Term Exam</b>	7 points (18 Aban 1399)
<b>Final Exam</b>	9 points (13 Dey 1399)
<b>Class Activity</b>	Bonus Points
<b>Total</b>	20 points