

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

Module name	Medical Informatics	
Module level	Undergraduate	
Code	EC184944	
Courses (if applicable)	Medical Informatics	
Semester	Elective	
Contact person	<i>Dr. I Ketut Eddy P</i>	
Lecturer	Dr. Adhi Dharma	
Language	[Indonesia / English]	
Relation to curriculum	Undergraduate degree program, <i>Elective</i>	
Type of teaching, contact hours	Lecture, < 60 students, 170 Minutes * 3 SKS	
Workload	<ol style="list-style-type: none"> 1. <i>Lectures: 3 x 50 = 150 minutes (2.5 hours) per week.</i> 2. <i>Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week.</i> 3. <i>Private study: 3 x 60 = 180 minutes (3 hours) per week.</i> 	
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	<p>CLO 1 Students are able to demonstrate the knowledge on Healthcare Information system and its aspects</p> <p>CLO 2 Students are able to demonstrate the knowledge on data management technique in hospital</p> <p>CLO 3 Students are able to demonstrate the knowledge on medical Record processing and representation</p> <p>CLO 4 Students are able to demonstrate skill on text processing on medical record data</p>	<p>PLO 3</p> <p>PLO 4</p> <p>PLO 5</p> <p>PLO 6</p>
Content	In this course, students are able to explain the concepts and models of telemedicine application, use of ICT technology in the health sector, and apply data analytics in healthcare text data and understand the concept of ethics in the field of medical informatics	

Study and examination requirements and forms of examination	<ul style="list-style-type: none"> • <i>In-class exercises</i> • <i>Quiz 1 and 2</i> • <i>Assignment 1, 2, 3</i> • <i>Mid-term examination</i> • <i>Final examination</i>
Media employed	<i>LCD, whiteboard, websites (myITS Classroom).</i>
Reading List	<p>Main :</p> <ol style="list-style-type: none"> 1. Josep Tanh, Healthcare Information Systems and Informatics - Research and Practices, Hershey New York 2. Maria Manuela Crus, Development in e-Health and Telemedicine – Technological and Social perspectives, Hershey New York 3. Penny Duqueno, Ethical, Legal and Social issues in Medical Informatics, Hershey New York 4. Neil S. Skolnik, Electronic Medical Records, A Practical Guide for Primary Care, Humana Press 5. David Loshin, Business Intelligence, Morgan Kaufman- Elsevier 6. Ken Collier, Agile Analytics, Addison Wesley 7. Ira J Kalet, Principles of Biomedical Informatics, AP and Elsevier <p>Supporting :</p> <ol style="list-style-type: none"> 1. Joel Rodrigues, Proceeding series “Health Information System – Concept, Methodologies, Tools and Applications”, Hershey New York 2. Various proceedings in the field of Text Mining and Data Science