

Global Learning Semesters

Course Syllabus

Course: EENG-470 Microwave and Antenna Systems

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



| Course Summary | | |
|------------------|-------------------------------|---|
| Course Code | Course Title | Recommended Credit Hours |
| EENG-470 | Microwave and Antenna Systems | 3 |
| Semester Offered | Contact Hours | Prerequisites |
| Spring | 42 | EENG-330 Electromagnetics II. Introduction to electromagnetic theory, Maxwell's equations for time varying electromagnetic fields and applications. |
| Department | Level of Course | Language of Instruction |
| Engineering | Upper Division | English |

Course Description

Covers a wide range of topics including electromagnetic theory and Maxwell's equations, transmission line theory, waveguides, microwave transistors and tunnel diodes, microwave field effect transistors, microwave solid state devices, microwave tubes, fundamental properties of antennas, analysis and design of antennas, various antenna types, antenna design and applications.

Instructor

Dr Anastasis Polycarpou

Course Aims and Objectives

This course provides an introduction to microwave devices and antennas and an understanding of the techniques used in the analysis and design of these systems.

Teaching Methods

The course is delivered through a mixture of lectures and practical exercises and assignments.

Course Teaching Hours

The course is 42 hours long and is delivered in 14 weeks (3 hours/week).

Evaluation and Grading

Homework: 10%
Test 1: 25%
Test 2: 25%
Final Exam: 40%

Readings and Resources

Required Textbook

S. Liao, Microwave Devices and Circuits, Third Edition, Prentice Hall, 1990

Recommended Reading

S. C. Harsany, Principles of Microwave Technology, Prentice Hall, 1997