

Global Learning Semesters

Course Syllabus

Course: EENG-450 Image Processing

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
EENG-450	Image Processing	3
Semester Offered	Contact Hours	Prerequisites
Spring	42	EENG-270 Signals and Systems, EENG-360 Random Processes. Analysis of signals and systems with applications; concepts on probability theory and random variables.
Department	Level of Course	Language of Instruction
Engineering	Upper Division	English

Course Description

The objective of this course is to provide an introduction to basic concepts and methodologies for image processing. Furthermore, practical applications are considered. Topics include elements of a digital image processing system, digital image fundamentals, image enhancement in the spatial domain, image enhancement in the frequency domain, image restoration, and image compression. The students are exposed to MATLAB image processing tools for computer assignments.

Instructor

Dr. George Gregoriou

Course Aims and Objectives

To introduce the students to concepts and methodologies for image processing.

Teaching Methods

The course is delivered through lectures and project assignments.

Course Teaching Hours

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

Evaluation and Grading

Homework/Computer Projects:	20%
Mid-Term Exam:	30%
Final Exam:	50%

Readings and Resources

Required Textbook

R. Gonzalez, R. Woods, Digital Image Processing, Prentice Hall, 2002

Recommended Readings

- A. Jain, Fundamentals of Digital Image Processing, Prentice Hall, 1989

- A. Low, Introductory Computer Vision and Image Processing, McGraw Hill, 1991