

Digital Image Processing					
Course code CIF61048	student workload 90 hours	credits (according to ECTS) 4,5	semester Sem. 5 & 7	frequency each odd-semester	duration 16 meetings
1	Types of courses <i>Elective</i>	contact hours 63 hours	independent study 27 hours	class size 40 students	
5	Prerequisites for participation Have completed Algorithms and Data Structures				
2	Learning outcomes IF-ILO-3 Graduates are able to develop professional careers in the field of computer science based on quality aspects, data-based decision making, be responsible, and make continuous improvements. IF-ILO-7 Mastering the theoretical concept and principles of computer science, especially in the aspect of algorithms, programming, intelligent systems, information management, parallel and distributed computing, information security, human-computer interaction, software engineering, and fundamentals of computer systems and networks. IF-ILO-10 Graduates are able to analyze, design, build and evaluate an intelligent system that has the ability to learn from the environment.				
3	Subject aims Students are able to understand the basic concepts of digital image processing Students are able to know and understand how to take and present digital images Students are able to know, understand and able to implement digital image quality improvement Students are able to know, understand and able to implement the processing of color images Students are able to know, understand and able to implement image analysis, including: a) Image morphology (morphological image processing) b) Image segmentation (image segmentation) c) Image representation and description d) Detection and recognition of objects (object detection and recognition)				
4	Teaching methods lectures, case study, class discussion, presentation				
6	Assessment methods assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment				
8	This module is used in the following degree programmes as well				

10	Responsibility for module
11	Other information <ol style="list-style-type: none">1. Rafael C. Gonzalez. 2002. Digital Image Processing 2nd Edition. Prentice Hall. Upper Saddle River, New Jersey 07458.2. William K. Pratt. 2001. Digital Image Processing: PIKS Inside, 3rd Edition. John Wiley & Sons, Inc.