

The Department of Mathematics

2021–22–B term

Course Name Linear Algebra for Electrical Engineering 1

Course Number 201.1.9511

Course web page

<https://math.bgu.ac.il/en/teaching/spring2022/courses/linalgee>

Lecturer Prof. Mikhail Muzychuk, <muzychuk@bgu.ac.il>, Office 305

Office Hours <https://math.bgu.ac.il/en/teaching/hours>

Abstract

Requirements and grading¹

Course topics

- .1 Fields: the definition of a field, complex numbers.
- .2 Linear equations: elementary operations, row reduction, homogeneous and non-homogeneous equations, parametrization of solutions.
- .3 Vector spaces: examples, subspaces, linear independence, bases, dimension.
- .4 Matrix algebra: matrix addition and multiplication, elementary operations, the inverse matrix, the determinant and Cramer's law. Linear transformations: examples, kernel and image, matrix representation.

¹Information may change during the first two weeks of the term. Please consult the webpage for updates