

長庚大學
生物醫學研究所
Graduate Institute of
Biomedical Sciences



2024
Manual for
International
Master of Science Students



Prepared by:
Course committee of GIBMS, CGU
2024/08/31

GIBMS
<https://www.cgu.edu.tw/gibms>



Contents

Mission, Scopes, and Infrastructure	1
Enrollment and Registration	1
Thesis Advisor	1
Courses and Credits	2
Guideline for Thesis Preparation.....	3
Requirements for Applying for Degree Examination	3
Requesting the Degree Examination	4
Details of the Degree Examination	4
Procedure for Graduation.....	6
List of Courses.....	7

Mission, Scopes, and Infrastructure

Name

As approved by the Ministry of Education, Taiwan, the official name of the institute is "The Graduate Institute of Biomedical Sciences" (hereinafter referred to as GIBMS), Chang Gung University (hereinafter referred to as CGU).

Mission

We are committed to providing a solid and foundation of training in biomedical sciences and beyond. We empower students to become excellent biomedical scientists in theory, leadership, innovation, and practice.

Organization

There is one director and various committees in our institute. The director is the representation of the institute. The director's responsibilities are to overlook the whole institute, coordinating the intra- and inter- committees. The committees are responsible for setting the guidelines for courses and developing the curriculum and details.

Amendments

All amendments of GIBMS became effective after a full review and approval by the Institute Committee, and announced by the GIBMS website (<http://gibms.cgu.edu.tw/>).

Enrollment and Registration

Dates for enrollment and registration will be stated in the acceptance letter.

Thesis Advisor

1. The thesis advisor must be a faculty member of GIBMS of CGU.

2. Responsibilities of the thesis advisor:

- (1) To guide the student in all academic matters, including course selection, paper assignment, experimental design and execution, and thesis writing.
- (2) To guide a student's extracurricular activities.
- (3) To attend all committee meetings on the research progress of the student.
- (4) To recommend committee members for student's evaluation.

Note 1. When a student needs to change advisor or the advisor is unable to continue his/her duty, a new advisor will be appointed with the approval by the original advisor, the newly assigned advisor and the Institute Director. The student needs to submit an application form to the GIBMS office for transfer.

Note 2. After approval by the Division Committee, an adjunct faculty member who is actively participating in teaching courses in his/her associated division will be qualified to serve as a thesis advisor.

Courses and Credits

1. Refer to the Curriculum for the international MS students for the required/elected courses.

2. Required courses:

- (1) Seminar: 4 credits required (one per semester).
- (2) MS thesis: 6 credits offered after completion and passing of the thesis defense.
- (3) Division required courses: courses can be CHOSEN from the MS Curriculum with the approval of the thesis advisor

3. Completion time, credit requirements and related regulations for graduation

- (1) MS students are expected to complete their studies in one to four years. Extensions may be granted according to Article 16 of the CGU Academic Regulations.
- (2) 24 credits (not including the thesis credits) are required for completion of the MS degree.
- (3) Passing score for all courses and final defense: 70 (in the 100-point system)

Guideline for Thesis Preparation

1. All MS students must complete the Advisor Agreement Form within one month after enrollment. (CGU-FLOW → 0600 教務處 → 038A 指導教授申請)
2. Thesis Advisory Committee:

All students must set up a thesis advisory committee. The committee comprises of 3 members; all members must hold a position equivalent to Assistant Professor/Researcher or above. Committee members are subject to future changes.
3. Thesis Proposal and Progress Reports:

After selecting a thesis advisor, students must complete their written and oral thesis proposal to a Thesis Advisory Committee before the end of the second semester (7/31 or 1/31) and complete a thesis progress report written and oral before the end of the third semester (1/31 or 7/31). The thesis adviser may request the student to present his/her thesis progress report at the fifth (or more) semester if the student cannot graduate at the end of the forth semester. The passing grade is 70.
4. In case the student cannot hold his/her thesis proposal or progress report on time, he/she should apply for postponing it in advance. The application will need to be approved by both the thesis adviser and the Director of GIBMS.

Requirements for Applying for Degree Examination

1. Completion of the 24 course units (including the required courses in the respective division).
2. Certificate of completing “Taiwan Academic Research Ethics Education” course.
3. Completion of the thesis requirements such as the thesis proposal, progress report, and participation in the annual thesis poster competition (at least once).

Requesting the Degree Examination

Please refer to the “Guidelines for Degree Examination” posted by Graduate Studies Section, Office of Academic Affairs.

1. Stage one (review all credits): (CGU-FLOW → 0600 教務處 → 011A 成績審核申請)
 - (1) Completion of the “Achievement Review Form”
 - (2) Application period: For the 1st semester, from August 1 to November 30. For the 2nd semester, from February 1 to April 30.
2. Stage two (oral examination): (CGU-FLOW → 0600 教務處 → 035A 學位考試申請)
 - (1) Completion of “Application Form for Degree Examination”
 - (2) Application period: For the 1st semester, from August 1 to December 31. For the 2nd semester, from February 1 to May 31.
 - (3) In addition to the guidelines and regulations laid out in the bulletin (Graduate Studies Section, Office of Academic Affairs), students have to complete the requests disclosed in the “Master’s Thesis Oral Defense Application Form” for the GIBMS and provide corresponding records. The graduating students must submit the original copies of papers to the department office and upload the copies to the 035A archive under the online approval process.
 - (4) Submit the examination date to the “University Affairs Information System” and print out the "Overall Score Sheet" and "Score Sheet".

Details of the Degree Examination

1. All examination-related regulations and implementations are in accordance with the "CGU Master’s and Doctoral Degree Examination Implementation Measures" issued by the Office of Academic Affairs.

2. Oral Examination Deadline:

The Degree Examination Application form needs to be completed by the candidate before taking the oral examination. The final Oral Examination evaluation form needs to be submitted to the Office of Academic Affairs before 31st July or 31st January.

3. The Thesis Originality Comparison form:

Candidates need to complete the “Thesis Originality Comparison” form before the Oral Examination and provide the form to the Examiners on the day of Oral Examination.

4. Examination Committee

- (1) In principle, the Oral Defense Committee shall consist of 3 Examiners (including External Examiners). However, 4 Examiners are needed if the candidate is supervised by 2 thesis advisors. The thesis advisor is the ex-officio member of the Oral Defense Committee, but cannot serve as the Committee convener.
- (2) The members of the Master’s degree Oral Defense Committee must hold a position equivalent to Assistant Professor/Researcher or above in the Universities or Research Institutes of Taiwan, ROC.
- (3) Once verified, the Oral Defense Committee cannot be changed without a proper reason. If there is a need to change the Oral Defense Committee, the 035B form (Application for the change of the Degree Examination) needs to be submitted.

5. Thesis

The thesis draft, following the approval of the thesis advisor, needs to be delivered to the Examiners two weeks before the examination.

6. Oral Defense

- (1) Candidates shall present their thesis and answer to Examiners’ questions at the designated location and time agreed by the Examiners.
- (2) The final grade of the oral defense shall be the average of the grades decided by all attending Examiners. A minimum final grade of 70 is needed to pass the oral defense. In addition, the oral defense is considered failed if 1/2 or more of the attending examiners give a grade of under 70.
- (3) The candidate who has failed the oral defense may retake the oral defense within 3 months during the remaining school years. The candidate shall be expelled from school should he/she fails the second oral defense.
- (4) Following the successful passing of the oral defense, the candidate shall obtain the recommendation letter form of the thesis advisor and the examiners’ approval form, and submit the final Thesis.

- (5) If there are any questions, please refer to the "Chang Gung University Master and Doctoral Degree Examination Implementation Measures".

Procedure for Graduation

1. Submitting a Master's thesis

- (1) The final version of the thesis must be revised in accordance with the suggestions given by the thesis committee.
- (2) Upon finalization, the full version of the thesis in accordance with the graduation thesis format has to be uploaded to the Chang Gung University Library > E-Resources > Thesis/Thesis. After the approval, the thesis is printed in the prescribed format in paperback. One copy is then sent to the GIBMS, one copy to the library, and one copy to the Office of Academic Affairs (this copy will be transferred to the National Central Library).

2. Leaving CGU

- (1) According to the items listed in "School Leaving Procedure Form" obtained from the University Affairs Information System, go to the relevant offices to complete and verify the procedures. CGU-FLOW → 0600 教務處 → 090A 畢業生離校手續單
- (2) Deadline for submitting "School Leaving Procedure Form" to the Office of Academic Affairs is August 15th for graduating in the first semester, or February 15th for the second semester.
- (3) The requirements of GIBMS for School Leaving Procedure are: (i) a completed "Application Form for Students Leaving the Laboratory of GIBMS" (please download the form from the GIBMS website), and (ii) a copy of thesis.

3. Upon completion of all requirements, the student is awarded a Master of Science degree in Biomedicine.

List of Courses

Master Curriculum (2024~2025) for international students Graduate Institute Of Biomedical Sciences, Chang Gung University 2024.05							
1. Students pursuing a master degree must fulfill a minimum 24 credits in course work and 6 credits for the master thesis. 2. Students may choose courses listed below and any English / EMI courses offered by GIBMS, MTM & MMEVI. 3. The 6 credits for the “Master Thesis” are given after passing the final defense and submitting the approved thesis. 4. See 2024 MS student manual for graduation requirements.							
General Required Courses	Course Code	Course Title	Credit	Year	Semester		Note
					Fall	Spring	
Required	BMM013	Seminar	4	1~2	√	√	Students must take all 4 semesters.
Elective Courses	BMD355	Special Topics in Biochemistry, Cell & Molecular Biology (1)	2	1	√		
	BMD254	Biological and Biomedical English Paper Writing Style	2	1	√		
	BMD671	Biochemistry and Molecular Biology	2	1	√		
	BMD601	Microbiology-Bacteriology	2	1	√		
	BMD602	Microbiology-Virology	2	1	√		
	BMD603	Microbiology-Parasitology	2	1	√		
	BMD652	Advanced Immunology	3	1	√		
	BMD704	Human Physiology	4	1	√		
	BMD202	Pharmacology	4	1	√		Jointly offered with School of Medicine.
	BMD241	Signal Transduction	2	1	√		
	BMD243	Special Topics in Circulation	3	1	√		
	BMD401	Advanced Technologies in Systems Biology	3	1	√		
	BMD453	Molecular Imaging	3	1	√		Offered bi-annually, starting in 2007
	BMD460	Vaccine Development	3	1	√		Offered bi-annually, starting in 2009
	BMD454	Special Topics in Emerging Viruses	2	1	√		
	BMD665	Special Topics in RNA Viruses	2	1	√		
	BMD466	Free Radical Biology & Medicine	2	1	√		
	BMD464	Translational Cancer Medicine	2	1	√		Offered jointly with the MS program. Prerequisite: Cell Biology or Molecular Biology
	BMD802	Special Topics in Natural Products	2	1	√		
	BMD811	Special Topics in Dosage Form Design	2	1	√		
	BMD812	Natural Products and the Balance of Thrombosis	2	1	√		
	BMD815	Special Topics in Advanced Medicinal Chemistry	2	2	√		
	BMD668	Animal Model for Studying Emerging Infectious Diseases	2	1	√		

BMD669	Genomic Data Science	2	1	√		
BMD670	Deep Learning with Python	2	1	√		
BMD403	Molecular & Cellular Biology	2	1	√		
BMD246	Advanced Biostatistics	2	1	√		
	Bioinformatics	2	1	√		
BMD524	Zoonotic Viral Infections	2	1	√		
BMD522	Molecular Virology Laboratory	2	1	√		Summer course, class limit: 20 students
	Protein Engineering Laboratory Course	1	1	√		Summer course, class limit: 30 students
BMD344	Special Topics in Membrane Trafficking and Exocytosis	2	1		√	
BMD672	Advanced Cell Biology	2	1		√	
BMD674	Cell Growth and Apoptosis	2	1		√	
BMD356	Special Topics in Biochemistry, Cell & Molecular Biology (2)	2	1		√	
BMD673	Advances in Immunology	2	1		√	
BMD660	Bacterial Pathogenesis	2	1		√	
BMD664	Writing Theses and Research Proposals	2	1		√	
BMD705	Medical Pharmacology	4	1		√	
BMD248	Special Topics in Pharmacology	2	1		√	Offered bi-annually, starting in 2023
BMD402	Scientific Integrity and Scientific Writing	2	2		√	
BMD461	Advanced Bacteriology	2	1		√	
BMD404	Technologies and Advances in Emerging Viral Infections	2	1		√	
BMD501	Special Topics in Multi-Omic Perspective of Biomedical Study	2	1		√	
BMD816	Special Topics in Pharmacogenomics	2	2		√	
BMD821	Special Topics in Industrial Pharmaceutical Biotechnology	2	1		√	
BMD817	Special Topics in Epigenetics	2	2		√	
BMD823	Industrial Development of Chinese Medicine and Herbal Drugs	2	2		√	
BMD675	Methodology of Molecular Virology	2	1		√	
BMD676	Anti-Virus Drug Development	2	1		√	
BMD677	Advanced Clinical Virology	2	1		√	
BMD678	Test Reagent Kit Development	2	1		√	
AIM104	Clinical Informatics	3	1		√	

Note: Subjects chosen by students must be approved and signed by the thesis supervisor.

Director of GIBMS: _____ **Head of the Course Committee:** _____

Appendix I. Forms for graduate students

Please refer to the link (www.gibms.com.tw) for detailed information.

Student related forms

-  [學生指導教授指導確認書 Advisor Agreement.doc](#)
-  [課程免修核定 Course Exemption Confirmation Form.doc](#)
-  [更換指導教授申請書 Change Advisor Application Form.doc](#)
-  [長庚大學生物醫學研究所教學助教評核作業細則-修改.doc](#)
- [所外專題演講認證表格 Approval Form for External Seminar Attendance](#)
-  [學生指導教授指導確認書 Advisor Agreement.odt](#)
-  [更換指導教授申請書 Change Advisor Application Form.odt](#)
-  [課程免修核定 Course Exemption Confirmation Form.odt](#)
-  [長庚大學生物醫學研究所教學助教評核作業細則-修改.odt](#)

Thesis and qualifying related forms

-  [論文報告申請書 Application Form.doc](#)
-  [評分表 Presentation_Score_Sheet.doc](#)
-  [論文報告申請書 Application Form.odt](#)
-  [評分表 Presentation Score Sheet.odt](#)

Seminar

-  [seminar score for teacher.doc](#)
-  [seminar-score.doc](#)
-  [seminar score for teacher.odt](#)
-  [seminar-score.odt](#)

畢業相關

- ♦ [Center for Taiwan Academic Research Ethics Education](#)

- ♦ [Master' s Thesis Oral Defense Application Form](#)
- ♦ [Lab Leaving Application Form](#)
- ♦ [Application for \(Mid-Term\) Graduation](#)

