

Physics, BS

Academic Plan: PHYS-BS
Program Code: 34031

This degree map is a term-by-term sample course schedule designed to assist you and your advisor in planning your 4-year academic path to graduation with a Physics Degree.

You and your advisor will use it, along with the program of study for your major (found in the [Lehman Bulletin](#) for the year of your major declaration) and Degree Works (degree audit system), to formulate your customized plan.

30

CUNY Common Core Credits

12

Lehman College Option Credits

60

Major Credits

18

Elective Credits

LEGEND:

Course Abbreviation

Credits

Class Name

Blue: Lehman Core Requirement (LCR)
Requirement fulfilled

Green: Major Requirement

Gold: Elective, Minor, or Certificate

- see footnote

Underlined information is hyperlinked

FRESHMAN

FALL

ENG 111 3 CR
English Composition I
Required Core – Communication

LCR 3 CR
Flexible Core – World Cultures and Global Issues

LCR 3 CR
Flexible Core – Individual and Society

MAT 171 and MAT 105 5 CR
Elements of Pre-Calculus and Immersive Algebra

Elective 3 CR
LEH 100 (recommended)
The Liberal Arts - Freshman Seminar

SPRING

ENG 121 3 CR
English Composition II
Required Core – Communication

LCR 3 CR
Flexible Core – Creative Expression

LCR 3 CR
Flexible Core -US Experience in its Diversity

MAT 175-LCR 4 CR
Calculus I
Required Core – Quantitative Skills

MAT 155 1 CR
Calculus I Lab

17 FALL CREDITS + 14 SPRING CREDITS = 31 CREDITS

SOPHOMOR

FALL

LCR 3 CR
Foreign Language I
Lehman College Option

LCR 3 CR
Flexible Core – Scientific World

MAT 176 4 CR
Calculus II

MAT 156 1 CR
Calculus II Lab

PHY 168^[3]-LCR 5 CR
Physics I for Scientists and Engineers
Required Core-Life and Physical Science

SPRING

LCR 3 CR
Foreign Language II
Lehman College Option

MAT 226 4 CR
Vector Calculus

PHY 169^[3] - LCR 5 CR
Physics II for Scientists and Engineers
Flexible Core – Any area^[1]

PHY 207 4 CR
Mathematics for the Physical Sciences

31 PRIOR CREDITS + 16 FALL CREDITS + 16 SPRING CREDITS = 63 CREDITS

JUNIOR

FALL

LCR	3 CR
<u>LEH 352, 353, 354, or 355</u> ^[2] <i>Lehman College Option</i>	
<u>PHY 241</u>	4 CR
Modern Physics	
<u>PHY 301</u>	4 CR
Intermediate Electricity and Magnetism	
<u>MAT 2##, 3##, 4##</u> ^[5]	3-4 CR
Additional Math courses	

SPRING

LCR	3 CR
<u>LEH 352, 353, 354, or 355</u> ^[2] <i>Lehman College Option</i>	
<u>AST or PHY 2##, 3##, 4##</u> ^[4]	3 CR
Major Elective	
<u>PHY 251</u>	2 CR
Modern Physics Lab	
<u>MAT 313 or MAT 323</u> or Elective ^[6]	4 CR
Elements of Linear Algebra or Ordinary Differential Equations	
Elective	3 CR

63 PRIOR CREDITS + 14 FALL CREDITS + 15 SPRING CREDITS = 92 CREDITS

SENIOR

FALL

<u>PHY 302</u>	4 CR
Intermediate Mechanics	
<u>PHY 307</u>	4 CR
Mathematical Physics	
Elective	3 CR
Elective	3 CR

SPRING

<u>AST or PHY 2## or 3## or 4 ##</u> ^[4]	3 CR
Major Elective	
<u>PHY 303</u>	4 CR
Thermodynamics and Statistical Mechanics	
<u>PHY 400</u>	4 CR
Introductory Quantum Mechanics	
Elective	3 CR

92 PRIOR CREDITS + 14 FALL CREDITS + 14 SPRING CREDITS = 120 CREDITS

[1] No more than two courses in one discipline may be used to satisfy Flexible Core requirements.

[2] These are variable topics courses, where each section covers a special topic. Take two courses with two different numbers. Pre-requisite: You must have achieved 60 credits and declared your major. Integration Courses: LEH 352: Studies in Literature, LEH 353: Studies in the Arts, LEH 354: Studies in Historical Studies, LEH 355: Studies in Philosophy, Theory & Abstract Thinking. (LEH 351: Studies in Science & Applied Perspectives, is NOT a College Option for this Major).

[3] With permission from the Chair students may take PHY 166, PHY 167 in place of PHY 168, PHY 169.

[4] 6 credits in at least two additional PHY or AST courses at the 200 level or above. With permission from the Chair one of these additional courses may be at the 100 level.

[5] 6 credits in at least two additional MAT courses at the 200 level or above.

[6] MAT 313 or MAT 323 is a corequisite for PHY 400

NOTE: Writing Intensive Sections: Complete 4 sections designated as writing-intensive, 3 prior to earning 60 credits and 1 following. These sections may be searched by class attribute and are offered in General Education, major, minor and elective courses.

See other degree maps.