永續化學科技國際研究生博士學位學程

114 學年度

最低修業年限	2 年
應修學分數	20 學分
應修(應選)課程及符合畢業資格之修課相關規定	1.必修課程： (1)書報討論 2 學分 (2)專題演講 2 學分 (3)實驗室實習 0 學分 (4)中文課(一)(二) 0 學分(外籍生必修) (5)永續化學科技導論(一)(二) 6 學分 (6)進階書報討論 1 學分 2.必選課程： a. 化學組: 以下五選一或多 (1)進階有機化學 3 學分 (2)進階無機化學 3 學分 (3)進階分析化學 3 學分 (4)進階物理化學(一) 3 學分 (5)進階化學生物(一) 4 學分 b. 環工組: 由指導老師指定至少一門課 (1)粒狀污染物控制設備的理論與實務 3 學分 (2)高等氣膠測量 3 學分 (3)表面化學 3 學分 (4)表面分析 3 學分 (5)環境分析 3 學分 (6)環境化學 3 學分 (7)氣狀汙染物控制原理及實務 3 學分 (8)工業催化 3 學分
備註	博士生須於申請學位考試前完成線上「學術研究倫理教育」課程，課程總測驗成績達及格標準並提供證明文件，始得申請學位考試。

Taiwan International Graduate Program of Sustainable Chemical Science and Technology

Academic Year 2025

Minimum Term of Study	Two Years
Minimum Credits	20 Credits
Curriculum and Regulations	1.Mandatory： (1) Seminar (2 credits) (2) Colloquium (2 credits) (3) Lab Rotation (0 credit) (4) Elementary Chinese I, II (0 credit) (Requirements for International students) (5) Introduction to Sustainable Chemical Science and Technology I, II (6 credits)。 (6) Advanced Seminar (1 credit) 2.Elective Courses(Core): a. Chemistry Division: Select at least one option (1) Advanced Organic Chemistry (3 credits) (2) Advanced Inorganic Chemistry (3 credits) (3) Advanced Analytical Chemistry (3 credits) (4) Advanced Physical Chemistry I (3 credits) (5) Discussion in Advanced Chemical Biology I (4 credits) b. Environmental Engineering Division: At least one course assigned by advisor (1)Theory and Practice of Particulate Control Equipment (3 credits) (2)Advanced Aerosol Measurement (3 credits) (3)Surface Chemistry (3 credits) (4) Surface Analysis (3 credits) (5)Environmental Analysis (3 credits) (6)Environmental Chemistry (3 credits) (7)Theory and Practice of Gaseous Pollution Control Devices (3 credits) (8)Fundamental and Applications of Industrial Catalysis (3 credits)
Notes	Students should pass the on-line course “Academic Research Ethics Education”. The passing certificate for this course should be submitted to the Department office before applying for the degree exam.