HANDBOOK

BACHELOR OF INFORMATICS PROGRAM
DEPARTMENT OF INFORMATICS
FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY
INSTITUT TEKNOLOGI SEPULUH NOPEMBER

Module name	**Digital Forensics**
Module level	Undergraduate
Code	IF184945
Courses (if applicable)	**Digital Forensics**
Semester	8
Contact person	-
Lecturer	Ary Mazharuddin Shiddiqi, S.Kom., M.Comp.Sc., Ph.D Hudan Studiawan, S.Kom., M.Kom
Language	Bahasa Indonesia and English
Relation to curriculum	1. Undergraduate degree program; optional; 8th semester. 2. International undergraduate program; optional; 8th semester.
Type of teaching, contact hours	1. Undergraduate degree program: lectures, < 60 students, 2. International undergraduate program: lectures, < 40 students
Workload	1. Lectures: 3 x 50 = 150 minutes (2 hours 30 minutes) 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	A student must have attended at least 80% of the lectures to sit in the exams.

regulations		
Mandatory prerequisites	-	
	After completing this module, a student is expected to:	

Learning outcomes and their corresponding PLOs	**CO1** Students are able to apply forensic methods to file environments, operating systems, web, computer networks, and on mobile devices and are familiar with antiforensic techniques.	
Content	Knowledge: • Mastering the concepts and principles of intelligent systems including representation and reasoning techniques, search techniques, agents, data mining, and machine learning, as well as intelligent application development in various fields, and mastering the concepts and principles of computational science including information management, multimedia data processing , and numerical analysis; • Master the theoretical concepts and principles of network-based computing and the latest technologies related to it, in the fields of distributed computing and mobile computing, multimedia computing, high-performance computing and information and network security; Specific Skill: • Able to design and build applications by applying the principles of intelligent systems and computational science to produce smart application products in various fields; • Able to apply the concept of network-based computing, parallel computing, distributed computing to analyze and design computational problem solving algorithms in various fields;	
Study and examination requirements and forms of examination	Mid-terms examination and Final examination.	
Media employed	LCD, whiteboard, websites, books (as references), etc.	
Assessments and Evaluation		

Reading List	Nelson, B., “Guide to Computer Forensics and Investigations”, Cengage Learning, 2009 Casey, E., “Digital Evidence and Computer Crime: Forensic Science, Computers, and the Internet”, Academic Press, 2011 Casey, E., “Handbook of Digital Forensics and Investigation”, Academic Press, 2009 Sammons, J., “The Basics of Digital Forensics: The Primer for Getting Started in Digital Forensics”, Elsevier, 2012 Altheide, C., Carvey, H., “Digital Forensic with Open Source Tools”, Elsevier, 2011 Hoog, A., “Android Forensics: Investigation, Analysis and Mobile Security for Google Android”, Elsevier, 2011 Daniel, L., Daniel, L., “Digital Forensics for Legal Professionals Understanding Digital Evidence From The Warrant To The Courtroom”, Elsevier, 2011