

PROGRAMME CURRICULUM

MASTER OF SCIENCE IN APPLIED BIOMEDICINE

Core Courses

All students, regardless of specialisation, are required to complete the following 4 core courses (12 units):

SEMESTER	PROPOSED COURSE TITLE	COURSE CODE	UNITS
1	Advanced Agile Project Management for Biomedicine Practitioners	ABM5005	4
1	Advanced Biomedical Informatics	BMI5101B	4
2	Advanced Biostatistics for Research	ABM5002	2
2	Leadership in Biomedicine	ABM5001	2

Compulsory Courses by Specialisation

To graduate with a specialisation, students must complete 5 compulsory courses (20 units) specific to their chosen specialisation:

VACCINOLOGY AND IMMUNOTHERAPY SPECIALISATION

Compulsory Courses (20 units) — Choose any 5 courses

SEMESTER	PROPOSED COURSE TITLE	COURSE CODE	UNITS
1	Biomedical Innovation & Enterprise	ABM5003	4
1	Applied Immunology	ABM5101	4
1	Vaccine Development and its Modern Applications	ABM5102	4
1	Advanced Technologies in Immune Therapeutic Development	ABM5103	4
2	Microbiome-Aging-Immunity Crosstalk	ABM5104	4
2	Clinical Immunology and Immunotherapeutics	MDG5207	4

INFECTIOUS DISEASES MANAGEMENT SPECIALISATION

Compulsory Courses (20 units) — Choose any 5 courses*

SEMESTER	PROPOSED COURSE TITLE	COURSE CODE	UNITS
1	Biomedical Innovation & Enterprise	ABM5003	4
1	Vaccine Development and its Modern Applications	ABM5102	4
1	Drugs Used in Infectious Diseases	ABM5105	4
1	Infectious Diseases: Principles & Research Methods	MDG5246	4
2	One World, One Health: Ecosystems, Animals and Us	ABM5107	4
1	Ethics in Infectious Disease and Public Health	MDG5216	4
2	Control of Infectious Diseases*	SPH5201	4
2	Urban Outbreak Management*	SPH5205	4

*The two SPH courses (SPH5201 and SPH5205) together constitute one course option. Students may read only one of the two approved courses. Only one may count towards the compulsory specialisation requirements.

DRUG DISCOVERY AND DEVELOPMENT SPECIALISATION

Compulsory Courses (20 units) — Choose any 5 courses

SEMESTER	PROPOSED COURSE TITLE	COURSE CODE	UNITS
1	Biomedical Innovation & Enterprise	ABM5003	4
1	Drugs Used in Infectious Diseases	ABM5105	4
1	Advanced Topics in Pharmacology	MDG5204	4
2	Anticancer Therapeutics	ABM5106	4
2	Current Practices in Biotechnology	MDG5232	4
2	Current Topics in Drug Design and Development	MDG5233	4

Note: Do not select a course as an elective if you have already completed it as part of your specialisation's compulsory requirements.

General Elective Courses

Students from any specialisation or the non-specialisation path may select elective courses from the list below, unless the course has already been taken as part of their compulsory course requirements.

SEMESTER	PROPOSED COURSE TITLE	COURSE CODE	UNITS
1	Biomedical Innovation & Enterprise	ABM5003	4
1	Applied Immunology	ABM5101	4
1	Vaccine development and its modern applications	ABM5102	4
1	Advanced technologies in immune therapeutic development	ABM5103	4
1	Drugs Used in Infectious Diseases	ABM5105	4
1	Advanced Topics in Pharmacology	MDG5204	4
1	Advanced Topics in Signal Transduction	MDG5229	4
1	Infectious Diseases: Principles & Research Methods	MDG5246	4
2	Microbiome-Aging-Immunity crosstalk	ABM5104	4
2	Anticancer Therapeutics	ABM5106	4
2	One World, One Health: Ecosystems, Animals and Us	ABM5107	4
2	Techniques in Biomedical Research	MDG5102	4
2	Clinical Immunology and Immunotherapeutics	MDG5207	4
2	Current Practices in Biotechnology	MDG5232	4
2	Current Topics in Drug Design and Development	MDG5233	4
1 & 2	Capstone Project*	ABM5004	8

*The Capstone Project is a single 8-unit course that runs across Semesters 1 and 2. For students choosing to take on the Capstone Project, they are required to find a supervisor prior to their enrolment.