

**G-32 Doctoral Program in Biotechnology Industrial Management and Innovation**  
**College of Life Sciences, National Chung Hsing University**  
**Doctoral Student Graduation Requirements for the 2023 Academic Year**

Item	Note																		
I. Period of study: 1. Minimum period of study: 2 years 2. Maximum period of study: 7 years (excluding up to 2 years of suspension)	In-service students may apply for a one-year extension of study.																		
II. Minimum total credits required to graduate (excluding credits earned from physical education and national defense education courses) General students: <u>30</u> credits Master's direct-entry doctoral students: <u>42</u> credits Bachelor's direct-entry doctoral students: <u>  </u> credits Including the following two categories: 1. Courses (required and elective courses): General students: Minimum credits from required courses, <u>11</u> ; and minimum credits from elective courses, <u>7</u> . Master's direct-entry doctoral students: Minimum credits from required courses, <u>11</u> ; and minimum credits from elective courses, <u>19</u> . Bachelor's direct-entry doctoral students: Minimum credits from required courses, <u>  </u> ; and minimum credits from elective courses, <u>  </u> . 2. Dissertation writing: 12 credits.	Graduate students must have an academic and conduct grade of 70 to pass. Students who fail their conduct will be dismissed. Academic performance accounts for 50% of the graduation score. Master's direct-entry doctoral students may have up to 12 of the credits they earned from their master's program courses counted toward their graduation credits. Bachelor's direct-entry doctoral students may transfer up to half of the required graduation credits for doctoral programs (excluding credits earned from their graduation dissertation). <b>*Doctoral students are required to participate in at least one international academic conference before the dissertation defense.</b> <b>*Required + elective + dissertation = Minimum total credits required for graduation</b>																		
III. Transfer credits: Maximum <u>  </u> credits	According to NCHU Regulation for Credits Exemption, students should apply for credit exemption and complete the process within 2 weeks after the registration date.																		
IV. Inclusion of relevant undergraduate courses in graduate credits	The University's Regulations on Course Registration : The number of required course credits that graduate students shall earn per semester is determined by their advisors or department/graduate institute/degree program heads. If necessary, students may take relevant undergraduate courses with the approval of their course instructors. For credits from these courses to count toward graduation credits, approval from the advisors and relevant department/graduate institute/degree program meetings is required, with a maximum of 9 credits allowed.																		
V. Recognition of credits from other departments/graduate institutes: No restriction on the maximum number of credits	Inter-university course credits may also be included.																		
VI. Required courses and credits: A total of <u>23</u> credits	Students who fail the required courses shall retake them. Students who do not complete all the required courses may not graduate.																		
<table> <thead> <tr> <th style="text-align: left;">Course title</th> <th style="text-align: right;">Number of credits</th> </tr> </thead> <tbody> <tr> <td>1. Foundation of Entrepreneurship Management in Biotech Industry</td> <td style="text-align: right;">3</td> </tr> <tr> <td>2. Practice on Entrepreneurship in Biotech Industry</td> <td style="text-align: right;">3</td> </tr> <tr> <td>3. Industrial Business Administration Traineeship</td> <td style="text-align: right;">1</td> </tr> <tr> <td>4. Industrial Practice(I)</td> <td style="text-align: right;">1</td> </tr> <tr> <td>5. Industrial Practice(II)</td> <td style="text-align: right;">1</td> </tr> <tr> <td>6. Biotechnology Industrial Seminar(I)</td> <td style="text-align: right;">1</td> </tr> <tr> <td>7. Biotechnology Industrial Seminar(II)</td> <td style="text-align: right;">1</td> </tr> <tr> <td>8. Dissertation</td> <td style="text-align: right;">12</td> </tr> </tbody> </table>	Course title	Number of credits	1. Foundation of Entrepreneurship Management in Biotech Industry	3	2. Practice on Entrepreneurship in Biotech Industry	3	3. Industrial Business Administration Traineeship	1	4. Industrial Practice(I)	1	5. Industrial Practice(II)	1	6. Biotechnology Industrial Seminar(I)	1	7. Biotechnology Industrial Seminar(II)	1	8. Dissertation	12	
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VII. Foundation courses assigned by the department/graduate institute (not counted toward graduation credits): A total of <u>  </u> credits																			
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VIII. Doctoral student evaluation: Doctoral students shall, with the approval of their department/graduate institute chairs, find their advisors before the end of the first academic year.	
IX. Doctoral degree candidate qualification examination: Graduate students who have completed the minimum period of study, fulfilled all required courses and credits, and prepared the outline and basic content of their degree dissertations may apply for a doctoral degree candidate qualification examination. The students are deemed to have passed the examination if at least two-thirds of the examination committee members agree so.	Students who fail their qualification examinations may not apply for dissertation defense. Those who fail the qualification examinations twice will be dismissed.
X. Doctoral degree examination (dissertation defense): 1. Graduate students must obtain proof showing that they have completed academic ethics education courses prior to applying for their dissertation defense. Relevant qualifications are determined by the respective departments/graduate institutes/degree programs. 2. Students who have passed their doctoral degree candidate qualification examinations and who have completed a draft of their dissertations shall, after registering and enrolling for the semester, apply for the dissertation defense; they shall apply for the defense at least 20 days before the scheduled defense date. A passing score for the defense is 70.	Dissertation defense score accounts for 50% of the graduation score. Graduate students may complete self-directed learning through the Center for Taiwan Academic Research Ethics Education website and shall pass the final test to obtain certification. Departments/graduate institutes/degree programs may require students to take additional professional academic research ethics training courses in accordance with their own regulations. Students who failed their dissertation defense but have not yet reached the maximum study period may register for the following academic year or semester to retake the examination once. For retakes, a passing score of 70 or above will be recorded as 70. Those who fail their dissertation defense twice will be dismissed.
XI. Other: English proficiency graduation requirements: (Specify if the department/graduate institute has no set requirements) 1. 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) One peer-reviewed international journal article as sole first author. Submission of a domestic or international invention/utility patent application (student listed as an inventor). (2) Submission of an officially filed business operation plan (authored by the student and approved by the Program Meeting). (3) Submission of a professional report jointly developed with an industry-academia partner (authored by the student and approved by the Committee Meeting). 2. English Proficiency Graduation Requirement (Applicants must satisfy at least one of the following criteria): (1) Proof of English proficiency equivalent to GEPT Intermediate-High level or above is required. (2) Alternative requirement: 2 publications in international journals (sole first author).	The departments/graduate institutes are authorized to set their own English proficiency standards for graduate students in accordance with Article 2 of the University's Regulations on Graduation English Proficiency (approved in the 57 <sup>th</sup> Academic Affairs Meeting on March 26, 2009).

\* The required courses and credit requirements shall be filled out in accordance with the curriculum plans of the respective departments/graduate institutes each academic year. Related regulations can be accessed via: <http://www.oaa.nchu.edu.tw/rule01.htm>

\* Annual submissions are not required if there are no changes to courses or credits.

\* This form was revised according to the records of the 62<sup>nd</sup>, 70<sup>th</sup>, 71<sup>st</sup>, and 80<sup>th</sup> Academic Affairs Meetings.

Department/graduate institute/degree program processing clerk: \_\_\_\_\_ Signature and seal of the head of the department/graduate institute: \_\_\_\_\_ (Amended on 8 / 22 / 2023 (MM/DD/YYYY))