

## Global Learning Semesters

### Course Syllabus

Course: EENG-260 Electronic Communications

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
EENG-260	Electronic Communications	3
Semester Offered	Contact Hours	Prerequisites
Fall, Spring	42	EENG-250 Electronics II, EENG-270 Signals and Systems. Fundamental concepts of electronic devices and circuits from an ac viewpoint; analysis of signals and systems with applications.
Department	Level of Course	Language of Instruction
Engineering	Lower Division	English

### Course Description

Emphasis on fundamental concepts of communications and RF circuit analysis and design. Specifically, the course covers topics on RF tuned amplifiers, oscillators such as the Colpitts, Hartley and Clapp, signal analysis using Laplace and Fourier Transforms, noise analysis in RF circuits, Amplitude Modulation (AM) and AM systems, transmitter and receiver circuits, sideband systems, Frequency and Phase Modulation (FM and PM) systems.

### Instructor

Dr Anastasis Polycarpou

### Course Aims and Objectives

The course seeks to provide a background knowledge and understanding of signal analysis and processing at audio and radio frequencies. It also aims to bridge the gap between RF circuit design and system concepts giving circuit details in particular applications.

### 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

Paul H. Young, Electronic Communication Techniques, Third Edition, Prentice Hall, 1994

### Recommended Reading

- Robert J. Shoenbeck, Electronic Communications Modulation and Transmission, Prentice Hall, 1988
- G. Kennedy and B. Davis, Electronic Communication Systems, Fourth Edition, McGraw Hill, 1993