HANDBOOK

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

Module name	**Biomedical Computation**
Module level	Undergraduate
Code	IF184953
Courses (if applicable)	**Biomedical Computation**
Semester	7
Contact person	
Lecturer	
Language	Bahasa Indonesia and English
Relation to curriculum	1. Undergraduate degree program; optional; 7th semester. 2. International undergraduate program; optional; 7th semester.
Type of teaching, contact hours	1. Undergraduate degree program: lectures, < 60 students, 2. International undergraduate program: lectures, < 40 students
Workload	1. Lectures: 3 sks 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	Computational Intelligence
	After completing this module, a student is expected to:

Learning outcomes and their corresponding PLOs	**CO1** Students are able to identify problems on biomedical field	
	CO2 Students are able to analyze biomedical problems based on existing biomedical data.	
	CO3 Students are able to design and implement statistical methods and machine learning methods to model solutions in the biomedical field.	
Content	Knowledge: Mastering concept and principles of Intelligent System such as representation and reasoning techniques, searching technique, intelligent agent, data mining, machine learning, and development of intelligent application in various fields, and also mastering concept and principles of computation science such as manage information, multimedia data processing, and numerical analysis	
	Specific Skill: Able to desain and develop applications using principles of intelligent systems and computing science to produce intelligent applications 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	Biomedical Informatics, Edward C Shortlife & James J. Cimino	