

강 의 계 획 서(Syllabus)

[1] 기본 정보(Basic Information)

■ 강의 정보(Course Information)

교과목명 (Course Title)	전자장	강의유형 (Course Type)	이론
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[2] 학습 목표/성과(Learning Objectives/Outcomes)

■ 과목 설명(Course Description)

The following topics will be lectured.

1. Dynamic Electromagnetic Fields
2. Plane waves
3. Transmission line theory
4. Impedance matching to design RF/Microwave circuits

■ 학습 목표(Learning Objectives)

To understand properties of time-varying electromagnetic waves and how to design RF/Microwave circuits by way of transmission line theory.

■ 학습 성과(Learning Outcomes)

기본지식: 40 설계능력: 20, 문제해결: 30, 국제함양: 10

[3] 강의 진행 정보(Course Methods)

■ 강의 진행 방식(Teaching and Learning Methods)

강의 진행 방식	추가 설명
강의 (Lecture)	Lecture will be given by Powerpoint & Blackboard.

■ 수업 자료(Textbooks, Reading, and other Materials)

수업 자료	제목	저자	출판일/게재일	출판사/학회지
주교재(Main Textbook)	Field and Wave Electromagnetics (2nd Edition)	D.K. Cheng	January 11, 1989	Wiley

[4] 수업 일정(Course Schedule)

차시	강사명	수업주제 및 내용	제출 과제	추가 설명
1	임성준	Faraday's Law		
2	임성준	Maxwell's Equations		
3	임성준	Potential Functions & Boundary Conditions		
4	임성준	Wave Equations & Time-Harmonic Fields		
5	임성준	Plane Waves		
6	임성준	Polarization of Plane Wave		
7	임성준	Plane Wave Normal Incidence		
8	임성준	Plane Wave Oblique Incidence		
9	임성준	Introduction to Transmission Line		
10	임성준	General Transmission Line Equations		
11	임성준	Lossless and Lossy Transmission Lines		
12	임성준	Shorted and Open Transmission Lines		
13	임성준	Introduction to Smith Chart		
14	임성준	Applications of Smith Chart		

[5] 수강생 학습 안내 사항

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