

## Course outlines

### Year 1 of 4-First Semester

Grouping	Course code	Course Title	Credit Hours
General studies courses	GSS 101	Use of English & Library Studies	2
	GSS 111	Introduction to Computer Studies	2
Core Courses	MAB 101	General Oceanography I	2
	MAB 121	Water Survival I	2
Electives	BIO 101	General Biology I	3
	BIO 107	General Practical Biology I	1
	CHM 101	General Chemistry I	3
	CHM 107	Practical Chemistry I	1
	MTH 101	Algebra & Trigonometry	3
	PHY 101	General Physics 1	3
	PHY 181	General Physics laboratory I	1
<b>Total Credit Hours</b>			<b>23</b>

### Year 1 of 4-Second Semester

Grouping	Course code	Course Title	Credit Hours
General studies courses	GSS 102	Use of English II	2
	GSS 114	Computer applications	2
	GSS 122	History and Philosophy of Science	2
Core Courses	MAB 101	General Oceanography II	2
Electives	BIO 102	General Biology II	3
	BIO 108	General Practical Biology I	1
	CHM 102	General Chemistry II	3

	CHM 108	Practical Chemistry II	1
	MTH 112	Coordinate Geometry and Calculus	3
	PHY 102	General Physics II	3
	PHY 182	General Physics laboratory II	1
<b>Total Credit Hours</b>			<b>23</b>

### Year 2 of 4-First Semester

Grouping	Course code	Course Title	Credit Hours
General studies courses	GSS 201	Introduction to Entrepreneurial Studies	2
	GSS 211	Introduction to Computer Studies <b>(Direct Entry Only)</b>	2
Core Courses	MAB 211	Marine Ecology and Biodiversity	2
	MAB 221	Marine Biology I	2
	MAB 231	Marine Chemistry	2
	MAB 241	Atmospheric circulation & Climate Change	2
	MAB 251	Marine Mineral Resources	2
Electives	BCH 201	General Biochemistry	3
	CHM 211	Inorganic Chemistry <b>OR</b>	3
	BOT 221	Seedless Plants	2
<b>Total Credit Hours</b>			<b>22</b>

### Year 2 of 4-Second Semester

Grouping	Course code	Course Title	Credit Hours
General studies courses	GSS 214	Computer Applications <b>(Direct Entry Only)</b>	2

Core Courses	MAB 212	Regional Oceanography & Continental Shelf	2
	MAB 222	Marine Biology II	2
	MAB 232	Marine Chemistry II	2
	MAB 242	Marine Analytical Techniques	2
	MAB 252	Marine Living Resources and Exploitation	2
	MAB 262	Statistics for Marine Biology	2
Electives	CHM 232	Organic Chemistry	3
	ZOO 202	Chordates	2
	ZOO 222	Coelomate Invertebrates	3
<b>Total Credit Hours</b>			<b>22</b>

### Year 3 of 4-First Semester

Grouping	Course code	Course Title	Credit Hours
General studies courses	GSS 301	Introduction to Entrepreneurial Skills	2
Core Courses	MAB 301	Marine Plant Biology	2
	MAB 311	Limnology	2
	MAB 321	Ichthyology	2
	MAB 331	General Marine Microbiology	2
	MAB 341	Aquaculture Practices	2
	MAB 351	Marine Geochemical Processes	2
	MAB 361	Marine Invertebrates	2
	MAB 371	Marine Biology Techniques	2
	MAB 381	Marine Biochemical Cycles	2
<b>Total Credit Hours</b>			<b>20</b>

**Year 3 of 4 - Second Semester****6 Months Student Industrial Work Experience Scheme 6 Credit Hours****Year 4 of 4-First Semester**

<b>Grouping</b>	<b>Course code</b>	<b>Course Title</b>	<b>Credit Hours</b>
Core Courses	MAB 401	Seminar in Marine Biology	1
	MAB 411	Maritime Policies	2
	MAB 421	Fisheries Resources and Management	2
	MAB 431	Fish Population Biology	2
	MAB 441	Maritime Pollution I	2
	MAB 451	Statistical Methods for Marine Sciences	2
	MAB 461	Interstitial Chemistry	2
Electives	BIO 401	Research Methods and Scientific	3
<b>Total Credit Hours</b>			<b>16</b>

**Year 4 of 4-Second Semester**

<b>Grouping</b>	<b>Course code</b>	<b>Course Title</b>	<b>Credit Hours</b>
Core Courses	MAB 400	Research Project in Marine Biology	6
	MAB 412	Biogeography of Marine Organism	2
	MAB 422	Estuarine Processes	2
	MAB 432	Aquatic Microbiology	2
	MAB 442	Marine Pollution	2
	MAB 452	Ocean Circulation	2
	MAB 462	Marine Organic Geochemistry	2
<b>Total Credit Hours</b>			<b>18</b>