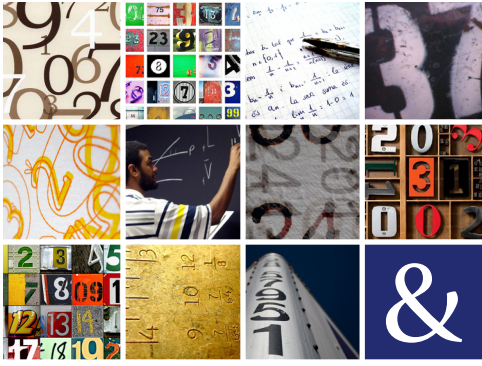


Mathematics for Business program



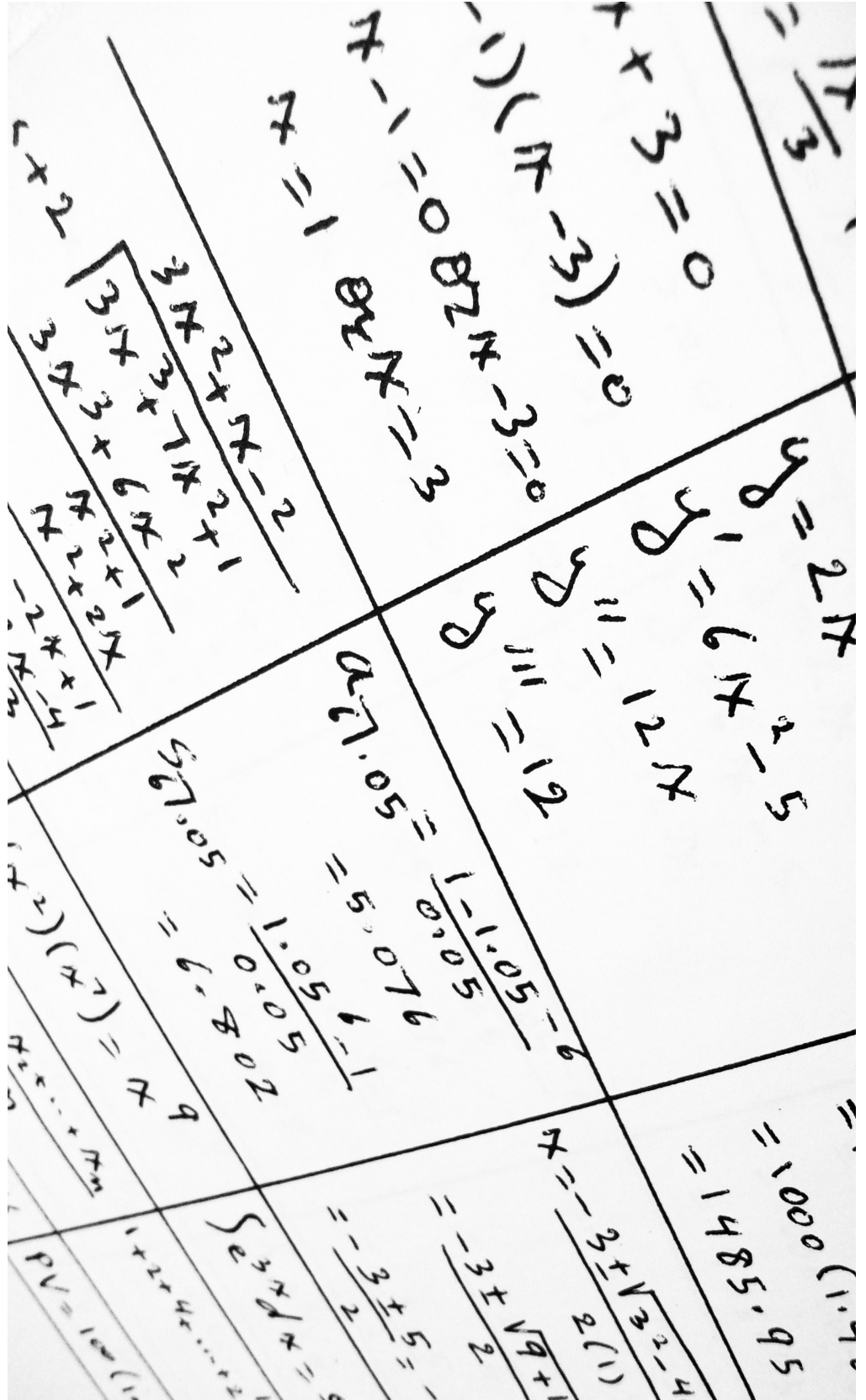
Analytic and quantitative skills have become increasingly important as business practices have become more theoretical and vast amounts of data have become available along with the computing power to analyze it. Historically, undergraduate mathematics programs have been oriented to pure mathematics or towards applications in physics or engineering.

UNC Charlotte's Department of Mathematics and Statistics is now offering a bachelor's degree in Mathematics for Business. The Mathematics for Business program is a practical applied mathematics program that tightens the focus on business applications to better prepare students for a successful career path in the areas of insurance, finance, banking and economics.

The Mathematics for Business program has a BA and a BS degree track.

Graduates of the Mathematics for Business program will be valuable assets to the business community. They will bring expertise in Mathematics, Statistics, and Operations Research along with excellent analytic skills to businesses, financial institutions, insurance firms and government agencies.

The B.S. degree program, when partnered with a program in Economics or Finance, is an excellent stepping stone to graduate work in the areas of Economics, Finance or Mathematical Finance.



UNC CHARLOTTE
College of Liberal Arts & Sciences

www.math.uncc.edu

For more information about the program, go to www.math.uncc.edu or contact Dr. Robert F. Anderson at rfanders@uncc.edu or 704-687-4559.

Bachelor of Science in Mathematics for Business

A major in Mathematics for Business for the B.S. degree consists of a minimum of 45 hours of approved mathematics, operations research, or statistics courses, including in its core:

MATH 1241, MATH 1242, MATH 2241,
Calculus courses I, II, III
MATH 2164, **Linear Algebra**
MATH 2171, **Differential Equations**
MATH 2428, **Mathematical Theory of Interest**
MATH 4051, **Computer Exploration and Generation of Data**
STAT 2122, **Introduction to Probability and Statistics**
STAT 2223, **Elements of Statistics II**
STAT 3110, **Applied Regression**
OPRS 3111, **Operations Research: Deterministic Models**

It is recommended that students take MATH/STAT 3122 and MATH/STAT 3123, Probability and Statistics I and II, in place of STAT 2122 and STAT 2223. A student in the BS program is required to select one of three concentrations: Actuarial Science, Operations Research and Economics/Finance.

In addition a student in the B.S. program must select from one of three concentrations:

Economics/Finance

Requirements:

MATH 4122, **Probability and Stochastic Models**
MATH 4128, **Risk Theory**
STAT 3150, **Time Series Analysis** and one additional 3000 or 4000 level course in MATH, STAT, or OPRS.

Actuarial

Requirements:

MATH 3128, MATH 3129, **Actuarial Science I and II**
STAT 3150, **Time Series Analysis**

Recommended: MATH 3122/3123 instead of STAT 2122/2223 and one additional 3000 or 4000 level course in MATH, STAT, or OPRS.

Operations Research

Requirements:

OPRS 3113, **Operations Research: Probabilistic Models**
OPRS 4113, **Game Theory**
OPRS 4114, **Dynamic Programming** and one additional 3000 or 4000 level course in MATH, STAT, or OPRS

For each of the three concentration required in addition are ITCS 1212 and related work consisting of 18 hours of approved courses in an area outside the Mathematics Department or an officially approved University minor. All students must meet the General Education requirements of the University.

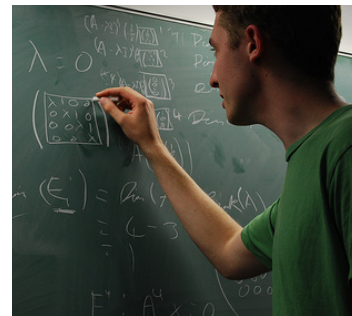
Bachelor of Arts in Mathematics for Business

A major in Mathematics for Business for the B.A. degree consists of a minimum of 36 hours of approved mathematics, operations research, or statistics courses, including in its core:

MATH 1120, **Business Calculus**
MATH 2120, **Intermediate Applied Calculus**
MATH 2164, **Matrices and Linear Algebra**
MATH 2428, **Mathematical Theory of Interest**
MATH 4051, **Computer Exploration and Generation of Data**
STAT 1220, STAT 2223 **Elements of Statistics I and II**
STAT 3110, **Applied Regression**
OPRS 3111, **Operations Research: Deterministic Models** and 9 additional hours of MATH, STAT, or OPRS numbers 3000 and above.

Required in addition are ITCS 1212 and related work consisting of 18 hours of approved courses in an area outside the Mathematics Department or an officially approved University minor. All students must meet the General Education requirements of the University.

The BA in Math for Business is tailored for students who would like to use their math skills without going deep into theory and abstraction.



*All students in the Mathematics for Business Program must meet the General Education requirements of the University. Several of the classes have prerequisites. See the Course Catalog.

For further questions, please contact Dr. Robert Anderson at 704-687-4559 or rfanders@uncc.edu