

Put more Muscle behind your Major!



Take more mathematics and/or statistics courses! Whatever your major is, you can do more and do it better with a stronger mathematics and statistics background. Employers are always looking for people with strong quantitative skills and the ability to think clearly. Set yourself apart and open doors for yourself. Sharpen your skills and develop your mind with mathematics!

Mathematics and statistics courses are closely related to the real world. Much of the mathematics in these courses was developed to solve real life problems, and many difficult real-world problems are easily solved with the appropriate mathematics. Even so, all the time in every field there are new challenges that will only be overcome by people trained in mathematics. Are you ready for that?

Mathematics is excellent as a second major! See

<http://www.bgsu.edu/dept/math/> for more information about math careers and programs in the Department of Mathematics and Statistics, including the majors in Mathematics, Applied Mathematics, Actuarial Science, and Statistics.

After Math 131, you can take:

- **Stat 211 Elementary Statistical Methods I** (probability and statistics with a business emphasis)
- **Math 222 Discrete Mathematics** (algorithms, logic, graph theory; great for CS and bioinformatics)
- **Math 232 Calculus II** (integration, sequences, series; for science, engineering, economics)
- **Math 247 Fundamentals of Statistics** (probability and some statistical techniques; for all science majors)
- **Math 313 Mathematical Logic** (a fun introduction to logic with interactive software; for everyone!)

After Math 232, you can take:

- **Math 233 Multivariable Calculus** (functions of two variables, partial derivative, multiple integrals)
- **Math 322 Discrete Mathematics** (logic, algorithms, counting, induction, graph theory)
- **Math 332 Elementary Linear Algebra** (linear systems, vectors, matrices; vital for many fields)
- **Math 341 Probability and Statistics** (probability and some statistical techniques)
- **Math 425 Theory of Interest** (present value of money; great for business!)

A minor in mathematics goes well with every major!

If you are interested in a minor in Mathematics, consider taking these courses:

- **Math 131, Math 232, Math 233, Math 332** (an excellent basis to complement almost every major)
- Two more 300 or 400 level courses, such as:
 - **Math 313 Mathematical Logic** (a fun introduction to logic with interactive software)
 - **Math 322 Discrete Mathematics** (logic, algorithms, counting, induction, graph theory)
 - **Math 337 Differential Equations** (model how physical systems change over time)
 - **Math 401 Number Theory** (prime numbers, Fermat's last Theorem, encryption)
 - **Math 411 History of Mathematics** (the development of mathematics through calculus)
 - **Math 432 Linear Algebra II** (sophisticated applications to science and engineering)
 - **Math 441 Probability and Statistics I** (the gateway to the statistics profession)

To check that the courses you've chosen satisfy the requirements for the Mathematics minor, see http://www.bgsu.edu/catalog/A_S/A_S65.html Visit the College of Arts and Sciences office on the second floor of the Administration Building to declare a minor.

Contact Prof. Steve Seubert (sseuber@bgsu.edu) or Prof. Craig Zirbel (zirbel@bgsu.edu) for more information about math courses, the math minor, the math major, or careers using mathematics.