

**Bachelor's Degree Programme****Bachelor of Science in Biomedical Sciences**

<b>Year I</b>		<b>Credits</b>
Compulsory Major Courses		
BIOM110	General Chemistry	3
BIOM111	General Chemistry Lab	2
BIOM112	Introduction to Biological Sciences	3
BIOM120	General and Clinical Biochemistry	3
BIOM121	Biochemistry Lab	1.5
Language and Skills Courses*		
EELC110	Interactive English I	3
EELC120	Interactive English II	3
1 Language and Skills course selected from the following:		3
CHNB100	Chinese Language	
PORT113	Portuguese Language	
Community and Peer Education Courses		
CPED100	Residential College Experiential Learning	1
CPED101	Physical Education I	0.5
CPED102	Physical Education II	0.5
CPED200	Communication Skills and Leadership	1
General Education Courses		
GEST003	Quantitative Reasoning for Health Sciences (Area of Science & Technology)	3
GESB000	Ethics, Values, Law and Society (Area of Society & Behaviour)	3
GELH001	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		
BIOM210	Cell and Molecular Biology	3
BIOM211	Cell and Molecular Biology Lab	1.5
BIOM212	General and Clinical Microbiology	3
BIOM213	Microbiology Lab	1.5
BIOM220	Genetics and Epigenetics	3

BIOM221	Development and Aging	3
BIOM222	Physiology and Pathophysiology	3
Language and Skills Course*		
EELC130	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		
BIOM310	Neuroscience and Neurodegenerative Diseases	3
BIOM311	Endocrinology and Metabolic Diseases	3
BIOM312	Immunology and Infectious Diseases	3
BIOM320	Biostatistics and Experimental Design	3
BIOM321	Genomics and Bioinformatics	3
BIOM322	Genetics, Genomics and Bioinformatics Laboratory	1.5
Language and Skills Course*		
CISB113	Information Technology Fundamentals and Practices	3
General Education Course		
GEA001	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	
BIOM410      Final Year Project I	3
BIOM420      Final Year Project II	3
BIOM411      Cancer Biology and Therapy	3
BIOM412      Stem Cell Biology and Regenerative Medicine	3
BIOM421      Public Health	3
BIOM422      Translational Medicine	3
1 Required Elective Course selected from the following:	3
BIOM413      Pharmacology and Chemical Biology	
BIOM414      Drug Discovery and Development	
1 Required Elective Course selected from the following:	3
BIOM423      Introduction to Pharmacy and Pharmaceutical Analysis	
BIOM424      Drug Toxicology	
<b><u>Pharmaceutical Stream</u></b>	
Compulsory Major Courses	
BIOM410      Final Year Project I	3
BIOM420      Final Year Project II	3
BIOM413      Pharmacology and Chemical Biology	3
BIOM414      Drug Discovery and Development	3
BIOM423      Introduction to Pharmacy and Pharmaceutical Analysis	3
BIOM424      Drug Toxicology	3
1 Required Elective Course selected from the following:	3
BIOM411      Cancer Biology and Therapy	
BIOM412      Stem Cell Biology and Regenerative Medicine	
1 Required Elective Course selected from the following:	3
BIOM421      Public Health	
BIOM422      Translational Medicine	
2 Free Elective Courses for both <u>Biomedical Stream</u> & <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.