



**UNIVERSITAS MATARAM**  
(University of Mataram)  
**FAKULTAS TEKNIK**  
(Faculty of Engineering)  
**PROGRAM STUDI TEKNIK INFORMATIKA**  
(Department of Informatics Engineering)

**MODULE HANDBOOK DESCRIPTION**

Operating System (W22B36)

Module designation	Operating System
Semester(s) in which the module is taught	3 / fourth year
Person responsible for the module	Andy Hidayat Jatmika, S.T., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Lectures, Discussions
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation <ul style="list-style-type: none"><li>• 3 x 50 minutes lecturer/week</li><li>• 3 x 60 minutes class exercise/week</li><li>• Self Study hours = 180 minutes/week</li></ul> Total workload 510 minutes/week
Credit points	3 (~ 4,8 ECTS)
Required and recommended prerequisites for joining the module	-

<p>Module objectives/intended learning outcomes</p>	<p>The main objective of Operating System courses is to provide an understanding of the basic principles, application techniques, and implementation of Operating System for the resolution of certain cases. Based on these main objectives, the Operating System courses have subject learning outcomes, namely:</p> <ol style="list-style-type: none"> <li>1. <i>Understand the meaning and function of the operating system on a computer system.</i></li> <li>2. <i>Understand the concept of process management, process scheduling, and process scheduling techniques.</i></li> <li>3. <i>Understand memory functions, memory usage, and memory allocation techniques, and understand virtual memory usage.</i></li> <li>4. <i>Comprehensively able to explain the importance of the operating system on a computer system.</i></li> </ol>
<p>Content</p>	<p>This course learn about operating system functions on computer systems, process management, process scheduling techniques, threads, concurrency, deadlocks, memory usage, memory allocation techniques, and virtual memory usage.</p>
<p>Examination forms</p>	<p><i>Assignments, Quiz, Exam</i></p>
<p>Study and examination requirements</p>	<p><i>Assignments 10%, Quiz 15%, Scheduled Exam 75%</i></p>
<p>Reading list</p>	<ol style="list-style-type: none"> <li>1. William Stallings. Operating Systems: Internals and Design Principles (8th Edition)</li> <li>2. Z.R. Mair. (2018). Sistem Operasi Teori dan Praktek.</li> <li>3. B. Haryanto. (2003). SISTEM OPERASI LANJUT. Penerbit INFORMATIKA.</li> </ol>