



Department of Mathematics and Statistics, Discovery Hall
University of Nebraska at Kearney

Physics Comprehensive plus Math Minor*

Success in Physics classes, especially Analytic Mechanics (PHYS 402), Electricity & Magnetism (PHYS 407), and Quantum Mechanics (PHYS 419) require a firm understanding of mathematics. That might help explain why nationwide, about one-third of undergraduate physics majors also earn a degree in mathematics. If you choose to attend a graduate program in physics, earning a math minor will help you be successful with the math intense first year core graduate classes.

Adding Mathematics minor to your program of study requires only taking two additional mathematics classes beyond the math classes that are required for your major.

For your General Studies LOPER 4 requirement take

- **MATH 115** Calculus I with Analytic Geometry (fall and spring) 5 credits

Physics Comprehensive Math Requirements take

- **MATH 202** Calculus II with Analytic Geometry (fall and spring, prerequisite: MATH 115) 5 credits
- **MATH 260** Calculus III (fall and spring, prerequisite: MATH 202) 5 credits
- **MATH 305** Differential Equations (spring only, prerequisite: MATH 260) 3 credits

For your Math minor, take

- **MATH 250** Foundations of Math (fall and spring, prerequisite: MATH 115) 3 credits

Physics Comprehensive Math, CYBR, or Chemistry Electives, take

- **MATH 350** Abstract Algebra (spring only, prerequisite: MATH 250) 3 credits

Alternatively, you may choose from MATH 310 (fall only), MATH 404 (spring only), MATH 413 (fall only), or MATH 460 (fall only).

Suggested mathematics course sequence

Freshman year Fall: MATH 115, Spring: MATH 202

Sophomore year Fall: MATH 260, Spring: MATH 305

Junior year Fall: MATH 250, Spring: MATH 350

Once you declare a mathematics minor, your academic advisor will be happy to help you build a four-year plan for earning a minor in mathematics. If you start on a path toward earning a math minor, but later decide to earn a Mathematics Bachelor of Science, all the math classes listed here will count toward the Bachelor of Science degree.

If you would like to discuss the possibility of adding a math minor to your Physics Comprehensive degree, please contact Dr. Barton Willis, Department of Mathematics and Statistics, Discovery Hall (DSCH), Room 368, willisb@unk.edu or 308-865-8868.

*This plan is up to date for the 2020-2021 catalog. Also, the designation of a fall or spring class is anticipated, but it is subject to change.