物理研究所碩士班

114 學年度

最低修業年限	一年
應修學分數	19 學分
應修(應選)課程及符合畢業資格之修課相關規定	1. 必修： 量子力學(一)、書報討論 4 次、學術研究倫理教育(依本校學生學術研究倫理教育課程實施辦法規定修課)、性別平等教育(依本校性別平等教育線上課程實施要點規定修課)。 2. 必選： (1) 量子力學(二)、電動力學(一)、古典力學、統計力學(一)、固態物理(一)、粒子物理(一)、高等量子力學中必選二科。 (2) 電動力學(二)、原子與分子物理(一)、統計力學(二)、固態物理(二)、高等固態物理(一)、量子場論(一)(二)、宇宙學簡介、生物物理學、半導體物理及元件(一)(二)、半導體製程技術、固態光學、物理光學中必選一科。
備註	1. 修習書報討論 4 次並及格。少於 4 學期畢業者不在此限，但其在學期間每學期必須依規定修習書報討論並及格。 2. 除非本所當學年度之必修或必選課程未開，或經課程委員會同意，否則不得至外系所修課。

物理研究所博士班

114 學年度

最低修業年限	二年
應修學分數	18 學分
直升博士生 應修學分數	36 學分(含直升前碩士班課程學分)
應修(應選)課程及符合畢業資格之修課相關規定	必修課程： 1. 量子力學(一)(二)：6 學分 2. 電動力學(一)：3 學分 3. 統計力學(一)：3 學分 4. 書報討論須修滿四學期：4 學分 5. 電動力學(二)及統計力學(二)中必選一科：3 學分 6. 在以下四項類別中，擇不同類別裡的兩個科目修習： (1) 固態物理(一)(二)或高等固態物理(一) (2) 量子場論(一)或粒子物理(一) (3) 原子與分子物理(一) (4) 本所同意之物理子領域課程 7. 學術研究倫理教育：依本校學生學術研究倫理教育課程實施辦法規定修課。 8. 性別平等教育：依本校性別平等教育線上課程實施要點規定修課。
備註	1. 進入本所博士班前所修之必修課程，申請後經本所核可者得免修之。(如欲申請抵免則按校方規定辦理) 2. 除非本所當學年度之必修或必選課程未開，或經課程委員會同意，否則不得至外系所修課。

Institute of Physics
Course Requirements for Master's Program

Academic Year 2025

Minimum Study Period	One year
Total Required Credits	19 credits
Required (required elective) courses and graduation requirements	1. Required courses: Quantum Mechanics (I), Four Seminar, Academic Research Ethics Education (In accordance with the NYCU Students' Academic and Research Ethics Education Program Implementation Rules.), Gender Equality Education (In accordance with the NYCU Implementing Guidelines for the Gender Equity Education Online Course). 2. Required elective courses: (1) Choose two from Quantum Mechanics (II), Electrodynamics (I), Classical Mechanics, Statistical Mechanics (I), Solid State Physics (I), **Particle Physics (I)**, Advanced Quantum Mechanics. (2) Choose one from Electrodynamics (II), Molecular Physics (I), Statistical Mechanics (II), Solid State Physics (II), Advanced Solid State Physics (I), Quantum Field Theory (I) (II), Introduction to Cosmology, Biophysics, Semiconductor Physics and Devices (I)(II), Semiconductor Process and Technology, Optical properties of solids, Physical Optics.
Note	1. Take four seminars, with all grades higher than the passing grade. Students whose study period is shorter than four semesters do not need to follow this regulation, but they should complete and pass the seminar for each semester during the master's program. 2. Unless the required or required elective courses are not offered by Institute of Physics in the current academic year or under the approval of the Curriculum Committee, students should not select courses outside of Institute of Physics.

Institute of Physics
Course Requirements for PhD Program

Academic Year 2025

Minimum Study Period	Two years
Total Required Credits	18 credits
Total Required Credits for Students with Direct Admission from Master's Program	36 credits (including credits earned during the master's program prior to direct admission)
Required (required elective) courses and graduation requirements	Required courses: 1. Quantum Mechanics (I) (II): 6 credits 2. Electrodynamics (I): 3 credits 3. Statistical Mechanics (I): 3 credits. 4. Seminar should be selected for four semesters: 4 credits. 5. Choose one from Electrodynamics (II) and Statistical Mechanics (II): 3 credits. 6. Choose two subjects from four different categories as follows: (1) Solid State Physics (I) (II) or Advanced Solid State Physics (I) (2) Quantum Field Theory (I) or Particle Physics (I) (3) Atomic and Molecular Physics (I) (4) Institute courses in a subfield of Physics that are approved by the Institute of Physics. 7. Academic Research Ethics Education: In accordance with the NYCU Students'

	Academic and Research Ethics Education Program Implementation Rules. 8. Gender Equality Education: In accordance with the NYCU Implementing Guidelines for the Gender Equity Education Online Course.
Note	1. Students can apply for course waivers for courses taken before admission to the PhD program. (Course waiver application must conform to related University bylaw.) 2. Unless the required or required elective courses are not offered by Institute of Physics in the current academic year or under the approval of the Curriculum Committee, students should not select courses outside of Institute of Physics.