

Courses of Other Colleges Similar to MA461 Linear Algebra and Their Prerequisites

College	Course Name	Description	Prereq
BMCC	MAT 315: Linear Algebra	This course covers matrices, determinants, systems of linear equations, vector spaces, eigenvalues and eigenvectors, Boolean algebra, switching circuits, Boolean functions, minimal forms, Karnaugh maps.	MAT 302 (Analytic Geometry and Calculus II), or permission of the department
BCC	MTH 42: Linear Algebra	Vector spaces, basis and dimension, matrices, linear transformations, determinants, solution of systems of linear equations, eigenvalues and eigenvectors.	MTH 32 (Analytic Geometry and Calculus II) or equivalent
Guttman	NO		
Hostos	MAT 217: LINEAR ALGEBRA	This course introduces the concepts and methods of solution of systems of linear equations with an arbitrary number of equations and variables by using both the elimination and matrix methods; algebra of matrices; determinants; vector spaces and subspaces, norm of a vector and distance between vectors; linear dependence and independence; basis and dimension of vector spaces, orthogonal and orthonormal bases, change of basis; linear transformations and their matrices, kernel and image; real inner products, eigenvalues and eigenvectors; diagonalization of symmetric matrices and its application to quadratic forms. During the course, students will be trained to use technology to solve linear algebraic problems. The technological means include Mathematica, Maple, Matlab, Sage, or graphing calculator TI-89 or equivalent.	Prerequisite: MAT 210 CALCULUS I Pre/Corequisite: MAT 220 CALCULUS II
Kingsborough	MAT 5600 - Linear Algebra	Study of vector spaces, matrix algebra transformation, and vector analysis.	Prerequisite(s): MAT 1500 - Calculus I with a grade of "C" or better

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Laguardia	MAT 210 Linear Algebra	This course is designed to introduce students to the theory and applications of algebraic structures by focusing on the solutions of systems of linear equations. The algebraic properties of these solutions will be analyzed and generalized in the theory of vector spaces. Matrices will be treated both as computational aids and as objects possessing algebraic structure in their own right. Major applications will be developed, including project(s) on various topics using linear algebra techniques and computer software.	Prerequisite: MAT 201 Calculus I or MAT 242 Technical Mathematics II
Queensborough Community College	MA-461 Linear Algebra	Vector spaces; systems of linear equations; determinants; linear operations; matrices; inner product spaces; eigenvalues and eigenvectors. Students will solve application problems using software such as MAPLE.	Pre-requisites (if any): MA-442 (with a grade of C or better)
Baruch College	MTH 2207 – Elements of Calculus I and Matrix Algebra	This course is an introductory applied calculus course with business applications. Topics to be discussed include algebra of matrices; inverses; linear systems of equations; Gaussian elimination; intuitive and geometric definitions of the limit; derivatives of algebraic, exponential and logarithmic functions; optimization problems; related rates; curve sketching; the antiderivative and areas. It is recommended that students who intend to pursue further studies in mathematics register for MTH 2610. This course is not open to students who completed MTH 2003 or MTH 2009; these students take MTH 2205.	Note: This course has a lower number than MTH 2610 – Calculus I. But, the prerequisite is not clearly stated.
	MTH 4100 – Linear Algebra	Topics to be included are Gauss-Jordan reduction, linear independence, linear vector spaces, linear transformations, similarity of matrices, diagonalizable matrices, characteristic values and vectors, symmetric matrices and quadratic forms.	The prerequisite is not clearly stated.
Brooklyn College	MATH 2101 Linear Algebra I	Matrix algebra. Systems of linear equations. Determinants. Vector spaces. Linear independence. Linear transformations. Inner product spaces. (Not open to students who are enrolled in or have completed Mathematics 4101.) Students who have completed both Mathematics 1711 and Mathematics 2101 will receive only 3 credits for Mathematics 1711 and only 2 credits for Mathematics 2101.	Prerequisite: MATH 1201 Calculus I

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College of Staten Island	MTH 338 Linear Algebra	An introduction to the computational and theoretical aspects of linear systems and linear transformations and to the writing of mathematical proofs. This is a core topic in mathematics, with applications in many fields. Topics include systems of linear equations, matrices, matrix, equations, determinants, vector spaces, linear transformations, linear independence, eigenvalues, and eigenvectors; with selected applications.	Prerequisite: MTH 232 Calculus II
Hunter College	MATH 160 Matrix Algebra	Systems of linear equations, matrices, determinants, introduction to vector spaces and linear transformations, applications.	MATH 125 Precalculus or appropriate score on placement exam
	MATH 260 Linear Algebra	Vector spaces, linear transformations, canonical forms, inner product spaces, bilinear forms, applications	MATH 156 Introduction to Mathematical Proof Workshop; pre- or coreq: MATH 250 Calculus with Analytic Geometry III
John Jay College of Criminal Justice	MAT 310 Linear Algebra	An introduction to the fundamentals of linear algebra. Topics studied include: systems of linear equations, matrices, determinants, vector spaces, basis and dimension, rank of a matrix, change of basis, linear transformations, eigenvalues and eigenvectors.	ENG 201 , and MAT 241 Calculus I
Lehman College	MAT 313: Elements of Linear Algebra	Vector spaces, systems of linear equations, determinants, linear transformations, and matrices.	PREREQ: MAT 176: Calculus II. With departmental permission, MAT 176 may be taken as a COREQ.
Medgar Evers College	MTH 207 - Linear Algebra I	The course is designed to introduce students to elements of finite dimensional vector spaces over real numbers; linear transformations and applications; system of matrices; independence of vectors, bases, dimension; dot product; projections; linear transformations, matrix representation; eigenvalues and eigenvectors, diagonalization.	Pre-Requisites: MTH 202 - Calculus I
New York City College of Technology	MAT 2580 Introduction to Linear Algebra	An introductory course in Linear Algebra. Topics include vectors, vector spaces, systems of linear equations, linear transformations, properties of matrices, determinants, eigenvalues and eigenvectors.	Prerequisite: MAT 1575 Calculus II

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Queens College	MATH 231 Linear Algebra I	An introduction to linear algebra with emphasis on techniques and applications. Topics to be covered include solutions of systems of linear equations, vector spaces, bases and dimension, linear transformations, matrix algebra, determinants, eigenvalues, and inner products.	One semester of calculus
The City College of New York	Math 34600: Elements of Linear Algebra	Vector spaces, basis and dimension, matrices, linear transformations, determinants, solution of systems of linear equations, eigenvalues, and eigenvectors.	Prereq.: Math 21200: Calculus II with Introduction to Multivariable Functions or Math 20300: Calculus III or departmental permission.
York College	MATH333 Linear Algebra	Systems of linear equations, matrices, determinants, Euclidean vector spaces and linear transformations, general vector spaces, basis and dimension, eigenvalues and eigenvectors. Applications to linear programming, least squares approximation, and Markov chains.	Preq: MATH122 Analytic Geometry and Calculus II
Nassau community college	MAT 226 - Elementary Linear Algebra	This course is an introduction to Elementary Linear Algebra. Topics to be covered include systems of linear equations, determinants, matrix algebra, vector algebra, vector spaces, linear transformations, eigenspaces, inner products, spectral theory, and linear differential equations.	Prerequisites: At least a C in MAT 123 - Calculus II .
St. John's University	MTH 1012: Linear Algebra	Vectors and vector spaces; linear transformations and matrices; characteristic values and vectors of linear transformations; similarity of matrices Eigenvalues and Eigenvectors.	Prerequisite: MTH 1009: Calculus I
	MTH 1008: Matrix Methods	Matrices; systems of linear equations; linear programming; simplex method; applications to business problems.	Prerequisite: MTH 1003: Introduction to College Mathematics I or equivalent.
Adelphi University	MTH (0144) 253 - Linear Algebra	Solve linear systems of equations, vector equations, and matrix equations. Investigate properties of linear transformations and vector spaces. Calculate determinants, eigenvectors, and eigenvalues. Analyze geometric data including distance, projections, and equations of surfaces. Apply theory to practical problems such as coding theory, dynamical systems, and curve fitting.	Corequisite: MTH (0144) 131 - Calculus 1 B or MTH (0144) 141 - Calculus I

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Hofstra University	MATH 135A - (MA) Linear Algebra	Systems of linear equations, matrices, vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, and applications.	Prerequisite(s)/Course Notes: MATH 072 - (MA) Analytic Geometry and Calculus II