Module Description

Module name	Intelligent Transportation System
Module level, if applicable	Bachelor of Informatics
Code, if applicable	21D12142803
Subtitle, if applicable	-
Course, if applicable	-
Semester(s) in which the module is taught	7th
Person responsible for the module	Dr. Ir. Indrabayu, ST., MT., M.Bus.Sys.
Lecturer	1. Dr. Indrabayu, ST., MT., M.Bus.Sys. 2. Dr.Eng. Intan Sari Areni, ST., MT.
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course and offered in the 7th semester.
Type of teaching, contact hours	Teaching methods: [project-based learning]. Teaching forms: [lecture] 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	Students have participated in at least 80% of the learning activities (Academic Regulations, Chapter VII)

examination regulations	
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course, Students are able: **Intended Learning Outcomes (ILO):** **ILO 3 :** Apply the knowledge of computing and other related disciplines to analyse and identify solutions for any computing-based problem. **ILO 7 :** Communicate their ideas in a convincing and effective manner, either in written or orally, to propose solutions. Perform a logical systematic procedure to solve problems, then communicate their ideas in a convincing and effective manner, either in written or orally, to propose solutions. **Course Learning Objective (CLO):** After completing this course, students are expected to understand about intelligent transportation systems and their applications. ILO 3 => CLO 1: Students are able to understand the current topics in intelligent transportation systems and its applications. ILO 7 => CLO 2: Students are able to explain ITS research ideas
Content	Students will learn about : 1. Introduction to intelligent transportation system 2. ITS application and program coverage 3. Basic components of ATIS functions and applications 4. ITS standards and architecture 5. ITS telecommunication technology 6. ATMS Management 7. Management of complex public transportation systems 8. ITS mobile applications 9. ITS security and policies
Forms of Assessment	Assessment techniques: [observation], [participation].

	Assessment forms: [final term exam], [assignment], [presentation]. Assignment = 60%, Presentation = 40% CLO 1 => ILO 3: 60% (Assignment : participation) CLO 2 => ILO 7: 40% (Presentation: 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 a final grade. **Form of examination:** Assignment and Presentation
Media employed	Video conference, slide presentation, Learning Management System (LMS)
Reading list	**Main :** 1. Aleksander Sladkowski dan Wieslaw Pamula, "Intelligent Transportation Systems: Problems dan Perspectives", Springer 2016. 2. Asier Perallos, Unai Hernandez-Jayo, Enrique Onieva, Ignacio Julio García Zuazola, "Intelligent Transport Systems : Technologies and Applications", Wiley 2014 **Support :** 1. ocw.mit.edu/courses/civil-and-environmental-engineering/1-212j-an-introduction-to-intelligent-transportation-systems-spring-2005/lecture-notes/