

Curricular planning for Doctorate-degree program
Ph.D. Program in Biochemical and Environmental Technology, Department of Applied Chemistry, Chaoyang University of Technology
(applicable to day division students enrolled in 2023)

Academic Year	First Year						Second Year					
	First Semester			Second Semester			First Semester			Second Semester		
	Subject	Hours	Credit	Subject	Hours	Credit	Subject	Hours	Credit	Subject	Hours	Credit
Required Courses	生物醫學專論(一) Special Topics and Research in Biomedical Sciences (I)	3	3	生物醫學專論(二) Special Topics and Research in Biomedical Sciences (II)	3	3	生物醫學專論(三) Special Topics and Research in Biomedical Sciences (III)	3	3	生物醫學專論(四) Special Topics and Research in Biomedical Sciences (IV)	3	3
	化學技術專論(一) Special Topics and Research in Chemical Technology (I)	3	3	化學技術專論(二) Special Topics and Research in Chemical Technology (II)	3	3	化學技術專論(三) Special Topics and Research in Chemical Technology (III)	3	3	化學技術專論(四) Special Topics and Research in Chemical Technology (IV)	3	3
Subtotal		6	6		6	6		6	6		6	6
Elective Courses	高等有機光譜 Advanced Organic Spectroscopy	3	3	蛋白質體學 Proteomics	3	3	高等代謝工程 Higher Metabolic Engineering	3	3	高等生物統計 Advanced Biostatistics	3	3
	高等生物有機化學	3	3	高等中草藥生技 Advances in Herbal Biotechnology	3	3	高等分析化學 Advanced Analytical Chemistry	3	3	高等儀器分析 Advanced Instrumental Analysis	3	3
	進階細胞學技術 Cell Biology Technologies for Advanced Study	3	3	高等有機合成 Advanced Organic Synthesis	3	3	環境物理原理 Environmental Physics Principles	3	3	環境化學原理 Environmental Chemistry Principles	3	3
	高等科技寫作與溝通技巧 Advance Technical Writing and Communicating	3	3	高等藥用菇類化學研究 Advanced Research in Medicinal Mushrooms	3	3						
				高等生物化學 Advanced Biochemistry	3	3						
				空氣污染特論 Special Topics of Air Pollution	3	3						
				環境生物程序工程 Biological Processes of Environmental Engineering	3	3						
Subtotal		12	12		21	21		9	9		9	9
University Requirements												
Required Courses				8 Courses 24 Credits (只需修習12學分)								
Elective Courses				Minimum elective 12 Credits								
Recognition limit of credits provided by other departments				0 Credits								
Total Requirement				30 Credits 30 credits (incl. 6 credits on doctorate-degree seeking theses)								

一、全校性規定：學生需修習並通過「學術研究倫理教育」相關課程後，始得申請學位考試。

二、本系之規定：

- (一)本系博士生因修業需要，得經指導老師及系主任同意後，修習本系或環管系碩士班課程，並於修習通過後認計畢業學分。
- (二)本系博士班研究生需依指導教授所屬之研究領域，修習「生物醫學專論」或「化學技術專論」，共需修習4 學期。

一、University-level regulations: Students are required to take and pass “Ethics Education Course” before applying for the entrance exam.

二、Department regulations:

- (一)本系博士生因修業需要，得經指導老師及系主任同意後，修習本系或環管系碩士班課程，並於修習通過後認計畢業學分。
- (二)本系博士班研究生需依指導教授所屬之研究領域，修習「生物醫學專論」或「化學技術專論」，共需修習4 學期。