HANDBOOK

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

Module name	**Human Computer Interaction**
Module level	Undergraduate
Code	IF184601
Courses (if applicable)	**Human Computer Interaction**
Semester	6
Contact person	-
Lecturer	Hadziq Fabroyir, S.Kom., Ph.D. Ridho Rahman Hariadi, S.Kom., M.Sc. Siska Arifiani, S.Kom., M.Kom.
Language	Bahasa Indonesia and English
Relation to curriculum	1. Undergraduate degree program; mandatory; 6th semester. 2. International undergraduate program; mandatory; 6th 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	Design and Analysis Algorithm

Learning outcomes and their corresponding PLOs	After completing this module, a student is expected to:	
	CO1 Students are able to discuss why device development user-centric software is important.	
	CO2 Students are able to understand the basic rules / guidelines in software development and interaction design by considering the physical, psychological and social aspects of the user.	
	CO3 Students are able to develop and use modeling concepts, feedback to analyze interactions between humans and software.	
	CO4 Students are able to define a user-focused design process that explicitly places the user rather than the builder.	
	CO5 Students are able to build simple applications along with instructions for use, as well as documentation that supports the user interface.	
	CO6 Students are able to create and perform usability tests on software that has been developed, perform quantitative evaluations (utility, efficiency, level of ease of use, and level of user satisfaction), and report them.	
	CO7 Students are able to report and discuss the development of the latest Natural User Interface technology: touch interface (Multi-touch), movement interface (Gesture), brain wave interface (Electroencephalography), muscle wave interface (Electromyography).	
Content	Knowledge: Menguasai konsep dan prinsip-prinsip grafika komputer meliputi pemodelan,rendering, animasi dan visualisasi, serta menguasai konsep dan prinsip-prinsipinteraksi manusia dan computer Specific Skill: Able to design and analyze algorithms to solve problems effectively and efficiently based on strong programming principles, and able to apply programming models that underlie various existing programming languages.	
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	Alan Dix, Janet E. Finlay, Gregory D. Abowd, and Russell Beale. Human-Computer Interaction (3rd Edition). Prentice-Hall, Inc., Upper Saddle River, NJ, USA. 2003. Johnson, Jeff. Designing with the mind in mind: Simple guide to understanding user interface design rules. Morgan Kaufmann, 2010. Wigdor, Daniel, and Dennis Wixon. Brave NUI world: designing natural user interfaces for touch and gesture. Elsevier, 2011. Donald A. Norman. The Design of Everyday Things: Revised and Expanded Edition. Basic Books, 2013.