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MODULE HANDBOOK

Module Name	Advanced applied linear algebra
Module level, if applicable	Doctoral
Code, if applicable	MMM 7208
Subtitle, if applicable	-
Courses, if applicable	Advanced applied linear algebra
Semester(s) in which the module is taught	1st or 2nd semester
Person responsible for the module	Head of Algebra Laboratory
Lecturer(s)	1. Indah Emilia Wijayanti, Prof., Dr., M.Si. 2. Sri Wahyuni, Prof., Dr.,M.S. 3. Budi Surodjo, Dr., M.Si., 4. Ari Suparwanto, Dr., M.Si.
Language	Bahasa Indonesia
Relation to curriculum	Elective Course
Teaching methods	Lecture, presentation, project.
Workload (incl. contact hours, self-study hours)	Total workload is 136 hours per semester, which consists of 150 minutes lectures per week for 14 weeks, 180 minutes structured activities per week, 180 minutes individual study per week, in total is 16 weeks per semester, including mid exam and final exam.
Credit points	3

Required and recommended prerequisites for joining the module	Students master the basic concepts of coding theory, chryptography, theory of representation and application of algebraic structures
Module objectives/intended learning outcomes	Upon successful completion, students will be able to: CO 1.Clarify various concepts, definitions and properties comprehensively in order to apply algebraic structures to various problems CO 2. Proving the properties of algebraic structures that become tools in solving problems CO 3. Making conjectures to the continuation of the problem on the application of algebraic structures to the topic studied CO4. Develop specialized knowledge related to the application of algebraic structures to the topics studied
Content	This course gives materials about advanced algebra topics that have not been covered in other courses such as coding theory, chryptography, theory of representation and application of algebraic structures
Examination forms	Oral presentation, essay, paper
Study and examination requirements	The final mark will be computed from a proportional weight of assignments, mid examination and final examination. The final mark will be weighted as follows: No — Assessment methods (components, activities) — Weight (percentage) 1 — Final Examination — 20 - 30% 2 — Mid-Term Examination — 20 - 30% 3 — Class Activities: Quiz, Project, etc. — 40 - 60% Minimum final mark to pass : B
Media employed	Whiteboard, LCD Screen, Laptop, Zoom Media
Reading list	References will be determined by the lecturer at the beginning of the lecture, including graduate textbooks and the latest relevant journals

CO-PLO Mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
CO 1			√	√		
CO 2	√	√	√	√	√	√

CO 3	√	√	√		√	√
CO 4	√	√	√	√	√	√

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