

PHYSICS - MINOR

College of Arts and Sciences

Department of Physics

www.kent.edu/physics

About This Program

The Physics minor allows students with a major or interest in natural sciences, mathematics, education and technology to complement their studies and enhance their academic credentials. Non-science majors may find that the Physics minor enhances their knowledge of this useful and fascinating field.

Contact Information

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- Speak with an Advisor

Program Delivery

- **Delivery:**
 - In person
- **Location:**
 - Kent Campus

Admission Requirements

Admission to a minor is open to students declared in a bachelor's degree, the A.A.B. or A.A.S. degree or the A.T.S. degree (not Individualized Program major). Students declared only in the A.A. or A.S. degree or the A.T.S. degree in Individualized Program may not declare a minor. Students may not pursue a minor and a major in the same discipline.

Program Requirements

Minor Requirements

| Code | Title | Credit Hours |
|---|--|--------------|
| Minor Prerequisites | | |
| MATH 11010 | ALGEBRA FOR CALCULUS (KMCR) | |
| MATH 11022 | TRIGONOMETRY (KMCR) | |
| MATH 12002 | ANALYTIC GEOMETRY AND CALCULUS I (KMCR) | |
| MATH 12003 | ANALYTIC GEOMETRY AND CALCULUS II | |
| Minor Requirements | | |
| PHY 12000 | INTRODUCTORY PHYSICS SEMINAR (ELR) | 1 |
| PHY 23101 | GENERAL UNIVERSITY PHYSICS I (KBS) (KLAB) | 5 |
| PHY 23102 | GENERAL UNIVERSITY PHYSICS II (KBS) (KLAB) | 5 |
| PHY 30020 | INTERMEDIATE PHYSICS LABORATORY (WIC) | 2 |
| PHY 36001 | INTRODUCTORY MODERN PHYSICS | 3 |
| Physics (PHY) Upper-Division Electives (30000 or 40000 level) | | 6 |
| Minimum Total Credit Hours: | | 22 |

Graduation Requirements

| Minimum Minor GPA | Minimum Overall GPA |
|-------------------|---------------------|
| 2.000 | 2.000 |

- Minimum 6 credit hours in the minor must be upper-division coursework (30000 and 40000 level).
- Minimum 6 credit hours in the minor must be outside of the course requirements for any major or other minor the student is pursuing.
- Minimum 50 percent of the total credit hours for the minor must be taken at Kent State (in residence).

Program Learning Outcomes

Graduates of this program will be able to:

1. Demonstrate a conceptual and quantitative understanding of fundamental principles of classical and modern physics.
2. Develop analytical and critical thinking skills, and use these skills to solve scientific problems.
3. Develop oral and written communication skills to present scientific findings obtained through theoretical, computational and experimental efforts.