

# Lecture: Mathematics-2

Presented by  
Phd S. Benzerdjeb

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# Preface

This manuscript is intended for first-year students in the common core curriculum preparing for a bachelor's degree in commercial, economic, and management sciences. It consists of three chapters covering the entire program of Mathematics 2 module.

The first chapter deals with solving first and second-order differential equations.

The second chapter explains fundamental and advanced concepts related to matrices. It also aims to provide readers with a thorough understanding of matrix operations and properties. It also introduces essential notions such as calculating the determinant and the inverse of a square matrix.

Finally, the last chapter describes Cramer's linear systems of equations and presents various solution methods. Additionally, non-Cramer systems are also addressed in this section.

We are aware that our work can always be improved, and we strongly encourage readers to provide us with their feedback or suggestions to enhance our document

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