

醫技系 博士班
113 學年度

最低修業年限	2 年
應修學分數	18 學分
逕博應修學分數	30 學分
應修（應選）課程及符合畢業資格之修課相關規定	<ol style="list-style-type: none"> 1. 必修科目：高等醫學生物技術學、生技醫藥產業、學術研究倫理。必修科目不及格應予重修，重修以一次為限，未獲通過者應予退學。 2. 必選科目：專題討論，博五(含)以上不需修專題討論。 3. 選修科目：高等蛋白質體學、VBA 程式設計 — 儀器分析數據的程式設計、免疫學、細胞治療導論、糖尿病與新陳代謝、醫學分子檢驗學、體細胞治療產品之品質與法規、細菌抗藥機制特論、醣質生物學特論、幹細胞生物學、生物資訊學、進階病毒學、腫瘤診斷與治療策略、寡核酸-PCR 原理及應用等、進階細胞生物學、進階分子生物學、新陳代謝、癌症與醣化修飾作用、人工輔助生殖技術講座、品管與法規、癌症細胞生物學、細菌之壓力反應、疾病及治療中免疫抑制受體的角色。 4. 選定實驗室後，博二以上每學年需選修「醫學生物技術學研究」。 5. 第二學年結束前需擇定本系大學部「實驗課程」為博士班教學課程。

Department of Biotechnology and Laboratory Science in Medicine,
Ph. D. Program
Academic Year 2023

Minimum Years of Study	2 years
Minimum Credit Requirements	18 credits
Minimum Credits for Students Transferred from MSc Program	30 credits
Curriculum and Regulations	<ol style="list-style-type: none"> 1. Required courses: Advanced Medical Biotechnology, Biotechnology in Biomedical Industry, Research Ethics (Total: 5 credits). Each course may be taken up to two times. (Those who do not meet this requirement will be discontinued from the program.) 2. Mandatory subject: Seminar (First to Fourth Year) 3. Elective courses: Advanced Proteomics, VBA Programming for Instrumental Analysis, Immunology, Advanced Molecular Biology, Molecular Diagnosis in Medicine, Rule and Regulation of Cell Therapy, Special Topics on Drug, Resistance in Special Topics on Glycobiology, Stem Cell Biology, Bioinformatics, Advance in Virology, Advanced Cell Biology, Oligonucleotide- Principle and Application of PCR, Diabetes Mellitus and Metabolism, Cancer Diagnostics and Therapeutic Landscape, Advanced Molecular Biology, Advanced Cell Biology, Global Health Challenges: Metabolic Abnormalities, Cancer & Glycosylation Alteration, Assisted Reproductive Technology (ART), Regulations and Quality Management in Medical Laboratory Sciences, Cancer Cell Biology, Stress Response of Bacteria, The Role of Inhibitory Receptors in Disease and Therapy, etc. 4. "Research in Biotechnology" credits are required for students starting from the second academic year 5. Before the end of the second academic year, students should choose an undergraduate laboratory course for teaching training.