Physics, Minor

LSPHYMIN

Gain a foundation as well as experience in applied and computational physics.

Description

The physics minor in the College of Integrative Sciences and Arts at the Polytechnic campus provides a rigorous foundation in physics with an emphasis on fundamental concepts and applied hands-on experience. It broadens and deepens a student's understanding of their major and increases their options for graduate study and employment. The primary emphasis of the physics minor is to give students experience through applied and computational physics projects. The projects will be guided by faculty with expertise in the physics of semiconductors and graphene, quantum nano-optics, laser physics and materials science.

At a Glance

• College/School: College of Integrative Sciences and Arts
• Location: Polytechnic campus

Program Requirements

The minor in physics requires 23 credit hours, as follows:

1. A Minimum of six upper-division credit hours in the minor must be taken in courses offered through the College of Integrative Sciences and Arts.

2. Courses that count toward the minor must have a grade of "C" (2.00 on a scale of 4.00) or higher.

3. Twelve credit hours of upper-division physics courses are required.

**Required Minor Courses: (14 credit hours minimum)**

PHY 121: University Physics I: Mechanics (SQ)(3)
PHY 122: University Physics Laboratory I (SQ)(1)
PHY 131: University Physics II: Electricity and Magnetism (SQ)(3)
PHY 132: University Physics Laboratory II (SQ)(1)
PHY 361: Introductory Modern Physics(3)
PHY 460: Numerical Methods in Modern Physics(3)

**Elective Minor Courses: (6 credit hours minimum)**

PHY 201: Mathematical Methods in Physics I (CS)(3)
PHY 302: Mathematical Methods in Physics II(3)
PHY 321: Vector Mechanics and Vibration(3)
PHY 331: Principles of Modern Electromagnetism(3)

**Required Project Research**

PHY 495: Project Research(3)

Depending on a student's undergraduate program of study, prerequisite courses may be needed in order to complete the requirements of this minor.

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**Enrollment Requirements**

**GPA Requirement:** 2.00 or higher (on a 4.00 scale)

**Majors Ineligible to Add This Minor:** Physics

**Other Enrollment Requirements:** None

Students in most majors may pursue at least one minor and, upon successful completion of the prescribed coursework, have that accomplishment officially recognized on the ASU transcript at graduation if the college or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met and the college (and in certain colleges, the department) of the student's major allows the official recognition of the minor. A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult an academic advisor in the college or department of the major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Courses taken as part of a minor may not count toward both the major degree and the minor. Students should contact the department for more information.

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**Contact Information**