

APPLIED PHYSICS PROGRAM: FIRST AND SECOND YEARS

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	SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV
MATHEMATICS¹	MATH UN1101 (3)	MATH UN1102 (3)	APMA E2000 (4) and E2001 (0) either semester and ODE (3) ²	
PHYSICS (three tracks, choose one)	UN1401 (3) UN1601 (3.5) UN2801 (4.5)	UN1402 (3) UN1602 (3.5) UN2802 (4.5)	UN1403 (3) UN2601 (3.5) → Lab UN3081 (2)	→ Lab UN1494 (3)
CHEMISTRY/ BIOLOGY (choose one course)	CHEM UN1403 (3), or higher or BIOL UN2001 (4) or BIOL UN2005 (4), or higher			
UNIVERSITY WRITING	CC1010 (3) either semester			
REQUIRED NONTECHNICAL ELECTIVES			HUMA CC1001, COCI CC1101, or Global Core (3–4) HUMA UN1121 or UN1123 (3)	HUMA CC1002, COCI CC1102, or Global Core (3–4) ECON UN1105 (4) and UN1155 recitation (0)
REQUIRED TECH ELECTIVES	(3) Student's choice			
COMPUTER SCIENCE	ENGI E1006 (3) ³ any semester			
PHYSICAL EDUCATION	UN1001 (1)	UN1002 (1)		
THE ART OF ENGINEERING	ENGI E1102 (4) either semester			

¹ Students with advanced standing may start the calculus sequence at a higher level (see page 12 for placement), in which case students are suggested to add linear algebra in the first two years.

² Applied physics majors should satisfy their ODE requirement with the Mathematics Department (ordinarily MATH UN2030).

Students who take APMA E2101 prior to declaring their major in applied physics may use this course to satisfy their ODE requirement with the permission of the faculty adviser.

³ With permission of faculty adviser, students demonstrating familiarity with computational mathematics using Python may waive course requirement and use 3 credits for another technical course.

APPLIED PHYSICS: THIRD AND FOURTH YEARS

		SEMESTER V	SEMESTER VI	SEMESTER VII	SEMESTER VIII
REQUIRED COURSES		APPH E3200 (3) Mechanics MSAE E3111 (3) Thermodynamics APMA E3101 (3) Linear algebra APPH E4901 (1) Seminar	APPH E3100 (3) Intro. to quantum mechanics APPH E3300 (3) Applied electromagnetism APMA E3102 (3) Partial differential equations	APPH E4300 (3) Applied electrodynamics APPH E4100 (3) Quantum physics Course in first AP area (3) APPH E4903 (2) Seminar	Course in second AP area (3) APPH E4018 (2) Laboratory
ELECTIVES	TECH¹	3 points	3 points	2 points	9 points
	NONTECH OR TECH	3 points	3 points	3 points	3 points
TOTAL POINTS		16	15	16	17

¹ They must include at least 2 points of laboratory courses. If PHYS UN3081 is taken as part of the first two years of the program, these technical electives need not include laboratory courses. Technical electives must be at the 3000 level or above unless prior approval is obtained.