

**Bachelor of Science in Biomedical Sciences**

<b>Year I</b>		<b>Credits</b>
Compulsory Major Courses		
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
Language and Skills Courses*		
EELC1001	Interactive English I	3
EELC1002	Interactive English II	3
1 Language and Skills course selected from the following:		3
CHLL1000	University Chinese	
PORT1000	Introductory Portuguese	
Community and Peer Education Courses		
CPED1000	Residential College Experiential Learning	1
CPED1001	Physical Education I	0.5
CPED1002	Physical Education II	0.5
CPED2000	Communication Skills and Leadership	1
General Education Courses		
GEST1003	Quantitative Reasoning for Health Sciences (Area of Science & Technology)	3
GESB1000	Ethics, Values, Law and Society (Area of Society & Behaviour)	3
GELH1000	Chinese Language and Culture (Area of Literature & Humanities)	3
<b>Total Credits:</b>		<b>33.5</b>

<b>Year II</b>		<b>Credits</b>
Compulsory Major Courses		
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	Development and Aging	3
HSCI2006	Physiology and Pathophysiology	3
Language and Skills Course*		
EELC1003	Academic English	3
General Education Courses		
1 course from area of Global Awareness		3
1 course from area of Science & Technology		3
1 course from area of Literature & Humanities		3
2 Free Elective Courses		6
<b>Total Credits:</b>		<b>36</b>

<b>Year III</b>		<b>Credits</b>
Compulsory Major Courses		
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 Laboratory	1.5
Language and Skills Course*		
CISC1000	Information Technology Fundamentals and Practices	3
General Education Course		
GEA1000	Macao and Chinese Civilization (Area of Global Awareness)	3
General Education Course		
1 course from area of Society & Behaviour		3
3 Free Elective Courses		9
<b>Total Credits:</b>		<b>34.5</b>

Year IV	Credits
<b><u>Biomedical Stream</u></b>	
Compulsory Major Courses	
HSCI4000    Final Year Project I	3
HSCI4001    Cancer Biology and Therapy	3
HSCI4002    Stem Cell Biology and Regenerative Medicine	3
HSCI4005    Final Year Project II	3
HSCI4006    Public Health	3
HSCI4007    Translational Medicine	3
2 Required Elective Courses selected from the following:	6
HSCI4003    Pharmacology and Chemical Biology	
HSCI4004    Drug Discovery and Development	
HSCI4008    Introduction to Pharmacy and Pharmaceutical Analysis	
HSCI4009    Drug Toxicology	
<b><u>Pharmaceutical Stream</u></b>	
Compulsory Major Courses	
HSCI4000    Final Year Project I	3
HSCI4003    Pharmacology and Chemical Biology	3
HSCI4004    Drug Discovery and Development	3
HSCI4005    Final Year Project II	3
HSCI4008    Introduction to Pharmacy and Pharmaceutical Analysis	3
HSCI4009    Drug Toxicology	3
2 Required Elective Courses selected from the following:	6
HSCI4001    Cancer Biology and Therapy	
HSCI4002    Stem Cell Biology and Regenerative Medicine	
HSCI4006    Public Health	
HSCI4007    Translational Medicine	
2 Free Elective Courses for both <u>Biomedical Stream</u> and <u>Pharmaceutical Stream</u>	6
<b>Total Credits:</b>	<b>30</b>

\*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 REG's webpage ([https://reg.umac.mo/current-students/1718model/lang\\_skills/](https://reg.umac.mo/current-students/1718model/lang_skills/)) for more details about the test out criteria.