

FACULTY OF HEALTH SCIENCES
Bachelor's Degree Programmes

Bachelor of Science
• **Biomedical Sciences**

Year I	Credits
Compulsory Major	
HSCI1000 General Chemistry	3
HSCI1001 General Chemistry Lab	2
HSCI1002 Introduction to Biological Sciences	3
HSCI1003 General and Clinical Biochemistry	3
HSCI1004 Biochemistry Lab	1.5
Languages and Skills*	
English Language Courses or Free Elective	6
Chinese/Portuguese Language Course or Free Elective	3
Community and Peer Education	2
General Education	
GEST1003 Quantitative Reasoning for Health Sciences (Area of Science & Technology)	3
GELH1000 Chinese Language and Culture (Area of Literature & Humanities)	3
Free Elective	3
Total Credits:	32.5

Year II		Credits
Compulsory Major		
HSCI2000	Cell and Molecular Biology	3
HSCI2001	Cell and Molecular Biology Lab	1.5
HSCI2002	General and Clinical Microbiology	3
HSCI2003	Microbiology Lab	1.5
HSCI2004	Genetics and Epigenetics	3
HSCI2005	Biology of Development and Aging	3
HSCI2006	Physiology and Pathophysiology	3
Languages and Skills*		
	English Language Courses or Free Elective	3
CISC1000	Information Technology Fundamentals and Practices	3
Community and Peer Education		1
General Education		
	1 course from area of Global Awareness	3
	1 course from area of Literature & Humanities	3
Total Credits:		31
Year III		Credits
Compulsory Major		
HSCI3000	Neuroscience and Neurodegenerative Diseases	3
HSCI3001	Endocrinology and Metabolic Diseases	3
HSCI3002	Immunology and Infectious Diseases	3
HSCI3003	Biostatistics and Experimental Design	3
HSCI3004	Genomics and Bioinformatics	3
HSCI3005	Genetics, Genomics and Bioinformatics Lab	1.5
General Education		
GEGA1000	Macao and Chinese Civilization (Area of Global Awareness)	3
GESB1000	Ethics, Values, Law and Society (Area of Society & Behaviour)	3
	1 course from area of Society & Behaviour	3
	1 course from area of Science & Technology	3
Free Elective		3
Total Credits:		31.5

Year IV	Credits
<u>Specialization in Medicinal Science</u>	
Compulsory Major	
HSCI4000 Graduation Project I	3
HSCI4001 Cancer Biology and Therapy	3
HSCI4002 Stem Cell Biology and Regenerative Medicine	3
HSCI4005 Graduation Project II	3
HSCI4006 Public Health	3
HSCI4007 Translational Medicine	3
Required Elective	
<i>Students are required to take 2 courses from the following:</i>	6
HSCI4003 Pharmacology and Chemical Biology	
HSCI4004 Drug Discovery and Development	
HSCI4008 Introduction to Pharmacy and Pharmaceutical Analysis	
HSCI4009 Toxicology	
Free Elective	3
<u>Specialization in Pharmaceutical Science and Technology</u>	
Compulsory Major	
HSCI4000 Graduation Project I	3
HSCI4003 Pharmacology and Chemical Biology	3
HSCI4004 Drug Discovery and Development	3
HSCI4005 Graduation Project II	3
HSCI4008 Introduction to Pharmacy and Pharmaceutical Analysis	3
HSCI4009 Toxicology	3
Required Elective	
<i>Students are required to take 2 courses from the following:</i>	6
HSCI4001 Cancer Biology and Therapy	
HSCI4002 Stem Cell Biology and Regenerative Medicine	
HSCI4006 Public Health	
HSCI4007 Translational Medicine	
Free Elective	3
Total Credits:	27
GRAND TOTAL:	122

*Students who test out of some or all of the Languages and Skills course(s) are required to make up the credits by taking additional Free Elective(s). Please visit the Registry's webpage (<https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/languages-and-skills/>) for more details about the test out criteria.