



Course title	Computer Image Processing
Institute/Division	Faculty of Computer Science and Telecommunication/ Department of Computer Science
Course code	F-1.CIP
Erasmus subject code	11.0, 11.1, 11.3
Number of contact hours**	40 lecture hours 60 Laboratory hours
Course duration	1 semester (Spring)
ECTS credits	6
Course description (max 100 words)	Digital colour models, colour bit depth, raster image standards, geometrical and arithmetical transformations, resizing algorithms, histogram and operations on it, image binarization, segmentation, logical operations, image filtering, morphological operations, skeletonization, image compression and file formats
Literature	Solomon, C.J.; Breckon, T.P. Fundamentals of Digital Image Processing: A Practical Approach with Examples in Matlab Wiley-Blackwell, 2010 Rafael C. Gonzalez; Richard E. Woods; Steven L. Eddins Digital Image Processing using MATLAB. Pearson Education 2004
Course type/organization	This course has one 1.5 hour long lecture each week, and one lab. Materials will be presented in a variety of formats to address different learning styles (e.g., lectures, slides, whiteboard calculations, exercises, textbook)
Assessment method	Attendance, evaluation of assignments, quiz, final exam
Prerequisites	
Primary target group	2-nd year computer science students
Contact person	dr Ilona Urbaniak
Remarks	Students are expected to complete all assigned readings and homework before class, and to be prepared to answer questions about these readings and homework.

*please insert one of the following codes:

11.0 Mathematics, Informatics

11.1 Mathematics

11.2 Statistics

11.3 Informatics, Computer Science

11.4 Artificial Intelligence

11.5 Actuarial Science

11.9 Others Mathematics, Informatics

**1 lecture hour=45 minutes