

MATHEMATICS (MATC)

MATC 103 Applied Mathematics

This course presents contemporary and historical topics in mathematics and discusses their use in modern business, science, social science, and other applications. Students will explore mathematical concepts in a real-world context. These concepts include problem-solving methods, set theory, graph theory, number theory, algebraic modeling, probability, statistics, voting methods, fair division, economics, and finance topics. 3 credits.

MATC 203 Quantitative Fluency, Level B

This course includes the calculation and interpretation of descriptive and inferential statistical data. Statistical methods [MSB1] will be used to analyze and interpret real-world problems using probability theory, correlation analysis, and regression analysis. 3 credits.

MATC 251 Discrete Mathematics

In this course, students will identify fundamental concepts of discrete mathematics as they apply to computer programming techniques. In many ways, Discrete Mathematics is not a single mathematical subject, but rather a collection of mathematical areas (e.g., logic, sets, arrays, graphs) that all have a common feature of being discrete (i.e., having specific values, but nothing in between those values). These topics are easily implemented within computing environments, and serve as the basis for the language used there (programming elements), the organizational structures employed to store data (data structures) and are able to be archived as algorithms (specific steps taken in a particular order to solve a problem). 3 credits.