

Physics is the most fundamental of all sciences. It involves studying the natural forces in the universe, including energy, matter and their interactions. Physicists are trained to communicate their understanding of a problem or phenomenon in precise terms from basic fundamental ideas. In the coming decades, the skills and knowledge acquired from the study of physics will become increasingly valuable as we depend more on new science and technologies, both to increase quality of life and to solve national or international challenges. Physics students in the LEAD program would be well-prepared to pursue the practice of intellectual property/patent law if they desire, and to discuss or influence science policy.

#### Topics that students study in this program:

- Mechanics and sound.
- Electricity and magnetism.
- Thermodynamics.
- Quantum mechanics.
- Modern physics.
- Laboratory methods.

Department of Physics  
[phys.k-state.edu](http://phys.k-state.edu)

#### Admissions requirements

- Be admitted for the summer or fall term.
- Submit a program application at [k-state.edu/prelaw/lead](http://k-state.edu/prelaw/lead).
- Have a minimum high school 3.5 GPA on a 4.0 unweighted scale.
- Have an ACT score of at least 26, or an SAT of at least 1170.

#### Application timeline

- Feb. 1: Priority deadline to apply.
- March 1: Priority deadline to file the FAFSA.
- Early March: Program committee will review qualified applications.
- Mid-March: Applicants will be notified of admissions decisions by mail.

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## First year, fall semester

Course	No. of hours
Calculus 1	4
Expository Writing I	3
Fine arts course	3
PHYS 122: Physics Today 1	1
PHYS 223: Physics 1	5
<b>16 credit hours</b>	

## First year, spring semester

Course	No. of hours
Calculus 2	4
Expository Writing II	3
Public speaking course	3
PHYS 123: Physics Today 2	1
PHYS 224: Physics 2	5
<b>16 credit hours</b>	

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## Second year, fall semester

Course	No. of hours
Calculus 3	4
Philosophy course	3
Social science course	3
PHYS 325: Physics 3	4
<b>14 credit hours</b>	

## Second year, spring semester

Course	No. of hours
Differential equations course	4
Social science course	3
PHYS 506: Advanced Lab	4
PHYS 522: Mechanics	4
<b>15 credit hours</b>	

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## Third year, fall semester

Course	No. of hours
Life science course (with lab)	4
Western heritage course	3
PHYS 532: Electromagnetic Fields 1	4
PHYS 664: Thermodynamics and Statistical Physics	3
<b>14 credit hours</b>	

## Third year, spring semester

Course	No. of hours
Social science course	3
Literary/rhetorical arts course	3
Advanced social science course	3
PHYS 662: Intro to Quantum Mechanics	4
PHYS elective	3
<b>16 credit hours</b>	

This is an example of a typical course schedule. All courses must be selected with and approved by the student's academic advisor.

Office of Pre-law Advising

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