

國立中央大學永續與綠能科技研究學院永續綠能科技博士學位學程修業辦法  
(113學年度入學適用)

Regulation for Ph.D. Students of Sustainability in Green Energy Program  
at National Central University Graduate College of Sustainability and Green Energy  
(Applicable to students admitted in the 2024-2025 academic year)

113.08.26 學程會議通過

113.09.23 院務會議通過

113.11.21 管理委員會會議通過

Revised and approved in Academic Program Meeting of SAGE on August 26th, 2024

Revised and approved in College Affairs Meeting of SAGE on September 23rd, 2024

Filed by Management Committee Meeting of SAGE for reference on November 21st, 2024

- 第一條 本辦法依據「國家重點領域產學合作及人才培育創新條例」、本校「學則」及「博士班、碩士班研究生學位考試細則」及本院「研究生修業辦法」規定訂定之。
- Article 1 These regulations are formulated following the school's "Innovation Act for Industry-Academia Collaboration and Talent Cultivation in National Key Fields", "National Central University Study Regulations", "National Central University Regulations on Degree Examinations for Postgraduate Students," and "National Central University Graduate College of Sustainability and Green Energy Regulations on Study for Master and Doctorate Students."
- 第二條 修業年限：二至七年。
- Article 2 Years of Study: 2 to 7 years.
- 第三條 本學程博士班研究生(以下簡稱博士生)於畢業前須修滿課程至少18學分，其中本學院必修課程3學分，核心選修課程至少6學分、選修課程至少9學分。論文學分另計。本院「書報討論」為必修課程，不計學分，博士生需於畢業前修滿六學期，如有提早畢業者，須修足在學之學期數。核心選修學分如超修，則可計入選修課程學分。
- 修習本學程專業選修課程以外之學分，須經指導教授同意及本學程主任核准，方得承認為畢業學分。博士生各科目學期成績及學位考試成績均以一百分為滿分，七十分為及格；未達七十分者不給學分。必修科目不及格者，不得補考，應令重修。操行成績以六十分為及格。博士生申請學分抵免，依本學院研究生抵免學分規定辦理。
- Article 3 Before graduation, Ph.D. students in this program (hereinafter referred to as "Ph.D. students") must complete at least 18 course credits. This includes 3 credits from compulsory courses within the college, at least 6 credits from core courses, and at least 9 credits from elective courses. Thesis credits are counted separately.
- The college's "Seminar" course is a required, non-credit course. Ph.D. students must complete it for six semesters before graduation. If graduating early, students must complete it for the number of semesters they are enrolled. Any excess core elective credits may be counted toward elective course credits.
- Credits taken other than the elective courses of this program must be approved by the thesis advisor and the director of the program before they can be recognized as graduation credits. Each subject's semester and degree examination scores are based on 100 points as a full score and 70 points as a passing grade; those who do not reach 70 points will not be given credit. Those who fail the compulsory course are not allowed to make up the exams and should be

ordered to retake the course. A passing score of sixty points is considered a conduct score. Ph.D. students applying for credit exemption shall follow the college's graduate student credit exemption regulations.

第四條 入學後第一個月結束前，須選定論文指導教授並繳交指導教授確認單經本學程主任簽章存查。論文指導教授以本學程核心選修課之授課教師為原則。研究生論文主題超出本學程核心選修課之授課教師研究範圍時，得經學程主任同意聘請本學院專任或合聘教授、副教授或助理教授擔任指導教授或共同指導；博士生經指導教授同意後，可選定企業專家共同指導論文。  
更換指導教授，須簽署更換指導教授申請單，經前任、現任指導教授同意簽章，送本學程主任簽章存查。

Article 4 First semester after admission, the thesis advisor must be selected, and the confirmation slip must be signed by the thesis advisor and program director and submitted to the Office of Graduate College of Sustainability and Green Energy, Sustainability in Green Energy Program. The thesis advisor should be a full-time or joint full-time teacher of the Program. Ph.D. students can select corporate experts to co-supervise their theses with the consent of their supervisor. To change the advisor, an application form must be signed by both the previous and current advisors, sent to the program director for signature and record, and submitted to the Office of Graduate College of Sustainability and Green Energy, Sustainability in Green Energy Program.

第五條 博士生於入學後六學期內，完成博士候選人資格考試為原則。博士生資格考處理原則及國際學術論文認定原則另訂之，經本學程會議通過後實施。

Article 5 Ph.D. students are expected to complete the Ph.D. Qualifying Exam within six semesters after enrollment. The guidelines for the Ph.D. Qualifying Exam and the recognition of international academic papers are established separately and will be implemented upon approval by the academic program meeting.

第六條 博士生符合下列各款規定者，得申請博士學位考試：  
一、 修滿本學程應修科目及學分數。  
二、 通過第五條博士候選人資格考核。  
三、 發表兩篇與博士論文相關論文，並通過資格審查。  
四、 完成論文初稿，並經指導教授同意。  
本學程主任邀集本學程相關領域助理教授以上教師，召開會議審查前項各款事項，通過後送教務處複審，同意後辦理學位考試。

Article 6 Ph.D. students who meet the following requirements may apply for the Ph.D. degree examination:  
a. Completion of all required courses and credits in the program.  
b. Passing the Ph.D. Qualifying Exam as specified in Article 5.  
c. Publication of two research papers related to the doctoral dissertation and passing the qualification review.  
d. Completion of a draft dissertation, approved by the thesis advisor.  
The program director will convene a review meeting with faculty members (assistant professors or above) in relevant fields to assess the above requirements. Upon approval, the application will be submitted to the Office of Academic Affairs for final review. Once approved,

the student may proceed with the Ph.D. degree examination.

- 第 七 條      學位考試依照本校「博士班、碩士班研究生學位考試細則」辦理。  
Article 7      The degree examination is conducted in accordance with the university's "Regulations on Degree Examinations for Postgraduate Students."
- 第 八 條      學分抵免依照本院「研究生學分抵免辦法」辦理。  
Article 8      Credit exemption is handled in accordance with the "Course Credit Waiver Guidelines" of our school.
- 第 九 條      本辦法未盡事宜，依相關規定辦理。  
Article 9      If there are any matters not covered in these regulations, they shall be handled in accordance with the relevant regulations of the Ministry of Education and the university.
- 第 十 條      本辦法經學程會議及院務會議審議通過後，報管理委員會備查，修正時亦同。  
Article 10      These regulations are reviewed and approved by the Academic Program Meeting and the College Affairs Meeting; they will be reported to the Management Committee Meeting for reference. The same applies to revisions.

如中、英文兩個版本有任何抵觸或不相符之處，應以中文版本為準。

In the event of discrepancies between the English and Chinese versions, the Chinese version shall prevail.

# 國立中央大學永續與綠能科技研究學院

## 永續綠能科技博士學位學程修業辦法

附表(113學年度入學適用)

必修課程	書報討論	
	地球環境	
	博士論文	
核心選修	電力系統故障分析	
	電力電子電路分析與設計	
	IPCC 報告導讀	
	切換式電能轉換器	
	能源技術實作	
	智慧型控制系統設計與應用	
	電力系統工程	
	電力品質訊號處理	
	人工智慧 (SG5006)	
	物聯網技術	
	綠能總論	
	太陽能工程	
	氢能與燃料電池	
	能源資通訊	
選修課程	綠能選修	分散式網路
		氣候變遷風險與評估
		氣象資訊與風光電實務
		高等電機控制
		電力電子技術
		電動車整合系統
		碳封存場址調查與開發
		複合式海域能源概論
		鋰離子電池技術與材料
		儲能原理與技術
	學院選修	天然災害風險評估與調適
		水資源的開發與風險評估
		地熱資源調查與實作
		空氣污染監測與控制

\*部份課程非於每學年開授，請依本校課程資訊與選課系統公告規劃選課。

\*選修課程可跨學程選修（課號以 SA、SL、SD、SG 為原則，SA5004「書報討論（國際瞭望大師講座）」除外。）

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Compulsory Course	Seminar	
	Earth Environment	
	Dissertation	
Core Course	Power System Fault Analysis	
	Analysis and Design of Power Electronics	
	Introduction to the IPCC assessment reports	
	Switching Mode Power Converters	
	Research Project on Energy Technology	
	Design and Applications of Intelligent Control Systems	
	Power system engineering	
	Signal Processing of Power Quality Disturbances	
	Artificial Intelligence (SG5006)	
	Internet of Things Technology	
	General Introduction to Green Energy	
	Solar Energy Engineering	
	Hydrogen Energy and Fuel Cells	
	Energy Information and Communication Technology	
Elective Course	Green Energy Electives	Distributed Networks
		Climate Change Risk and Assessment
		Wind and Solar Energy Practice with Weather Data
		Advanced Electric Motor Drives and Control
		Power Electronics Technologies
		Electric Vehicle Integration System
		Assessment and Development of Carbon Storage Sites
		Introduction to Integrated Offshore Energy Development
		Lithium-ion battery technology and materials
		Theory and Technology of energy storage
	College Electives	Assessing and Adapting to Natural Hazard Risks
		Water Resource Development and Risk Assessment
		Geothermal Resource Survey and Implementation
		Air pollution monitoring and control

\* Some courses are not offered every academic year. Please refer to the university's course information and registration system announcements when planning your course selection. ◦

\* Elective courses can be taken across different programs (course codes SA, SL, SD, and SG in principle), except for SA5004 "Global Master Lecture Series."

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