

**Department of Physics & Engineering**  
**West Chester University of Pennsylvania**

**B.S. Physics Curriculum – Schedule for Graduate School Track & Applied Track**  
**Updated: June 2020**

Fall Semester 1

FYE	First Year Experience	4
MAT 161	Calculus I	4
WRT 120	Effective Writing I	3
CHE 103	General Chemistry I	3
CRL 103	Exper. Gen. Chem. I	1
<b>Total credits:</b>		<b>15</b>

Spring Semester 1

PHY 170	Physics I	4
MAT 162	Calculus II	4
WRT 2XX	Effective Writing II	3
CHE 104	General Chemistry II	3
CRL 104	Exper. Gen. Chem. II	1
<b>Total credits:</b>		<b>15</b>

Fall Semester 2

PHY 180	Physics II	4
MAT 261	Calculus III	4
MAT 321	Linear Algebra	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	1
<b>Total credits:</b>		<b>15</b>

Spring Semester 2

PHY 175	Computational Physics	3
PHY 240	Intro. to Modern Physics	3
MAT 343	Differential Equations	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
<b>Total credits:</b>		<b>15</b>

Fall Semester 3

PHY 300	Mechanics	3
PHY 370	Mathematical Physics	3
PHY 420	Quantum Mechanics – I	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
<b>Total credits:</b>		<b>15</b>

Spring Semester 3

PHY 350	Thermodynamics	3
PHY XXX	Physics Elective	3
PHY XXX	Physics Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
<b>Total credits:</b>		<b>15</b>

Fall Semester 4

PHY 310	Intermediate Physics Lab I	3
PHY 430	Electricity & Magnetism - I	3
PHY XXX	Physics Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
<b>Total credits:</b>		<b>15</b>

Spring Semester 4

PHY 320	Intermediate Physics Lab II	3
PHY XXX	Physics Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
<b>Total credits:</b>		<b>15</b>

All students must take:

- PHY core courses: PHY 170, 180, 175, 240, 300, 310, 320, 350, 370, 420, 430
- Three PHY electives numbered 300 or above. Eligible PHY Elective courses are:
  - PHY 330: Electronics, offered in Spring
  - PHY 390: Astrophysics, offered occasionally
  - PHY 410: Optics, offered in Fall
  - PHY 425: Quantum Mechanics II, offered every other Spring
  - PHY 435: Electricity & Magnetism II, offered every other Spring
  - PHY 480/1: Special Topics, offered occasionally in Spring

Recommended PHY XXX electives for students in the graduate school track: PHY 425 (QM-II) and PHY 435 (E&M-II)

Recommended PHY XXX electives for students in the applied track: PHY 330 (Electronics), PHY 410 (Optics)

Note:

- PHY courses numbered 300 or above must be completed with a grade of C or better
- Majors shall not be permitted more than one repeat of a Physics course
- Total number of credits in B.S. Physics Curriculum = 120