

Physics, Minor

LSPHYMIN

Advancements at the intersection of physics, engineering and technology create a need for interdisciplinary training and research experience. This program aims to meet these needs by producing forward-thinking students.

Description

By pairing fundamental physics with practical applications, the minor program in applied physics serves students with a wide range of interests, from engineering applications to research. The program combines physics, computer science and applied mathematics to tackle complex problems in material sciences, engineering, chemistry and related fields.

This program is delivered by dedicated faculty with expertise in modeling of physical systems, materials science, modern numerical techniques and fundamental physics. Given the importance of hands-on experience, the program offers rigorous courses and elements of project-based research.

The growing presence of high-tech companies in the metro Phoenix area, including the East Valley, presents a unique opportunity for students to establish connections with industry.

At a glance

- College/School: [College of Integrative Sciences and Arts](#)
- Location: [Polytechnic](#)

Program requirements

[2024 - 2025 Minor Map](#)

[Minor Map \(Archives\)](#)

The minor in physics requires 23 credit hours, including a minimum of 12 upper-division credit hours. A minimum of nine upper-division credit hours must be taken in courses offered by the College of Integrative Sciences and Arts. A grade of "C" (2.00 on a 4.00 scale) or better is required in all courses.

Required Courses -- 17 credit hours

[PHY 121: University Physics I: Mechanics \(SCIT OR SQ\)](#) (3)

[PHY 122: University Physics Laboratory I \(SCIT OR SQ\)](#) (1)

[PHY 131: University Physics II: Electricity and Magnetism \(SCIT OR SQ\)](#) (3)

[PHY 132: University Physics Laboratory II \(SCIT OR SQ\)](#) (1)

[PHY 314: Quantum Physics I](#) (3)

[PHY 321: Vector Mechanics and Vibration](#) (3)

[PHY 499: Individualized Instruction](#) (3)

Electives (choose two) -- 6 credit hours

[PHY 201: Mathematical Methods in Physics I \(MATH OR CS\)](#) (3)

[PHY 302: Mathematical Methods in Physics II](#) (3)

[PHY 331: Principles of Modern Electromagnetism](#) (3)

[PHY 361: Introductory Modern Physics](#) (3)

Prerequisite courses may be needed in order to complete the requirements of this minor.

Enrollment requirements

GPA Requirement: 2.00 or higher

Incompatible Majors: BA or BS in physics

Other Enrollment Requirements: None

Current ASU undergraduate students may pursue a minor and have it recognized on their ASU transcript at graduation. Minor requirements appear on the degree audit once the minor is added. Certain major and minor combinations may be deemed inappropriate by the college or department of either the major program or the minor. Courses taken for the minor may not count toward both the major and minor.

Career opportunities

Minor programs allow students to develop additional competencies that complement the marketable knowledge and skills they acquire in their majors. A minor in physics can help students expand analytical skills as they pursue careers in engineering, postsecondary education or mechanical design.

Contact information

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