UNDERGRADUATE PROGRAM IN COMPUTER SCIENCE
DEPARTMENT OF COMPUTER ENGINEERING
FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY

Module name	**Intelligent Web and Big Data**	
Module level	Undergraduate	
Code	EC184907	
Courses (if applicable)	Intelligent Web and Big Data	
Semester	Elective	
Contact person		
Lecturer		
Language	Indonesia	
Relation to curriculum	Undergraduate degree program, elective semester.	
Type of teaching, contact hours	Lecture, < 60 students, 170 Minutes * SKS	
Workload	1. Lectures: 3 x 50 = 150 minutes (2.5 hours) per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Private study: 3 x 60 = 180 minutes (3 hours) per week.	
Credit points	3 credit points (sks).	
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.	
Mandatory prerequisites		
Learning outcomes and their corresponding PLOs	CLO-1 Students are able to understand and applying Big Data software	PLO-3 PLO-4
	CLO-2 Students are able to implement the design and architecture of Big Data for specific case	PLO-3 PLO-4
	CLO-3 Students are able to analyze the need of Big Data Systems.	PLO-5 PLO-6
Content	In this course, students will learn about Big Data processing and how to visualize it.	
Study and examination requirements and forms of examination	• In-class exercises • Quiz 1 and 2 • Assignment 1, 2, 3 • Mid-term examination • Final examination	
Media employed	LCD, whiteboard, websites (myITS Classroom).	

Assessments and Evaluation	CO-1: Assignment 1 (5%), question no 4 in midterm exam (30%), Quiz 2 (5%) CO-2: Question no 1 in final exam (30%), question no 2 in final exam (15%) CO-3: Assignment 2 (5%), question no 3 in final exam (10%)
Reading List	1. Apache Hadoop 2. Apache Spark 3. Selected Big Data Papers