



# Physics & Astronomy

## College of Arts and Sciences

### Degree Options

Bachelor of Science in Physics and Astronomy

Specialization Tracks Available:

Astrophysics

Planetary Sciences

Standard Physics

Applied Physics

### Minors

Astronomy

Physics

### Program Strengths

- The highly rigorous undergraduate program prepares graduates to be competitive in top graduate programs or for employment.
- 63% of faculty are Society Fellows; the national average is 10%
- Faculty bring in over \$9 million/year in grant funds.
- The department hosts a weekly colloquium, where WSU faculty and visiting scholars discuss their research/work.
- The James Richard Jewett Observatory houses the largest refracting telescope in the state of Washington. Several times a year, star parties are held for the public to attend.
- Each year, usually during Parent's Weekend, the Physics and Astronomy Club hosts the annual Pumpkin Drop, a gravity experiment using pumpkins and the 12-story Webster Hall.

### Student Club

Physics and Astronomy Club

### Admission to the Major Requirements

Students may be admitted as Physics & Astronomy majors upon declaring their intent to the department.

### Suggested Classes for First year

Chem 105: Principles of Chemistry I

Chem 106 or 116: Principles of Chemistry II

CptS 111: Introduction to Algorithmic Problem Solving

OR CptS 121: Program Design and Development

Engl 101: Introductory Writing

Hist 105: The Roots of Contemporary Issues

Math 171: Calculus I

Math 172: Calculus II

Physics 188: First-year Seminar

Physics 201/205: Physics for Scientists and Engineers

UCORE requirements

### Suggested Classes for Transfer Students

CptS 111: Introduction to Algorithmic Problem Solving

OR CptS 121: Program Design and Development

Engl 402: Technical and Professional Writing

Physics 188: First-Year Seminar

Physics 303: Modern Physics I

Physics 320: Mechanics

Physics 341: Electricity and Magnetism



**WASHINGTON STATE**  
UNIVERSITY

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## Math Requirement

Math 171: Calculus I

Math 172: Calculus II

Math 220: Introductory Linear Algebra

Math 273: Calculus III

Math 315: Differential Equations

Plus six credits of Math 300 or higher

## Core Courses

Physics 201/205: Physics for Scientists and Engineers I

Physics 202/206: Physics for Scientists and Engineers II

Physics 303: Modern Physics I

Physics 304: Modern Physics II

Physics 320: Mechanics

Physics 330: Thermal Physics

Physics 341: Electricity and Magnetism I

Physics 342: Electricity and Magnetism II

Physics 410: Electronics

Physics 415: Quantum Physics Laboratory

Physics 450: Introduction to Quantum Physics

Physics 489: Thesis Proposal

Physics 490: Undergraduate Thesis

## Career Options

- Alternative energy sciences, energy exploration
- Medical profession, imaging, diagnosis
- Sports technologies,

biophysics/engineering

- Architecture, civil engineering, materials science
- Education, forensics/law enforcement
- Computer technologies and applications
- Special effects, sound engineering, design
- Science journalism, technical writing
- Astronomy, aero-space technology
- Capital investment, insurance, computational economics

## For more information:

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## Advisors

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## Notes: