About the course Mathematical methods in physics

Course Presenter : Zach Star

Mathematical methods in physics, in this course we will learn about the essential mathematical tools used to solve complex physical problems. From vector calculus and differential equations to linear algebra, complex analysis, and Fourier series, this course equips you with the mathematical foundation required for higher-level physics courses such as quantum mechanics, electromagnetism, and general relativity. Youâ€™ll explore how to apply these methods to model physical systems, analyze wave functions, describe fields, and work with symmetry in nature. Whether itâ€™s solving SchrÃ¶dingerâ€™s equation, analyzing harmonic oscillators, or transforming coordinates in different frames, mathematics is the language of physics. This course is ideal for physics majors aiming to strengthen their problem-solving skills and understand the quantitative framework behind physical laws. Letâ€™s begin mastering the mathematics that drives physics Zach Star

Mathematics Category's Courses

Course Lesson(8)

Lesson 1 : **The Physics Major**

Lesson 2 : **The Physics Major Part 2**

Lesson 3 : **The History of Physics and Its Applications**

Lesson 4 : **The History of Physics Part 2**

Lesson 5 : **What You Should Know About Getting a Career In Astronomy Astrophysics**

Lesson 6 : **Astronomy Astrophysics Part 2**

Lesson 7 : **Physics Vs Engineering Which Is Best For You**

Lesson 8 : **How To Take All The Physics Classes You Need Right From Your Computer**

Related courses

Real numbers

Statistics

Quadratic Equation

Polynomials

Pair of Linear Equations in Two Variables

Coordinate Geometry