

Course: Image Processing Lab
Module code: EITB612M
Lecturer: Prof. Dr. Jan Bauer
Scope of weekly semester hours (SWS): 2
Semester of delivery: Winter and Summer
Type/Mode: Laboratory, compulsory subject
Language of instruction: English or German; the course language will be announced at the beginning of the semester
<p>Contents:</p> <p>Consecutive experiments on:</p> <ul style="list-style-type: none"> • Planning the image capture & camera calibration. • Bit-plane decomposition, color and pixel decomposition • Color transformation • Point transformations • Image Statistics • Filtering and image transformations • Interpolation • Morphological operations • Programming of simple image operations in real time (FPGA based)
<p>Recommended reading:</p> <ul style="list-style-type: none"> • B. Jähne: „Digitale Bildverarbeitung und Bildgewinnung“, Springer, Berlin, 2012 • W. Burger, M. J. Burge: Digitale Bildverarbeitung, Springer, 2006 • R.C. Gonzalez, R.E. Woods: “Digital Image Processing” 4. Aufl., Pearsonl 2017 • W. K. Pratt: “Digital image processing” 3. Aufl., Wiley, 2001