

# B.S. in Applied Mathematics



## A Mathematics Degree for Real-World Professionals

The amount of data across all industries is increasing exponentially. As a result, organizations need skilled analysts to interpret data so that leaders can make informed decisions that benefit clients, improve processes and increase profit. In WilmU's Applied Mathematics degree program, you'll develop the advanced mathematics and technical skill sets needed to gather and analyze data to solve complex real-world problems. With a choice of two concentrations and multiple certificates embedded into this applied math degree, it's a valuable credential you can customize to meet your specific career goals.



### An Interdisciplinary Program That Emphasizes Application Over Theory

While some math degree programs dive deeply into advanced mathematics theory, WilmU's program prepares graduates for the workforce by focusing on solid foundational skills in mathematics, statistics, analysis and communication. Integrating curriculum taught by WilmU's Mathematics, Business and Technology faculty — experts who apply these concepts in their own careers — this well-rounded STEM program uses project-based learning, coupled with co-ops/internships, to help students develop skills and apply their knowledge in context.



### Align Your Degree to Your Career Goals

Choose from two concentrations, each with multiple embedded certificates.

- **Data Visualization** focuses on applied predictive modeling, forecasting, data mining, data visualization and machine learning. This concentration incorporates five business analytics courses and includes three embedded certificates: Data Analytics, Data Visualization and Applied Business Statistics.
- **Programming** focuses on data warehousing, programming, artificial intelligence and machine learning. This concentration incorporates six computer science courses and includes two certificates: Data Analytics and Java Programming or Microsoft .NET Applications Development.



### An Affordable Applied Mathematics Degree With Online Options

Choose your preferred format. The 100% online option allows you to advance your education while working full time — or learning at a distance — so you can continue to earn while you learn. There is also a face-to-face synchronous option for those who prefer face-to-face instruction.

Get started today at [wilmu.edu/Apply](http://wilmu.edu/Apply).



**40 courses** | **120 total credits**

Finish your Applied Mathematics degree faster by transferring credits.

**\$1,227**  
per course

Cost of a typical 3-credit course



Classes start  
every 8 weeks.



**WILMINGTON**  
UNIVERSITY™

EDUCATION & LIBERAL ARTS

# B.S. in Applied Mathematics

## General Education Requirements (39 Credits)

<input type="checkbox"/> CTA 326 Integrating Excel Into Business Problem Solving	<input type="checkbox"/> MAT 205 Introductory Survey of Mathematics
<input type="checkbox"/> ECO 101 Economics 1	<input type="checkbox"/> Natural Science (3-4 credits)
<input type="checkbox"/> ENG 121 English Composition I	<input type="checkbox"/> HIS 381 Contemporary Global Issues OR <input type="checkbox"/> POL 300 American Politics
<input type="checkbox"/> ENG 122 English Composition II	<input type="checkbox"/> PHI 100 Critical Thinking
<input type="checkbox"/> ENG 131 Public Speaking	<input type="checkbox"/> Humanities Elective
<input type="checkbox"/> ENG 310 Research Writing	<input type="checkbox"/> Humanities Elective
<input type="checkbox"/> PSY 101 Introduction to Psychology OR <input type="checkbox"/> SOC 101 Introduction to Sociology	

## Program Core (39 Credits)

<input type="checkbox"/> MAT 200 Precalculus	<input type="checkbox"/> MAT 312 Business Statistics
<input type="checkbox"/> MAT 310 Calculus 1	<input type="checkbox"/> MAT 313 Experimental Design ✓
<input type="checkbox"/> MAT 311 Calculus 2	<input type="checkbox"/> CSC 402 Data Analysis Storytelling ✓
<input type="checkbox"/> MAT 315 Calculus 3 ✓	<input type="checkbox"/> CSC 414 Ethics for AI and Data Analytics ✓
<input type="checkbox"/> MAT 322 Linear Algebra With Applications ✓	<input type="checkbox"/> BBA 460 R for Business Analytics ✓
<input type="checkbox"/> MAT 320 Finite Mathematics ✓	<input type="checkbox"/> MAT 330 Discrete Mathematics ✓
<input type="checkbox"/> MAT 490 Experiential Learning in Applied Mathematics ✓ OR <input type="checkbox"/> MAT 491 Internship in Applied Mathematics ✓	

### Concentration Option: Programming (33 credits)

<input type="checkbox"/> CSC 315 Fundamentals of Object-Oriented Programming ✓
<input type="checkbox"/> CSC 400 Object-Oriented System Analysis and Design ✓
<input type="checkbox"/> CSC 325 Java Programming 1 ✓ OR <input type="checkbox"/> CSC 310 Microsoft.NET 1 ✓
<input type="checkbox"/> CSC 335 Java Programming 2 ✓ OR <input type="checkbox"/> CSC 311 Microsoft.NET 2 ✓
<input type="checkbox"/> CSC 340 Java Script 1 ✓
<input type="checkbox"/> CSC 345 Database Foundations ✓
<input type="checkbox"/> CSC 407 Data Analysis for Organizations ✓
<input type="checkbox"/> CSC 419 Python for Data Science ✓
<input type="checkbox"/> CSC 420 Introduction to Artificial Intelligence ✓
<input type="checkbox"/> CSC 430 Machine Learning Principles ✓
<input type="checkbox"/> ISM 420 Data Modeling and Warehousing ✓
<input type="checkbox"/> Free Elective (9 credits) (FYE if required)

### Concentration Option: Data Visualization (33 credits)

<input type="checkbox"/> BBA 301 Introduction to Business Analytics ✓
<input type="checkbox"/> BBA 305 Advanced Excel for Business Analytics ✓
<input type="checkbox"/> BBA 350 Predictive Analytics ✓
<input type="checkbox"/> BBA 360 Forecasting for Business Analytics ✓
<input type="checkbox"/> BBA 420 Data Mining ✓
<input type="checkbox"/> BBA 430 Big Data and Visualization ✓
<input type="checkbox"/> BBA 450 Advanced Visualization ✓
<input type="checkbox"/> GIS 300 Geographic Information Systems Science and Technology ✓
<input type="checkbox"/> CSC 345 Database Foundations ✓
<input type="checkbox"/> CSC 407 Data Analysis for Organizations ✓
<input type="checkbox"/> CSC 419 Python for Data Science ✓



Dual-Credit  
**ADVANTAGE™**

**SAVE TIME & TUITION**

You can apply selected courses (and their credits) in this degree program to a variety of WilmU certificate programs, allowing you to earn a resume-boosting certificate and your bachelor's degree simultaneously. Learn more at [wilmu.edu/DualCredit](http://wilmu.edu/DualCredit).

### Already have an associate degree?

A WilmU completion degree provides just the courses you need to earn your bachelor's degree. Look for the ✓ to see typical completion degree courses.

*Prerequisite and additional courses not listed here may be required.*

### Have questions? We're here to help!

Academic Recruiters



(302) 213-3916



[recruiting@wilmu.edu](mailto:recruiting@wilmu.edu)



Get started today!

[wilmu.edu/Apply](http://wilmu.edu/Apply)



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