

Global Learning Semesters

Course Syllabus

Course: EENG-420 Satellite Optical and Mobile Communication Systems

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
EENG-420	Satellite, Optical and Mobile Communication Systems	3
Semester Offered	Contact Hours	Prerequisites
Fall	42	EENG-460 Digital Communication Systems. Study of digital communication systems focusing on the design of optimum receivers.
Department	Level of Course	Language of Instruction
Engineering	Upper Division	English

Course Description

The course covers topics in the following areas: Satellite links, orbits and inclination, satellite construction, transmission losses, noise frequencies, use of satellite circuits for data transmission, the mobile radio environment, prediction of propagation loss, calculation of fades and methods of reducing fades, mobile radio interference, introduction to optical communications, structures and wave guiding fundamentals of optical fibers, optical sources, photo detectors, and optical receiver operation.

Instructor

Dr. Andreas Siamarou

Course Aims and Objectives

To help students understand advanced topics in communication systems and keep up-to-date with the latest technology.

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

Instructor notes.