<table>
<tr><td>Module designation</td><td>CE121 Linear Algebra</td></tr>
<tr><td>Semester(s) in which the module is taught</td><td>1</td></tr>
<tr><td>Person responsible for the module</td><td>Aminuddin Rizal, S.T., M.Sc.
Nabila Husna Shabrina, S.T, M.T.
Dr. Hugeng, S.T., M.T.
Ariana Tulus Purnomo, S.T., M.Sc.</td></tr>
<tr><td>Language</td><td>Indonesian</td></tr>
<tr><td>Relation to curriculum</td><td>Compulsory</td></tr>
<tr><td>Didactic Methods</td><td>Lecture, Independent Learning</td></tr>
<tr><td>Workload (incl. contact hours, self-study hours)</td><td>Total workload: 136.08 hours
- 35.01 hours of synchronous lecture.
- 84.06 hours of self-study and assignments in the form of essays.
- 17.01 hours related to exam and self study</td></tr>
<tr><td>Credit points</td><td>3 SKS (5.04 ECTS)</td></tr>
<tr><td>Required and recommended prerequisites for joining the module</td><td>-</td></tr>
<tr><td>Module objectives/intended learning outcomes</td><td><table>
<tr><td>J</td><td>J2</td><td>Understand algorithms and mathematical principles upon which the computer system is founded to solve engineering problems.</td><td>Students will be able to apply linear combination, linear independence, basis, and vector dimension operation (C3)
Students will be able to determine orthogonal and orthonormal bases (C3)
Students will be able to determine eigenvalue and eigenvector of a matrix (C3)
Students will be able to employ linear transformation in Rn (C3)</td></tr>
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<tr><td>Content</td><td>This course covers matrix theory and linear algebra, emphasizing topics useful in computer engineering field</td></tr>
<tr><td>Assessment Instrument</td><td>Written Test</td></tr>
<tr><td>Study and examination requirements</td><td>The total average score for the assignments&quiz (40%), midterm exam (25%), final exam (35%). Final score must be more than or equal to 55 (C).</td></tr>
</table>

Reading list	1. Howard Anton dan Chris Rorres. Elementary Linear Algebra. Application Version. 12 th edition. John Wiley & Sons, 2019 2. Poole, David Linear Algebra A Modern Introduction 4th Edition, Belmont: Thomson Higher Education, 2015