

FI586 Nanomaterial

Module name:	Nanomaterial	
Module level, if applicable:	Undergraduate	
Code:	FI586	
Sub-heading, if applicable:	-	
Classes, if applicable:	-	
Semester:	7 th	
Module coordinator:	Endi Suhendi	
Lecturer(s):	Endi Suhendi	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Elective course	
Type of Teaching	Contact hours per week during the semester	Class Size
<ol style="list-style-type: none"> 1. Lecture (conceptual, contextual and problem-solving approaches, discussions and presentation). 2. Structured activities (assignments based on conceptual, contextual and problem-solving approaches) 3. Self-study (reading literature) 	1 hours 40 minutes	20
Workload:	The total workload is 91 hours/5440 minutes (3.2 ECTS) per semester, consisting of 25 hour 20 minutes/1400 minutes lectures (0.82 ECTS), 28 hours/1680 minutes structured activities (0.98 ECTS) and 28 hours/1680 minutes self-study (0.98 ECTS) per week for 14 weeks, 11 hour 54 minutes/714 minutes for two exams and exam preparations (0.42 ECTS).	
Credit points:	3.2 ECTS	
Pre-requisites course(s):	FI121 Basic Physics I, FI340 Mechanics	
Course Learning Outcomes (CLO):	<p>After taking this course the students have ability to:</p> <p>CLO1. Explain the need for nanometer-sized materials.</p> <p>CLO2. Analyze the effect of size on material properties</p> <p>CLO3. Explain the synthesis and characterization of nanometer-sized materials.</p> <p>CLO4. Explain the concept, synthesis, characterization, and application of quantum dot material.</p> <p>CLO5. Explain the concept, synthesis, characterization, and application of nano wire.</p> <p>CLO6. Explain nanocomposite materials</p>	

