

# 永續化學科技國際研究生博士學位學程

110 學年度

最低修業年限	三年
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	<p>1.必修課程：</p> <p>(1)書報討論 2 學分</p> <p>(2)專題演講 2 學分</p> <p>(3)實驗室實習 0 學分。 (第二學期為選修)</p> <p>(4)中文課(一)(二) 0 學分(外籍生必修)</p> <p>(5)永續化學科技導論(一)(二) 6 學分</p> <p>2.必選課程：</p> <p>a. 化學組：以下五選一或多</p> <p>(1)進階有機化學 3 學分</p> <p>(2)進階無機化學 3 學分</p> <p>(3)進階分析化學 3 學分</p> <p>(4)進階物理化學(一) 3 學分</p> <p>(5)進階化學生物(一) 4 學分</p> <p>b. 環工組：由指導老師指定至少一門課</p> <p>(1)粒狀污染物控制設備的理論與實務 3 學分</p> <p>(2)高等氣膠測量 3 學分</p> <p>(3)表面化學 3 學分</p> <p>(4)表面分析 3 學分</p> <p>(5)環境分析 3 學分</p> <p>(6)環境化學 3 學分</p> <p>(7)氣狀污染物控制原理及實務 3 學分</p> <p>(8)工業催化 3 學分</p>
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 2021

Minimum Term of Study	Three Years
Minimum Credits	20 Credits
Curriculum and Regulations	<p>1.Mandatory :</p> <ul style="list-style-type: none"> <li>(1) Seminar (2 credits)</li> <li>(2) Colloquium (2 credits)</li> <li>(3) Lab Rotation (0 credit) (elective course for the second semester)</li> <li>(4) Elementary Chinese I, II (0 credit) (Requirements for International students)</li> <li>(5) Introduction to Sustainable Chemical Science and Technology I, II (6 credits) °</li> </ul> <p>2.Elective Courses(Core):</p> <p>a. Chemistry Division: Select at least one option</p> <ul style="list-style-type: none"> <li>(1) Advanced Organic Chemistry (3 credits)</li> <li>(2) Advanced Inorganic Chemistry (3 credits)</li> <li>(3) Advanced Analytical Chemistry (3 credits)</li> <li>(4) Advanced Physical Chemistry I (3 credits)</li> <li>(5) Discussion in Advanced Chemical Biology I (4 credits)</li> </ul> <p>b. Environmental Engineering Division:</p> <p>At least one course assigned by advisor</p> <ul style="list-style-type: none"> <li>(1) Theory and Practice of Particulate Control Equipment (3 credits)</li> <li>(2) Advanced Aerosol Measurement (3 credits)</li> <li>(3) Surface Chemistry (3 credits)</li> <li>(4) Surface Analysis (3 credits)</li> <li>(5) Environmental Analysis (3 credits)</li> <li>(6) Environmental Chemistry (3 credits)</li> <li>(7) Theory and Practice of Gaseous Pollution Control Devices (3 credits)</li> <li>(8) Fundamental and Applications of Industrial Catalysis(3 credits)</li> </ul>
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.