



UNIVERSITY OF KELANIYA SRI LANKA

Faculty of Science

Student Handbook

**BACHELOR OF SCIENCE
(GENERAL AND SPECIAL) DEGREE
PROGRAMMES**

**BACHELOR OF SCIENCE
ENVIRONMENTAL CONSERVATION AND MANAGEMENT
(GENERAL AND SPECIAL) DEGREE
PROGRAMMES**

**BACHELOR OF SCIENCE
MANAGEMENT AND INFORMATION TECHNOLOGY
(GENERAL AND SPECIAL) DEGREE
PROGRAMMES**

2011/2012



UNIVERSITY OF KELANIYA SRI LANKA

Mission of the Faculty of Science

The mission of the Faculty of Science of the University of Kelaniya is to produce highly motivated graduates and postgraduates capable of making a significant contribution towards national development and the well being of mankind, to conduct research and provide advice and consultancy services in various scientific disciplines to foster a better understanding of the environment for sustainable use and conservation of natural resources.

CONTENTS

1. GENERAL	1
1.1 Preamble	2
1.2 Notations of Course Units and Abbreviations Used	3
1.3 B.Sc. (General) Degree Programmes	4
1.4 B.Sc. (Special) Degree Programmes	5
1.5 Registration for Courses	8
1.6 Changes of Courses	8
1.7 Attendance	8
2. ASSESSMENT CRITERIA	9
2.1 Assessment Procedure	10
2.2 Grading System	10
2.3 Repeating a Course Unit Examination	10
2.4 Grade Point Average	11
2.5 B.Sc. (General) Degree	11
2.6 B.Sc. ENCM (General) Degree	13
2.7 B.Sc. MIT (General) Degree	14
2.8 B.Sc. (Special) Degree	15
2.9 B.Sc. ENCM (Special) Degree	18
2.10 B.Sc. MIT (Special) Degree	20
2.11 Award of the Degree	22
3. COURSE STRUCTURE GENERAL DEGREE	23
3.1 Course Structure for B.Sc. (General) Degree - Biological Sciences	24
3.2 Course Structure for B.Sc. (General) Degree - Physical Sciences	27
3.3 Course Structure for B.Sc. ENCM (General) Degree	32
3.4 Course Structure for B.Sc. MIT (General) Degree	33
4. COURSE STRUCTURE SPECIAL DEGREE	34
4.1 Special Degree –Course Structure Botany, Chemistry, Environmental Conservation and Management, Microbiology, Molecular Biology & Plant Biotechnology and Zoology	35
4.2 Special Degree – Course Structure Computer Science, Management and Information Technology, Mathematics, Mathematical Physics, Physics and Statistics	37
5. COURSE UNITS	39
Compulsory Course Units for Biological Science Stream (BIOL)	40
Applied Mathematics (AMAT)	41
Biochemistry (BIOC)	42
Botany (BOTA)	43
Chemistry (CHEM)	44
Computer Science (COSC)	46
Computer Studies (COST)	47
Electronics (ELEC)	48-A
Environmental Conservation and Management (ENCM)	48-B
Industrial Management (IMGT)	49
Information Technology (IMIT)	50
Management (IMMG)	51
Microbiology (MIBI)	52
Molecular Biology and Plant Biotechnology (MBBT)	54
Physics (PHYS)	55
Pure Mathematics (PMAT)	57
Statistics (STAT)	58
Zoology (ZOOL)	60
6. List of Course Units Offered by Other Faculties to the Students in the Faculty of Science	61
7. List of Certificate Courses Offered by Other Faculties to the Students in the Faculty of Science	67

1. GENERAL

1.1 Preamble

The Faculty of Science of the University of Kelaniya consists of eight academic Departments, namely the Departments of Botany, Chemistry, Industrial Management, Mathematics, Microbiology, Physics, Statistics & Computer Science and Zoology. Academic programmes of the Faculty operate on a 'Course Unit System' i.e. a modularized credit based system within a two-semester academic year with end of course examinations. It offers a variety of course combinations designed to provide maximum possible flexibility in the choice of subjects.

The Faculty of Science now offers six B.Sc. Degree Programmes viz, three General Degree Programmes of 3 years duration and three Special Degree Programmes of 4 years duration. The General Degree Programmes are B.Sc. (General) Degree, B.Sc. (General) Degree in Environmental Conservation and Management (ENCM) and B.Sc. (General) Degree in Management and Information Technology (MIT). The Special Degree Programmes are B.Sc. (Special) Degree, B.Sc. (Special) Degree in ENCM and B.Sc. (Special) Degree in MIT.

The duration of a semester is 15 weeks. After 15 weeks of teaching, a study leave period of 2 weeks is given followed by end of course written examinations conducted within a period of 3 to 4 weeks. Examinations of laboratory course units are usually conducted either during the last week of the semester or during the study leave period.

A course unit is a subject module which has a credit value. A credit is a time based quantitative measure used in calculating the grade point average. The course modules are organized at four levels namely level 1, level 2, level 3 and level 4.

For level 1, level 2 and level 3 course units, credit ratings are as follows.

For course units with lectures only

15 contact hours = 1 credit

For course units with laboratory work only

30 – 45 hours of laboratory work = 1 credit

60 – 75 hours of laboratory work = 2 credits

For course units with both lectures and laboratory work

10 contact hours + 15 hours of laboratory work = 1 credit

Theory course units at level 4 with 15 hours of lectures, seminars and tutorials in any combination carry a credit rating of one. Laboratory course units and research projects at level 4 with 30 hours of laboratory or field work carry a credit rating of

one. A level 4 lecture *cum* practical course unit with 10 hours of lectures plus 15 hours of laboratory or 15 hours of field work also carries a credit rating of one.

1.2 Notations of Course Units and Abbreviations Used

There are three types of course units, namely **Compulsory (C)**, **Optional (O)** and **Auxiliary (A)**.

All **compulsory course units** of a given subject together form the minimum subject content required to be completed by a student following those units as the subject.

The **optional course units** are those outside the core of a particular subject.

The **auxiliary course units** of a subject are, in general, designed to provide fundamental knowledge and to develop some skills in selected areas of the subject. Auxiliary course units of a subject are offered, without any pre-requisites, to all students other than those who are following that on a subject.

An alpha numeric code is used to identify a unit. The code consists of five digits prefixed by a set of four letters which refers to the principal discipline of the course content of the unit.

The first digit denotes the level of the course unit whereas the fifth digit signifies its credit value. The second digit indicates the semester in which the course unit is offered (1 – first semester, 2 – second semester, 3 – both first & second semesters, 4 – either the first or the second semester). The third and fourth digits together form a number assigned by the Department that conducts it.

The academic disciplines designated by the 4 letters in the code are as follows:

Applied Mathematics	AMAT
Biochemistry*	BIOC
Biological Science Compulsory Course Units*	BIOL
Botany*	BOTA
Chemistry*	CHEM
Computer Science*	COSC
Computer Studies*	COST
Electronics*	ELEC
Environmental Conservation and Management*	ENCM
Industrial Management	IMGT
Information Technology*	IMIT
Information Technology Course Unit for Biological Science*	ITBS
Management	IMMG
Microbiology*	MIBI
Molecular Biology & Plant Biotechnology*	MBBT
Physics*	PHYS

Professional Placement	PRPL
Pure Mathematics	PMAT
Statistics*	STAT
Zoology*	ZOOL

* - with a practical component

Some course units require courses of study that must previously be completed before students are allowed to follow them. Such courses of study are called pre-requisites (PR). Some of the pre-requisites are subjects taken for the GCE (Advanced Level) Examination. Some other course units require certain course units, which are called co-requisites (CR), to be taken simultaneously with them. Practical course units are co-requisites for theory course units and vice-versa.

1.3 B.Sc. (General) Degree Programmes

All the Biological Science students are required to follow all the stream compulsory course units as specified during the first semester of the first academic year. In the first semester of the first year, all the Physical Science students are required to follow the compulsory course units PMAT 11042 and AMAT 11032 and, the course units available in the subjects they intend to follow in their degree programme, subject to the condition that they accumulate not less than 13 and not more than 19 credits. For details refer Section 3.2.1.

All the Biological and Physical Science students have the option of following the Computer Science course unit COSC 11014 during the first semester of the first academic year. Furthermore, the Physical Science students can take two more Computer Science course units COSC 22025 and COSC 32025 in academic years 2 and 3 respectively in addition to their selected subjects. Those who wish to follow Computer Studies as a subject are required to take COSC 11014 during the first semester of the first academic year.

Selection of students for preferred subjects in the Biological Science and Physical Science streams will be carried out at the beginning of the second semester of the first academic year based upon the performance at examinations in the first semester of the first academic year when demand exceeds capacity. In the Biological Sciences, Biochemistry (BIOC), Computer Studies (COST), Microbiology (MIBI) and Molecular Biology & Plant Biotechnology (MBBT) subjects have limited enrolment. In the Physical Sciences, Chemistry (CHEM), Computer Science (COSC), Computer Studies (COST), Electronics (ELEC), Physics (PHYS) and Statistics (STAT) subjects have limited enrolment.

The B.Sc. (General), B.Sc. ENCM (General) and B.Sc. MIT (General) Degree students are required to follow only the levels 1, 2 and 3 course units. Course units to be completed during each academic year by the students following the B.Sc. (General), B.Sc. ENCM (General) and B.Sc. MIT (General) Degree

Programmes are given in the student handbook of the Faculty of Science. After deciding on a particular subject combination, a student should take all course units in the category 'C' of the selected subjects and sufficient number of units in categories 'O' and 'A', as the time table permits, to make up at least 27 credits in each academic year. A student may take course units aggregating **up to not more than 6 credits with not more than 2 credits per semester from the other Faculties** for the Degree Programme. Students are advised to consult an academic advisor of the Faculty before deciding on their choice of course units.

All credits accumulated by a student over the entire three academic year period shall be considered for the computation of the GPA in respect of the B.Sc. (General) Degree Programme or the B.Sc. ENCM (General) Degree Programme or the B.Sc. MIT (General) Degree Programme, **unless stated otherwise.**

1.4 B.Sc. (Special) Degree Programmes

At the end of the second academic year, a student may apply to follow a Special Degree Programme in any one of the following subjects: Botany, Chemistry, Computer Science, Computer Studies, Environmental Conservation and Management, Management and Information Technology, Mathematical Physics, Mathematics, Microbiology, Molecular Biology and Plant Biotechnology, Physics, Statistics and Zoology.

The minimum requirements for selection to the Special Degree Programmes are as follows:

- (i) **Botany**
A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units in Botany, BIOL 11012 Basic Microbiology and BIOL 11022 Genetics aggregating to 21 credits. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.
- (ii) **Chemistry**
A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units in Chemistry aggregating to 21 credits counted for GPA. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.
- (iii) **Computer Science**
A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units in Computer Science aggregating to at least 19 credits and followed Pure Mathematics as a subject in the first two years of study. In addition, a student should not have obtained either D/D+/C-

grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(iv) Environmental Conservation and Management

A student should have obtained grades of C or better in all Level 1 and Level 2 BOTA, CHEM, ENCM, MIBI, and ZOOL compulsory course units prescribed for the degree programme and obtained grades of B or better aggregating to at least 40 credits from BOTA, ENCM, MIBI and ZOOL course units. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(v) Management and Information Technology

A student should have obtained grades of B or better in Level 1 and Level 2 course units in IMIT and IMMAG aggregating to at least 40 credits. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(vi) Mathematical Physics

A student should have followed Applied Mathematics, Physics and Pure Mathematics as subjects in the first two years of study and should have obtained grades of B or better in Level 1 and Level 2 compulsory course units, aggregating to 19 credits in each of the subjects Pure Mathematics & Applied Mathematics, and aggregating to 20 credits in Physics. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(vii) Mathematics (Pure Mathematics and Applied Mathematics)

A student should have obtained grades of B or better for Level 1 and Level 2 compulsory course units aggregating to 19 credits in each of the subjects Pure Mathematics and Applied Mathematics. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(viii) Mathematics (Pure Mathematics and Statistics)

A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units, aggregating to 19 credits in Pure Mathematics, and 20 credits in Statistics. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(ix) Microbiology

A student should have obtained grades of B or better for in Level 1 and Level 2 compulsory course units in Microbiology and BIOL 11012 Basic

Microbiology aggregating to at least 20 credits. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(x) **Molecular Biology & Plant Biotechnology**

A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units in Molecular Biology & Plant Biotechnology, and BIOL 11012 Basic Microbiology, BIOL 11022 Genetics, and BIOL 11032 Basic Biochemistry aggregating to at least 20 credits. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(xi) **Physics**

A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units aggregating to 20 credits in Physics and followed Pure Mathematics as a subject in the first two years of study. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(xii) **Statistics**

A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units aggregating to 20 credits in Statistics and followed Pure Mathematics as a subject in the first two years of study. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(xiii) **Zoology**

A student should have obtained grades of B or better in Level 1 and Level 2 compulsory course units in Zoology and BIOL 11072 Evolution and Biogeography, BIOL 11012 Basic Microbiology and BIOL 11022 Genetics, aggregating to at least 20 credits. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

(xiv) **Computer Studies**

A student should have obtained at least B grades for Level 1 and Level 2 course units in Computer Studies (COST) aggregating to 19 credits in the first two years of study. In addition, a student should not have obtained either D/D+/C- grades in Level 1 and Level 2 course units aggregating to more than 8 credits, or E grades in Level 1 and Level 2 course units.

Selection criteria may be varied at the discretion of the Department concerned.

A student selected for Special Degree Programme is required to obtain the approval of the relevant Head/Heads of the Department/Departments for the course units he/she intends to follow before enrolling for the programme.

The maximum number of credits that should be accumulated by a student following the Special Degree Programme shall be determined by the Department/Departments concerned.

During the fourth academic year, a Special Degree student should carry out a research/study project on a given topic under the supervision of a senior member of the academic staff assigned by the Department/Departments.

All credits accumulated by a student over the entire four academic year period shall be considered for the computation of the GPA in respect of the B.Sc. (Special) Degree Programme in the relevant subject, **unless stated otherwise.**

1.5 Registration for Courses

Students are strongly advised to obtain advice from relevant academic advisors prior to registration for course units, and must complete their registration for selected course combinations before the commencement of each academic year. A student must also ensure that he/she has fulfilled the required pre-requisites.

1.6 Changes of Courses

A student wishing to drop or add a course unit may do so within the first two weeks of the relevant semester. No changes in enrolment for course units shall be permitted later than the stipulated period.

1.7 Attendance

Students are strongly advised to attend and actively participate in all teaching activities regularly, as it has proven that there is a highly significant relationship with the grades obtained for a particular course unit and attendance. A minimum of 80% attendance is compulsory for both theory and laboratory classes. For details refer Section 2.2.

2. ASSESSMENT CRITERIA

2.1 Assessment Procedure

Student performance at a course unit is generally assessed through assignments, reports, presentations and end of course examinations. The method of assessment will be announced by the relevant Department at the commencement of a course unit. The research projects of the Special Degree Programme are assessed by dissertation and oral presentation.

2.2 Grading System

Marks obtained in respect of a course unit will be graded according to the following grading system. A grade point value as indicated below is assigned to each grade.

Range of Marks	Grade	Grade Point Value
85 - 100	A+	4.0
70 - 84	A	4.0
65 - 69	A-	3.7
60 - 64	B+	3.3
55 - 59	B	3.0
50 - 54	B-	2.7
45 - 49	C+	2.3
40 - 44	C	2.0
35 - 39	C-	1.7
30 - 34	D+	1.3
25 - 29	D	1.0
00 - 24	E	0.0

If the attendance of a student at a theory, laboratory or theory cum laboratory course unit is less than 80%, he /she will not be allowed to sit for the end of semester examination of the relevant course unit and will be considered as a referred candidate for the relevant course unit at subsequent sittings.

Students should complete all course units that they are registered for and if they fail to complete a particular course unit, it will be indicated in the transcript as “absent” and a zero (0.0) grade point value will be assigned to it.

2.3 Repeating a Course Unit Examination

A student who does not obtain a grade C or better in a particular course unit may re-sit the examination of that course unit in the following academic year for the purpose of improving the grade. The best grade obtainable by a student in this instance would be C. In the event a student obtains a lower grade while attempting to better the grade, he/she will be entitled to the previous grade.

2.4 Grade Point Average

Grade Point Average (GPA) is the credit-weighted arithmetic mean of the Grade Point Values, which is determined by dividing the total credit-weighted Grade Point Value by the total number of credits. GPA shall be computed to the second decimal place.

Example: A student who has completed one course unit with two credits, three course units each of three credits and two course units each of 1 credit with grades A, C, B, D, C+ and A+ respectively would have the GPA of 2.48 as calculated below.

$$\frac{(2 \times 4 \cdot 0) + (3 \times 2 \cdot 0) + (3 \times 3 \cdot 0) + (3 \times 1 \cdot 0) + (1 \times 2 \cdot 3) + (1 \times 4 \cdot 0)}{2 + 3 + 3 + 3 + 1 + 1} = \frac{32 \cdot 3}{13} = 2 \cdot 4846$$

$$\text{Grade Point Average} = 2 \cdot 48$$

Grade point values and credit values of all registered course units in a study programme of a student shall be taken into account in calculating the final GPA, unless stated otherwise.

2.5 B.Sc. (General) Degree

2.5.1 Eligibility for the Award of the B.Sc. (General) Degree

To be eligible for the B.Sc. (General) Degree a student must

- (i) accumulate grades of D or better in course units, aggregating to at least 60 credits during the first two academic years, and aggregating to at least 90 credits during the entire three academic year period, including the stream compulsory units where applicable, of which at least 27 credits must be from each academic year,
- (ii) obtain grades of C or better in course units aggregating to at least 72 credits of which at least 48 must be from two subjects with at least 24 credits from each of them, and grades of D or better in course units aggregating to at least further 18 credits, considered under (i) above, provided that at least one of the above two subjects is with a practical component,
- (iii) obtain a GPA of 2.00 or greater, and
- (iv) complete the relevant requirements within a period of five academic years.

2.5.2 Award of Honours

2.5.2.1 First Class Honours

A student who is eligible for the B.Sc. (General) Degree may be awarded First Class Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 90 credits, considered under 2.5.1 (ii),
- (ii) obtains grades of A or better in course units aggregating to at least half the number of total credits for the course units considered under 2.5.1 (ii),
- (iii) obtains a GPA of 3.70 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.5.2.2 Second Class (Upper Division) Honours

A student who is eligible for the B.Sc. (General) Degree may be awarded Second Class (Upper Division) Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of D or better in the remaining course units, considered under 2.5.1 (ii),
- (ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.5.1 (ii),
- (iii) obtains a GPA of 3.30 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.5.2.3 Second Class (Lower Division) Honours

A student who is eligible for the B.Sc. (General) Degree may be awarded Second Class (Lower Division) Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of D or better in the remaining course units, considered under 2.5.1 (ii),
- (ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.5.1 (ii),
- (iii) obtains a GPA of 3.00 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.6 B.Sc. ENCM (General) Degree

2.6.1 Eligibility for the Award of the B.Sc. ENCM (General) Degree

To be eligible for the B.Sc. ENCM (General) Degree a student must

- (i) accumulate grades of D or better in course units, aggregating to at least 60 credits during the first two academic years, and aggregating to at least 90 credits during the entire three academic year period, of which at least 27 credits must be from each academic year,
- (ii) obtain grades of C or better in course units aggregating to at least 72 credits of which not less than 48 must be from compulsory course units and grades of D or better in course units aggregating to at least further 18 credits, considered under (i) above, with the proviso that he/she should not have obtained grades of D/D+/C- in course units aggregating to more than 6 credits in each of the three subject areas (ENCM course units; BOTA, MIBI and ZOOL course units; CHEM course units),
- (iii) obtain a GPA of 2.00 or greater, and
- (iv) complete the relevant requirements within a period of five academic years.

2.6.2 Award of Honours

2.6.2.1 First Class Honours

A student who is eligible for the B.Sc. ENCM (General) Degree may be awarded First Class Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 90 credits, considered under 2.6.1 (ii),
- (ii) obtains grades of A or better in course units aggregating to at least half the number of total credits for the course units considered under 2.6.1 (ii),
- (iii) obtains a GPA of 3.70 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.6.2.2 Second Class (Upper Division) Honours

A student who is eligible for the B.Sc. ENCM (General) Degree may be awarded Second Class (Upper Division) Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of D or better in the remaining course units, considered under 2.6.1 (ii),
- (ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.6.1 (ii),
- (iii) obtains a GPA of 3.30 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.6.2.3 Second Class (Lower Division) Honours

A student who is eligible for the B.Sc. ENCM (General) Degree may be awarded Second Class (Lower Division) Honours provided he/she;

- (i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of at least D in the remaining course units, considered under 2.6.1 (ii),
- (ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.6.1 (ii),
- (iii) obtains a GPA of 3.00 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.7 B.Sc. MIT (General) Degree

2.7.1 Eligibility for the B.Sc. MIT (General) Degree

To be eligible for the B.Sc. MIT (General) Degree a student must

- (i) accumulate grades of D or better in course units, aggregating to at least 60 credits during the first two academic years, and aggregating to at least 90 credits during the entire three academic year period, of which at least 27 credits must be from each academic year,
- (ii) obtain grades of C or better in course units aggregating to at least 80 credits of which not less than 70 must be from compulsory course units inclusive of level 3 project IMIT 33066, and grades of D or better in course units aggregating to at least further 10 credits, considered under (i) above,
- (iii) obtain a GPA of 2.00 or greater, and
- (iv) complete the relevant requirements within a period of five academic years.

2.7.2 Award of Honours

2.7.2.1 First Class Honours

A student who is eligible for the B.Sc. MIT (General) Degree may be awarded First Class Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 90 credits, considered under 2.7.1 (ii),
- (ii) obtains grades of A or better in course units aggregating to at least half the number of total credits for the course units considered under 2.7.1 (ii),
- (iii) obtains a GPA of 3.70 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.7.2.2 Second Class (Upper Division) Honours

A student who is eligible for the B.Sc. MIT (General) Degree may be awarded Second Class (Upper Division) Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of D or better in the remaining course units, considered under 2.7.1 (ii),
- (ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.7.1 (ii),
- (iii) obtains a GPA of 3.30 or greater, and
- (iv) completes the relevant requirements within three academic years.

2.7.2.3 Second Class (Lower Division) Honours

A student who is eligible for the B.Sc. MIT (General) Degree may be awarded Second Class (Lower Division) Honours provided he/she

- (i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of D or better in the remaining course units, considered under 2.7.1 (ii),
- (ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.7.1 (ii),
- (iii) obtains a GPA of 3.00 or greater, and
- (iv) completes the relevant requirements within three academic years..

2.8 B.Sc. (Special) Degree

2.8.1 Eligibility for the Award of the B.Sc. (Special) Degree

To be eligible for the B.Sc. (Special) Degree, a student must

- (i) accumulate grades of D or better,
 - (a) in course units aggregating to at least 27 credits, including either at least 10 credits in the subject of specialization and the stream compulsory course units where applicable, or at least 10 credits each in the subjects of specialization and the stream compulsory course units where applicable, as the case may be, in each academic year, totalling to at least 60 credits, in the first two academic years, and
 - (b) aggregating to at least 66 credits in the third and the fourth academic year course units including at least 48 credits in level 4 course units in the subject/subjects of specialization, totalling to at least 126 credits, provided that he/she accumulates credits in the compulsory course units as stipulated by the relevant Department/Departments of study,
- (ii) obtain grades of C or better in course units aggregating to at least 100 credits of which at least 40 credits should be in level 4 course units, and

grades of D or better in course units aggregating to at least further 26 credits, with the proviso that he/she should not obtain grades of E in any of the course units in the subject/subjects of specialization, considered under (i) above,

- (iii) obtain a GPA of 2.00 or greater, and
- (iv) complete the relevant requirements within a period of five academic years.

2.8.2 Award of Honours

2.8.2.1 First Class Honours

A student who is eligible for the B.Sc. (Special) Degree may be awarded First Class Honours if he/she

- (i) obtains grades of C or better in course units, including all the course units in the subject/subjects of specialization, aggregating to at least 126 credits, considered under 2.8.1 (ii),
- (ii) obtains a GPA of 3.70 or greater,
- (iii) obtains grades of A or better in level 4 course units in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of A or better in level 4 and level 3 course units where applicable, in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

Note: A student who obtains grades of D/D+/C- aggregating to not more than 6 credits in level 4 course units, but fulfils all the other requirements stipulated under 2.8.2.1 may be considered by the Board of Examiners for the award of Second Class (Upper Division) Honours.

2.8.2.2 Second Class (Upper Division) Honours

A student who is eligible for the B.Sc. (Special) Degree may be awarded Second Class (Upper Division) Honours if he/she

- (i) obtains grades of C or better in course units, including all the course units in the subject/subjects of specialization, aggregating to at least 116 credits, considered under 2.8.1 (ii),
- (ii) obtains a GPA of 3.30 or greater,
- (iii) obtains grades of B or better in level 4 course units in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of B or better in level 4 and level 3 course units where applicable, in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

Note: A student who obtains grades of D/D+/C- aggregating to not more than 6 credits in level 4 course units, but fulfils all the other requirements stipulated under 2.8.2.2 may be considered by the Board of Examiners for the award of Second Class (Lower Division) Honours.

2.8.2.3 Second Class (Lower Division) Honours

A student who is eligible for the B.Sc. (Special) Degree may be awarded Second Class (Lower Division) Honours provided he/she

- (i) obtains grades of C or better in course units, including all the course units in the subject/subjects of specialization, aggregating to at least 116 credits, considered under 2.8.1 (ii),
- (ii) obtains a GPA of 3.00 or greater,
- (iii) obtains grades of B or better in level 4 course units in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of B or better in level 4 and level 3 course units where applicable, in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

2.8.3 Option of reverting to the B.Sc. (General) Degree

A student reading for a B.Sc. (Special) Degree may request the award of the B.Sc. (General) Degree foregoing the B.Sc. (Special) Degree, upon satisfying the requirements for the award of the B.Sc. (General) Degree. This request should be made in the course of the 4th academic year or within 14 days from the date of final release of the results of the level 4 course units by the Faculty.

The results of the B.Sc. (General) Degree shall be determined solely on the basis of course units followed in the first three academic years.

2.9 B.Sc. ENCM (Special) Degree

2.9.1 Eligibility for the Award of the B.Sc. ENCM (Special) Degree

To be eligible for the B.Sc. ENCM (Special) Degree, a student must

- (i) accumulate grades of D or better,
 - (a) in course units aggregating to at least 27 credits, including all compulsory course units in each academic year, totalling to at least 60 credits in the first two academic years, and
 - (b) aggregating to at least 66 credits in the third and the fourth academic years, including all the compulsory course units, and at least 48 credits in the level 4 course units, totalling at least 126 credits,
- (ii) obtain grades of C or better in course units aggregating to at least 100 credits of which at least 40 credits should be in level 4 course units including the final year research project, and grades of D or better in course units aggregating to at least further 26 credits, with the proviso that he/she should not obtain grades of D/D+/C- in course units aggregating to more than 6 credits in each of the three subject areas (level 1, 2, & 3 ENCM course units; BOTA, MIBI and ZOOL course units; CHEM course units), or grades of E in any of the course units, considered under (i) above,
- (iii) obtain a GPA of 2.00 or greater, and
- (iv) complete the relevant requirements within a period of five academic years.

2.9.2 Award of Honours

2.9.2.1 First Class Honours

A student who is eligible for the B.Sc. ENCM (Special) Degree may be awarded First Class Honours if he/she

- (i) obtains grades of C or better in course units, including all the compulsory course units in the subject of specialization, aggregating to at least 126 credits, considered under 2.9.1 (ii),
- (ii) obtains a GPA of 3.70 or greater,
- (iii) obtains grades of A or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of A or better in level 4 and level 3 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

Note: A student who obtains grades of D/D+/C- aggregating to not more than 6 credits in level 4 course units, but fulfils all the other requirements stipulated under 2.9.2.1 may be considered by the Board of Examiners for the award of Second Class (Upper Division) Honours.

2.9.2.2 Second Class (Upper Division) Honours

A student who is eligible for the B.Sc. ENCM (Special) may be awarded Second Class (Upper Division) Honours if he/she

- (i) obtains grades of C or better in course units, including the compulsory course units, aggregating to at least 116 credits, considered under 2.9.1 (ii),
- (ii) obtains a GPA of 3.30 or greater,
- (iii) obtains grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of B or better in level 4 and level 3 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

Note: A student who obtains grades of D/D+/C- aggregating to not more than 6 credits in level 4 course units, but fulfils all the other requirements stipulated under 2.9.2.2 may be considered by the Board of Examiners for the award of Second Class (Lower Division) Honours.

2.9.2.3 Second Class (Lower Division) Honours

A student who is eligible for the B.Sc. ENCM (Special) Degree may be awarded Second Class (Lower Division) Honours provided he/she

- (i) obtains grades of C or better in course units, including the compulsory course units, aggregating to at least 116 credits, considered under 2.9.1 (ii),
- (ii) obtains a GPA of 3.00 or greater,
- (iii) obtains grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of B or better in level 4 and level 3 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

2.9.3 Option of reverting to the B.Sc. ENCM (General) Degree

A student reading for a B.Sc. ENCM (Special) Degree may request the award of the B.Sc. ENCM (General) Degree foregoing the B.Sc. ENCM (Special) Degree, upon satisfying the requirements for the award of the B.Sc. (General) Degree. This request should be made in the course of the 4th academic year or within 14 days from the date of final release of the results of the level 4 course units by the Faculty.

The results of the B.Sc. ENCM (General) Degree shall be determined solely on the basis of course units followed in the first three academic years.

2.10 B.Sc. MIT (Special) Degree

2.10.1 Eligibility for the Award of the B.Sc. MIT (Special) Degree

To be eligible for the B.Sc. MIT (Special) Degree, a student must

- (i) accumulate grades of D or better,
 - (a) in course units aggregating to at least 27 credits, including all compulsory course units in each academic year, totalling to at least 60 credits, in the first two academic years, and
 - (b) aggregating to at least 68 credits in the third and the fourth academic years, including all the compulsory course units of which at least 48 credits should be in the level 4 course units, totalling to at least 128 credits,
- (ii) Obtained grades of C or better in compulsory course units inclusive of level 3 project IMIT 33066 and level 4 research project IMIT 43068 aggregating to at least 110 credits of which at least 40 credits should be in level 4 course units, and grades of D or better in course units aggregating to at least further 18 credits, **with the proviso that he/she should not have obtained grades of E in any of the course units considered under (i) above**
- (iii) Obtain a GPA of 2.00 or greater, and
- (iv) Complete the relevant requirements within a period of 5 academic years.

2.10.2 Award of Honours

2.10.2.1 First Class Honours

A student who is eligible for the B.Sc. MIT (Special) Degree may be awarded First Class Honours if he/she

- (i) obtains grades of C or better in course units, including all the compulsory course units, aggregating to at least 128 credits, considered under 2.10.1 (ii),
- (ii) obtains a GPA of 3.70 or greater,
- (iii) obtains grades of A or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of A or better in level 4 and level 3 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

Note: A student who obtains grades of D/D+/C- aggregating to not more than 6 credits in level 4 course units, but fulfils all the other requirements stipulated under 2.10.2.1 may be considered by the Board of Examiners for the award of Second Class (Upper Division) Honours.

2.10.2.2 Second Class (Upper Division) Honours

A student who is eligible for the B.Sc. MIT (Special) Degree may be awarded Second Class (Upper Division) Honours if he/she

- (i) obtains grades of C or better in course units, including the compulsory course units, aggregating to at least 118 credits, considered under 2.10.1 (ii),
- (ii) obtains a GPA of 3.30 or greater,
- (iii) obtains grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of B or better in level 4 and level 3 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

Note: A student who obtains grades of D/D+/C- for a maximum of 6 credits in level 4 course units, and fulfils all the other requirements stipulated under 2.10.2.2 may be considered by the Board of Examiners for the award of Second Class (lower Division) Honours.

2.10.2.3 Second Class (Lower Division) Honours

A student who is eligible for the B.Sc. MIT (Special) Degree may be awarded Second Class (Lower Division) Honours provided he/she

- (i) obtains grades of C or better in course units, including the compulsory course units, aggregating to at least 118 credits, considered under 2.10.1 (ii),
- (ii) obtains a GPA of 3.00 or greater,
- (iii) obtains grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units,
- (iv) obtains grades of B or better in level 4 and level 3 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (v) completes the relevant requirements within four academic years.

2.10.3 Option of reverting to the B.Sc. MIT (General) Degree

A student reading for a B.Sc. MIT (Special) Degree may request the award of the B.Sc. MIT (General) Degree foregoing the B.Sc. MIT (Special) Degree, upon satisfying the requirements for the award of the B.Sc. (General) Degree. This request should be made in the course of the 4th academic year or within 14 days from the date of final release of the results of the level 4 course units by the Faculty.

The results of the B.Sc. MIT (General) Degree shall be determined solely on the basis of course units followed in the first three academic years.

2.11 Award of the Degree

A student who intends to enhance the grade(s) obtained at the examination(s) of a course unit(s) should request the Dean/Science in writing to refrain from processing her/his results, within a week of completion of releasing the results of all the course unit examinations in the relevant semester.

On successful completion of the B.Sc. (General), B.Sc. (Special), B.Sc. ENCM (General), B.Sc. ENCM (Special), B.Sc. MIT (General), or B.Sc. MIT (Special) Degree, and after the confirmation of results by the University Senate, a student is entitled to have an official transcript giving the grades in the respective course units.

**3. COURSE STRUCTURE
GENERAL DEGREE**

3.1 Course Structure for B.Sc. (General) Degree Biological Sciences

3.1.1 B.Sc. (General) Degree Programme – Year 1 Biological Sciences

Available combinations to select course units

Course code	Course unit combination (BSY1)								
	1	2	3	4	5	6	7	8	9
BIOL 11012	C	C	C	C	C	C	C	C	C
BIOL 11022	C	C	C	C	C	C	C	C	C
BIOL 11032	C	C	C	C	C	C	C	C	C
BIOL 11072	C	C	C	C	C	C	C	C	C
ITBS 12012	O	O	O	O	O	O	O	O	O
ELTU 11022 ¹	C	C	C	C	C	C	C	C	C
BIOC 12122						C		C	C
BIOC 12133						C		C	C
BIOC 12141						C		C	C
BOTA 12014	C	C		C				C	
BOTA 12022	C	C		C				C	
CHEM 11111 ¹	C	C	C	C	C	C	C	C	C
CHEM 11122	C	C	C	C	C	C	C	C	C
CHEM 11132	C	C	C	C	C	C	C	C	C
CHEM 11141	C	C	C	C	C	C	C	C	C
CHEM 12152	C	C	C	C	C	C	C	C	C
CHEM 12162	C	C	C	C	C	C	C	C	C
CHEM 12171	C	C	C	C	C	C	C	C	C
COSC 11014	O	C	C	O	O	O	O	O	O
COST 12115		C	C						
IMGT 14012	A	A	A	A	A	A	A	A	A
IMGT 21011	A	A	A	A	A	A	A	A	A
MIBI 12014				C	C	C			
MIBI 12022				C	C	C			
MBBT 12013							C		
MBBT 12024							C		
MGMT 11022 ^{1,2}	C	C	C	C	C	C	C	C	C
PHYS 14222	A	A	A	A	A	A	A	A	A
PMAT 11083	A	A	A	A	A	A	A	A	A
PMAT 12093	A	A	A	A	A	A	A	A	A
PMAT 14102	A	A	A	A	A	A	A	A	A
STAT 14142	A	A	A	A	A	A	A	A	A
ZOOL 12014	C		C		C		C		C
ZOOL 12022	C		C		C		C		C
No of Credits from Compulsory Units	30	33	33	30	30	30	31	30	30

¹ Credits not counted for the GPA calculation.

² Should offer during the three year period of the Degree Programme.

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.1.2 B.Sc. (General) Degree Programme – Year 2 Biological Sciences Available combinations to select course units

Course code	Course unit combination (BSY2)								
	1	2	3	4	5	6	7	8	9
BIOC 21114						C		C	C
BIOC 21121						C		C	C
BIOC 22132						C		C	C
BIOC 22142						C		C	C
BIOC 22151						C		C	C
BOTA 21013	C	C		C				C	
BOTA 21022	C	C		C				C	
BOTA 22034	C	C		C				C	
BOTA 22042	C	C		C				C	
CHEM 21112	C	C	C	C	C	C	C	C	C
CHEM 21122	C	C	C	C	C	C	C	C	C
CHEM 21131	C	C	C	C	C	C	C	C	C
CHEM 22142	C	C	C	C	C	C	C	C	C
CHEM 22152	C	C	C	C	C	C	C	C	C
CHEM 22161	C	C	C	C	C	C	C	C	C
CHEM 22171	C	C	C	C	C	C	C	C	C
COST 21123		C	C						
COST 22133		C	C						
COST 22144		C	C						
ELTU 22032 ¹	C	C	C	C	C	C	C	C	C
IMGT 14012	A	A	A	A	A	A	A	A	A
IMGT 21011	A	A	A	A	A	A	A	A	A
MIBI 21014				C	C	C			
MIBI 21022				C	C	C			
MIBI 22034				C	C	C			
MIBI 22042				C	C	C			
MBBT 21014							C		
MBBT 21022							C		
MBBT 22033							C		
MBBT 22042							C		
MGMT 11022 ^{1,2}	C	C	C	C	C	C	C	C	C
PHYS 14222	A	A	A	A	A	A	A	A	A
PMAT 14102	A	A	A	A	A	A	A	A	A
PMAT 11083	A	A	A	A	A	A	A	A	A
PMAT 12093	A	A	A	A	A	A	A	A	A
STAT 14142	A	A	A	A	A	A	A	A	A
ZOOL 21014	C		C		C		C		C
ZOOL 21022	C		C		C		C		C
ZOOL 22064	C		C		C		C		C
ZOOL 22042	C		C		C		C		C
No of Credits from Compulsory Units	34	29	30	34	35	33	34	32	33

¹ Credits not counted for the GPA calculation.² Should offer during the three year period of the degree programme.

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.1.3 B.Sc. (General) Degree Programme – Year 3 Biological Sciences

Available combinations to select course units

Course code	Course unit combination (BSY3)								
	1	2	3	4	5	6	7	8	9
BIOC 31111						C		C	C
BIOC 31122						O		O	O
BIOC 31132						O		O	O
BIOC 31141						O		O	O
BIOC 32163						O		O	O
BIOC 32171						O		O	O
BOTA 31014	C	C		C				C	
BOTA 31022	C	C		C				C	
BOTA 32034 ¹	O	O		O				O	
BOTA 32042 ¹	O	O		O				O	
BOTA 32054 ¹	O	O		O				O	
CHEM 31111	C	C	C	C	C	C	C	C	C
CHEM 31122	O	O	O	O	O	O	O	O	O
CHEM 31132	O	O	O	O	O	O	O	O	O
CHEM 32152	O	O	O	O	O	O	O	O	O
CHEM 32162	O	O	O	O	O	O	O	O	O
CHEM 32171	O	O	O	O	O	O	O	O	O
CHEM 32182	O	O	O	O	O	O	O	O	O
COST 31153		C	C						
COST 31163		C	C						
COST 32173		O	O						
COST 32183		O	O						
IMGT 14012	O	O	O	O	O	O	O	O	O
IMGT 21011	O	O	O	O	O	O	O	O	O
MIBI 31014				C	C	C			
MIBI 31022				C	C	C			
MIBI 33034				O	O	O			
MIBI 32041				O	O	O			
MIBI 32056				O	O	O			
MIBI 33062				O	O	O			
MBBT 31024							C		
MBBT 32044							O		
MBBT 32052							O		
MGMT 11022 ^{1,2}	C	C	C	C	C	C	C	C	C
PHYS 14222	A	A	A	A	A	A	A	A	A
PHYS 32312	O	O	O	O	O	O	O	O	O
PHYS 32322	O	O	O	O	O	O	O	O	O
PMAT 11083	A	A	A	A	A	A	A	A	A
PMAT 12093	A	A	A	A	A	A	A	A	A
PRPL 31012	O	O	O	O	O	O	O	O	O
STAT 14142	A	A	A	A	A	A	A	A	A
ZOOL 31013 ⁴	O		O		O		O		O
ZOOL 31023 ⁴	O		O		O		O		O
ZOOL 32033 ⁴	O		O		O		O		O
ZOOL 32043 ⁴	O		O		O		O		O
No of Credits from Compulsory Units	7	13	7	13	7	8	5	8	2

¹ Students are permitted to select either BOTA 32034 & BOTA 32042 or BOTA 32054.

² Should offer during the three year period of the Degree Programme.

³ Credits not counted for the GPA calculation.

⁴ Students should select at least three course units.

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.2 Course Structure for B.Sc. (General) Degree Physical Sciences

3.2.1 B.Sc. (General) Degree Programme – Year 1 – Semester I Physical Sciences

Available combinations to select course units

Course code	Course unit combination (PSY1SI)								
	1	2	3	4	5	6	7	8	9
CHEM 11111 ¹	C	C	C	C	C				
CHEM 11122	C	C	C	C	C				
CHEM 11132	C	C	C	C	C				
CHEM 11141	C	C	C	C	C				
COSC 11014 ²	C	C	C			C	C		C
ELEC 11134				C		C		C	
ELEC 11141				C		C		C	
PHYS 11162		C		C	C	C	C	C	C
PHYS 11172		C		C	C	C	C	C	C
PHYS 11181		C		C	C	C	C	C	C
AMAT 11032	C	C	C	C	C	C	C	C	C
PMAT 11042	C	C	C	C	C	C	C	C	C
STAT 11014			C						C
STAT 11021			C						C
No of Credits	13	18	18	19	14	18	13	14	18

¹ Credits not counted for the GPA calculation.

² Those who wish to follow Computer Studies as a subject should follow COSC 11014.

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.2.2 B.Sc. (General) Degree Programme – Year 1 Physical Sciences

Available combinations to select course units

Course code	Course unit combination (PSY1)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
AMAT 11032	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
AMAT 12042	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
AMAT 12053	C	C	C	C	C					C				C	C	C	C
AMAT 12062	C	C	C	C	C												
ELTU 13022 ^{3,5}	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
BIOC 12113 ¹	C	O	O	O	O		C	C	C	C	C	O	O	O	O	O	O
BIOC 12122						C	C										
BIOC 12133						C	C										
BIOC 12141						C	C										
BOTA 12032 ²	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
CHEM 11111 ³	C	O	O	O	O	C	C	C	C	C	C	O	O	O	O	O	O
CHEM 11122	C	O	O	O	O	C	C	C	C	C	C	O	O	O	O	O	O
CHEM 11132	C	O	O	O	O	C	C	C	C	C	C	O	O	O	O	O	O
CHEM 11141	C	O	O	O	O	C	C	C	C	C	C	O	O	O	O	O	O
CHEM 12152	C					C	C	C	C	C	C						
CHEM 12162	C					C	C	C	C	C	C						
CHEM 12171	C					C	C	C	C	C	C						
CHEM 12182		A	A	A	A							A	A	A	A	A	A
COSC 11014	O	C	C	O	O	C	O	C	C	O	O	C	C	C	C	O	O
COSC 12025		C						C				C	C				
COST 12115			C			C			C						C	C	
ELEC 11134 ⁴	O	O	O	C	O	O	O	O	O	C	O	O	C	C	C	C	C
ELEC 11141 ⁴	O	O	O	C	O	O	O	O	O	C	O	O	C	C	C	C	C
ELEC 12154														C		C	
ELEC 12161														C		C	
IMGT 14012	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
IMGT 21011	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PHYS 11162	O	O	O	C	O	O	O	O	O	C			C	C	C	C	C
PHYS 11172	O	O	O	C	O	O	O	O	O	C			C	C	C	C	C
PHYS 11181	O	O	O	C	O	O	O	O	O	C			C	C	C	C	C
PHYS 12194	C	C	C	C	C					C			C	C	C	C	C
PHYS 12201				C						C			C	C	C	C	C
PHYS 14222	A	A	A		A	A	A	A	A		A	A					
PMAT 11042	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
PMAT 12052	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
PMAT 12062	C	C	C	C	C	O	C	C	C	C	C	C	C	O	C	C	C
PMAT 12073	C	C	C	C	C	O	C	C	C	C	C	C	C	O	C	C	C
PMAT 14102	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
STAT 11014	O	O	O	O	C	O	O	O	O	O	C	C	O		O	O	C
STAT 11021	O	O	O	O	C	O	O	O	O	O	C	C	O		O	O	C
STAT 12033					C						C	C					C
STAT 12042					C						C	C					C
STAT 14142	A	A	A	A		A	A	A	A	A			A	A	A	A	
ZOOL 12032	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
ZOOL 12042	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
No of Credits from Compulsory Units	35	31	31	33	32	36	32	35	35	44	36	32	40	40	40	36	40

¹ Students who are following Chemistry as a subject should offer during the first year or the second year.

² Availability of the course unit will be announced by the Department at the beginning of the each academic year.

³ Credits not counted for the GPA calculation.

⁴ Students who are following Physics as a subject should offer during the first, second or the third year.

⁵ Offered throughout the year.

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.2.3 B.Sc. (General) Degree Programme – Year 2

Physical Sciences

Available combinations to select course units

Course code	Course unit combination (PSY2)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
AMAT 21035	C	C	C	C	C												
AMAT 22045	C	C	C	C	C												
BIOC 12113 ¹	O							O	O	O	O						
BIOC 21114						C	C										
BIOC 21121						C	C										
BIOC 22132						C	C										
BIOC 22142						C	C										
BIOC 22151						C	C										
BOTA 12032 ²	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
CHEM 21112	C					C	C	C	C	C	C						
CHEM 21122	C					C	C	C	C	C	C						
CHEM 21131	C					C	C	C	C	C	C						
CHEM 22142	C					C	C	C	C	C	C						
CHEM 22152	C					C	C	C	C	C	C						
CHEM 22161	C					C	C	C	C	C	C						
CHEM 22171	C					C	C	C	C	C	C						
CHEM 12182		A	A	A	A							A	A	A	A	A	A
COSC 21015		C						C				C	C				
COSC 22025		C			O			C			O	C	C				O
COSC 22035		O						O				O	O				
COST 21123			C			C			C					C	C		
COST 22133			C			C			C					C	C		
COST 22144			C			C			C					C	C		
ELEC 11134 ³				O						O			O		O		O
ELEC 11141 ³				O						O			O		O		O
ELEC 21174														C		C	
ELEC 21181														C		C	
ELEC 22194														C		C	
ELEC 22201														C		C	
IMGT 14012	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
IMGT 21011	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PHYS 14222	A	A	A		A	A	A	A	A		A	A					
PHYS 21234				C						C			C	C	C	C	C
PHYS 21241				C						C			C	C	C	C	C
PHYS 22252				C						C			C	C	C	C	C
PHYS 22262				C						C			C	C	C	C	C
PHYS 22271				C						C			C	C	C	C	C
PMAT 14102	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PMAT 21035	C	C	C	C	C	O	C	C	C	C	C	C	C	O	C	C	C
PMAT 22045	C	C	C	C	C	O	C	C	C	C	C	C	C	O	C	C	C
STAT 14142	A	A	A	A		A	A	A	A	A	A	A	A	A		A	A
STAT 21053					C						C	C					C
STAT 21062					C						C	C					C
STAT 22073					C						C	C					C
STAT 22082					C						C	C					C
ZOOL 12032	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
ZOOL 12042	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
No of Credits from Compulsory Units	31	30	30	30	30	31	31	31	31	31	31	30	30	30	30	30	30

¹ Students who are following Chemistry as a subject should offer during the first year or the second year.

² Availability of the course unit will be announced by the Department at the beginning of the each academic year.

³ Students who are following Physics as a subject should offer during the first, second or the third year.

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.2.4 B.Sc. (General) Degree Programme – Year 3**Physical Sciences****Available combinations to select course units**

Course code	Course unit combination (PSY3)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
AMAT 31053	O	O	O	O	O												
AMAT 31063	O	O	O	O	O												
AMAT 31073	O	O	O	O	O												
AMAT 31083	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
AMAT 32093	O	O	O	O	O												
AMAT 32103	O	O	O	O	O												
AMAT 32113	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
BIOC 31111						C	C										
BIOC 31122						O	O										
BIOC 31132						O	O										
BIOC 31141						O	O										
BIOC 32163						O	O										
BIOC 32171						O	O										
BOTA 12032 ¹	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
CHEM 31111	C					C	C	C	C	C	C						
CHEM 31122	O					O	O	O	O	O	O						
CHEM 31132	O					O	O	O	O	O	O						
CHEM 32152	O					O	O	O	O	O	O						
CHEM 32162	O					O	O	O	O	O	O						
CHEM 32171	O					O	O	O	O	O	O						
CHEM 32182	O					O	O	O	O	O	O						
CHEM 12182		A	A	A	A							A	A	A	A	A	A
COSC 31014		C						C				C	C				
COSC 32025		O			O			O			O	O	O				O
COSC 32035		O						O				O	O				
COST 31153			C			C			C					C	C		
COST 31163			C			C			C					C	C		
COST 32172			O			O			O					O	O		
COST 32183			O			O			O					O	O		
ELEC 11134 ²				O						O			O		O		O
ELEC 11141 ²				O						O			O		O		O
ELEC 31214														C		C	
ELEC 31221														C		C	
ELEC 33232														C		C	
ELEC 32244														O		O	
IMGT 14012	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
IMGT 21011	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PHYS 14222	A	A	A		A	A	A	A	A		A	A					
PHYS 31282				C						C			C	C	C	C	C
PHYS 31292				C						C			C	C	C	C	C
PHYS 31301				C						C			C	C	C	C	C
PHYS 32312			O							O			O	O	O	O	O
PHYS 32322 ¹				O						O			O	O	O	O	O
PHYS 32331				C						C			C	C	C	C	C
PMAT 14102	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
PMAT 31073	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PMAT 31083	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PMAT 32123	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PMAT 31103	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PMAT 32113	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PMAT 31093	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PMAT 32133	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
PRPL 31012	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
STAT 14142	A	A	A	A		A	A	A	A	A				A	A	A	A
STAT 31094					O						O	O					O
STAT 31101					O						O	O					O
STAT 32112					O						O	O					O

STAT 32123					C						C	C					C
STAT 32131					O						O	O					O
ZOOL 12032	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
ZOOL 12042	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
No of Credits from Compulsory Units	1	4	6	6	3	8	2	5	7	7	4	7	10	19	12	13	9

¹ Availability of the course unit will be announced by the Department at the beginning of the each academic year.

² Students who are following Physics as a subject should offer during the first, second or the third year.
Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.3 Course Structure for B.Sc. ENCM (General) Degree

Course code	Course unit combination (ENCM)		
	Year 1	Year 2	Year 3
BOTA 22034		C	
BOTA 22042		C	
ELTU 11022 ¹	C		
CHEM 11111 ¹	C		
CHEM 11122	C		
CHEM 11132	C		
CHEM 11141	C		
CHEM 12152	C		
CHEM 12162	C		
CHEM 12171	C		
CHEM 21122		C	
CHEM 22171		C	
CHEM 31132			C
CHEM 32171			C
COSC 11014	O		
ENCM 11012	C		
ENCM 11022	C		
ENCM 11033	C		
ENCM 12043	C		
ENCM 12052	C		
ENCM 21022		C	
ENCM 21043		C	
ENCM 21053		C	
ENCM 21062		C	
ENCM 22013		C	
ENCM 22032		C	
ENCM 31014			C
ENCM 31022			C
ENCM 31033			C
ENCM 31043			C
ENCM 32053			C
ENCM 32062			C
ENCM 32073			C
ENCM 32085			C
MIBI 22054		C	
MIBI 22062		C	
PHYS 32312			C
STAT 14142	O		
ZOOL 12014	C		
ZOOL 12022	C		
No of Credits from Compulsory Units	28	30	30

¹ Credits not counted for the GPA calculation.

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

3.4 Course Structure for B.Sc. MIT (General) Degree

Course code	Course unit combination (MIT)		
	Year 1	Year 2	Year 3
ELTU 11032 ¹	C		
ELTU 31022			C
IMIT 11063	C		
IMIT 11022	C		
IMIT 12033	O		
IMIT 12043	C		
IMIT 12052	C		
IMIT 21012		C	
IMIT 21024		O	
IMIT 21032		C	
IMIT 21042		C	
IMIT 22053		C	
IMIT 22062		C	
IMIT 31013			C
IMIT 31022			O
IMIT 31033			O
IMIT 31073			O
IMIT 32042			C
IMIT 32052			O
IMIT 33066			C
IMMG 11012	C		
IMMG 11023	C		
IMMG 11033	C		
IMMG 12043	C		
IMMG 12062	C		
IMMG 12072	C		
IMMG 13082 ¹	C		
IMMG 14052	O		
IMMG 21012		C	
IMMG 21023		C	
IMMG 21032		C	
IMMG 21063		C	
IMMG 22043		C	
IMMG 22052		C	
IMMG 22072		C	
IMMG 31013			C
IMMG 31023			C
IMMG 31033			O
IMMG 32042			C
IMMG 32052			O
IMMG 32062			C
IMMG 32072			O
IMMG 32082			O
PMAT 11042	C		
PMAT 12062	C		
PMAT 11083 ²	O		
PMAT 12093 ²	O		
No of Credits from Core/Compulsory Units	29	28	23

¹ The credits earned from this course unit will not be counted for the award of the B.Sc. MIT Degree.

² For those who did Biology for G.C.E. (A/L).

Students may take course units up to a maximum of 6 credits with not more than 2 credits per semester from other faculties.

**4. COURSE STRUCTURE
SPECIAL DEGREE**

4.1 Special Degree –Course Structure

Botany, Chemistry, Environmental Conservation and Management, Microbiology, Molecular Biology & Plant Biotechnology and Zoology

Course code	Course combination (SDBS)							
	1	2	3	4	5	6	7	8
BIOC 31111			C					
BIOC 31122			O					
BIOC 31132			O					
BIOC 31141			O					
BIOC 32163	O	O	O					O
BIOC 32171	O	O	O					O
PRPL 31012	O	O	O				O	O
BOTA 31014	C	C	C					
BOTA 31022	C	C	C					
BOTA 32034	C	C	C					
BOTA 32042	C	C	C					
BOTA 41016	C	C	C					
BOTA 42026	C	C	C					
BOTA 41034	C	C	C					
BOTA 41043	C	C	C					
BOTA 42056	C	C	C					
BOTA 41066	C	C	C					
BOTA 42074	C	C	C					
BOTA 42083	C	C	C					
BOTA 43098	C	C	C					
BOTA 43112	C	C	C					
CHEM 31111	C				C	C	C	
CHEM 31122	O				O	O	O	
CHEM 31132	O			C	O	O	O	
CHEM 32152	O				O	O	O	
CHEM 32162	O				O	O	O	
CHEM 32171	O			C	O	O	O	
CHEM 32182	O				O	O	O	
CHEM 43214			C					
CHEM 43224			C					
CHEM 43234			C					
CHEM 43244			C					
CHEM 43254			C					
CHEM 43262			C					
CHEM 43272			C					
CHEM 43283			C					
CHEM 43293			C					
CHEM 43303			C					
CHEM 43312			C					
CHEM 43322 ³			C					
CHEM 43334			C					
CHEM 43344			C					
CHEM 43354			C					
CHEM 43364			C					
CHEM 43374			C					
CHEM 43384			C					
CHEM 43396			C					
CHEM 43401			C					

Course code	Course combination (SDBS)							
	1	2	3	4	5	6	7	8
ENCM 31014					C			
ENCM 31022					C			O
ENCM 31033					C			
ENCM 32053								O
ENCM 32073					C			
ENCM 33091					C			
ENCM 41014					C			
ENCM 42023					C			
ENCM 42034					C			
ENCM 42041					C			
ENCM 41054					C			
ENCM 41074					C			
ENCM 43084					C			
ENCM 41094					C			
ENCM 42104					C			
ENCM 42114					C			
ENCM 43122					C			
ENCM 43132					C			
ENCM 43148					C			
MIBI 31014						C		
MIBI 31022						C		
MIBI 33034						C		
MIBI 32041						C		
MIBI 32056						O		
MIBI 33062						O		
MIBI 43016						C		
MIBI 43026						C		
MIBI 43036						C		
MIBI 43046						C		
MIBI 43056						C		
MIBI 43066						C		
MIBI 43074						C		
MIBI 43088						C		
MBBT 31024							C	
MBBT 32044							C	
MBBT 32052							C	
MBBT 41016							C	
MBBT 42026							C	
MBBT 41034							C	
MBBT 41044							C	
MBBT 41055							C	
MBBT 42064							C	
MBBT 43073							C	
MBBT 43086							C	
MBBT 43092							C	
MBBT 43108							C	

Course code	Course combination (SDBS)							
	1	2	3	4	5	6	7	8
ZOOL 31013		O			O			C
ZOOL 31023		O			O			
ZOOL 32033		O						C
ZOOL 32043		O						C
ZOOL 41012								C
ZOOL 41025								C
ZOOL 42034 ¹								O
ZOOL 42044 ¹								O
ZOOL 41052								C
ZOOL 41064								C
ZOOL 41104								C
ZOOL 41124								C
ZOOL 42074								C
ZOOL 42092								C
ZOOL 42115								C
ZOOL 43132								C
ZOOL 43148								C
ZOOL 42152 ²					O			O
ZOOL 42162 ²					O			O

¹ Students must follow one of the two course units.

² Zoology (Special) students must follow one from the two course units. Students of ENCM (Special) can select one from the two or ignore both course units.

³ **Credits not counted for the GPA calculation.**

4.2 Special Degree –Course Structure

Computer Science, Management and Information Technology, Mathematics, Mathematical Physics, Physics and Statistics

Course Units	Course combination (SDPS)								
	1	2	3	4	5	6	7	8	9
AMAT 21035				O	O				
AMAT 31053	C	O	C						
AMAT 31063	O	O		C	C				
AMAT 41053	C	O							
AMAT 41063	C	O							
AMAT 42073	C	O							
AMAT 42083	C		C						
AMAT 42093	O	O							
AMAT 41244	C	O	O						
AMAT 41254	C								
AMAT 42264	C		C						
AMAT 42274	C		C	O	O				
AMAT 43288	C		C						
COSC 11014						C			
COSC 22025						C			
COSC 31014								C	
COSC 32025						O		C	
COSC 44014								C	
COSC 32035								C	
COSC 44024								C	
COSC 44034								C	
COSC 44045					O			C	
COSC 44055								C	
COSC 44064					O			C	
COSC 44074								O	
COSC 44084								O	
COSC 44094								O	
COSC 44104								O	
COSC 44114								O	
COSC 44124								O	
COSC 44134								O	
COSC 44144								O	
COSC 44154								O	
COSC 44164								O	
COSC 44174								O	
COSC 44184								O	
COSC 44194								O	
COSC 43206								C	
COSC 43214								O	
COST 31153									C
COST 31163									C
COST 31414 ¹									C
COST 31424									C
COST 32172									C
COST 32183									C
COST 32434 ²									C
COST 32444									C
COST 41604 ³									O
COST 41614 ³									O

Course Units	Course combination (SDPS)								
	1	2	3	4	5	6	7	8	9
COST 44513									C
COST 44522									C
COST 44532									C
COST 44542									C
COST 44554									C
COST 44562									C
COST 44574									C
COST 44584									C
COST 44594									C
COST 44624									C
COST 44634									C
COST 44644									C
COST 43656									C
ELEC 31214				O	O				
ELEC 32244					O				
ELTU 31022								C	
IMIT 31073							O		
IMIT 32042								C	
IMIT 32052							O		
IMIT 33066								C	
IMIT 44016								C	
IMIT 44026								C	
IMIT 44034								C	
IMIT 44044							O		
IMIT 44054							O		
IMIT 43068								C	
IMMG 31023								C	
IMMG 31033								O	
IMMG 32042								C	
IMMG 32052								O	
IMMG 32072								O	
IMMG 32082								O	
IMMG 44014								C	
IMMG 44024								C	
IMMG 44034								C	
IMMG 44044								C	
IMMG 44054								O	
IMMG 44064								O	
IMMG 44074								C	
PRPL 31012								O	
PHYS 13212				C	C				
PHYS 31282			C	C	C				
PHYS 31292			C	C	C				
PHYS 31301			C	C	C				
PHYS 32312				C	C				
PHYS 32331			C	C	C				
PHYS 44014			C	C	C				
PHYS 44024			C	C	C				
PHYS 44034				C					

Course Units	Course combination (SDPS)								
	1	2	3	4	5	6	7	8	9
PHYS 44044	C		C		C				
PHYS 43053				C	C				
PHYS 44064			C	C	C				
PHYS 44074			C	C	C				
PHYS 44084			C	C	C				
PHYS 44094	O		C	C	C				
PHYS 43104				C	C				
PHYS 43115				C	C				
PHYS 43128			C	C	C				
PMAT 31073				C	C				
PMAT 31093	C	C	C	C	C	C		C	
PMAT 32113				C	C				
PMAT 32123	O	O	O						
PMAT 32133	C	C	C	C	C	C		C	
PMAT 41063	C	C	C						
PMAT 41073	C	C	C						
PMAT 41083	C	C	O						
PMAT 42093	C	C	C						
PMAT 42103	O	O	O						
PMAT 41284*	C	C	O						
PMAT 41294	C	C	C						
PMAT 41304	C	C	C						
PMAT 42314	C	C							
PMAT 42324	O	O	O						
PMAT 42334	O	O							
PMAT 42344		C							
PMAT 43358	C	C							
STAT 11014								C	
STAT 11021								C	
STAT 31094		O				C			
STAT 31101		O				C			
STAT 32123		C				C			
STAT 32131		O				C			
STAT 32112		O				C			
STAT 41013		C				C			
STAT 44024		C				C			
STAT 41033		C				C			
STAT 44044		C				C			
STAT 44124						O			
STAT 42053		C				C			
STAT 43066		C				C			
STAT 44073		C				C			
STAT 42084		C				C			
STAT 44093		O				O			
STAT 44103		O				O			
STAT 43116						C			

¹ Compulsory only for students entered to the Special Degree Programme from the Biological Science stream.

² Compulsory for all students who have not followed the course units STAT 11014 and STAT 11021 in Level 1.

³ Students are allowed to register to follow either COST 41604 or COST 41614, but not both in Semester I of Level 4.

* Students in the Mathematical Physics program are strongly advised to attend this course.

Combination 1: A student should take either AMAT 43288 or PMAT 43358

Combination 3: A student should take either AMAT 43288 or PHYS 43128

Note: Some of the optional course units will be offered depending on the staff availability. Students are requested to consult the Head of the Department prior to their registrations for the level 4 course units.

5. COURSE UNITS

Course Units offered for B.Sc., BSc. ENCM and BSc. MIT programmes

Compulsory Course Units for Biological Science Stream		
	Course Units	Status
Year 1 Sem 1	BIOL 11012 Basic Microbiology	C
	BIOL 11022 Genetics	C
	BIOL 11032 Basic Biochemistry	C
	BIOL 11072 Evolution and Biogeography	C
	ELTU 11022 ¹ English for Biology	C
Year 2 Sem 2	ELTU 22032 ¹ English for communication and further studies	C
Year 1, Year 2 or Year 3	MGMT 11022 ^{1,2} Communication Skills and Personality Development	C

¹Credits not counted for the GPA calculation.²Should offer during the three year period of the Degree Programme.

Compulsory Course Units for Physical Science Stream		
Year 1	ELTU 13022 ^{1,2} English for Sciences	C

¹Offered throughout the year.²Credits not counted for the GPA calculation.

Compulsory Course Units for B.Sc. MIT Programme		
Year 1 Sem 1	ELTU 11032 ¹ English for Management Professionals	C
Year 3 Sem 1	ELTU 31022 Communication Skills for Management Professionals	C

¹Credits not counted for the GPA calculation.

Compulsory Course Units for B.Sc. ENCM Programme		
Year 1 Sem 1	ELTU 11022 ¹ English for Biology	C

¹Credits not counted for the GPA calculation.

Subject: Applied Mathematics (AMAT)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	AMAT 11032 Vector Algebra ¹	C	A/L Combined Mathematics	
Year 1 Sem 2	AMAT 12042 Elementary Ordinary Differential Equations ¹	C	A/L Combined Mathematics	
	AMAT 12053 Vector Analysis ²	C	AMAT11032	
	AMAT 12062 Mechanics I	C		AMAT12053
Year 2 Sem 1	AMAT 21035 Mechanics II	C	AMAT12062	
Year 2 Sem 2	AMAT 22045 Numerical Methods	C	PMAT 12062 PMAT 12073	
Year 3 Sem 1	AMAT 31053 Numerical Methods using MATLAB	O	AMAT 22045	
	AMAT 31063 Mechanics III ³	O	AMAT 21035	
	AMAT 31073 Mathematical Modelling	O	PMAT 12073	
	AMAT 31083 Mathematics for Finance I	O	PMAT 12062	
	PRPL 31012 Professional Placement	O	All AMAT compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	AMAT 32093 Computational Mathematics	O	AMAT31053	
	AMAT 32103 Introduction to Fluid Dynamics	O	PMAT 31073	PMAT 32113
	AMAT 32113 Mathematics for Finance II	O	AMAT31083	
Special				
	Course Units	Status	Pre-requisite	Co-requisite
Year 3 Sem 1	AMAT 41053 Qualitative and Quantitative Behaviour of the Solutions of Ordinary Differential Equations	C	AMAT22045	
	AMAT 41063 Advanced Mathematical Modelling	O	PMAT 12073	
Year 3 Sem 2	AMAT 42073 Advanced Computational Mathematics	C	AMAT41053	
	AMAT 42083 Fluid Dynamics	C	PMAT 41063	PMAT 42093
	AMAT 42093 Financial Mathematics	O	PMAT 12062	
Year 4 Sem 1	AMAT 41244 Boundary Value Problems ⁴	C/O	PMAT 41073	
	AMAT 41254 Quantum Mechanics	C	AMAT31063	
	AMAT 43288 Research/Study Project	C		
Year 4 Sem 2	AMAT 42264 Quantum Field Theory	C	AMAT41254/ PHYS 44014	
	AMAT 42274 Tensors and General Relativity	C	PHYS 12194 PMAT 21035	

¹ Compulsory for the Physical Science students.² Compulsory also for the students offering Physics as a subject.³ Not consider for students following B.Sc. (Special) Degree in Physics.⁴ Compulsory for the students in the Special Degree Programme in Mathematics (Applied Mathematics stream).

Subject: Biochemistry¹ (BIOC)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	BIOL 11032 Basic Biochemistry (Lecture cum Laboratory) - (for BS stream)	C	A/L Chemistry and Biology	
Year 1 Sem 2	BIOC 12113 Introductory Biochemistry (Lecture cum Laboratory) - (for PS stream)	C	A/L Chemistry	
	BIOC 12122 Tools in Biochemistry	C/O	BIOL 11032/ BIOC 12113	
	BIOC 12133 Functional Biochemistry	C/O	BIOL 11032/ BIOC 12113	BIOC 12141
	BIOC 12141 Functional Biochemistry Laboratory	C/O		BIOC 12133
Year 2 Sem 1	BIOC 21114 Molecular Biology & Analytical Biochemistry	C/O	BIOC 12133	BIOC 21121
	BIOC 21121 Molecular Biochemistry Laboratory	C/O		BIOC 21114
Year 2 Sem 2	BIOC 22132 Biotechnology	C/O	BIOC 21114	
	BIOC 22142 Introduction to Environmental and Agricultural Biochemistry	C/O	BIOC 12133	BIOC 22151
	BIOC 22151 Environmental and Agricultural Biochemistry Laboratory	C/O		BIOC 22142
Year 3 Sem 1	BIOC 31111 Seminar	C	BIOC 22132	
	BIOC 31122 Immunochemistry & Neurochemistry	O	BIOC 22132	
	BIOC 31132 Pharmaceutical Chemistry	O	BIOC 31122	BIOC 31141
	BIOC 31141 Pharmaceutical Chemistry Laboratory	O		BIOC 31132
	PRPL 31012 Professional Placement	O	All BIOC compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	BIOC 32163 Food and Nutritional Biochemistry	O	BIOC 12133/ CHEM 22152	BIOC 32171
	BIOC 32171 Food and Nutritional Biochemistry Laboratory	O		BIOC 32163

¹Restricted enrolment.

Subject: Botany (BOTA)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year1 Sem 1	BIOL 11022 Genetics	C	A/L Biology	
Year1 Sem 2	BOTA 12014 Form, Structure and Classification of Angiosperms	C	All BIOL course units	BOTA 12022
	BOTA 12022 Form, Structure and Classification of Angiosperms Laboratory	C		BOTA 12014
	BOTA 12032 Plants and People*	A		
Year 2 Sem 1	BOTA 21013 Plant Physiology	C	BOTA 12014	BOTA 21022
	BOTA 21022 Plant Physiology Laboratory	C		BOTA 21013
Year 2 Sem 2	BOTA 22034 Plant Evolution and Diversity	C	All BIOL course units/ENCM 11012	BOTA 22042
	BOTA 22042 Plant Evolution and Diversity Laboratory	C		BOTA 22034
Year 3 Sem 1	BOTA 31014 Ecology and Environmental Resources Management	C	BOTA 22034	BOTA 31022
	BOTA 31022 Ecology and Environmental Resources Management Laboratory	C		BOTA 31014
	PRPL 31012 Professional Placement	O	All BOTA compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	BOTA 32034 Plant Pathology, Tissue Culture and Gene Technology	O	BOTA 21013	BOTA 32042
	BOTA 32042 Plant Pathology, Tissue culture and Gene Technology Laboratory	O		BOTA 32034
	BOTA 32054 Horticulture and Post Harvest Biology	O	BOTA 21013	
Special				
	Course Units	Status	Pre-requisite	
Year 3 Sem 1	BOTA 41016 Plant Systematics and Bioinformatics	C	All BOTA compulsory course units	
Year 3 Sem 2	BOTA 42026 Plant Physiology and Biochemistry			
Year 4 Sem 1	BOTA 41034 Plant Pathology		All BOTA compulsory course units and BOTA 32034	
	BOTA 41043 Applied Microbiology			
	BOTA 41066 Economic Botany and Plant Breeding			
	BOTA 43098 Research Project-Dissertation			
	BOTA 43112 Term Paper			
	BOTA 42056 Ecology of Sustainability			
Year 4 Sem 2	BOTA 42074 Molecular & Microbial Genetics			
	BOTA 42083 Fungal Ecophysiology and Applied Mycology			

* Offered during alternate academic years

Subject: Chemistry (CHEM)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year1 Sem 1	CHEM 11111 Calculations in Chemistry ¹	C	A/L Chemistry	
	CHEM 11122 General Chemistry and Basic Analytical Chemistry	C	A/L Chemistry	
	CHEM 11132 Basic Physical Chemistry	C	A/L Chemistry	
	CHEM 11141 Basic Chemical Analysis Laboratory	C	A/L Chemistry	CHEM 11122
Year1 Sem 2	CHEM 12152 Basic Inorganic Chemistry I	C	CHEM 11122	
	CHEM 12162 Basic Organic Chemistry	C	CHEM 11122	
	CHEM 12171 Introductory Organic Chemistry Laboratory	C	CHEM 11141	
	CHEM 12182 Chemistry in Context ²	A	A/L Chemistry	
Year 2 Sem 1	CHEM 21112 Basic Physical Chemistry II	C	CHEM 11132	
	CHEM 21122 Analytical Chemistry	C	CHEM 11122	
	CHEM 21131 Physical Chemistry Laboratory	C	CHEM 11141/ CHEM 11132	CHEM 21112
Year 2 Sem 2	CHEM 22142 Basic Inorganic Chemistry II	C	CHEM 12152	
	CHEM 22152 Organic Spectroscopy, Natural Products and Synthesis	C	CHEM 12162	
	CHEM 22161 Organic Analytical and Synthetic Chemistry Laboratory	C	CHEM 12171	CHEM 22152
	CHEM 22171 Analytical Chemistry Laboratory	C	CHEM 21122	
Year 3 Sem 1	CHEM 31111 Inorganic Synthesis and Analysis Laboratory	C	CHEM 11141	
	CHEM 31122 Material Chemistry, Earth Recourses and Introduction to Quality Management	O	CHEM 22142	
	CHEM 31132 Introduction to Environmental Chemistry	O	CHEM 11122/ 22122	CHEM 32171
	PRPL 31012 Professional Placement	O	All CHEM compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	CHEM 32152 Polymer Chemistry	O	CHEM 11132/ 21112	
	CHEM 32162 Applied Natural Products Chemistry	O	CHEM 22152	
	CHEM 32171 Environmental Chemistry Laboratory	O		CHEM 31132

¹Credits not counted for the GPA calculation.²Offered only to students that do not take Chemistry as a subject

Subject: Chemistry (CHEM)		
Special		
	Course Units	Status
Year 3	CHEM 43214 Advanced Analytical Chemistry	C
	CHEM 43224 Advanced Biochemistry I	C
	CHEM 43234 Advanced Inorganic Chemistry I	C
	CHEM 43244 Advanced Organic Chemistry I	C
	CHEM 43254 Advanced Physical Chemistry I	C
	CHEM 43262 Analytical and Environmental Chemistry Laboratory	C
	CHEM 43272 Biochemistry Laboratory	C
	CHEM 43283 Inorganic Chemistry Laboratory	C
	CHEM 43293 Organic Chemistry Laboratory	C
	CHEM 43303 Physical Chemistry Laboratory	C
	CHEM 43312 Concepts in Chemistry	C
	CHEM 43322 Industrial / Professional Placement ¹	C
Year 4	CHEM 43334 Advanced Biochemistry II	C
	CHEM 43344 Advanced Environmental Chemistry	C
	CHEM 43354 Advanced Inorganic Chemistry II	C
	CHEM 43364 Advanced Organic Chemistry II	C
	CHEM 43374 Advanced Physical Chemistry II	C
	CHEM 43384 Materials Chemistry	C
	CHEM 43396 Research Project - Dissertation	C
	CHEM 43401 Seminar	C

¹Credits not counted for the GPA calculation.

Subject: Computer Science¹ (COSC)			
General			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	COSC 11014 Theoretical Foundations of Computer Science	C	A/L
Year 1 Sem 2	COSC 12025 Introduction to Programming and Program Design	C	COSC 11014
Year 2 Sem 1	COSC 21015 Data Structures and Algorithms	C	COSC 12025
Year 2 Sem 2	COSC 22025 Database Management Systems	C	COSC 11014
	COSC 22035 Object Oriented Programming	O	COSC 12025
Year 3 Sem 1	COSC 31014 Data Communication and Networks	C	COSC 11014
	PRPL 31012 Professional Placement	O	All COSC compulsory units offered in Levels 1 & 2
Year 3 Sem 2	COSC 32025 Web and Internet Technologies	O	COSC 11014
	COSC 32035 Visual Programming	O	COSC 12025
Special			
	Course Units	Status	Pre-requisite
Year 3 and Year 4	COSC 44014 System Analysis and Design	C	COSC 11014
	COSC 44024 Object Oriented Analysis and Design	C	COSC 12025
	COSC 44034 Computer Architecture and Design	C	COSC 11014
	COSC 44045 Advanced Database Systems with Applications	C	COSC 22025
	COSC 44055 Logic Programming	C	COSC 12025
	COSC 44064 Machine Learning	C	COSC 11014
	COSC 44074 Theoretical Aspects of Computer Graphics	O	COSC 12025
	COSC 44084 Data Security	O	COSC 31014
	COSC 44094 Software Engineering	O	COSC 44014
	COSC 44104 Software Project Management	O	COSC 44014 or COSC 44094
	COSC 44114 Multimedia Systems Development	O	COSC 31014
	COSC 44124 Wireless Communication and Networks	O	COSC 31014
	COSC 44134 Theory of Computation	O	COSC 11014
	COSC 44144 Compiler Theory	O	All COSC compulsory course units
	COSC 44154 Digital Image Processing	O	COSC 44074
	COSC 44164 Data Mining and Warehousing	O	COSC 22025 and COSC 44045
	COSC 44174 e-Business Technologies	O	COSC 11014
	COSC 44184 Natural Language Processing	O	All COSC compulsory course units
	COSC 44194 Special Topics in Computer Science	O	
	COSC 43206 Research Project	C	
	COSC 43214 Industrial Training	O	

¹Restricted enrolment.

Subject: Computer Studies¹ (COST)			
General			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	COSC 11014 Theoretical Foundations of Computer Science	C	G.C.E (A/L)
Year 1 Sem 2	COST 12115 Introduction to Programming	C	COSC 11014
Year 2 Sem 1	COST 21123 Database Management Systems	C	G.C.E (A/L)
Year 2 Sem 2	COST 22133 Structured Systems Analysis and Design	C	COSC 11014
	COST 22144 Web Technology and e commerce Applications	C	COSC 12115
Year 3 Sem 1	COST 31153 Visual Programming	C	COSC 12115
	COST 31163 Management Information Systems	C	COSC 11014
	PRPL 31012 Professional Placement	O	All COST compulsory units offered in Levels 1 & 2
Year 3 Sem 2	COST 32172 Web Programming	O	COST 22144
	COST 32183 Multimedia Technologies	O	COSC 11014

¹Restricted enrolment.

Subject: Computer Studies¹ (COST)			
Special	Course Units	Status	Pre-requisites
Year 3 and Year 4	COST 31414 Mathematics for Information Technology ²	C	
	COST 31424 Data Structures and Algorithms	C	COST12115
	COST 32434 Statistics for Information Technology ³	C	COST31414
	COST 32444 Object Oriented Programming	C	COSC11014, COST12115
	COST 44513 Operating Systems	C	COSC11014
	COST 44522 Human-Computer Interaction	C	COST22144, COST31153
	COST 44532 Software Quality Assurance	C	COSC11014, COST22133
	COST 44542 Software Project Management	C	COST22133
	COST44554 Data Communication and Networks	C	COSC11014
	COST 44562 Systems and Network Administration	C	COSC11014, COST44513, COST44553
	COST 44574 Object Oriented Analysis and Design	C	COST32444
	COST 44584 Computer Architecture and Organization	C	COSC11014, COST44513
	COST 44594 Advanced Database Systems with Applications	C	COST21123
	COST 41604 e-Business Technologies	O	COSC11014, COST22144
	COST 41614 Industrial Training	O	All COST compulsory course units
	COST 44624 Computer Graphics	C	COST12115, COST31414
	COST 44634 Logic Programming	C	COST12115, COST31414
	COST 44644 Information Security	C	COST44554
	COST 43656 Research Project	C	All COST compulsory course units

¹ Restricted enrolment.² Compulsory only for students entered to the Special Degree Programme from the Biological Science stream.³ Compulsory for all students who have not followed the course units STAT 11014 and STAT 11021 in Level 1.

Subject: Environmental Conservation and Management (ENCM)			
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	ENCM 41014 Air and Water Quality Management ¹	C	ENCM 22013 MIBI 22054
Year 3 Sem 2	ENCM 42023 Geographical Information Systems in Environmental Studies	C	All Level 1 & 2 ENCM course units
	ENCM 42034 Marine and Coastal Resources Management ¹	C	All Level 1 & 2 ENCM course units
	ENCM 42041 Seminar	C	All Level 1, 2 & 3 compulsory ENCM course units
Year 4 Sem 1	ENCM 41054 Applied Ecology	C	ENCM 21053
	ENCM 41074 Conservation Biology and Wild Life Management	C	ENCM 31014
	ENCM 43084 Environmental Toxicology ¹	C	ENCM 22013
	ENCM 41094 Urban Environment Management ¹	C	ENCM 21022, ENCM 31043, ENCM 32073
Year 4 Sem 2	ENCM 43148 Research Project	C	All compulsory ENCM course units offered in the first three years
	ENCM 42104 Reserve Design and Protected Area Management ¹	C	ENCM 41054
	ENCM 42114 Management of Wetlands and Their Resources	C	ENCM 31014 ENCM 41054 ENCM 41074
	ENCM 43122 Special Topics in Environmental Management	C	All compulsory ENCM course units offered in the first three years
	ENCM 43132 Industrial/ Professional Training	C	

¹These may be offered in the third year or fourth year of the degree programme depending on the availability of resources while maintaining the required level 4 course credits in the third and fourth years of the programme.

Subject: Industrial Management (IMGT)		
	Course Units	Status
Year 1	IMGT 14012 ¹ Management Theory and Practice	A
Year 2	IMGT 21011 Introduction to Intellectual Property	A

¹Can take either IMGT 14012 or MGMT 11012

Subject: Information Technology (IMIT)			
General			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	IMIT 11063 Computer Systems	C	G.C.E. (A/L)
	IMIT 11022 Programming Concepts	C	G.C.E. (A/L)
Year 1 Sem 2	IMIT 12033 Object-Oriented Programming	O	IMIT 11022
	IMIT 12043 Database Management Systems	C	G.C.E. (A/L)
	IMIT 12052 Data Structures and Algorithms	C	G.C.E. (A/L)
Year 2 Sem 1	IMIT 21012 Structured Systems Analysis and Design	C	IMIT 11063
	IMIT 21024 Data Communication and Computer Networks	O	IMIT 11063
	IMIT 21032 Visual Programming	C	IMIT 12043
	IMIT 21042 Business Information Systems	C	IMIT 11063
Year 2 Sem 2	IMIT 22053 Software Engineering	C	IMIT 21012
	IMIT 22062 Object Oriented Systems Analysis and Design	C	IMIT 21012
Year 3 Sem 1	IMIT 31013 Web Programming	C	IMIT 11022
	IMIT 31022 Advanced Databases	O	IMIT 12043
	IMIT 31033 Human Factors in Information Technology	O	IMIT 21042
	IMIT 31073 Mobile Computing	O	IMIT 12033
Year 3 Sem 2	IMIT 32042 Information Systems Management	C	IMIT 21042
	IMIT 32052 Emerging Technologies	O	IMIT 11063
	IMIT 33066 Computer Project	C	All comp. modules in MIT
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	IMIT 31073 Mobile Computing	O	IMIT 12033
Year 3 Sem 2	IMIT 32042 Information Systems Management	C	IMIT 21042
	IMIT 32052 Emerging Technologies	O	IMIT 11063
Year 3	IMIT 33066 Computer Project	C	All comp. modules in MIT
Year 4 Sem ½	IMIT 44016 Data Engineering	C	IMIT 12043
	IMIT 44026 E-commerce and Web Technology	C	IMIT 21042 IMIT 32042
	IMIT 44034 Systems Modeling and Simulation	C	IMMG 22043
	IMIT 44044 Human Computer Interaction	O	IMIT 21042
	IMIT 44054 Knowledge-based Systems	O	PMAT 11042 PMAT 12062
Year 4	IMIT 43068 Research Project	C	IMMG 44034

Subject: Management (IMMG)

General			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	IMMG 11012 Principles of Management	C	G.C.E. (A/L)
	IMMG 11023 Economics for Managers	C	G.C.E. (A/L)
	IMMG 11033 Business Statistics	C	G.C.E. (A/L)
Year 1 Sem 2	IMMG 12043 Operations Research I	C	G.C.E. (A/L)
	IMMG 12062 Organizational Behaviour	C	IMMG 11012
	IMMG 12072 Industry and Technology	C	G.C.E. (A/L)
Year 1 Sem 1/2	IMMG 14052 Industrial and Business Law	O	G.C.E. (A/L)
Year 1 Sem 1/2	IMMG 13082 Personal Progress and Development	C	None
Year 2 Sem 1	IMMG 21012 Leadership and Management Communication	C	IMMG 11012
	IMMG 21023 Marketing Management	C	G.C.E. (A/L)
	IMMG 21032 Human Resource Management	C	IMMG 11012
	IMMG 21063 Operations Management	C	IMMG 12043
Year 2 Sem 2	IMMG 22043 Operation Research II	C	IMMG 12043
	IMMG 22052 Financial Accounting	C	G.C.E. (A/L)
	IMMG 22072 Industrial Training	C	All prev. comp. modules
Year 3 Sem 1	IMMG 31013 Management of Technology	C	IMMG 12072
	IMMG 31023 Corporate Finance	C	IMMG 22052
	IMMG 31033 International Trade and Export Marketing	O	IMMG 21023
Year 3 Sem 2	IMMG 32042 Strategic Management	C	IMMG 11012 IMMG 21023
	IMMG 32052 Cross Cultural Management	O	IMMG 11012
	IMMG 32062 Advanced Operations Management	C	IMMG 21063
	IMMG 32072 Global Trends in Business Management	O	IMMG 11012
	IMMG 32082 Small Business Management	O	IMMG 11012
Special			
Year 3 Sem 1	IMMG 31023 Corporate Finance	C	IMMG 22052
	IMMG 31033 International Trade and Export Marketing	O	IMMG 21023
Year 3 Sem 2	IMMG 32042 Strategic Management	C	IMMG 11012
	IMMG 32052 Cross Cultural Management	O	IMMG 11012
	IMMG 32072 Global Trends in Business Management	O	IMMG 11012
	IMMG 32082 Small Business Management	O	IMMG 11012
Year 4 Sem 1/2	IMMG 44014 Strategic Marketing	C	IMMG 21023
	IMMG 44024 Strategic Accounting & Corporate Finance	C	IMMG 31023
	IMMG 44034 Research Methodology	C	IMMG 11033
	IMMG 44044 Management of Technology for Competitiveness	C	IMMG 12072
	IMMG 44054 Quantitative Techniques in Decision Making	O	IMMG 12043 IMMG 22043
	IMMG 44064 Investment Management	O	IMMG 22052
	IMMG 44074 Business Process Engineering	C	IMMG 21063

Subject: Microbiology ¹ (MIBI)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	BIOL 11012 Basic Microbiology (Lecture cum Laboratory)	C	A/L Biology	
Year 1 Sem 2	MIBI 12014 Taxonomy of Bacteria, virus and Eukaryotic Microorganisms	C	BIOL 11012	MIBI 12022
	MIBI 12022 Taxonomy of Bacteria, virus and Eukaryotic Microorganisms laboratory	C	BIOL 11012	MIBI 12014
Year 2 Sem 1	MIBI 21014 Microbial Genetics and Microbial Physiology & Biochemistry	C	MIBI 12014 MIBI 12022	MIBI 21022
	MIBI 21022 Microbial Genetics and Microbial Physiology & Biochemistry laboratory	C	MIBI 12014 MIBI 12022	MIBI 21014
Year 2 Sem 2	MIBI 22034 Environmental and Agricultural Microbiology	C	MIBI 21014 MIBI 21022	MIBI 22042
	MIBI 22042 Environmental and Agricultural Microbiology laboratory	C	MIBI 21014 MIBI 21022	MIBI 22034
	MIBI 22054 Environmental Microbiology ²	C	ENCM 21032	MIBI 22062
	MIBI 22062 Environmental Microbiology Laboratory ²	C	ENCM 21032	MIBI 22054
Year 3 Sem 1	PRPL 31012 Professional placement	O	All MIBI compulsory units offered in Levels 1 & 2	
	MIBI 31014 Food Microbiology, Food Hygiene and Food Technology	C	MIBI 21014 MIBI 21022	MIBI 31022
	MIBI 31022 Food Microbiology, Food Hygiene and Food Technology laboratory	C	MIBI 21014 MIBI 21022	MIBI 31014
Year 3 Sem 2	MIBI 33034 Medical, & Veterinary Microbiology and Microbial Technology	C ³ /O	MIBI 21014 MIBI 21022	MIBI 32041
	MIBI 32041 Medical, & Veterinary Microbiology laboratory	C ³ /O	MIBI 21014 MIBI 21022	MIBI 33034
	MIBI 32056 Internship in microbiology	C ³ /O	MIBI 31014 MIBI 31022	
	MIBI 33062 Industrial Microbiology laboratory	O	MIBI 31014 MIBI 31022	MIBI 33034

¹Restricted enrolment.²Compulsory only for the students who follow the B.Sc. Degree Programme in Environmental Conservation and Management.³Compulsory only for the Microbiology special students.

Subject: Microbiology (MIBI)			
Special			
	Course Units	Status	Pre-requisite
Year 3	MIBI 43016 Bacterial Taxonomy, Physiology & Biochemistry and Virology	C	All MIBI compulsory course units
	MIBI 43026 Microbial Genetics and Bio-informatics		
Year 4	MIBI 43036 Microbial Technology and Environmental Microbiology		
	MIBI 43046 Food Quality Assurance, Food Safety and Food Technology		
	MIBI 43056 Medical Microbiology and Immunology		
	MIBI 43066 Microbiological Aspects in Agriculture, Fisheries and Special Topics		
	MIBI 43074 Microbiology Practical/Field Visits		
	MIBI 43088 Research Project		

Subject: Molecular Biology and Plant Biotechnology¹ (MBBT)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	BIOL 11022 Genetics	C	A/L Biology	
Year 1 Sem 2	MBBT 12013 Cell Biology	C	All BIOL course units	
	MBBT 12024 Introduction to Molecular and Microbial Biology	C	All BIOL course units	
Year 2 Sem 1	MBBT 21014 Plant Physiology and Biochemistry	C	MBBT 12013	MBBT 21022
	MBBT 21022 Plant Physiology and Biochemistry Laboratory	C		MBBT 21014
Year 2 Sem 2	MBBT 22033 Principles of Molecular Genetics and Plant Biotechnology	C		MBBT 22042
	MBBT 22042 Principles of Molecular Genetics and Plant Biotechnology Laboratory	C		MBBT 22033
Year 3 Sem 1	MBBT 31024 Eukaryotic Gene Expression and Advanced Techniques in Biotechnology	C		
	PRPL 31012 Professional Placement	O	All MBBT compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	MBBT 32044 Plant Pathology and Tissue Culture	O	MBBT 21014	MBBT 32052
	MBBT 32052 Plant Pathology and Tissue Culture Laboratory	O		MBBT 32044

¹Restricted enrolment.

Subject: Molecular Biology and Plant Biotechnology (MBBT)			
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	MBBT 41016 Advanced Microbial Genetics	C	All MBBT compulsory course units
Year 3 Sem 2	MBBT 42026 Plant Genetic Engineering		
Year 4 Sem 1	MBBT 41034 Molecular Plant Pathology		All MBBT compulsory course units and MBBT 32044
	MBBT 41044 Genetic Manipulation of Micro-organisms		
	MBBT 41055 Developmental Gene Regulation		
	MBBT 43073 Bioinformatics in Molecular Biology		
	MBBT 43086 Special Topics in Molecular Biology/ Biotechnology		
	MBBT 43092 Term Paper		
	MBBT 43108 Research Project-Dissertation		
Year 4 Sem 2	MBBT 42064 Ethics in Biotechnology		

Subject: Physics ¹ (PHYS)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	PHYS 11153 Basic Physics for Audiology ²	C	O/L Mathematics & Science	
	PHYS 11162 Mechanics and Properties of Matter	C	A/L Physics	PHYS 11181
	PHYS 11172 Electric Circuit Fundamentals	C	A/L Physics	PHYS 11181
	PHYS 11181 Elementary Physics Laboratory – I	C	A/L Physics	PHYS 11162 & PHYS 11172
Year 1 Sem 2	PHYS 12194 Modern Physics ³	C/O	A/L Physics	PHYS 12201
	PHYS 12201 Elementary Physics Laboratory - II	C	PHYS 11181	PHYS 12194
Year 1	PHYS 14222 Physics for Understanding Nature ⁴	A	A/L Physics	
Year 2 Sem 1	PHYS 21234 Physics of Waves and Optics	C	PHYS 12194	PHYS 21241
	PHYS 21241 General Physics Laboratory – I	C	PHYS 12201	PHYS 21234
Year 2 Sem 2	PHYS 22252 Solid State Physics	C	PHYS 21234	PHYS 22271
	PHYS 22262 Thermodynamics	C	PHYS 21234	PHYS 22271
	PHYS 22271 General Physics Laboratory – II	C	PHYS 21241	PHYS 22252 & PHYS 22262
Year 3 Sem 1	PHYS 31282 Electromagnetism	C	PHYS 11172	PHYS 31301
	PHYS 31292 Nanoscience	C	PHYS 12194	PHYS 31301
	PHYS 31301 General Physics Laboratory – III	C	PHYS 22271	PHYS 31282
	PRPL 31012 Professional Placement	O	All PHYS compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	PHYS 32312 Environmental Physics	O	A/L Chemistry or Physics	
	PHYS 32322 Introduction to Cosmology and Astrophysics ^{5,6}	O	A/L Physics	
	PHYS 32331 General Physics Laboratory – IV	C	PHYS 31301	

¹Restricted enrolment.²PHYS 11153 is offered for the BSc in Speech and Hearing Sciences programme conducted by the Department of Disability Studies, Faculty of Medicine.³No Co-Requisite for students following Applied Mathematics as a subject.⁴Offered for students who have not followed Physics as a subject.⁵Availability of the course unit will be announced by the Department at the beginning of the each academic year.⁶Not offered for students following B Sc (Special) Degree in Physics.

Subject: Physics (PHYS)			
Special			
	Course Units	Status	Pre-requisite
Year 3	PHYS 13212 Computer Applications in Physics	C	All AMAT/PHYS Compulsory Course units
	PHYS 44014 Quantum Mechanics		
	PHYS 44024 Statistical Physics		
	PHYS 44034 Advanced Electronics ¹		
	PHYS 44044 Theory of Relativity ²		
	PHYS 43053 Advanced Physics Laboratory – I		
Year 4	PHYS 44064 Solid State Physics		
	PHYS 44074 Electromagnetic Theory		
	PHYS 44084 Nuclear Physics and Fundamental Particles		
	PHYS 44094 Cosmology and Astrophysics		
	PHYS 43104 Special Topics in Physics		
	PHYS 43115 Advanced Physics Laboratory - II		
	PHYS 43128 Research Project		

¹Offered for students who have not followed Electronics as a subject.

²Offered for students who have followed Electronics as a subject.

Subject: Pure Mathematics (PMAT)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	PMAT 11042 Discrete Mathematics I ^{1,2}	C		
	PMAT 11083 Topics in Basic Mathematics ³	A		
	PMAT 14102 Logic and Reasoning	A		
Year 1 Sem 2	PMAT 12052 Calculus I ¹	C	A/L Combined Mathematics	
	PMAT 12062 Discrete Mathematics II ²	C	PMAT 11042	
	PMAT 12073 Calculus II	C		PMAT 12052
	PMAT 12093 Introduction to Calculus ³	A		
Year 2 Sem 1	PMAT 21035 Linear Algebra	C	PMAT 12062	
Year 2 Sem 2	PMAT 22045 Infinite Series and Series of Functions	C	PMAT 12073	
Year 3 Sem 1	PMAT 31073 Introduction to Functions of Several Variables	O	PMAT 22045	
	PMAT 31083 Algebraic Structures	O	PMAT 21035	
	PMAT 31093 Ordinary Differential Equations	O	PMAT 12073	
	PMAT 31103 Riemann Theory of Integration	O	PMAT 22045	
	PRPL 31012 Professional Placement	O	All PMAT compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	PMAT 32113 Complex Variables	O	PMAT 31073	
	PMAT 32123 Geometry	O	PMAT 21035	
	PMAT 32133 Partial Differential Equations and Integral Transforms	O	PMAT 31093 PMAT 22045	

¹ Compulsory for Physical Science students² Compulsory for Management and Information Technology students³ Available only for students who have not offered Combined Mathematics for G.C.E. (A/L) Examination

Subject: Pure Mathematics (PMAT)			
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	PMAT 41063 Functions of Several Variables	C	PMAT 22045
	PMAT 41073 Mathematical Methods	C	PMAT 22045
	PMAT 41083 Advanced Theory of Riemann Integration	C	PMAT 22045
Year 3 Sem 2	PMAT 42093 Complex Analysis	C	PMAT 31073
	PMAT 42103 Differential Geometry	O	PMAT 22045
Year 4 Sem 1	PMAT 41284 Topology ¹	C	PMAT 41083
	PMAT 41294 Functional Analysis	C	PMAT 31073
	PMAT 41304 Group Theory	C	PMAT 21035
Year 4 Sem 2	PMAT 42314 Measure Theory	C	PMAT 41083
	PMAT 42324 Ring Theory and Field Theory	O	PMAT 41304
	PMAT 42334 Graph Theory and Number Theory	O	PMAT 41304
	PMAT 42344 Special Topics in Mathematics and Statistics	C	PMAT 41083
	PMAT 43358 Research/Study Project	C	

¹ Students in the Mathematical Physics program are strongly advised to attend these lectures.

Subject: Statistics¹ (STAT)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	STAT 11014 Statistical Modelling	C	A/L Combined Mathematics/Mathematics	STAT 11021
	STAT 11021 Statistical Laboratory I	C	A/L Combined Mathematics/Mathematics	STAT 11014
Year 1 Sem 2	STAT 12033 Probability Distributions and Applications I	C	STAT 11014 and STAT 11021	
	STAT 12042 Operational Research I	C		
Year 1	STAT 14142 Statistics for Natural Sciences	A		
Year 2 Sem 1	STAT 21053 Probability Distributions and Applications II	C	STAT 12033	
	STAT 21062 Statistical Inference I	C	STAT 21053	
Year 2 Sem 2	STAT 22073 Statistical Inference II	C	STAT 21062	
	STAT 22082 Survey Methods and Sampling Techniques	C	STAT 22073	
Year 3 Sem 1	STAT 31094 Operational Research II	O	STAT 12042	STAT 31101
	STAT 31101 O.R. Laboratory	O	STAT 12042	STAT 31094
	PRPL 31012 Professional Placement	O	All STAT compulsory units offered in Levels 1 & 2	
Year 3 Sem 2	STAT 32112 Statistical Quality Control	O	STAT 21053	
	STAT 32123 Linear Models	C	STAT 22073	
	STAT 32131 Statistical Laboratory II	O	STAT 11021	

¹Restricted enrolment.

Subject: Statistics (STAT)			
Special			
	Course Units	Status	Pre-requisite
Year 3	STAT 41013 Time Series Analysis	C	Compulsory course units covered in the first two years
	STAT 44024 Categorical Data Analysis	C	
	STAT 41033 Optimization	C	STAT 12042
	STAT 44044 Actuarial Mathematics	C	STAT 22073
	STAT 42053 Bayesian Inference & Decision Theory	C	STAT 22073
Year 4	STAT 43066 Stochastic Processes	C	STAT 21062
	STAT 44073 Multivariate Data Analysis	C	Compulsory course units covered in first three years
	STAT 42084 Design and Analysis of Experiments	C	STAT 32123
	STAT 44093 Econometrics	O	STAT 32123
	STAT 44103 Special Topics in Statistics	O	Compulsory course units covered in first three years
	STAT 43116 Research Project/Independent Study	C	
	STAT 44124 Industrial Training	O	All STAT compulsory units
	COSC 44045 Advanced Database Systems With Applications	O	COSC 22025
	COSC 44064 Machine Learning	O	COSC 11014 COSC 32025

Subject: Zoology (ZOOL)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	BIOL 11072 Evolution and Biogeography	C	A/ L Biology	
Year 1 Sem 2	ZOOL 12014 Animal Diversity	C	A/ L Biology	ZOOL 12022
	ZOOL 12022 Animal Diversity Laboratory	C	A/ L Biology	ZOOL 12014
	ZOOL 12032 Insects in relation to man	A		
	ZOOL 12042 Introduction to ornamental fish culture	A		
Year 2 Sem 1	ZOOL 21014 Animal Histology, Physiology and Developmental Biology	C	A/ L Biology	ZOOL 21022
	ZOOL 21022 Animal Histology, Physiology and Developmental Biology Laboratory	C	A/ L Biology	ZOOL 21014
Year 2 Sem 2	ZOOL 22064 Animal Ecology and Behaviour	C	BIOL 11072	ZOOL 22042
	ZOOL 22042 Animal Ecology Laboratory	C	A/ L Biology	ZOOL 22064
Year 3 Sem 1	PRPL 31012 Professional Placement	O	All ZOOL compulsory units offered in Levels 1 & 2	
	ZOOL 31013 Fisheries Biology and Management ²	C ¹ /O	A/L Biology	
	ZOOL 31023 Applied Entomology ²	O*	ZOOL 12014	
Year 3 Sem 2	ZOOL 32033 Aquaculture ²	C ¹ /O	A/ L Biology	
	ZOOL 32043 Parasitology ²	C ¹ /O	ZOOL 12014	

* Offered only for General Degree students

¹ Compulsory only for the Zoology (Special) students

² The student who wish to follow Zoology as a subject should follow all compulsory ZOOL course units and at least **three** optional ZOOL course units offered in the Level 3

Subject: Zoology (ZOOL)			
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	ZOOL 41012 Statistical Methods in Zoology	C	All compulsory ZOOL Course units offered in the first two years
	ZOOL 41025 Insect Systematics and Biology	C	ZOOL 12014
Year 3 Sem 2	ZOOL 42034 Comparative Animal Physiology ¹	O	ZOOL 21014 ZOOL 21022
	ZOOL 42044 Molecular Genetics ¹	O	BIOL 11022
	ZOOL 42092 Histological and Museum Techniques	C	ZOOL 12014/ZOOL 21014
	ZOOL 41052 Conservation Biology	C	ZOOL 12014/ZOOL 22064
Year 4 Sem 1	ZOOL 41064 Applied Ecology	C	ZOOL 22064
	ZOOL 41124 Environmental Management	C	ZOOL 22064
	ZOOL 41104 Aquaculture Management	C	ZOOL 32033
Year 4 Sem 2	ZOOL 42115 Agricultural, Medical and Veterinary Entomology	C	ZOOL 41025
	ZOOL 43132 Essay and Seminar on Special Topics in Zoology	C	All ZOOL Course units compulsory for Special students
	ZOOL 43148 Research Project	C	All ZOOL Course units compulsory for Special students
	ZOOL 42074 Fish Population Dynamics and Management	C	ZOOL 31013
	ZOOL 42152 Herpetology ²	O	ZOOL 12014
	ZOOL 42162 Ornithology ²	O	ZOOL 12014

¹ Select one from the two course units

² Select one from the two course units; offered depending on the availability of a resource person

6. List of Course Units Offered by Other Faculties to the Students in the Faculty of Science

Auxiliary Course Units Offered by the Faculty of Humanities

BUDDHIST CULTURE

Level One

BUCU 11032 Ancient Buddhist Monasteries of Sri Lanka

BUCU 12062 Buddhist Art and Architecture in Sri Lanka

Level Two

BUCU 22042 Buddhist Art and Antiquities of South Asia- 2

BUCU 22092 Buddhist Rituals and Ceremonies- 2

Level Three

BUCU 32042 Development of Buddhist Culture in Sri Lanka- 2

BUCU 32082 Buddhism and other religions- 2

BUDDHIST PHILOSOPHY

Level One

BUPH 12072 Buddhism and Social Issues

Level Two

BUPH 22062 Buddhist Attitude Towards Law, Crime and Punishment

Level Three

BUPH 32062 Buddhist Attitude towards Economy, Politics and Health.

CHINESE

Level One

CHIN 13052 Chinese Language and Culture I

Level Two

CHIN 23052 Chinese Language and Culture II

Level Three

CHIN 33052 Chinese Language and Culture III

CHRISTIAN CULTURE

Level One

CHCU 12052 Introduction to the Bible

CHCU 12062 Introduction to Christianity

FRENCH

Level One

FREN 13052 French Grammar & Vocabulary

Level Two

FREN 23052 Grammar, Composition and Expression

Level Three

FREN 33052 French Grammar, Expression and Culture

GERMAN

Level One

GERM 13052 German Language and Culture I

Level Two

GERM 23052 German Language and Culture II

Level Three

GERM 33052 German Language and Culture III

HINDI

Level One

HIND 11032 Proficiency in Hindi language I

HIND 12062 Proficiency in Hindi language II

Level Two

HIND 21032 Proficiency in Hindi language III

HIND 22062 Proficiency in Hindi language IV

Level Three

HIND 31032 INTRODUCTION TO NORTH INDIAN CULTURE

HIND 32062 INTRODUCTION TO MODERN HINDI PROSE & VERSE (PRESCRIBED)

JAPANESE

Level One

JPNS 13052 Japanese Grammar & Vocabulary I

Level Two

JPNS 23052 Japanese Grammar & Vocabulary II

Level Three

JPNS 33052 Japanese Grammar & Vocabulary III

KOREAN

Level One

KORE 13052 Korean Language and Culture I

Level Two

KORE 23052 Korean Language and Culture II

Level Three

KORE 33052 Korean Language and Culture III

PALI

Level One

PALI 11032 Source acquaintance

PALI 12083 Introduction to Pali Thripitaka

Level Two

PALI 22072 Pali Sources and Sri Lankan History- 2

Level Three

PALI 32073 Pali Teaching Skills

SANSKRIT

Level One

SANS 13053 Translation of Inter-languages & Usage

Level Two

SANS 23063 Identification of Sanskrit Literature

Level Three

SANS 33063 Principles of Criticism

SINHALA

Level I

SINH 13054 Practical Sinhala I

Level Two

SINH 22052 Practical Sinhala II

SINH 22062 Modern Sinhala Writing Skills

WESTERN CLASSICAL CULTURE

Level One

WCCU 11032 Greek and Roman Civilizations

WCCU 12062 Greek and Roman Drama

WCCU 12072 Greek and Roman Heroic Epic

WCCU 12082 Greek and Roman Antiquities

Level Two

WCCU 22052 Greek Thought - Socrates, Plato, Aristotle

Level three

WCCU 32052 Greek and Roman Literary Theory

WCCU 32062 Greek and Roman History

Auxiliary Course Units Offered by the English Language Teaching Unit (ELTU)

Level Two

ELTU 21012 English in Today's World

ELTU 22022 Introduction to Literature

Level Three

ELTU 33012 English for Professional Purposes

Auxiliary Course Units Offered by the Faculty of Social Sciences

ANTHROPOLOGY

Level One

ANTH 11032 Heritage of Anthropology

Level Two

ANTH 21032 Visual Media for Anthropology

ARCHAEOLOGY

Level One

ARCH 11032 Archaeological Heritage of Sri Lanka

Level Two

ARCH 21042 Archaeological Theory & Practice

Level Three

ARCH 31042 Prehistory & Environmental Archaeology

DEVELOPMENT STUDIES

Level Two

DVST 22052 Urban and Settlement Studies

Level Three

DVST 32052 Human Resources Development

ECONOMICS

Level Two

ECON 22072 Money and Banking

Level Three

ECON 32072 Population and Economic Development

GEOGRAPHY

Level One

- GEOG 11032 Population and Society
GEOG 12042 Environment and Sustainable Development

Level Two

- GEOG 21032 Cultural Regions in the World
GEOG 22032 Environmental Hazards

Level Three

- GEOG 31032 Human Settlement Studies

HISTORY

Level Two

- HIST 21022 Civilization of Ancient Sri Lanka
HIST 22042 Sri Lanka & Western Colonial Powers

Level Three

- HIST 31022 South Asia since World War II
HIST 32062 Modern Society of Sri Lanka

INTERNATIONAL STUDIES

Level Two

- INTS 22072 New Trends in World Economic

Level Three

- INTS 32072 International Technology and Development

LIBRARY AND INFORMATION SCIENCES

Level One

- LISC 11052 Libraries and Librarianship
LISC 11062 Information Literacy and Information Skills

Level Three

- LISC 31053 Reference and Information Services

PHILOSOPHY

Level One

- PHIL 11052 Basic Psychology
PHIL 11062 Problems of Philosophy

Level Two

- PHIL 21032 Contemporary Philosophy
PHIL 22042 Philosophy of Language

POLITICAL SCIENCE

Level Two

POLS 21032	A Basic Introduction to patterns of Decentralization in the West and East
POLS 22062	International Organizations and Law Making
POLS 22072	Foreign Policy of Independent Sri Lanka

Level Three

POLS 32072	New Global Trends
------------	-------------------

SOCIOLOGY

Level One

SOCI 11032	Social Problems
------------	-----------------

Level Two

SOCI 21032	Combine Sociology
------------	-------------------

Social Statistics

Level Two

SOST 22062	Introduction of Research Techniques
SOST 22072	Models of Simultaneous Relationships

SPORT AND RECREATION MANAGEMENT

Level One

SRMG 12052	Sport Leadership and Interpersonal Skills
------------	---

Auxiliary Course Units Offered by the Faculty of Commerce & Management

Level One

MGMT 11012 ¹	Principles of Management
MGMT 11022	Communication Skills and Personality Development
MGMT 12012	Fundamentals of Organizational Behaviour
MGMT 12022	Business Accounting

Level Two

MGMT 21012	Human Resource Management
MGMT 22022	Marketing Management

Level Three

MGMT 31012	Japanese Management Approach
MGMT 32022	Financial Management

¹ Can take either IMGT 14012 or MGMT 11012

7. List of Certificate Courses Offered by Other Faculties to the Students in the Faculty of Science

The students may register for the courses, which are not considered for the award of the B.Sc. (General/Special) Degree.

Certificate Courses Offered by the Faculty of Humanities

Certificate Course in Modern Languages (two years) Offered by the Department of Modern Languages

French	Japanese	German	Chinese	Russian
Korean	Spanish			

The Certificate Course in Hindi Language (two years) Offered by the Department of Hindi Studies
