강 의 계 획 서(Syllabus)

[1] 기본 정보(Basic Information)

■ 강의 정보(Course Information)

교과목명 (Course Title)	마이크로파 공학	강의유형 (Course Type)	이론

[2] 학습 목표/성과(Learning Objectives/Outcomes)

■ 과목 설명(Course Description)

This class will cover fundamental techniques of RF and microwave circuit design.

1) Transmission Lines
2) Network Analysis
3) Microwave Resonators

■ 학습 목표(Learning Objectives)

The goal of this course is to develop students' design, analysis, and evaluation skills at microwave frequencies where lumped elements (e.g., resistors, capacitors, inductors) are no longer appropriate.

■ 학습 성과(Learning Outcomes)

Students will learn how to design microwave circuits for wireless communication.

[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)	Microwave Engineering	D. M. Pozar	2012	Wiley

[4] 수업 일정(Course Schedule)

차시	강사명	수업주제 및 내용	제출 과제	추가 설명
1	임성준	General Transmission Line Equations		
2	임성준	Lossless Transmission Line		
3	임성준	Lossless Transmission Line with Open and Short Termination		
4	임성준	Impedance and Admittance Matrices		
5	임성준	Scattering Parameter		
6	임성준	Generalized Scattering Parameter		
7	임성준	ABCD Matrix		
8	임성준	Series Resonant Circuit		
9	임성준	Parallel Resonant Circuit and Q Factor		
10	임성준	Short-Circuited Transmission Line Resonators		
11	임성준	Open-Circuited Transmission Line Resonators & Mode Excitation		

[5] 수강생 학습 안내 사항