

NATIONAL INSTITUTE OF PHYSICS

College of Science
University of the Philippines

B.S. Physics Program

Effective: First Semester, A.Y. 2012 - 2013

First Year, First Semester		First Year, Second Semester	
Math 14 (Plane Trigonometry) ¹	3	Physics 101 (Fundamental Physics I)	4
Math 53 (Elementary Analysis I) ¹	5	Physics 101.1 (Fundamental Physics I Laboratory)	1
Geology 11 (Principles of Geology)	3	Math 54 (Elementary Analysis II) ¹	5
Geology 11.1 (Laboratory in Principles of Geology)	1	Chemistry 16 (General Chemistry I)	5
English 10 (College English)	3	Communication 3 (Practical Speech Fundamentals)	3
Physics 10 (Physics & Astronomy for Pedestrians)	3	PE	(2)
PE	(2)		
	18		18
Second Year, First Semester		Second Year, Second Semester	
Physics 102 (Fundamental Physics II)	4	Physics 103 (Fundamental Physics III)	4
Physics 102.1 (Fundamental Physics II Laboratory)	1	Physics 103.1 (Fundamental Physics III Laboratory)	1
Physics 111 (Mathematical Physics I)	3	Physics 112 (Mathematical Physics II)	3
Math 55 (Elementary Analysis III)	3	Math 121.1 (Elementary Differential Equations)	3
Chemistry 17 (General Chemistry II)	5	Biology 11 (Fundamentals of Biology I)	5
Philosophy 1 (Philosophical Analysis)	3	Kasaysayan 1 (Kasaysayan ng Pilipinas)	3
PE	(2)	PE	(2)
	19		19
Third Year, First Semester		Third Year, Second Semester	
Physics 104 (Modern Physics I)	4	App Physics 155 (Computer Methods in Physics I)	4
Physics 104.1 (Modern Physics I Laboratory)	1	App Physics 181 (Physical Electronics I)	4
Physics 113 (Mathematical Physics III)	3	Physics 122 (Theoretical Mechanics II)	3
Physics 121 (Theoretical Mechanics I)	3	Physics 132 (Electromagnetic Theory II)	3
Physics 131 (Electromagnetic Theory I)	3	Physics 141 (Quantum Physics I)	3
G.E. (Arts & Humanities - 1)	3		
	17		17
Fourth Year, First Semester		Fourth Year, Second Semester	
Physics 114 (Mathematical Physics IV)	3	Physics 151 (Statistical Physics I)	3
Physics 142 (Quantum Physics II)	3	Physics 180 (Nuclei & Particles)	3
Physics 165 (Optical Physics I)	3	Physics 192 (Experimental Physics II)	3
Physics 170 (Condensed Matter)	3	Physics/App Physics Elective 2	3-5
Physics 191 (Experimental Physics I)	5	GE (Social Science & Philosophy - 2)	3
Filipino 40 (Wika, Kultura at Lipunan)	3	NSTP	(3)
NSTP	(3)		15-17
	20		
Fifth Year, First Semester		Fifth Year, Second Semester	
Physics 152 (Statistical Physics II)	3	Physics 196 (Undergraduate Seminar)	1
Physics/App Physics Elective ²	3-5	Physics 200 (Undergraduate Thesis)	3
Physics 199 (Undergraduate Research)	3	Science/Math Elective ³	3-5
STS	3	GE (Arts & Humanities - 2)	3
G.E. (Arts & Humanities - 1)	3	GE (Social Science & Philosophy - 3)	3
		P.I. 100 (The Life and Works of Jose Rizal)	3
	15-17		16-18
Total Number of Units: 174-180			

¹ Math 14 and Math 53 are to be taken together provided the student passed the APE in Math 11. Otherwise the student must take Math 17 in the 1st year/1st semester (in place of Math 14 and Math 53); Math 53 in the 1st year/2nd semester (in place of Math 54); and Math 54 in the immediately following summer session.

² May be chosen from Physics 135, 161, 195 or App Physics courses.

³ May be chosen, upon the consent of the adviser, from courses in natural sciences or mathematics.

Note: As a requirement for graduation, all students are required to take (6) units in one of National Service Training Program (NSTP) components. ROTC and Civic Welfare Training Service are offered by UPD.