

## MODULE HANDBOOK

Module Name	:	Modern Physics
Module Level	:	Bachelor
Abbreviation, if applicable	:	FI2204
Sub-heading, if applicable	:	
Semester/ term	:	4
Module Coordinator(s)	:	
Lecturer(s)	:	
Language	:	Bahasa Indonesia
Classification within the curriculum	:	Major Subject
Teaching format/ class hours per week during the semester	:	2 x 2-hour lectures
Workload	:	4 hours lectures, 4 hours structured activities, 4 hours individual study, 16 weeks per semester, 1024 hours a semester
Credits Points	:	4
Requirements	:	<ol style="list-style-type: none"> <li>1. FI1101 Physics I</li> <li>2. FI1201 Physics II</li> <li>3. MA1101 Mathematics I</li> <li>4. MA1201 Mathematics II</li> </ol>
Leraning goals	:	<p>Competencies:</p> <ol style="list-style-type: none"> <li>(1) Ability to identify a phenomenon as a classic or modern phenomenon</li> <li>(2) Understanding the concepts and basic principles of Einstein's special theory of relativity</li> <li>(3) Understanding basic concepts and principles of quantum theory, including be able to solve Schrodinger's equations for simple cases</li> <li>(4) Understanding quantum concepts in atoms and molecules</li> <li>(5) Understanding classical and quantum statistics</li> <li>(6) Ability to explain the concepts of solids</li> <li>(7) Ability to explain concepts in nuclear related aspects and elementary particles</li> </ol>
Content	:	The course will provide students with basic knowledge on special theory of relativity and quantum theory.