

## **Module Description**

Module name	Script Programming
Module level, if applicable	Bachelor of Informatics
Code, if applicable	21D12120702
Subtitle, if applicable	-
Course, if applicable	-
Semester(s) in which the module is taught	3 <sup>rd</sup>
Person responsible for the module	Dr. Muhammad Niswar., ST., M.InfoTech
Lecturer	<ol> <li>Dr. Ir. Zahir Zainuddin, M.Sc</li> <li>Dr. Muhammad Niswar., ST., M.InfoTech</li> </ol>
Language	Indonesian Language [Bahasa Indonesia]
Relation to Curriculum	This course is a compulsory course and offered in the 3 <sup>th</sup> semester.
Type of teaching, contact hours	Teaching methods: [group discussion], [simulation], [collaborative learning].
	Teaching forms: [lecture], [tutorial].
	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	2 credit points (equivalent with 3.4 ECTS)

Requirements according to the examination regulations	Students have participated in at least 80% of the learning activities (Academic Regulations, Chapter VII)
Recommended prerequisites	Basic Computer Programming, Algorithm and Data Structure
Module objectives/intended learning outcomes	Intended Learning Outcomes (ILO): After completing this course, students are able to: ILO 1: Have the knowledge of fundamental Computing Science that includes basic theory and concept of computer science, Mathematics and Statistics, Programming Algorithm, Software Engineering and Information System ILO 4: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements by applying computer science theory and software development fundamentals. ILO 6: Perform effectively in a team, either as a member or leader, in activities related to the program's discipline  Course Learning Objective (CLO): After completing this course, students can understand the concept of interpreted programming language and can write python codes for creating an application program.  ILO 1 => CLO 1: Students can understand the concept of interpreted programming language. ILO 4 => CLO 2: Students can write python codes for creating application programs and evaluate the performance of the application program.  ILO 6 => CLO 3: Students can work in a group assignment to create and evaluate an application program and present the results to other students.
Content	Students will learn about:  1. Introduction to Python 2. Data types, variables, input-output operation, operators 3. Conditional & Loop Statements 4. List, Tuples, Sets, and Dictionary 5. Function and Files 6. Modules, Packages, Class and Object

	7. Object-oriented Programming
Forms of Assessment	Assessment techniques: [observation], [participation], [written test].  Assessment forms: [Mid exam], [final term exam], [assignment], [presentation]  Mid = 20%, Final term exam = 30%, Assignment = 40%, Presentation = 10%  CLO 1 => ILO 1: 50% (Mid and Final term exam: written test)  CLO 2 => ILO 4: 30% (Assignment: participation)  CLO 3 => ILO 6: 20% (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:  Written test
Media employed	Video conference, slide presentation, Learning Management System (LMS).
Reading list	<ul> <li>Main:</li> <li>1. Zed A. Show, "Learn Python 3 the Hard Way: A Very Simple Introduction to the Terrifyingly Beautiful World of Computers and Code" Addison-Wesley, 2017</li> <li>2. Mark Lutz, "Learning Python", O'Reilly, 2013</li> </ul>