

**STATISTICS MAJOR REQUIREMENTS: ADVISEMENT FORM
BACHELOR OF SCIENCE DEGREE
MATHEMATICAL STATISTICS TRACK**

Name:

UMBC username or ID:

NOTE: A grade of C or better is required in courses to fulfill major requirements.

I Core Requirements

		Semester/Year	Grade
MATH 151	Calculus and Analytic Geometry I	_____	_____
MATH 152	Calculus and Analytic Geometry II	_____	_____
MATH 221	Introduction to Linear Algebra	_____	_____
MATH 251	Multivariable Calculus	_____	_____
MATH 301	Introduction to Mathematics Analysis	_____	_____
STAT 433	Statistical Computing	_____	_____
STAT 451	Introduction to Probability Theory	_____	_____
STAT 453	Introduction to Mathematical Statistics	_____	_____
STAT 454	Applied Statistics	_____	_____

II Upper Level Mathematics/Statistics Electives

Students must successfully complete NINE elective courses, with at least SIX courses in Statistics. Electives are to be chosen with departmental approval. See below for suggested electives.

		Semester/Year	Grade
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____
7	_____	_____	_____
8	_____	_____	_____
9	_____	_____	_____

Suggested Electives in Mathematics and Statistics:

- MATH 301 Introduction to Mathematical Analysis I
- MATH 302 Introduction to Mathematical Analysis II
- MATH 341 Computational Methods
- MATH 381 Linear Methods in Operations Research
- MATH 430 Matrix Analysis
- MATH 441 Introduction to Numerical Analysis
- MATH 452 Introduction to Stochastic Processes

STAT 405 Survey Sampling
STAT 414 Environmental Statistics
STAT 417 Introduction to Time Series Data Analysis
STAT 418 Applied Multivariate Methods
STAT 419 Introduction to Biostatistics
STAT 455 Design of Experiments and Quality Control

Suggested Electives in Other Fields:

CMSC 201 Computer Science I for Majors **OR**
CMSC 202 Computer Science II for Majors
CMSC 331 Principles of Programming Languages
CMSC 341 Data Structures

ECON 421 Introduction to Econometrics
ECON 422 Topics in Econometrics
ECON 423 Economic Forecasting

IS 410 Introduction to Database Program Development
IS 420 Advanced Database Project
IS 427 Artificial Intelligence
IS 444 Total Quality Management for the Information Systems Department

POLI 400 Qualitative Research Methods in Political Science

PSYC 331 Experimental Psychology-Design and Analysis I
PSYC 332 Experimental Psychology-Design and Analysis II

SOCY 419 Qualitative Methods in Social Research

III Proficiency in English: All Statistics majors must demonstrate their proficiency in English by passing ENGL 393 (Technical Writing) and by passing a course in Speech (SPCH).