

國立中興大學生命科學院生技產業創新研發與管理博士學位學程 研究生修業辦法

Regulations for study in the Doctoral Program in Biotechnology Industrial Management and Innovation,
College of Life Sciences, National Chung Hsing University

112 年 8 月 22 日學程會議通過
Enacted in the Committee Meeting on August 22, 2023
113 年 7 月 17 日學程會議修正通過
Amended in the Committee July 17, 2024
114 年 12 月 2 日學程會議修正通過
Amended in the Committee December 2, 2025

- 一. 名稱：本學程依教育部核定為「生技產業創新研發與管理博士學位學程」(以下簡稱本學程)，英文為“Doctoral Program in Biotechnology Industrial Management and Innovation”。

Article 1 This program is approved by the Ministry of Education as the Doctoral Program in Biotechnology Industrial Management and Innovation (hereinafter referred to as “DPBIMI”).

- 二. 入學考試及新生報到與註冊規定：悉依當年度國立中興大學招生簡章。

Article 2 Admission examinations, new student enrollment, and registration procedures shall be conducted in accordance with the admission brochure of National Chung Hsing University for the corresponding academic year.

- 三. 課程

Article 3 Curriculum

(一) 必修科目：

Required Courses：

1. 生技創業核心(Foundation of Entrepreneurship Management in Biotech Industry)：3 學分
Foundation of Entrepreneurship Management in Biotech Industry：3 credits
2. 生技創業實務(Practice on Entrepreneurship in Biotech Industry)：3 學分
Practice on Entrepreneurship in Biotech Industry：3 credits
3. 產業實作(Industrial Practice)：1 學分(2 學期)
Industrial Practice：1 credit (two semesters)
4. 產業經營管理見習(Industrial Business Administration Traineeship)：1 學分
Industrial Business Administration Traineeship：1 credit
5. 生技產業專題討論(Biotechnology Industrial Seminar)：1 學分(2 學期)
Biotechnology Industrial Seminar：1 credit (two semesters)
6. 博士論文(Dissertation)：12 學分
Dissertation：12 credits

(二) 選修科目：

Elective Courses：

1. 老化醫學(中西醫學)(Aging)：2 學分(2 學期)、生技醫藥品產業實務(Biotechnology and Pharmaceuticals Industrials Practice)：2 學分(2 學期)、生物科技研究產業的創新服務模式(Innovation of Service Provider in Biotech Research Industry)：1 學分(2 學期)、生物科學企業導論(Introduction of Bioscience Enterprise)：1 學分(2 學期)、進階組織工程學(Advanced Tissue Engineering)：2 學分(1 學期)。
Aging：2 credits (two semesters), Biotechnology and Pharmaceuticals Industrials Practice：2 credits (two semesters), Innovation of Service Provider in Biotech Research Industry：1 credit (two semesters), Introduction of Bioscience Enterprise：1 credit (two semesters), Advanced Tissue Engineering：2 credits (one semester).
2. 除本學程外，亦得修習生命科學院系所開設之生物醫學、產業相關課程(需經指導教授同意)。

With the approval of the academic advisor, students may also take biomedical- or industry-related courses offered by departments and institutes within the College of Life Sciences.

- 四. 抵免或免修學分

Article 4 Credit Waiver and Exemption

本學程新生在錄取前三年內，曾修習過相當於本學程必修科目，且成績達 70 分以上，且該

課程未計入各學制 (含學士班、碩士班、博士班)學位規定之畢業學分數，其所修讀科目之學分，符合下列條件者，可報請學程會議認定或經由考核後申請抵免或免修。

Newly admitted students who have completed courses equivalent to the required courses of DPBIMI within three years prior to admission, obtained a grade of 70 or above, and whose credits were not counted toward any degree requirements (bachelor's, master's, or doctoral levels), may apply for credit waiver or exemption subject to review and approval by the Committee or through an assessment process.

- (一) 科目名稱、內容及性質相同者 (需提原校成績證明)。

Courses with identical titles, contents, and academic nature (official transcripts required).

- (二) 科目名稱不同但性質相同者 (需提原校成績證明，並由該科教師認定之)。

Courses with different titles but similar content and academic nature (official transcripts required and subject to approval by the course instructor).

- (三) 學分數以多抵少者：經核定抵免後，以本學程該科目之學分數登記。

If the credited course has more credits than the required course, credits shall be recorded according to DPBIMI's course credit value.

- (四) 學分數以少抵多者：由學程會議核定應補修之學分數，俟修足後再行辦理。

If the credited course has fewer credits, the Committee shall determine additional credits to be completed.

- (五) 特殊案例，經專案簽請學程會議核可者。抵免學分需於入學後第一學期加、退選結束前提出申請，抵免之學分總數不得超過本學程畢業應修學分數 (不含論文學分) 二分之一。論文及專題討論不得抵免。

Special cases may be approved by the Committee through special review. Applications for credit waiver or exemption must be submitted before the end of the add/drop period of the first semester after enrollment. The total waived or exempted credits shall not exceed one-half of the required graduation credits (excluding dissertation credits). Dissertation and seminar credits are not eligible for waiver.

五. 修業年限、學分

Article 5 Duration of Study and Credit Requirements

- (一) 博士班修業期限以二至七年為限。

The doctoral program duration shall range from two to seven years.

- (二) 本學程博士班至少應修畢 18 學分，碩士逕修讀本學程至少應修畢 30 學分(含碩、博士班學分)，均包含本學程訂定之必修科目；博士班研究生論文 12 學分另計。

Doctoral students must complete at least 18 credits; students entering directly from a bachelor's degree must complete at least 30 credits (including master's and doctoral credits). Dissertation credits (12 credits) are calculated separately.

- (三) 博士生至少兩年於產業或法人單位實作研發並完成論文畢業。

Doctoral students must engage in at least two years of research and development practice in industry or legal entities and complete the dissertation for graduation.

六. 論文口試委員

Article 6 Dissertation Defense Committee

委員至少 5 名，各組包含成員如下：

The dissertation defense committee shall consist of at least five members, including:

- (一) 校內、外助理教授 (含) 以上或同職等專家學者。

Assistant Professors or above, or scholars of equivalent rank, from within or outside NCHU.

- (二) 合作企業代表。

Representatives from cooperating enterprises.

委員之聘請及更改由指導教授及本學程主任共同決定之。

The appointment and replacement of committee members shall be jointly determined by the advisor and the Director of DPBIMI.

七. 論文指導教授

Article 7 Advisor

- (一) 學生論文主指導教授由院內指導老師擔任，另可由符合本校「博士班章程」第六條規定之

合作企業專家擔任共同指導教授。

The primary advisor must be a faculty member from the College of Life Sciences, NCHU. A co-advisor may be appointed from cooperating enterprises in accordance with Article 6 of the NCHU Doctoral Program Regulations.

指導教授之職責為：

The advisor's responsibilities include:

1. 負責指導研究生之全程學業輔導，含選課、閱讀、研究、實驗、論文撰寫。

Providing comprehensive academic guidance, including course selection, research, experimentation, and dissertation writing.

2. 出席與所指導研究生有關之評審會議。

Attending evaluation and review meetings related to the supervised student.

(二) 應於博士一年級第一學年結束日前選定指導教授。

Students must select an advisor by the end of the first academic year of doctoral study.

(三) 本學程在選定指導教授後，原則上不宜更換指導教授。

In principle, advisors should not be changed once appointed.

八. 博士學位候選人資格考核

Article 8 Doctoral Candidacy Qualification Examination

(一) 應考條件

Eligibility

1. 申請人應修畢本學程必修科目且成績及格者。

Applicants must have completed all required courses with passing grades.

2. 博士學位候選人資格考核應在第三學年結束前完成，逕修讀本學程者亦同。

The qualification examination must be completed before the end of the third academic year.

(二) 資格考核方式

Methods of Qualification Examination

1. 考核方式以口試進行。申請人請依本校規定時限內提出並完成申請。

The Qualification Examination shall be conducted orally. Applicants must submit applications within the deadlines specified by NCHU.

2. 申請人於資格考核兩週前提出詳細研究計畫書，研究計畫書應由學生獨立撰寫，指導教授應從旁協助，但不可直接參與。

The research proposal must be submitted two weeks prior to the Qualification Examination. The proposal must be independently written by the student, with guidance but no direct involvement from the advisor.

3. 考試日期由考生與委員磋商，考核內容為研究生提出之學位論文計畫書，考試委員就論文有關問題進行口試，口試合格由本學程通知教務處登錄為博士學位候選人。

Examination dates shall be scheduled through consultation with committee members. Upon passing, DPBIMI shall notify the Office of Academic Affairs to register the student as a doctoral candidate.

九. 資格考核委員

Article 9 Qualification Examination Committee

委員會委員至少五人，指導教授為當然委員，其餘委員由學生商請指導教授籌組，委員應具備學位授予法認定可擔任學位考試委員之資格，研究生之配偶或三等親內之血親、姻親，不得擔任之。

The Committee shall consist of at least five members. The advisor shall serve as an ex officio member, while the remaining members shall be nominated by the student in consultation with the thesis advisor. All committee members shall meet the qualifications prescribed under the National Chung Hsing University Act for Conferring Degrees for serving as degree examination committee members. The spouse of the graduate student, as well as relatives by blood or marriage within the third degree of kinship, shall not be appointed as committee members.

十. 博士學位考試

Article 10 Doctoral Degree Examination

(一) 研究生符合下列各項規定，得申請博士學位考試：

Students who meet all of the following requirements may apply for the doctoral degree examination:

1. 修完最低修業年限。
Completion of the minimum study period.
2. 修畢本學程規定之最低畢業學分。
Completion of the minimum graduation credits required by DPBIMI.
3. 通過博士學位候選人資格考核。
Passing the doctoral candidacy qualification examination.
4. 本學程研究生之論文不受 Impact Factor 限制，惟須含有一篇以本學程名義發表於具審查制度之國際性學術期刊論文(為唯一第一作者且指導教授必須為通訊作者)，並完成下列其中一項。

The dissertation is not subject to Impact Factor restrictions; however, it must include at least one peer-reviewed international journal article published under the DPBIMI's affiliation, with the student as the sole first author and the advisor as the corresponding author, and satisfy one of the following:

- (1) 一篇以本學程名義發表於具審查制度之國際性學術期刊（為唯一第一作者）。
One peer-reviewed international journal article as sole first author.
- (2) 提交正式申請送件國內外之發明/新型專利申請書（研究生須為發明人之一）。
Submission of a domestic or international invention/utility patent application (student listed as an inventor).
- (3) 提交正式申請送件營運企劃書（研究生須為撰寫人，由學程會議審定之）。
Submission of an officially filed business operation plan (authored by the student and approved by the Program Meeting).
- (4) 與簽約產學合作單位共同擬定之專業報告書（研究生須為撰寫人，由學程會議審定之）。
Submission of a professional report jointly developed with an industry-academia partner (authored by the student and approved by the Committee Meeting).
5. 英語能力畢業標準：
English Proficiency Graduation Requirement (Applicants must satisfy at least one of the following criteria):
 - (1) 檢附全民英檢中高級(含以上)之同等英文檢定證明。
Proof of English proficiency equivalent to GEPT Intermediate-High level or above is required.
 - (2) 或發表 2 篇國際性學術期刊(為唯一第一作者)。

Alternative requirement: 2 publications in international journals (sole first author).

- (二) 符合條件之研究生得於當學期完成註冊選課後，於預定舉行論文口試日期二十五天前填寫申請書提出論文口試申請，經指導教授及學程主任核章後，送教務處請校長核准。

Eligible students may apply for the dissertation defense at least 25 days prior to the scheduled defense date after completing course registration for the semester. The application must be approved by the advisor and the Program Director and submitted to the Office of Academic Affairs for final approval by the NCHU President.

- (三) 博士學位考試委員五至九人，其中校外委員須三分之一以上，論文指導教授為當然委員但不得擔任召集人，委員名單提請委員會審查。委員應具備學位授予法認定可擔任學位考試委員之資格。研究生之配偶或三等親內之血親、姻親，不得擔任之。
- (四) The doctoral degree examination committee shall consist of five to nine members. At least one-third of the members must be external to the institution. The supervisor shall serve as an ex officio member but shall not act as the convener. The list of committee members shall be submitted to the committee for review. Committee members must possess the qualifications to serve as doctoral examination committee members as defined by the National Chung Hsing University Act for Conferring Degrees. The spouse and relatives by blood or marriage within the third degree of kinship of the graduate shall be disqualified from serving as committee members.
- (五) 成績及格者於辦理離校手續時，應備妥經指導教授及學位口試委員簽名並加蓋學位學程戳章之論文正本二冊繳交總圖書館，其中一冊留存學校典藏，另一冊留存學程辦公室。並應另外繳交與紙本論文內容相同之全文電子檔供學校典藏。成績不及格者，其論文考試結果通知書由學程逕送教務處登錄。修業年限尚未屆滿者，得於次學年或次學期辦理註冊並申請重考一

次，重考成績達七十分以上者，概以七十分計算，重考仍不及格者，應予退學。

Students who pass the doctoral degree examination must submit two bound copies of the approved dissertation, signed by the advisor and committee members and stamped with the DPBIMI seal, to NCHU Library—one for University archiving and one for DPBIMI Office—along with an electronic full-text version identical to the printed copy. Students who fail may retake the examination once if their study period has not expired. A retake score of 70 or above shall be recorded as 70. Students who fail the retake examination shall be dismissed from DPBIMI.