



Module Description

Module name	System Big Data
Module level, if applicable	Bachelor of Informatics
Code, if applicable	21D12131204
Subtitle, if applicable	-
Course, if applicable	-
Semester(s) in which the module is taught	
Person responsible for the module	Mukarramah Yusuf, B.Sc., M.Sc
Lecturer	<ol style="list-style-type: none"> 1. Mukarramah Yusuf, B.Sc., M.Sc 2. Dr. Eng. Ady Wahyudi Paundu, ST., MT. 3. Igra Aswad, S.T., M.T.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course and offered in the 6 th semester.
Type of teaching, contact hours	Teaching methods: [project based], [problem-based learning]. Teaching forms: [lecture], [tutorial] CH : 08.00 - 16.00
Workload	For this course, students are required to meet a minimum of 136.00 hours in one semester, which consist of: <ul style="list-style-type: none"> - 40.00 hours for lecture, - 48.00 hours for structured assignments, - 48.00 hours for private study
Credit points	4 credit points (equivalent with 5.1 ECTS)
Requirements	Students have participated in at least 80% of the learning activities



<p>according to the examination regulations</p>	<p>(Academic Regulations, Chapter VII)</p>
<p>Recommended prerequisites</p>	<p>-</p>
<p>Module objectives/intended learning outcomes</p>	<p>Intended Learning Outcomes (ILO): After completing this course, students are able to: ILO 1: Have the knowledge of fundamental in Computing Science that includes basic theory and concepts of Big Data Analytic, Advance Analytical Theory & Methods, Advance Analytics, Analyzing Data ILO 3: Apply the knowledge of computing and other related disciplines to analyze and identify solutions for any computing-based problem. ILO 7: Perform a logical systematic procedure to solve problems, then communicate their ideas in a convincing and effective manner, either in written or orally, to propose solutions.</p> <p>Course Learning Objective (CLO): After completing this course, students can understand the concepts of descriptive analytics, predictive analytics and prescriptive analytics, and apply these concepts to propose solutions in Big Data cases.</p> <p>ILO 1 => CLO 1: Student can explain advance analytical theory and methods of Big Data.</p> <p>ILO 3 => CLO 2: Student can demonstrate the concept, life cycle and methods of big data analytics.</p> <p>ILO 7 => CLO 3: Student can review an up to date issues in System of Big Data.</p>
<p>Content</p>	<p>Students will learn about :</p> <ol style="list-style-type: none"> 1. Big Data Analytic 2. Advance Analytical Theory & Methods 3. Advance Analytics 4. Analyzing Data



<p>Forms of Assessment</p>	<p>Assessment techniques: [observation], [performance], [written test].</p> <p>Assessment forms: [quiz], [final term exam], [assignment], [presentation].</p> <p>Quiz = 10%, Final term exam = 20%, Assignment = 40%, Presentation = 30%</p> <p>CLO 1 => ILO 1: 30% (Quiz and Final term exam: written test) CLO 2 => ILO 3: 40% (Assignment: performance) CLO 3 => ILO 7: 30% (Presentation: observation)</p>
<p>Study and examination requirements and forms of examination</p>	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get a final grade. <p>Form of examination: Written test</p>
<p>Media employed</p>	<p>Video conference, Slide presentation, Learning Management System (LMS).</p>
<p>Reading list</p>	<p>Main :</p> <ol style="list-style-type: none"> 1. Data Science & Big Data Analytic , Discovering, Analizing, Visualizing and Presenting Data, EMC Education Services, Published by : John Wiley & Sons, Inc. 10475 Crosspoint Boulevard