

Mathematics & Statistics

(Bachelor of Science)

The Mathematics discipline has programs of study in two emphasis areas: mathematics and statistics.

Students choosing the emphasis in mathematics will focus their studies in a discipline which has been an important part of our intellectual heritage for centuries. Students select this area of emphasis if they are interested in mathematics for its own sake (pure mathematics) or as a tool for analyzing and solving real-world problems (applied mathematics). Graduates may use their skills in many careers, including fields such as secondary education and engineering. Other typical areas of employment traditional for mathematicians are those requiring physics. Today, mathematical techniques are required in social, industrial, and management realms as well.

The emphasis in statistics provides applied courses in experimental design, multivariate statistical analysis, and applied regression analysis. Students also gain an extensive background in statistical computing. Students who wish to enter actuarial professions may prepare for the first two actuarial examinations by completing the calculus sequence, linear algebra sequence, and statistical theory sequence. Students who concentrate studies in statistics may find employment in business, industry, and government, as well as pursue further professional training in graduate school.

Program Entrance Requirements

The University of Wisconsin System placement examination in mathematics is used to advise entering freshmen about the level at which they should enter university courses. In rare cases, a student who has been accelerated and has mastery of calculus may, with advice of faculty, enter Calculus and Analytic Geometry II (MATH 203). Upon earning a "C" or better in MATH 203, an additional four credits are granted for MATH 202.

Credits for calculus at UW-Green Bay may also be awarded for satisfactory performance on an AP exam. More details are available at [https://www.uwgb.edu/otsa/credit-for-prior-learning/advanced-placement-\(ap\)-program/](https://www.uwgb.edu/otsa/credit-for-prior-learning/advanced-placement-(ap)-program/).

Retroactive credit for MATH 202 is not awarded to students who transfer to UW-Green Bay and have completed coursework deemed to be equivalent to MATH 203. If the student completes MATH 209 or MATH 305 at UW-Green Bay, they may submit an approved Retroactive Credit Form to the Registrar's Office to be awarded credit for MATH 202 only.

Mathematics majors often choose an additional minor. Examples are Environmental Science or Business Administration.

Students seeking information on teacher certification should contact the Education Office.

Area of Emphasis (<http://catalog.uwgb.edu/archive/2022-2023/undergraduate/programs/mathematics/mathematics-major/>)

Students must complete requirements in one of the following areas of emphasis:

- Mathematics Emphasis
- Statistics Emphasis

Minors (<http://catalog.uwgb.edu/archive/2022-2023/undergraduate/programs/mathematics/mathematics-minor/>)

- Actuarial Science Minor
- Mathematics Minor: Students must complete requirements in one of the following areas of emphasis:
 - Mathematics Emphasis
 - Applied Mathematics Emphasis
 - Statistics Emphasis

Curriculum Guides (<http://catalog.uwgb.edu/archive/2022-2023/undergraduate/programs/mathematics/cg/>)

The following are only examples of four-year Mathematics degree programs and are subject to change without notice. Students should consult a Mathematics program advisor to ensure that they have the most accurate and up-to-date information available about a particular four-year degree option.

- Mathematics Emphasis
- Statistics Emphasis

Faculty

Gregory J Davis; Professor; Ph.D., Northwestern University*

Woo Jeon; Professor; Ph.D., University of Wisconsin - Madison, chair

Devin Bickner; Associate Professor; Ph.D., Iowa State University

Tetyana Malysheva; Associate Professor; Ph.D., University of Oklahoma

Megumi Onoda; Associate Professor; M.S., Southeastern Louisiana University

Yongjun Yang; Associate Professor; Ph.D., Colorado School of Mines

Dhanamalee Bandara; Assistant Professor; Ph.D., Texas Tech University

Mark Norfleet; Assistant Professor; Ph.D., University of Texas - Austin

Mary E Guy; Senior Lecturer; M.S., University of Wisconsin - Oshkosh

James M Meyer; Senior Lecturer; Ph.D., University of North Carolina

Katie M Burke; Lecturer; Ph.D., University of Iowa

Terrisa Deprez; Lecturer; M.S., University of Central Florida

Synde Krause; Lecturer; M.A., Saginaw Valley State University