HANDBOOK

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

Module name	**Mobile Device Programming**
Module level	Undergraduate
Code	IF184901
Courses (if applicable)	**Mobile Device Programming**
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	4 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	Object Oriented Programming
	After completing this module, a student is expected to:

Learning outcomes and their corresponding PLOs	**CO1** Students have an understanding of mobile device programming, are able to implement various platforms on mobile devices, are able to use JavaScript, AJAX on mobile devices and use standard templates, are able to create mobile web pages on smartphone browsers, are able to use bandwidth saving techniques, are able to use bandwidth saving techniques	
Content	Knowledge: • Mastering the concepts and principles: design and development of software with standard and scientific methods of planning, requirements engineering, designing, implementing, testing, and launching, and producing software products that meet various technical and managerial quality parameters, and are efficient, as well as mastering the concepts and principles of: making simple programs in general programming languages and object-oriented programming languages, making web applications and desktop applications, creating simple databases to solve problems in the context of software development in general; • Mastering the concepts and principles of computer graphics including modeling, rendering, animation and visualization, as well as mastering the concepts and principles of human and computer interaction; Specific Skill:	

	• Capable to analyze, design and build software using software engineering process principles to produce software that meets both technical and managerial quality • Capable to build applications using the principles of computer graphics including modeling, rendering, animation and visualization, as well as applying the principles of human and computer interaction as well as evaluating the efficiency to build applications with a suitable interface
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	Beginning Smartphone Web Development, Gail Rahn Frederick with Rajesh Lal, Appress, 2009 Hello, Android, Introducing Google's, Mobile Development Platform, 2nd Edition, Ed Burnette, The Pragmatic Bookshelf, Raleigh, North Carolina Dallas, Texas, 2009