Module Description

Module name	Mobile Programming
Module level, if applicable	Bachelor of Informatics
Code, if applicable	309D4223
Subtitle, if applicable	-
Course, if applicable	-
Semester(s) in which the module is taught	6th
Person responsible for the module	Dr. Eng. Muhammad Niswar., ST., MIT
Lecturer	1. Dr. Eng. Muhammad Niswar., ST., MIT 2. A. Ais Prayogi Alimuddin., ST., M.Eng 3. Muhammad Alief Fahdal Imran Oemar, S.T., M.Sc
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a compulsory course and offered in the 6th semester.
Type of teaching, contact hours	Teaching methods: [group discussion], [collaborative learning], [problem-based learning]. Teaching forms: Teaching forms: [lecture], [tutorial], [practicum]. CH : 08.00 - 16.00
Workload	For this course, students are required to meet a minimum of 136.00 hours in one semester, which consist of: - 40.00 hours for lecture, - 48.00 hours for structured assignments, - 48.00 hours for private study.
Credit points	3 credit points (equivalent with 5.1 ECTS)

Requirements according to the examination regulations	Students have participated in at least 80% of the learning activities (Academic Regulations, Chapter VII)
Recommended prerequisites	Database II
Module objectives/intended learning outcomes	After completing the course, Students are able: **Intended Learning Outcomes (ILO):** **ILO 2 : Have the knowledge of advance topic** in an Informatics specific fields of either Artificial Intelligence, Data Science, Computer Network, Cloud Computing or Internet of Things. **ILO 3 :** Apply the knowledge of computing and other related disciplines to **analyze** and identify solutions for any computing-based problem.
	Course Learning Objective (CLO): After attending the course for 1 (one) semester,students are able to **understand** the concept of mobile programming, knowledge of informatics in the field of mobile programming independently, of good quality and measurable. students are able to **think logically, critically, and innovatively** in the implementation of making mobile platform-based applications involving computational science, mathematics as well as algorithms, and programming independently and measurably.
	Sub CLO : ILO 2 ⇒ CLO 1: Able to **know** the concept of Android and know Android programming. ILO 3 ⇒ CLO 2: students are able to **think logically, critically, and innovatively** in the implementation of making mobile platform-based applications involving computational science, mathematics as well as algorithms, and programming independently and measurably
Content	Students will learn about : 1. The basic concept of Android 2. Android Programming Environment 3. Android Resource Application Project Structure 4. Creating Activity Layouts, Events for Activities, and Exchange of Data between Activities 5. SQLite, Shared Preference File

	6. Difference between Service and Service Creation Activity 7. Content Provider Creation and Utilization
Forms of Assessment	Assessment techniques: [observation], [written test]. Assessment forms: [quiz], [midterm exam], [final term exam], [assignment]. Quiz = 30%, Midterm exam = 20%, Final term exam = 20%, Assignment = 30% CLO 1 => ILO 2: 70% (Quiz, Midterm exam and Final term exam: written test) CLO 2 => ILO 3: 30% (Assignment: observation)
Study and examination requirements and forms of examination	**Study and examination requirements:** - Students must attend 15 minutes before the class starts. - Students must switch off all electronic devices. - Students must inform the lecturer if they will not attend the class due to sickness, etc. - Students must submit all class assignments before the deadline. - Students must attend the exam to get final grade. **Form of examination:** Written exam: Essay
Media employed	Video conference, slide presentation, Learning Management System (LMS)
Reading list	**Main :** 1. Android Programming Guide for Beginner, Eduonix, http://www.eduonix.com 2. "Android: Getting Started", http://developer.android.com/training/index.html 3. http://www.tutorialspoint.com/android/android_hello_world_example.html