

STATISTICS (QMX)

QMX-210 QUANTITATIVE APPLICATION FOR BUSINESS STUDENTS (3 Credits)

An introduction to quantitative techniques used in business, including real-world application problems, linear equations and inequalities, systems of equations, basic notions from the mathematics of finance, including simple and compound interest, annuities, amortization, graphical methods for solving linear programming optimization tasks, along with an introduction to calculus. Course opened to business majors only.

Restrictions: RG.BUS

QMX-211 INTRODUCTION TO STATISTICS (3 Credits)

The course involves analysis of descriptive statistics. Emphasis is placed on graphical methods, measures of central tendency, measures of variability and their application to the "real world." Major emphasis is placed in presenting an introduction to probability and its applications. Random variables and their distribution are discussed along with mathematical expectation and useful discrete probability distributions. The course concludes with a detailed discussion of the normal probability distribution, sampling distributions and the use of confidence intervals for statistical inference. Computer usage is required throughout.

Prerequisite(s): Take MATH-122 QMX-210 or MATH-151

QMX-212 STATISTICAL APPS FOR BUSINESS (3 Credits)

A review of confidence intervals for statistical inference is followed by an extensive discussion of hypothesis testing for both large and small samples. An in-depth study of analysis of variance precedes detailed work on linear regression, multiple regression and correlation. Analysis of enumerative data including chi-square and a study of non-parametric statistics concludes the course. Survey sampling techniques permeate the course, along with a focus on the application of statistical techniques in business. Computer usage is required throughout.

Prerequisite(s): Take QMX-211