

國立暨南國際大學應用化學系博士班必選修科目一覽表

National Chi Nan University

Department of Applied Chemistry Doctoral Program Curriculum

本表(113)學年度入學新生適用 Effective for students admitted in Fall,2024, and in spring2025

最低畢業學分：22學分；必修6學分，選修16學分。

Doctoral program requirements: a minimum of 22 required credits, including 6 credits in Department required courses and 16 credits in Department elective courses.

課程代號 Course Code	課程名稱(中文及英文) Course Name (Chinese and English)	學分數 Credits	修別 Course type (required/elective)	開課年級 Course availability	備註 Notes
249031	化學技術(上) Chemistry Skill (I)	1	必修 required	一上 Doctorate 1st Semester	
249032	化學技術(下) Chemistry Skill (II)	1	必修 required	一下 Doctorate 2nd Semester	
249001	書報討論一(上) Seminar I(1)	1	必修 required	一上 Doctorate 1st Semester	
249003	書報討論一(下) Seminar I(2)	1	必修 required	一下 Doctorate 2nd Semester	
249005	書報討論二(上) Seminar II(1)	1	必修 required	二上 Doctorate 3rd Semester	
249012	書報討論二(下) Seminar II(2)	1	必修 required	二下 Doctorate 4th Semester	
249020	高等分析化學(上) Advances in Analytical Chemistry (I)	3	選修 elective	一 Doctorate 1st/2nd Semester	至少修習12學分。 (take at least 12 credits)
249059	高等分析化學(下) Advances in Analytical Chemistry (II)	3	選修 elective	一 Doctorate 1st/2nd Semester	
249060	高等生物化學(上) Advances in Biochemistry (I)	3	選修 elective	一 Doctorate 1st/2nd Semester	
249010	高等生物化學(下) Advances in Biochemistry (II)	3	選修 elective	一 Doctorate 1st/2nd Semester	
249019	材料化學(上) Material Science (1)	3	選修 elective	一 Doctorate 1st/2nd Semester	

249009	材料化學(下) Material Science (2)	3	選elective	一 Doctorate 1st/2nd Semester	
249036	高等有機化學(I) Advances in Organic Chemistry(I)	3	選elective	一 Doctorate 1st/2nd Semester	
249037	高等有機化學(II) Advances in Organic Chemistry(II)	3	選elective	一 Doctorate 1st/2nd Semester	
249039	高等無機化學 Advances in Inorganic Chemistry	3	選elective	一 Doctorate 1st/2nd Semester	
249033	材料化學特論 Special Topics in Material Science	3	選elective	一 Doctorate 1st/2nd Semester	
249024	分析化學特論 Special Topics in Analytical Chemistry	3	選elective	一 Doctorate 1st/2nd Semester	
249021	研究方法(I) Graduate Research (I)	1	選elective	一上 Doctorate 1st Semester	修業期間每學期 需選修研究方法
249015	研究方法(II) Graduate Research (II)	1	選elective	一下 Doctorate 2nd Semester	
249022	研究方法(III) Graduate Research (III)	1	選elective	二上 Doctorate 3rd Semester	elective courses during doctorate periode, but not include in elective courses
249025	研究方法(IV) Graduate Research (IV)	1	選elective	二下 Doctorate 4th Semester	
249023	研究方法(V) Graduate Research (V)	1	選elective	三上 Doctorate 5th Semester	
249026	研究方法(VI) Graduate Research (VI)	1	選elective	三下 Doctorate 6th Semester	
249028	研究方法(VII) Graduate Research (VII)	1	選elective	四上 Doctorate 7th Semester	
249029	研究方法(VIII) Graduate Research(VIII)	1	選elective	四下 Doctorate 8th Semester	
249030	研究方法(IX) Graduate Research (IX)	1	選elective	五上 Doctorate 9th Semester	

249035	研究方法(X) Graduate Research (X)	1	選elective	五下 Doctorate 10 th Semester
249041	研究方法(XI) Graduate Research (XI)	1	選elective	六上 Doctorate 11th Semester
249042	研究方法(XII) Graduate Research (XII)	1	選elective	六下 Doctorate 12th Semester
249043	研究方法(XIII) Graduate Research (XIII)	1	選elective	七上 Doctorate 13th Semester
249046	研究方法(XIV) Graduate Research (XIV)	1	選elective	七下 Doctorate 14th Semester
249008	電分析化學(II) Electrochemical Analysis(II)	3	選elective	— Doctorate 1st/2nd Semester
249006	材料分析暨實驗 Experiments in Material Science	2	選elective	— Doctorate 1st/2nd Semester
249027	無機化學特論 Special topics on Inorganic Chemistry	3	選elective	— Doctorate 1st/2nd Semester
249040	結晶學 X-Ray Crystallography	3	選elective	— Doctorate 1st/2nd Semester
249044	有機合成特論(I) Special topics on organic Synthesis(I)	3	選elective	— Doctorate 1st/2nd Semester
249045	有機合成特論(II) Special topics on organic Synthesis(II)	3	選elective	— Doctorate 1st/2nd Semester
249007	生醫分析特論(I)Special topics in Biomedical Analysis	3	選elective	— Doctorate 1st/2nd Semester
249002	應用化學特論(I) Special topics on applied Chemistry(I)	3	選elective	— Doctorate 1st/2nd Semester
249004	應用化學特論(II) Special topics on applied Chemistry(II)	3	選elective	— Doctorate 1st/2nd Semester
249053	生命系統論文選讀 Paper reading ofbiological systems	1	選elective	— Doctorate 1st/2nd Semester
249052	高等細胞生物學 (I) Advanced CellBiology(I)	3	選elective	— Doctorate 1st/2nd Semester

249054	高等細胞生物學(二) Advanced Cell Biology(II)	3	選elective	— Doctorate 1st/2nd Semester	
249048	電子順磁共振光譜原理與運用 Electron Paramagnetic Resonance	3	選elective	— Doctorate 1st/2nd Semester	
249055	計算化學 Computational chemistry	3	選elective	— Doctorate 1st/2nd Semester	需同時修習計算化學實驗 requisite courses Computational Chemistry Lab at same time
249057	計算化學實驗 Computational Chemistry Lab	1	選elective	— Doctorate 1st/2nd Semester	需同時修習計算化學 requisite courses Computational Chemistry at same time

填表人：_____系(所)主管：_____院長：_____填表日期：_____