Module Description

Module name	Microprocessor
Module level, if applicable	Bachelor of Informatics
Code, if applicable	21D12142003
Subtitle, if applicable	-
Course, if applicable	-
Semester(s) in which the module is taught	7th
Person responsible for the module	Ir. Christoforus Yohannes., MT
Lecturer	Ir Christoforus Yohannes., MT
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is an elective course and is offered starting from the 7th semester.
Type of teaching, contact hours	Teaching methods: [problem-based learning]. Teaching forms: [lecture], [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	Students have participated in at least 80% of the learning activities (Academic Regulations, Chapter VII)

regulations	
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing the course, Students are able: **Intended Learning Outcomes (ILO):** **ILO 1 :** Have the knowledge of fundamental in Computing Science that includes basic theory and concepts of computer science, Mathematics and Statistics, Programming Algorithm, Software Engineering, Information Management and Digital Resilience, also the advance topics 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 to any computing-based problems. **Course Learning Objective (CLO):** After following the Microprocessor for one semester, students are able to learn the architecture, programming, interfacing and rudiments of system design of microprocessors and microcontrollers. **Sub CLO** ILO 1 => CLO 1 : Students are able to explain the basics of system design using microprocessors and microcontrollers. ILO 3 => CLO 2 : Students are able to know about architecture, instruction set and programming of microprocessors and microcontrollers, peripheral interfacing of microprocessors.
Content	Students will learn about : 1. Basics of system design using microprocessors 2. Architecture, instruction set and programming of microprocessors 3. Peripheral interfacing of microprocessors 4. Architecture, instruction set, programming and interfacing of microcontrollers
Forms of Assessment	Assessment techniques: [observation], [participation], [written test]. Assessment forms: [quiz], [midterm exam], [final term exam], [assignment].

	Quiz = 20% , Midterm Exam = 30%, Final term Exam = 30%, Assignment = 20% CLO 1 => ILO 1 : 40% (Quiz : observation, assignment : participation) CLO 2 => ILO 3 : 60% (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 a final grade. **Form of examination:** Written exam: Essay
Media employed	Video conference, slide presentation, Learning Management System (LMS)
Reading list	**Main :** 1. S. Ravindrakumar & D. Nithya, "Microprocessors and Microcontrollers - Interfacing, Programming and Design". 2. John Crisp, "Introduction to microprocessors and microcontrollers", Elsevier, Second Edition, 2004 **Support :** 1. Databook Microprocessors, third edition, 1988