

National Taiwan University

Ph.D. Program in Precision Health and Intelligent Medicine

Degree Regulations

- I. Study period: 2 to 7 years
- II. Minimum graduation credits:
 - General student: 15 credits (Thesis, Special Project, Seminar, and Internship excluded).
 - Direct admission to Ph.D. student: 27 credits. (Thesis, Special Project, Seminar, and Internship excluded).
- III. At least 9 credits of professional electives are required from the program (courses subject to advisor approval).
- IV. Online learning of Academic Ethics is a required course and does not count toward graduation credits.
- V. Credits from undergraduate courses do not fulfill the minimum graduation credit requirements.
- VI. For those enrolled in the 2022 academic year, 35% of English-taught courses should be registered for graduation requirements.

For those enrolled in the 2023 and 2024 academic year, 50% of English-taught courses should be registered for graduation requirements.

- VII. For any matters not covered, please refer to the regulations of Graduate School of Advanced Technology.

Required Curriculum

必修課程 Required Curriculum		
課程名稱 Course Title	學分 Credit Points	備註 Note
研發實習 Internship	3	必修，一學期 1 semester
專題討論 Seminar	1	必修，四學期 4 semesters
專題研究 Special Project	1	必修，在學必修 Every semester
博士論文 Thesis	0	必修，畢業學期當修 Semester of graduation
學術倫理 Academic Ethics	0	必修，不及格者不得申請學位考試 Students who fail the Academic Ethics are Not eligible to apply Defense
精準健康概論 Introduction to Precision Health	2	必修，一學期 1 semester

Required Competency I

必選修課程 I (三選一) Required Competency I (Choose one out of three)		
學位 Degree	課程名稱 Course Title	學分 Credit Points
碩博 Ms. Ph.D.	機器學習的生醫應用 Machine Learning in Biomedical Applications	3
	醫學影像處理 Medical Image Processing	3
	數位生醫訊號處理 Digital Engineering Signal and Systems	3

Required Competency II

必選修課程 II (二選一) Required Competency II (Choose one out of two)		
學位 Degree	課程名稱 Course Title	學分 Credit Points
碩博 Ms. Ph.D.	醫療器材臨床試驗 Medical Device Clinical Trials	2
	醫療器材商品化 Medical Device Commercialization and Entrepreneurship	2

Elective Curriculum

選修課程 Elective Curriculum		
學位 Degree	課程名稱 Course Title	學分 Credit Points
碩博 Ms. Ph.D.	Transcription addiction and Cancer	1
	DNA repair and DNA binders anti-tumoral drugs	1
	超穎介面與生醫應用 Metasurfaces and biomedical applications	2
	衍射光學與全像影像術 Holographic Imaging and Diffractive Optics	2
	醫學影像重建與分析 Medical Image Reconstruction and Analysis	2
	即時系統 Real-times Systems	2
	分子醫學特論 Special Topics in Molecular Medicine	2
	病毒與免疫治療於臨床上的應用和策略 Clinical application and strategy in cancer virotherapy and immunotherapy	2

選修課程 Elective Curriculum		
學位 Degree	課程名稱 Course Title	學分 Credit Points
碩博 Ms. Ph.D.	微生物與精準健康	2
	臺灣臨床試驗與精準醫療	2
	從精準醫學到精準健康：臺灣的展望	2
	精準腫瘤醫療與體外檢驗	2
	醫用超音波原理	2
	癌症免疫治療標誌開發特論	2
	奈米材料應用於生物醫學	2
	精準腫瘤醫學與組學技術	2
	精準健康大數據專題討論	2
	Omics data analysis	2
	雷射在臨床之應用	2
	智慧感測系統設計 Design for Smart Sensing Systems	3
	高效能巨量資料與人工智慧系統 High-Performance Big Data and Artificial Intelligence Systems	3
	健康宇宙之創新科技策略 Technology Innovation Strategy to HealthVerse	3
	精準醫療物聯網	3
	光學繞射造影方法與應用	3
	生物輸送	3
	生物力學分析	3
	癌症生物技術與實作 Biotechnology in Cancer Research with Laboratory	3

* 課程非於每學年開授，請依本校課程資訊與選課系統公告規劃選課。

Please refer to the current course catalog for the actual course offerings each semester.