

Module designation	<i>Fuzzy Logic</i>
Semester(s) in which the module is taught	6
Person responsible for the module	<i>Prof. Dr. Agus Maman Abadi M.Si.</i>
Language	<i>Bahasa Indonesia</i>
Relation to curriculum	<i>Compulsory course</i>
Teaching methods	<i>150 minutes lectures and 180 minutes structured activities per week.</i>
Workload (incl. contact hours, self-study hours)	<i>Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.</i>
Credit points	3
Required and recommended prerequisites for joining the module	<i>MAT6329 - Theory of Fuzzy Set</i>
Module objectives/intended learning outcomes	<p><i>CO1: Demonstrates respect for the opinions of others in completing group and individual tasks.</i></p> <p><i>CO 2: Communicates ideas in solving mathematical problems related to vague logic in writing and orally.</i></p> <p><i>CO 3: Explaining fuzzy if-then rules, estimation reasoning, fuzzy rule bases, fuzzy inference engines, fuzzification, defuzzification, and fuzzy system accuracy.</i></p> <p><i>CO 4: Using fuzzy logic to solve problems related to fuzzy logic.</i></p> <p><i>CO 5: Using software to solve problems related to fuzzy logic implementation.</i></p>
Content	<i>This course covers fuzzy if-then rules, fuzzy reasoning, fuzzy rule bases, fuzzy inference engines, fuzzification, defuzzification, accuracy of fuzzy systems, and their applications to prediction, classification, decision making, and control systems.</i>
Examination forms	<i>CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.</i>

Study and examination requirements	<p><i>The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.</i></p> <p><i>The final mark will be weight as follow:</i></p> <table><tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr><tr><td>1</td><td>CO 1</td><td>a. Presentat ion b. Discussio n</td><td>Observation</td><td>5% 10%</td></tr><tr><td>2</td><td>CO 2, CO 3, CO 4</td><td>a. Individual assignme nt b. Group assignme nt c. Quiz d. Midterm e. Final test</td><td>Written</td><td>10% 10% 20% 20% 25%</td></tr><tr><td colspan="4">Total</td><td>100%</td></tr></table>	No	CO	Assessment Object	Assessment Technique	Weight	1	CO 1	a. Presentat ion b. Discussio n	Observation	5% 10%	2	CO 2, CO 3, CO 4	a. Individual assignme nt b. Group assignme nt c. Quiz d. Midterm e. Final test	Written	10% 10% 20% 20% 25%	Total				100%
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Reading list	<p>1. Wang, L.X..1997. A Course in Fuzzy Systems and Control. New Jersey : Prentice-Hall International, Inc.</p> <p>2. A. Klir, G.J, Clair, U.S, Yuan B. 1997. Fuzzy Set Theory : Foundations and Applications. New Jersey : Prentice-Hall, Inc.</p>																				