

Physics, B.S.

Dual Degree (Engineering) with Georgia Tech

2023–24 Catalog

This example plan is designed to provide a blueprint for students to complete their degrees within four years. It includes recommended sequences of courses. Individual plans will vary based on previously earned credit, such as Dual Enrollment and AP credit, as well as the student's academic goals. Students will work with an academic advisor to develop a more individualized plan to complete their degree.

This example four-year plan is applicable to students admitted during the 2023–24 academic year.

Total credits required: 120 credits

Required GPA for graduation: 2.0 (institutional)

Courses requiring a C or better are denoted with an asterisk (*). Courses only offered in the fall semester are denoted with a plus sign (+). Courses only offered in the spring semester are denoted with a double-plus sign (++).

Legend is available on the last page of this document.

Year 1							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
PHYS 0001	First-Year Academic Seminar	1		PHYS 2211 PHYS 2211L	Principles of Physics I & Lab (pre-reqs to PHYS 2212/2212L, 3001, and 3005)	4	D
ENGL 1101*	English Composition I (pre-req to ENGL 1102)	3	A	ENGL 1102	English Composition II	3	A
PHYS 1012	Techniques in Physics II	3	F	CHEM 1211K	Principles of Chemistry I & Lab (pre-req to CHEM 1212K)	4	F
MATH 1261*	Calculus I (pre-req to MATH 1262, MATH 2150, and PHYS 2211/2211L)	4	F	MATH 1262*	Calculus II (pre-req to MATH 2263, PHYS 2212/2212L, and PHYS 3005)	4	D
GC1Y 1000	Critical Thinking (pre-req to GC2Y 2000)	3	B				
Semester Hours		14		Semester Hours		15	
Summer	Summer is a good time to get ahead on required courses. Several core courses are offered online over the summer terms.						
Notes:	Area A and GC1Y 1000 must be completed by 30 earned hours. First-Year Academic Seminar is a graduation requirement and impacts a student's GPA; however, it does not count toward the minimum of 120 semester hours required for a degree.						

Year 2							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
PHYS 2920+	Sophomore Seminar	0	Major	MATH 4340	Differential Equations	3	Major
PHYS 2212 PHYS 2212L	Principles of Physics II & Lab (pre-reqs to PHYS 3010 and 3100)	4	F	MATH 2150	Linear Algebra (pre-req to PHYS 3321)	3	Major
PHYS 3001+	Statics (pre-req to PHYS 3002)	3	Major	PHYS 3002++	Dynamics	3	Major
MATH 2263*	Calculus III (pre-req to MATH 4340 and PHYS 3010, 3100, and 3321)	4	Major	PHYS 3005++	Mechanics	3	Major
CHEM 1212K	Principles of Chemistry II & Lab	4	F	GC2Y 2000	Global Perspectives	4	B
Semester Hours		15		Semester Hours		16	
Summer	<p>Students must complete a world language course at the 1002 level or higher. Complete the WebCAPE exam to determine placement for first course.</p> <p>Students who need to start at the 1001 level due to placement should take this course in the summer after Year 2. Alternatively, they may take a Core Humanities & Ethics or Social Sciences class in the summer after Year 2, and then take a 1001-level language class in the fall of Year 3.</p>						
Notes:	<p>GC2Y 2000 must be taken between 30–59 earned hours.</p> <p>Students must maintain a 2.0 GPA over the 44–59 hours used to satisfy Area F and major requirements.</p>						

Year 3							
Fall				Spring			
Course	Title	Hours	Area	Course	Title	Hours	Area
PHYS 3200+	Thermodynamics for Engineers	3	Major	PHYS 3321++	Introduction to Quantum Physics	3	Major
PHYS 3010+	Modern Physics (pre-req to PHYS 3321)	3	Major	ECON 2100 or ECON 2105 or ECON 2106	Economics and Society or Macroeconomics or Microeconomics	3	E
PHYS 3100+	Electricity and Magnetism	3	Major	Core Area C	Fine Arts (student's choice)	3	C
Core Area C	Humanities and Ethics (student's choice)	3	C	Core Area E	Social Science (student's choice)	3	E
Core Area E	Social Science (student's choice)	3	E	Lang 1002	World Language II (1002-level)	3	Foreign Lang
Semester Hours		15		Semester Hours		15	
Notes:	Apply to Georgia Tech in the fall. Years 4 and 5 will be completed at Georgia Tech as part of the Dual Degree Program. Students must complete a world language course at the 1002 level or higher. Complete the WebCAPE exam to determine placement for first course. Students who need to start at the 1001 level due to placement should take this course in the summer after Year 2. Or, they may take the language class in the fall of Year 3 and a core class in the summer after Year 2. General electives can be in any discipline and any level (1000–4999).						

Years 4 & 5 will be completed at Georgia Tech as part of the Dual Degree Program

Legend	
Area	This section of the plan references the area of the curriculum the course fulfills.
A	Core Area A: Essential Skills
B	Core Area B: Institutional Options
C	Core Area C: Humanities, Ethics, and Fine Arts
D	Core Area D: Science, Technology, and Math
E	Core Area E: Social Sciences
F	Core Area F: Major Directed Core Requirements
Major	Physics Major Requirements