COURSE DESCRIPTION

COURSE NAME	**DIGITAL IMAGE PROCESSING**	CODE: MOC2103O2

STUDY YEAR	MASTER II	SEMESTER	1	COURSE STATUS (**C**-compulsory/**OP**-optional/**F**-facultative)	OP

HOURS PER WEEK				TOTAL HOURS PER SEMESTER	TOTAL HOURS INDIVIDUAL ACTIVITY	CREDITS	EVALUATION (**P**-during the semester, **C**-oral examination, **E**-written examination, **M**-mixed)	TEACHING LANGUAGE
C	S	L	Pr.					
2	-	2	-	56	184	8	M	English

COURSE TEACHER	TEACHING AND SCIENTIFIC DEGREE, FIRST NAME, LAST NAME	DEPARTMENT
	LECT. DR. ANCA IGNAT	Computer Science

PREVIOUS COURSES REQUESTED	Numerical Calculus

OBJECTIVES	Understanding the basic techniques used in digital image processing
GENERAL DESCRIPTION	• Examples, fundamentals in image processing • Sampling and quantization, reconstruction • Image enhancement in the spatial domain: histogram processinf, spatial filters • Image enhancement in the frequency domain: smoothing, sharpening • Color image processing • Image compression • Morphological image processing • Image segmentation • Object recognition
DESCRIPTION OF SEMINARY / LABORATORY WORKS	• Presenting and using MATLAB package in image processing • Implementing some algorithms • Presenting articles in image processing domain
TEACHING METHODS	slides on video-projectors

BIBLIOGRAPHY (SELECTION)	• R.C. Gonzales, R.E. Woods, *Digital Image Processing*, Prentice Hall, 2007 (ed. a 3-a) • R.C. Gonzales, R.E. Woods, S.L. Eddins, *Digital Image Processing Using MATLAB*, Prentice Hall, 2003 • W.K. Pratt, *Digital Image Processing*, Wiley-Interscience, 2007 (ed. a 4-a)

EVALUATION	conditions	Final score (lab + exam) must exceed a certain threshold
	criteria	
	evaluation methods	
	final result - formula	