

Department of Physics & Engineering
West Chester University of Pennsylvania

B.S. Physics Curriculum – Schedule for Graduate School Track & Applied Track
Updated: March 2022

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
Total credits:		15

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
Total credits:		15

Fall Semester 2

PHY 180	Physics II	4
MAT 261	Calculus III	4
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	1
Total credits:		15

Spring Semester 2

PHY 240	Intro. to Modern Physics	3
PHY 275	Computational Physics	3
MAT 315	Dif. Eqns. & Lin. Algebra	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
Total credits:		15

Fall Semester 3

PHY 300	Mechanics	3
PHY 310	Intermediate Physics Lab	3
PHY 370	Mathematical Physics	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
Total credits:		15

Spring Semester 3

PHY 350	Thermodynamics	3
PHY 455	Advanced Physics Lab	3
PHY XXX	Physics Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
Total credits:		15

Fall Semester 4

PHY 420	Quantum Mechanics	3
PHY 430	Electricity & Magnetism	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
Total credits:		15

Spring Semester 4

PHY XXX	Physics Elective	3
PHY XXX	Physics Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
	Gen Ed / Free Elective	3
Total credits:		15

All students must take:

- PHY core courses: PHY 170, 180, 240, 275, 300, 310, 350, 370, 420, 430, 455
- Three PHY electives numbered 300 or above. Eligible PHY Elective courses are:
 - PHY 330: Electronics, offered in Spring every year
 - PHY 390: Astrophysics, offered in Spring occasionally
 - PHY 410: Optics, offered in Fall every year
 - PHY 425: Quantum Mechanics II, offered in Spring occasionally
 - PHY 435: Electricity & Magnetism II, offered in Spring occasionally
 - PHY 480/1: Special Topics, offered in Spring occasionally

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
- Students may complete MAT 311 and MAT 343 in place of MAT 315.
- Total number of credits in B.S. Physics Curriculum = 120