

Digital Image Processing (W22B43)

Module designation	Digital Image Processing
Semester(s) in which the module is taught	4 / second year
Person responsible for the module	Fitri Bimantoro, S.T., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Lectures, Discussions, Case Study
Workload (incl. contact hours, self-study hours)	<p>Contact Hours every week, each week of the 16 weeks/semester including Evaluation</p> <ul style="list-style-type: none"> • 3 x 50 minutes lecturer/week • 1 x 60 minutes class exercise/week • 2 x 60 minute Laboratory • Self Study hours = 180 minutes/week <p>Total workload 520 minutes/week</p>
Credit points	3 (~ 4,8 ECTS)
Required and recommended prerequisites for joining the module	Probability and statistic, numerical method
Module objectives/ intended learning outcomes	<p>In this course, students are expected to be able to:</p> <ol style="list-style-type: none"> 1. understand and able to use methods of digital image processing, 2. Able to create algorithms and computer programs for solving certain cases of digital image processing. 3. Able to apply the digital image processing method to handle digital image problems in the field of engineering with good performance.
Content	this course discuss about fundamental of DIP, basic operation of DIP, Histogram and convolution, digital image transformation, image enhancement, edge detection, image morfology, feature extraction, and image compression.
Examination forms	Assignments, Contribution/Activeness in Class, Scheduled Exam
Study and examination requirements	Assignements 10%, Quiz 15 %, Practicum 30%