Module designation	*Applied Linear Algebra*
Semester(s) in which the module is taught	*6*
Person responsible for the module	*1. Prof. Dr. Agus Maman Abadi M.Si.* *2. Lusi Harini S.Si., M.Sc.*
Language	*Bahasa Indonesia*
Relation to curriculum	*Elective course*
Teaching methods	*150 minutes lectures and 180 minutes structured activities per week.*
Workload (incl. contact hours, self-study hours)	*Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.*
Credit points	*3*
Required and recommended prerequisites for joining the module	*MAT6319 - Linear Algebra*
Module objectives/intended learning outcomes	*CO 1. Respecting the views, opinions, and original ideas of others.* *CO 2. Applying linear algebra in GPS and iteration methods* *CO 3. Apply linear algebra in Markov chains and population growth 5* *CO 4. Apply linear algebra in differential equation systems and single value decomposition problems* *CO 5. Apply linear algebra in other mathematical and statistical problems*
Content	*This course discusses the application of SPL to GPS problems, iterative methods, matrix applications to Markov chains, population growth, digital image compression, and the application of linear algebra to other problems. The course also covers the application of linear algebra to other problems.*
Examination forms	*CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.*

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<td>Study and examination requirements</td>
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The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.

The final mark will be weight as follow:
<table>
<tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>1</td><td>CO 1</td><td>a. Presentation
b. Discussion</td><td>Observation</td><td>5%
10%</td></tr>
<tr><td>2</td><td>CO 2, CO 3, CO 4</td><td>a. Individual assignment
b. Group assignment
c. Quiz
d. Midterm
e. Final test</td><td>Written</td><td>10%
10%
20%
20%
25%</td></tr>
<tr><td colspan="4">Total</td><td>100%</td></tr>
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<tr>
<td>Reading list</td>
<td>
1. Anton H. 2019. Elementary linear algebra with aplications
2. Poole, D. 2014. Linear Algebra: A modern Introduction, 4th Edition
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