

	UNIVERSITAS PADJADJARAN FACULTY OF MATHEMATICS AND NATURAL SCIENCES MASTER PROGRAM IN CHEMISTRY	COURSE CODE: D20B.233
Module designation	Composite Chemistry	
Semester(s) in which the module is taught	2	
Lecturers	Dr. Engela Evy Ernawati Allyn Pramudya Sulaeman, Ph.D.	
Medium of instruction	English and Indonesian	
Relation to curriculum	Mandatory elective courses Functional Material Master of Science in Chemistry	
Teaching methods	Lecture and discussion	
Workload	Total workload : 53.42 hours CLASS Lecture and Discussion : 16.69 hours Tutorial : 3.35 hours Assignment : 2.00 hours Test and Examination : 6.68 hours Independent Study : 26.70 hours	
Credit points	2 (2-0) 2 Credits = 3.62 ECTS	

Required and recommended prerequisites for joining the module	-
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Module objectives/intended learning outcomes	1. Students are able to master the theoretical concepts of composite chemistry. [C2] 2. Students are able to produce appropriate conclusions regarding the latest topics in composite chemistry, both personally and in group work, as well as present them. [C3]
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Contents	Composite chemistry includes preliminary composites, composite classification, promoter and reinforcement phases, metal matrix composites, polymer matrix composites, ceramic matrix composites, composite membranes, composite materials, proton exchange, mono-filtration composites, and reverse osmosis.
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Examination forms	Test, Presentation, and Assignment
Study and examination requirements	Minimum attendance at lectures is 80%. Final score is evaluated based on quiz (10%), individual assignment (20%), mid semester exam (35%), and end semester exam (35%).
Reading lists	1. Composite Materials Science and Engineering, 2012, Krishan K. Chawla, Third Edition, Springer. 2. Composite Materials Engineering, Fundamentals of Composite Materials, 2018, Yi Xiao-Su , Du Shanyi , Zhang Litong , Vol 1 and 2, Springer.