

## Physics Major Path to Graduate Study in Physics

### Required courses:

Physics: 2110/2111, 2120/2121, 3005, 3010, 3030, 3550/3551, 3700/3701, 3800, 4000/4001

Math: 1910, 1920, 2110, 3120

CSci: 2000

Engl: 2700

Major electives: 8 hours of science or math at any level, 10 hours of upper-level (3000 or higher) selected science/math electives (see catalog for full listing of options)

### Recommended major electives:

Phys 3050/3051 (4), 3100/3101 (4), 3740 (3), 4830 (3), 4850 (3), 4970 (3); choose one upper-level experimental class from 3750/3751 (4), 3900/3901 (4), 4200/4201 (4)

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### Freshman

Phys 2110/2111, University Physics I	5	Phys 2120/2121, University Physics II	5
Math 1910, Calculus & Analytic Geom. I	5	Math 1920, Calculus & Analytic Geom. II	5
Engl 1010, English Comp. I	3	Engl 1020, English Comp. II	3
APSU 1000 Freshman Experience	1	Comm 1010, Fund. of Public Speaking	3
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Semester Total	14	Semester Total	16

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### Sophomore

Phys 3550/3551, Experimental Methods	4	Phys 3005, Theoretical Methods	4
Math 2110, Calculus III	3	Phys 3700/3701, Modern Physics	4
CSci 2000, Prog. & Data Struct. in C++	4	Math 3120, Differential Equations I	3
Humanities/Fine Arts Core	3	Engl 2700, Science Writing	3
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Semester Total	14	Semester Total	14

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### Junior

Phys 3010, Intermediate Mechanics	3	Phys 3030, Electricity & Magnetism	3
Phys 4000/4001, Computational Methods	4	Phys 3100/3101, Optics	4
Phys 3050/3051, Circuits	4	Phys 3740, Thermal & Stat. Physics	3
Hist 2010, American History I	3	Hist 2020, American History II	3
Engl 2030, Trad. in World Literature	3	Social/Behavioral Science Core	3
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Semester Total	17	Semester Total	16

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### Senior

Phys 3800, Quantum Mechanics	3	Phys 4850, Advanced Quantum Mech.	3
Phys 4830, Theoretical Elec. & Mag.	3	Phys 4970, Independent Study	3
Social/Behavioral Science Core	3	Upper-level Experimental Elective	4
Elective, any level	3	Humanities/Fine Arts Core	3
Elective, any level	3	Elective, any level	1
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Semester Total	15	Semester Total	14

**Total Hours**

**120**