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| Course title | Computer Image Processing |
| Institute/Division | Faculty of Computer Science and Mathematics/ Department of Computer Science |
| Course code | F-1.CIP |
| Erasmus subject code* | 11.0, 11.1, 11.3 |
| Number of contact hours** | 45 lecture 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