Module Description

Module name	Specific Topic In Computer System
Module level, if applicable	Bachelor of Informatics
Code, if applicable	466D4233
Subtitle, if applicable	-
Course, if applicable	-
Semester(s) in which the module is taught	6th
Person responsible for the module	Ir. Christoforus Yohannes., MT
Lecturer	1. Ir Christoforus Yohannes., MT 2. Muhammad Alief Fadhal Imran Oemar., ST., 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]. 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 2 :** Have knowledge of advanced topics in specialized fields of Informatics either Artificial Intelligence, Data Science, Computer Networking, Cloud Computing, or Internet of Things. **ILO 3 :** Apply knowledge of competencies and other related disciplines to analyze and identify solutions to any computing-based problems. **ILO 7 :** Communicate their ideas in a convincing and effective manner, both in writing and orally, to propose solutions. **Course Learning Objective (CLO):** After following the Special Topic in Computer System for one semester, students are able to find out the hot topics that are happening in computer system knowledge. Have an understanding of basic concepts and theories in the fields of informatics, systems, computers and programming by showing independent performance in solving problems. **Sub CLO** ILO 2 => CLO 1 : Students are able to explain the basics of embedded systems, Single Purpose Processor, General Purpose Processor, Memory, Interfacing, Digital Camera Example, Control System, IC Technology, and Design Technology. ILO 3 => CLO 2 : Students are able to know in general the topics of computer systems. ILO 7 => CLO 3 : Students discuss computer system topics such as DevSecOps, DARQ, XaaS, Quantum Computers, Brain MI, and Human Aug.
Content	Students will learn about : 1. Embedded System 2. Single Purpose Processor and General Purpose Processor 3. Memory

	4. Interfacing 5. Digital Camera Example 6. Control System 7. IC Technology and Design Technology 8. DevSecOps 9. DARQ 10. XaaS 11. Quantum Computer 12. Brain MI 13. Human Aug
Forms of Assessment	Assessment techniques: [observation], [participation], [written test]. Assessment forms: [quiz], [midterm exam], [final term exam], [assignment], [presentation]. Quiz = 5% , Midterm Exam = 15%, Final term Exam = 15%, Assignment = 30%, Presentation = 35% CLO 1 => ILO 2 : 35% (Quiz : observation, assignment : participation) CLO 2 => ILO 3 : 35% (Presentation : participation) CLO 3 => ILO 7 : 30% (Mid term and Final term Exam : written test)
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, Video and Power Point Presentation.
Reading list	**Main :** 1. Pernantin Tarigan, “Sistem Tertanam (Embedded System)”, Graha Ilmu, 2013 2. Buku Ajar “Embedded System”, Laumal, Samudra Biru, 2019