

**For students admitted from academic year 2020/2021 onwards (B-C0-XXXX-X students)  
Bachelor of Science in Business Intelligence and Data Analytics -BIA19**

Updated on 24/05/2021

Students are strongly advised to check the enrolment records each semester in order to secure the graduation requirement has been fulfilled. You may print out this study plan and cross-check with your enrolment records. Should you have any doubts on the below study plan, please approach the Department of Accounting and Information Management.

**First Year - UF1 (2020/2021)**

	Course Code	Course Title	Credit Units	Course Type
1st Semester	BECO1000	Principles of Microeconomics	3	CM
		<b>1 "Chinese Language / Portuguese Language" Course *</b>	3	CM / FE
	CHLL1000	University Chinese		
	PORT1000	Portuguese Language I – Introductory Portuguese		
		1 Free Elective Course		
	CPED1000	Residential College Experiential Learning (Year course)	1	CM
	CPED1001	Physical Education I	0.5	CM
	CPED1003	<b>Communication Skills &amp; Leadership (Semester course)**</b>	1	CM
		<b>1 "English Language" Course***</b>	3	CM / FE
	EELC1001	Interactive English I		
	EELC1002	Interactive English II		
	EELC1003	Academic English		
		1 Free Elective Course		
GEST1001	Quantitative Reasoning for Business	3	GE	
MGMT1000	Principles of Business Management	3	CM	
2nd Semester	ACCT1000	Principles of Financial Accounting	3	CM
	CISC1000	<b>"Information Technology" Course****</b>	3	CM
		Information Technology Fundamentals and Practices		
	CPED1002	Physical Education II	0.5	CM
		<b>1 "English Language" Course***</b>	3	CM / FE
	EELC1002	Interactive English II		
	EELC1003	Academic English		
		1 Free Elective Course		
ISOM1005	Introduction to Business Intelligence	3	CM	
	1 General Education Course	3	GE	
		<b>33</b>		

**Second Year - UF2 (2021/2022)**

	Course Code	Course Title	Credit Units	Course Type
1st Semester		<b>1 "English Language" Course***</b>	3	CM / FE
	EELC1003	Academic English		
		1 Free Elective Course		
	FINC2000	Financial Management	3	CM
	ISOM2007	Programming for Business Analytics	3	CM
	ISOM2002	Statistics and Data Analysis	3	CM
	ISOM3000	Database Management	3	CM
		1 General Education Course	3	GE
2nd Semester	ISOM3016	Computer Networking for Business	3	CM
	ISOM3028	Advanced Computer Programming	3	CM
	MKTG2000	Principles of Marketing	3	CM
		1 General Education Course	3	GE
		1 Required Elective From List 1 @	3	RE
		<b>33</b>		

**Third Year - UF3 (2022/2023)**

	Course Code	Course Title	Credit Units	Course Type
1st Semester	ISOM3015	Big Data Management	3	CM
	ISOM4005	Business Project Management	3	CM
	ISOM3035	Operations Management	3	CM
	ISOM3030	Quantitative Decision Analysis	3	CM
		1 Free Elective Course	3	FE
2nd Semester	ISOM3018	Business Data Mining and Visualization	3	CM
	ISOM3036	Cyber Security and Blockchain	3	CM
		1 Required Elective From List 2 @	3	RE
		1 General Education Course	3	GE
	1 General Education Course	3	GE	
		<b>30</b>		

#### Fourth Year - UF4 (2023/2024)

	Course Code	Course Title	Credit Units	Course Type
1st Semester	ISOM4008	Machine Learning for Business Intelligence	3	CM
	ISOM3031	Forecasting Models in Business	3	CM
		1 General Education Course	3	GE
		1 Free Elective Course	3	FE
2nd Semester	ISOM4007	Graduation Project	3	CM
		1 Required Elective From List 2 @	3	RE
		1 General Education Course	3	GE
		1 Free Elective Course	3	FE
			<b>24</b>	

Note: Students are expected to complete 120 credits in order to graduate.

#### @ One course (3 credits) selected from Required Electives List 1

Students in Year 2 select one from the following:

ISOM3002	Analysis and Design of Information Systems
ISOM2006	E-Commerce and M-Commerce Strategies

#### @ Two course (6 credits) selected from Required Electives List 2

Students in Year 3 & Year 4 select two from the following:

ISOM3011	Mobile Application Development
ISOM3012	Website Design and Internet Business Applications
ISOM3014	Advanced Computer Networking for Business
ISOM3025	Business Modeling and Simulation
ISOM3037	Internet of Things and Cloud Computing

Students are required to take GE courses as follows in order to graduate:

Global Awareness	GEGA1000 – Macao and Chinese Civilization (Compulsory)
	1 course from the list other than GEGA1000
Literature and Humanities	GELH1000 – Chinese Language and Culture (Compulsory)
	1 course from the list other than GELH1000
Science and Technology	GEST1001 – Quantitative Reasoning for Business (Compulsory)
	1 course from the list other than GEST1001
Society and Behaviour	GESB1000 – Ethics, Values, Law and Society (Compulsory)
	1 course from the list other than GESB1000 (GESB1001/1002/1003)

\* Students can test out of the Chinese and/or Portuguese language course(s) if they obtain certain qualifications and should enroll course as follows:

- Test out **EITHER** Chinese Language Course **OR** Portuguese Language Course : One 3-credit free elective in the first semester of first year of study
- Test out **NEITHER** Chinese Language Course **NOR** Portuguese Language Course : CHLL1000 **OR** PORT1000 in the first semester of first year of study

\*\* CPED1003 consists of 2 components: Online Lectures, plus Communication and Leadership Activities.

This course can be studied and completed in any year level, and enrollment record will be shown after course completion.

\*\*\* Students can test out of some or all of the 3 English language courses but still are required to take English courses should enroll course as follow:

- Placement level "IE1": EELC1001 + EELC1002 + EELC1003
- Placement level "IE2": EELC1002 + EELC1003 + One 3-credit free elective course
- Placement level "AE": EELC1003 + Two 3-credit free elective courses
- None of the above : Three 3-credit free elective courses

\*\*\*\* Students **CANNOT** test out of the IT course. They are required to take the IT course and complete the test online within the semester.

If a student successfully passes the online test, he/she will get a pass grade. Otherwise, he/she will be required to retake the test within the semester or retake the course in the following semester(s).

Test out information: [https://reg.umac.mo/current-students/ugmodel/lang\\_skills/](https://reg.umac.mo/current-students/ugmodel/lang_skills/)