

## MATH2257 - Linear Algebra

Credits:	3 (3/0/0)
Description:	Meets MnTC Goal Areas 2 and 4. The course focuses on systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues and eigenvectors.
Prerequisites:	• MATH1134
Corequisites:	
Pre/Corequisites*:	
Competencies:	<ol style="list-style-type: none"> <li>1. Solve systems of linear equations using Gauss-Jordan elimination.</li> <li>2. Construct systems of linear equations to model real-life problems.</li> <li>3. Apply properties of matrices.</li> <li>4. Perform matrix operations.</li> <li>5. Apply properties of determinants.</li> <li>6. Evaluate the determinant of a matrix.</li> <li>7. Discriminate between vector spaces.</li> <li>8. Apply concepts of inner products.</li> <li>9. Determine whether a given function is a linear transformation.</li> <li>10. Find eigenvalues and eigenvectors.</li> </ol>
MnTC goal areas:	<ol style="list-style-type: none"> <li>2. Critical Thinking</li> <li>4. Mathematics/Logical Reasoning</li> </ol>

\*Can be taking as a Prerequisite or Corequisite.