강의 계획서(강의소개)

교과목개요 (강의소개)	Electromagnetic theory, together with classical and quantum mechanics, forms the core of present-day theoretical training for undergraduate and graduate physicists. A thorough grounding in these subjects is a requirement for more advanced or specialized training.
교재 및 참고문헌	Schaum's Outline of Electromagnetics - Joseph A. Edminister - McGraw-Hill(2010) 전기자기학 - 심광열 외 공저 - 북스힐(2008)
주별	강의 주제
	강의 내용
1주	Outline of Electromagnetics, Electric Current
	[EM-200 & 201] Current Flow, Electric Resistance and Ohm's Law
2주	Electric Current
	[EM-202] Voltage, Power, Thermoelectric Phenomenon
3주	Magnetic Field
	[EM-203] Magnetism, Magnetostatic Field
4주	Magnetic Field
	[EM-204] Magnetic Potential, Magnetic Dipole
5주	Magnetic Field
	[EM-205] Current-produced Magnetic Fields, Magnetic Force
6주	Magnetic Circuit
	[EM-206] Magnetization Phenomenon, Demagnetizing Force
7주	Magnetic Circuit
	[EM-207] Boundary Condition for Magnetic Material, Magnetic Circuit
8주	**Midterm Examination**
9주	Electromagnetic Induction and Inductance
	[EM-209] Faraday's Law of Induction, Self-induction & Mutual-induction
10주	Electromagnetic Induction and Inductance
	[EM-210] Induced Electromotive Force, Calculating the Inductance.
11주	Electromagnetic Induction and Inductance
	[EM-211] Energy stored in the coil, Eddy Current and Skin Effect
12주	Electromagnetic Field
	[EM-212] Maxwell's Equations, Displacement Current
13주	Electromagnetic Field
	[EM-213] Nature of Electromagnetic Waves, Traveling Electromagnetic Wave
14주	Review of Electromagnetics 2
	[EM-201] ~ [EM-213]
15주	**Final Examination**