

Macaulay Honors College

MHC Physics BS

Academic Plan: MHCPHY-BS
Program Code: 34252

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

9-18

Additional Macaulay Honors Requirements

12

Lehman College Option Credits

60

Major Credits

0-9

Elective Credits

LEGEND:

Course Abbreviation **Credits**

Class Name

Blue: Lehman Core Requirement (LCR) &
Macaulay Honors College Requirement
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

MHC 350 3 CR
The Arts in New York City
Fulfills *Flexible Core – Creative Expression*

LCR 3 CR
Flexible Core – World Cultures and Global Issues

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

Elective 3 CR

Note: Macaulay Honors Advisement^[7]

SPRING

MHC 351 3 CR
The Peopling of New York City
Fulfills *Flexible Core – US Experience in Its Diversity*

LCR 3 CR
Foreign Language I
College Option - Foreign Language

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

MAT 155 1 CR
Calculus I Lab

LSP ###/ MHC ###^[10] 3 CR
Select one LSP/MHC Seminar

Note: Macaulay Honors Advisement^[7]

17 FALL CREDITS + 14 SPRING CREDITS = 31 CREDITS

SOPHOMORE

FALL

MHC 352 3 CR
Science and Technology in New York City
Fulfills *Flexible Core – Scientific World*

LCR 3 CR
Foreign Language II
College Option - Foreign Language

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 Sciences

Note: Macaulay Honors Advisement^[7]

SPRING

ENG 121 3 CR
English Composition II
Required Core – Communication

MHC 353 3 CR
Shaping the Future of New York City
Fulfills *Flexible Core – Individual and Society*

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

Note: Macaulay Honors Advisement^[7]

31 PRIOR CREDITS + 16 FALL CREDITS + 19 SPRING CREDITS = 66 CREDITS

JUNIOR

FALL

LCR Foreign Language III <i>College Option - Foreign Language</i>	3 CR
<u>LSP ###/ MHC ###</u> ^[10] <i>Select one LSP/MHC Seminar</i>	3 CR
<u>PHY 241</u> Modern Physics	4 CR
<u>PHY 301</u> Intermediate Electricity and Magnetism	4 CR
<u>MAT 2##, 3##, 4##</u> ^[5] Additional Math courses	3-4 CR

Note: Additional Macaulay Requirements ^[8]

SPRING

Internship or Study Abroad or Elective ^[9]	3 CR
<u>LSP ###/ MHC ###</u> ^[10] <i>Select one LSP/MHC Seminar</i>	3 CR
<u>AST or PHY 2##, 3##, 4##</u> ^[4] Major Elective	3 CR
<u>PHY 251</u> Modern Physics Lab	2 CR
<u>MAT 313 or MAT 323</u> or Elective ^[6] Elements of Linear Algebra or Ordinary Differential Equations	4 CR

Note: Additional Macaulay Requirements ^[8]

66 PRIOR CREDITS + 17 FALL CREDITS + 15 SPRING CREDITS = 98 CREDITS

SENIOR

FALL

Senior Year Option 1 or 2 ^[11]	3-6 CR
LCR Foreign Language IV <i>College Option - Foreign Language</i>	3 CR
<u>PHY 302</u> Intermediate Mechanics	4 CR
<u>PHY 307</u> Mathematical Physics	4 CR

SPRING

Senior Year Option 1 or 2 ^[11]	3-6 CR
<u>AST or PHY 2## or 3## or 4 ##</u> ^[4] Major Elective	3 CR
<u>PHY 303</u> Thermodynamics and Statistical Mechanics	4 CR
<u>PHY 400</u> Introductory Quantum Mechanics	4 CR

99 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
- [7] Every Macaulay Honors student is required to meet with the Macaulay Honors Advisor prior to registration during their first four terms.
- [8] Every Macaulay Honors student is required to complete a minimum of 30 hours of community service by their senior year.
- [9] Every Macaulay Honors student is required to complete at least one (1) qualifying internship or study abroad experience. Students may fulfill this requirement with a paid, unpaid, and credit-bearing or non-credit bearing experience. In all instances, students must complete an MHC internship agreement form and subsequent internship evaluation, in order to be acknowledged for fulfilling this requirement.
- [10] Every Macaulay Honors student is required to complete nine (9) credits in Upper Level honors courses (MHC or LSP). These courses can be taken at the Macaulay Honors College, which may require an ePermit (See Advisor). They may also be taken on campus by enrolling in an LSP Seminar.
- [11] Macaulay Honors students may chose a Senior Option 1 or Senior Option 2 based on the following
- Senior Option 1
- Fall Semester: LSP ###/ MHC ### (select one LSP/MHC seminar)
- Spring Semester: Honors in Major (Where offered) or LSP 481: Honors Tutorial
- Senior Option 2
- Fall Semester: LSP ###/ MHC ### (select one LSP/MHC seminar) and MHC 355: Research Seminar (Part 1
- Spring Semester: MHC 355: Research Seminar (Part 2)

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.

***NOTE: Kindly speak with your Macaulay Honors advisor or Honors Program Director. For further information, kindly view the following link:**

<https://macaulay.cuny.edu/admissions/tuition-and-merit-scholarship/tuition-information/>

See other degree maps.