

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	√		
	EMM002	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	√		

BMD523	Bioinformatics	2	1	√		
BMD524	Zoonotic Viral Infections	2	1	√		
BMD522	Molecular Virology Laboratory	2	1	√		Summer course, class limit: 20 students
BMM	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:** _____