

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 3 weeks will be given followed by written examinations conducted within a period of 3 weeks. Examinations of laboratory course units will usually be conducted either during the last week of study 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 the 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

45 – 60 hours of laboratory work = 1 credit

75 – 90 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.

1.2 Notations of Course Units and Abbreviations Used

There are four types of course units, namely Core (C), Compulsory (C*), Elective (E) and Auxiliary (A).

All core course units of a given subject together form the minimum subject content required to be completed by a student following that as a main subject.

The elective course units are subject modules outside the core of that subject and are offered to students following that as a main subject as well as for other students in some study programmes with a choice of selecting them.

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 as a main 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 unit whereas the fifth digit signifies the credit value. The second digit indicates the semester in which the course 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 Stream Core Course Units	BIOL
Botany*	BOTA
Chemistry*	CHEM
Computer Studies*	COST
Electronics*	ELEC
Environmental Conservation and Management*	ENCM
Faculty of Science-Auxiliary Course Units	FSAC
General Studies Course Units	GNST
Industrial Management	IMGT
Information Technology*	IMIT
Management	IMMG
Microbiology*	MIBI
Molecular Biology & Plant Biotechnology*	MBBT
Physics*	PHYS
Pure Mathematics	PMAT
Statistics & Computer Science*	STCS
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 courses are co-requisites for theory courses and vice-versa.

1.3 General Studies Course Units

Every student who enrolls in the Faculty of Science should follow a minimum of two General Studies Course Units. However, a student is not allowed to select General Studies Course Units, which overlap with his/her academic course units. 80% attendance for General Studies Course Units is compulsory and these would be evaluated by continuous assessment. The credits earned from these course units will not be counted for the award of the Degree. However, obtaining passes in at least 2 of the General Studies Course Units is compulsory.

1.4 Faculty of Science Auxiliary Course Units

Every student who enrolls in the Faculty of Science should follow two Faculty of Science Auxiliary Course Units which do not overlap with their academic course units. The credits earned from these units will be counted for the award of the degree.

1.5 General Degree Programmes

The General Degree students are required to follow only the levels 1, 2 and 3 course modules. Three subject combinations with elective and/or auxiliary course units or two subject combinations with elective and/or auxiliary course units are available in both the Biological Science and the Physical Science streams. In addition, all the Biological Science students should follow all the Biological Science stream compulsory course units as specified.

Course units to be completed during each academic year by the Biological Science students and Physical Science students following the B.Sc. degree programme are given in pages 24 to 33 while the pages 34 and 35 contain the same information in respect of students following B.Sc. ENCM and B.Sc. MIT degree programmes. After deciding on a particular subject combination, a student should take all course units in the category 'C' of the selected main subjects and sufficient number of units in categories 'E' and 'A' as the time table permits to make up a minimum of 30 credits in each academic year. A student may take course units up to a maximum of 6 credits with not more than 2 credits per semester from 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 (except General Studies Course Units) over the entire 3 year period shall be considered for the award of the B.Sc. (General) degree or B.Sc. ENCM (General) degree or B.Sc. MIT (General) degree.

In the Biological Sciences, Computer Studies (COST), Microbiology (MIBI) and Molecular Biology & Plant Biotechnology (MBBT) disciplines have limited enrolment. In the Physical Sciences, Chemistry (CHEM), Computer Studies (COST), Electronics (ELEC), Physics (PHYS) and Statistics & Computer Science (STCS) disciplines have limited enrolment. Selection for these limited enrolment course units is based upon the admission criteria currently used by the University Grants Commission when demand exceeds capacity.

1.6 Special Degree Programmes

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

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

(i) Botany

A student should have obtained at least B grades for Level 1 and Level 2 core course units in Botany, BIOL 11012 Introductory Microbiology and BIOL 11022 Genetics aggregating to 20 credits. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(ii) Chemistry, Physics and Statistics & Computer Science

A student should have obtained at least B grades for Level 1 and Level 2 course units aggregating to 20 credits, in the subject of specialization. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(iii) Environmental Conservation and Management

A student should have obtained at least C grades for all Level 1 and Level 2 ENCM, ZOOL, BOTA, and MIBI course units prescribed for the degree programme and obtained at least B grades aggregating to a minimum of 20 credits out of ENCM and ZOOL course units. In addition, a student should have obtained neither D grades in Level 1 and Level 2 BIOL, CHEM, and FSAC course units aggregating to more than 8 credits, nor E grades in these Level 1 and Level 2 course units.

(iv) Management and Information Technology

A student should have obtained at least B grades for Level 1 and Level 2 course units aggregating to 40 credits. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(v) 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 at least B grades for Level 1 and Level 2 course units aggregating to 20 credits in each of the three subjects. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(vi) Mathematics (Pure Mathematics and Applied Mathematics)

A student should have obtained at least B grades for Level 1 and Level 2 course units aggregating to 20 credits in each of the subjects Pure Mathematics and Applied Mathematics. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(vii) Mathematics (Pure Mathematics and Statistics)

A student should have obtained at least B grades for Level 1 and Level 2 course units aggregating to 20 credits in Pure Mathematics and 10 credits in core course units in Statistics. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(viii) Microbiology

A student should have obtained at least B grades for Level 1 and Level 2 core course units in Microbiology and BIOL 11012 Introductory Microbiology aggregating to 20 credits. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(ix) Molecular Biology & Plant Biotechnology

A student should have obtained at least B grades for Level 1 and Level 2 core course units in Molecular Biology & Plant Biotechnology, and BIOL 11012 Introductory Microbiology, BIOL 11022 Genetics, BIOL 11033 Introductory Biochemistry and BIOL 11041 Biochemistry Laboratory aggregating to 20 credits. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor E grades in Level 1 and Level 2 course units.

(x) Zoology

A student should have obtained at least B grades for Level 1 and Level 2 core course units in Zoology and BIOL 11012 Introductory Microbiology and BIOL 11022 Genetics aggregating to 20 credits. In addition, a student should have obtained neither D grades in Level 1 and Level 2 course units aggregating to more than 8 credits, nor 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 the Special Degree Programme should 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 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.

All credits accumulated over the entire 4 year period shall be considered for the award of the B.Sc. (Special) degree in the relevant discipline.

1.7 Registration for Courses

A student is expected to obtain advice from his/her Faculty or Departmental academic advisors if he/she has any questions regarding which courses suit his/her study programme. A student must also ensure that he/she has the correct pre requisites. A student must complete his/her registration for a selected course combination before the commencement of each academic year.

1.8 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 will be permitted later than this.

1.9 Attendance

Regular attendance is strongly advised for students in all courses and there is no regulation which prevents a teacher from taking attendance in the class.

The students are strongly advised to attend all lectures and laboratory classes of all course units for which they have enrolled.

2. EVALUATION CRITERIA

2.1 Evaluation procedure

Performances of students will generally be evaluated through assignments, reports, presentations and end of course examination for each course unit and assigned a grade for each student. The method of evaluation will be announced by the relevant Department at the commencement of a course unit. The research projects of the Special Degree Programme are evaluated 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+	4.5
70 - 84	A	4.0
65 - 69	A-	3.5
60 - 64	B+	3.3
55 - 59	B	3.0
50 - 54	B-	2.8
45 - 49	C+	2.5
40 - 44	C	2.0
25 - 39	D	1.0
00 - 24	E	0.0

If the attendance at a laboratory course unit is greater than 49% but less than 80% the best grade obtainable by a student will be C and if the attendance at a laboratory course unit is less than 50% the best grade obtainable by the student will be D.

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

2.3 Repeating a Course Unit Examination

A student who obtains either a D or an E grade in a particular course unit may re-sit the examination in respect of the course unit for the purpose of improving the grade; the best grade obtainable in this instance is 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 first 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, E and A+ respectively would have the GPA of 2.3 as calculated below.

$$\frac{(2 \times 4.0) + (3 \times 2.0) + (3 \times 3.0) + (3 \times 1.0) + (1 \times 0.0) + (1 \times 4.5)}{2 + 3 + 3 + 3 + 1 + 1} = \frac{30.5}{13} = 2.346$$

$$\text{Grade Point Average} = 2.3$$

Grade point values and credit values of all registered course units (except General Studies Course Units) in a study programme of a student shall be taken into account in calculating the final GPA.

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 have

- (i) accumulated at least 30 credits, including the stream compulsory units where applicable, in each academic year totalling to a minimum of 90 credits, of which 4 credits should be from Faculty of Science Auxiliary Course Units,
- (ii) obtained grades of C or better in course units aggregating to at least 72 credits of which at least 48 should be from two main subjects with at least 24 credits from each subject and grades of D or better in course units aggregating to at least further 18 credits, provided that at least one of the main subjects is with a practical component,
- (iii) obtained a minimum GPA of 2.0,
- (iv) passed a minimum of 2 General Studies Course Units and
- (v) completed 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 from 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 taken,
- (iii) obtains a minimum GPA of 3.5, 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 from course units aggregating to at least 80 credits and grades of at least D in the remaining course units, considered under 2.5.1 (ii),
- (ii) obtains grades of B or above in course units aggregating to at least half the number of total credits taken,
- (iii) obtains a minimum GPA of 3.3, 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 from course units aggregating to at least 80 credits and grades of at least D in the remaining course units, considered under 2.5.1 (ii),
- (ii) obtains a minimum GPA of 3.0, and
- (iii) 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 have

- (i) accumulated at least 30 credits in each academic year totalling to a minimum of 90 credits, of which 4 credits should be from Faculty of Science Auxiliary Course Units,
- (ii) obtained grades of C or better in course units aggregating to at least 72 credits of which not less than 48 should be from core course units inclusive of level 3 Environmental project, and grades of D or better in course units aggregating to a minimum of further 18 credits, with the proviso that he/she should not have obtained grades of D in course units aggregating to a maximum of 6 credits in each of the three subject areas (ENCM and MIBI course units; BIOL, BOTA and ZOOL course units; CHEM course units),
- (iii) obtained a minimum GPA of 2.0,
- (iv) passed a minimum of 2 General Studies Course Units and
- (v) completed 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 from 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 taken ,
- (iii) obtains a minimum GPA of 3.5, 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 from course units aggregating to at least 80 credits and grades of at least D in the remaining course units, considered under 2.7.1 (ii),
- (ii) obtains grades of B or above in course units aggregating to at least half the number of total credits taken,
- (iii) obtains a minimum GPA of 3.3, 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 from course units aggregating to at least 80 credits and grades of at least D in the remaining course units, considered under 2.7.1 (ii),
- (ii) obtains a minimum GPA of 3.0, and
- (iii) 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 have

- (i) accumulated at least 30 credits in each academic year totalling to a minimum of 90 credits of which 4 credits should be from Faculty of Science Auxiliary Course Units,
- (ii) obtained grades of C or better in course units aggregating to at least 80 credits of which not less than 70 should be from core course units inclusive of level 3 project IMIT 33066, and at least D grades in course units aggregating to a minimum of further 10 credits,
- (iii) obtained a minimum GPA of 2.0,
- (iv) passed a minimum of 2 General Studies Course Units, and
- (v) completed 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 2.6.1 (ii),
- (ii) obtains grades of A or better in course units aggregating to at least half the number of total credits taken,
- (iii) obtains a minimum GPA of 3.5, 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 at least D in the remaining course units, considered under 2.6.1 (ii),
- (ii) obtains grades of B or above in course units aggregating to at least half the number of total credits taken,
- (iii) obtains a minimum GPA of 3.3, 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 at least D in the remaining course units, considered under 2.6.1 (ii),
- (ii) obtains a minimum GPA of 3.0, and
- (iii) 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 have

- (i) accumulated,
 - (a) at least 30 credits, including a minimum of 10 credits from the subject of specialization or 10 credits each in the subjects of specialization as the case may be and the stream compulsory course units where applicable, in each academic year, totalling to a minimum of 60 credits of which 4 credits should be from Faculty of Science Auxiliary Course Units, during the first two years, and
 - (b) at least 66 credits in the third year and the fourth year course units including a minimum of 48 credits from the level 4 course units in the subject of specialization, aggregating to at least 126 credits provided that he/she has accumulated credits in the compulsory course units as stipulated by the relevant Department/Departments of study,
- (ii) obtained grades of C or better in course units aggregating to at least 100 credits of which at least 40 credits should be from 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 have obtained grades of E in any of the course units in the subject/subjects of specialization,

- (iii) obtained a minimum GPA of 2.0,
- (iv) passed a minimum of 2 General Studies Course Units, and
- (v) completed the relevant requirements within a period of 5 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 compulsory course units in the subject/subjects of specialization, aggregating to at least 126 credits,
- (ii) obtains a minimum GPA of 3.5,
- (iii) obtains grades of A or better in course units taken in the third year and the fourth year, in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of A or better in level 4 course units taken in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, and
- (iv) completes the relevant requirements within four academic years.

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 compulsory course units in the subject/subjects of specialization, aggregating to at least 116 credits,
- (ii) obtains a minimum GPA of 3.3,
- (iii) obtains grades of B or better in course units taken in the third year and the fourth year, in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of B or better in level 4 course units taken in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, and
- (iv) completes the relevant requirements within four academic years.

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 compulsory course units in the subject/subjects of specialization, aggregating to at least 116 credits,
- (ii) obtains a minimum GPA of 3.0,
- (iii) obtains grades of B or better in course units taken in the third year and the fourth year, in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of B or better in level 4 course units taken in the subject/subjects of specialization, aggregating to at least half the number of credits accumulated in such course units, and
- (iv) completes the relevant requirements within four academic years.

2.8.2.4

A student who has obtained a GPA greater than 3.0, but has obtained grades of D for a maximum of 6 credits in level 4 course units may be considered by the board of Examiners for the award of Second Class (Lower Division) Honours.

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 after the release of the results of the last 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 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 have

- (i) accumulated,
 - (a) at least 30 credits, including all core course units, in each academic year, totalling to a minimum of 60 credits of which 4 credits should be from Faculty of Science Auxiliary Course Units, during the first two years, and
 - (b) at least 66 credits in the third and the fourth years, including all the core course units, and a minimum of 48 credits from the level 4 course units,

aggregating to at least **126** credits of which 4 credits should be from Faculty of Science Auxiliary Course Units,

- (ii) obtained grades of C or better in course units aggregating to at least 100 credits of which at least 40 credits should be from level 4 course units including the final year research project, and grades of D or better in course units aggregating to a minimum of further 26 credits, with the proviso that he/she should not have obtained grades of D in course units aggregating to a maximum of 6 credits in each of the three subject areas (MIBI and level 1, 2, & 3 ENCM course units; BIOL, BOTA and ZOOL course units; CHEM course units), and grades of E in any of the course units,
- (iii) obtained a minimum GPA of 2.0,
- (iv) passed a minimum of 2 General Studies Course Units, and
- (v) completed the relevant requirements within a period of 5 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) 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,
- (ii) obtains a minimum GPA of 3.5,
- (iii) obtains grades of A or better in course units taken in the third year and the fourth year, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of A or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (iv) completes the relevant requirements within four academic years.

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 core course units, aggregating to at least **116** credits,
- (ii) obtains a minimum GPA of 3.3,
- (iii) obtains grades of B or better in course units taken in the third year and the fourth year, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units, and

- (iv) completes the relevant requirements within four academic years.

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 core course units, aggregating to at least **116** credits,
- (ii) obtains a minimum GPA of 3.0,
- (iii) obtains grades of B or better in course units taken in the third year and the fourth year, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (iv) completes the relevant requirements within four academic years.

2.9.2.4

A student who has obtained a GPA greater than 3.0, but has obtained grades of D for a maximum of 6 credits in level 4 course units may be considered by the board of Examiners for the award of Second Class (Lower Division) Honours.

2.9.2.5 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 after the release of the results of the last 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 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 have

- (i) accumulated,
 - (a) at least 30 credits, including all core course units, in each academic year, totalling to a minimum of 60 credits of which 2 credits should be from Faculty of Science Auxiliary Course Units, during the first two years, and
 - (b) at least 68 credits in the third and the fourth years, including all the core course units, and a minimum of 48 credits from the level 4 course units, aggregating to at least 128 credits of which 4 credits should be from Faculty of Science Auxiliary Course Units,
- (ii) obtained grades of C or better in core course units including the third year and final year projects aggregating to at least 110 credits of which at least 40 credits should be from level 4 course units, and grades of D or better in course units aggregating to a minimum of further 18 credits, with the proviso that he/she should not have obtained grades of E in any of the course units,
- (iii) obtained a minimum GPA of 2.0,
- (iv) passed a minimum of 2 General Studies Course Units, and
- (v) completed 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 core course units, aggregating to at least 128 credits,
- (ii) obtains a minimum GPA of 3.5,
- (iii) obtains grades of A or better in course units taken in the third year and the fourth year, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of A or better in level 4 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.

2.10.2.2 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 core course units, aggregating to at least 118 credits,

- (ii) obtains a minimum GPA of 3.3,
- (iii) obtains grades of B or better in course units taken in the third year and the fourth year, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (iv) completes the relevant requirements within four academic years.

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 core course units, aggregating to at least 118 credits,
- (ii) obtains a minimum GPA of 3.0,
- (iii) obtains grades of B or better in course units taken in the third year and the fourth year, aggregating to at least half the number of credits accumulated in such course units, with the proviso that he/she should have obtained grades of B or better in level 4 course units, aggregating to at least half the number of credits accumulated in such course units, and
- (iv) completes the relevant requirements within four academic years.

2.10.2.4

A student who has obtained a GPA greater than 3.0, but has obtained grades of D for a maximum of 6 credits in level 4 course units may be considered by the board of Examiners for the award of Second Class (Lower Division) Honours.

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 after the release of the results of the last 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 years.

2.11 Award of the Degree

A student should apply for the award of a Degree on satisfying the requirements. On 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, a student is entitled to an official transcript giving the grades in the respective course units after the confirmation of results by the University Senate.

3. COURSE STRUCTURE GENERAL DEGREE

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

3.1.1 With three subjects

Year	General Studies ¹	Faculty	First Subject ²	Second & Third Subjects and Stream Compulsory Units	Elective/Auxiliary Units ⁴
1 st year 1 st semester	Minimum of <u>two</u> Course Units	<u>ONLY</u> <u>two</u> Course Units	Core Course Units in Chemistry or Biochemistry	Compulsory Course Units in Biological Sciences. Those who select computer studies as a subject should follow core course units in Computer Studies	In each year Elective/Auxiliary Course Units should be selected such that total number of Course Units taken in the year aggregate to a minimum of <u>thirty</u> credits excluding General Studies Units
1 st year 2 nd semester				Core Course Units in <u>two</u> of the following subjects: Botany/ Molecular Biology & Plant Biotechnology ³ , Computer Studies ³ , Microbiology ³ , Zoology	
2 nd			Core Course Units in Chemistry or Biochemistry as selected in Year 1	Core Course Units in the two subjects selected above	
3 rd	None		Core Course Units in Chemistry or Biochemistry as selected in Year 1	Core Course Units in the two subjects selected above, if Zoology is one of the subjects, two Elective Course Units	

Core Course Units in a subject are compulsory for a student following that subject as one of the main subjects for the degree.

¹ Does not carry credits for B.Sc. degree programme. Compulsory to follow GNST 14012 and GNST 14082

² Those who select Microbiology and Molecular Biology & Plant Biotechnology, should select Chemistry as first subject.

³ Restricted enrolment.

⁴ Compulsory to follow ELTU 22032 (does not carry credits for B.Sc. degree programme). Subject to constraints imposed by the time table, pre requisites, co requisites, and limited enrolments, a student may take Core/Elective Course Units, in any subject other than the main subjects, as Auxiliary Course Units.

3.1.2 With two subjects

Year	General	Faculty Auxiliary	First Subject ²	Second & Third Subjects and Stream Compulsory Units	Elective/Auxiliary Units ⁴
1 st year 1 st semester	Minimum of two Course Units	<u>ONLY</u> two Course Units	Core Course Units in Chemistry or Biochemistry	Compulsory Course Units in Biological Sciences	In each year Elective/Auxiliary Course Units should be selected such that total number of Course Units taken in the year aggregate to a minimum of thirty credits excluding General Studies Units
1 st year 2 nd semester			Core Course Units in Chemistry or Biochemistry as selected in Year 1	Core Course Units in <u>one</u> of the following subjects: Botany/Molecular Biology & Plant Biotechnology ³ , Microbiology ³ , Zoology	
2 nd		None	Core Course Units in Chemistry or Biochemistry as selected in Year 1	Core Course Units in the subject selected above	
3 rd			Core Course Units in Chemistry or Biochemistry as selected in Year 1	Core Course Units in the subject selected above, if Zoology is one of the subjects, two Elective Course Units	

Core Course Units in a subject are compulsory for a student following that subject as one of the main subjects for the degree.

¹ Does not carry credits for B.Sc. degree programme. Compulsory to follow GNST 14012 and GNST 14082

² Those who select Microbiology and Molecular Biology & Plant Biotechnology, should select Chemistry as first subject.

³ Restricted enrolment.

⁴ Compulsory to follow ELTU 22032, (does not carry credits for B.Sc. degree programme). Subject to constraints imposed by the timetable, pre requisites, co requisites, and limited enrolments, a student may take Core/Elective Course Units, in any subject other than the main subjects, as Auxiliary Course Units.

3.1.3 B.Sc. Degree Programme – Year 1 - Biological Sciences**Possible combinations to select course units**

Course code	Course unit combination									
	I	II	III	IV	V	VI	VII	VIII	IX	X
GNST 14012 ¹	A	A	A	A	A	A	A	A	A	A
GNST 14022	A	A	A	A	A	A	A	A	A	A
GNST 14052	A	A	A	A	A	A	A	A	A	A
GNST 14062	A	A	A	A	A	A	A	A	A	A
GNST 14072	A	A	A	A	A	A	A	A	A	A
GNST 14082 ¹	A	A	A	A	A	A	A	A	A	A
FSAC 14012	A	A	A	A	A	A	A	A	A	A
FSAC 14022	A	A	A	A	A	A	A	A	A	A
FSAC 14032	A	A	A	A	A	A	A	A	A	A
FSAC 14052	A	A	A	A	A	A	A	A	A	A
BIOL 11012	C*	C*	C*	C*	C*	C*	C*	C*	C*	C*
BIOL 11022	C*	C*	C*	C*	C*	C*	C*	C*	C*	C*
BIOL 11033	C*	C*	C*	C*	C*	C*	C*	C*	C*	C*
BIOL 11041	C*	C*	C*	C*	C*	C*	C*	C*	C*	C*
BIOL 11062		C*	C*		C*	C*	C*	C*	C*	C*
BOTA 12013	C	C	C				C			
BOTA 12022	C	C	C				C			
CHEM 11014	C	C	C	C	C	C	C	C	C	C
CHEM 11021	C	C	C	C	C	C	C	C	C	C
CHEM 12032	C	C	C	C	C	C	C	C	C	C
CHEM 12042	C	C	C	C	C	C	C	C	C	C
CHEM 12051	C	C	C	C	C	C	C	C	C	C
COST 11014 [#]	C			C						
COST 12034 [#]	C			C						
MIBI 12014 [#]		C				C			C	
MIBI 12022 [#]		C				C			C	
MBBT 12013 [#]					C			C		
MBBT 12022 [#]					C			C		
PMAT 13015 ²	A	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 Core/Compulsory Units	33	31	31	34	31	32	25	25	26	26

[#]Restricted enrolment

Students should pass a minimum of two General Studies Course Units within 3 years.

Students should follow two Faculty of Science Auxiliary Course Units within 1st two years.

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

¹Compulsory to follow.²Offered throughout the year.

3.1.4 B.Sc. Degree Programme – Year 2 – Biological Sciences**Possible combinations to select course units**

Course code	Course unit combination														
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
GNST 14012 ¹	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14022	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14052	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14062	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14072	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14082 ¹	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14012	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14022	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14032	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14052	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
BIOC 21014	C	C	E		E	C	E			C	C	E			E
BIOC 21021	C	C	E		E	C	E			C	C	E			E
BIOC 22034	C	C	E		E	C	E			C	C	E			E
BIOC 22041	C	C	E		E	C	E			C	C	E			E
BOTA 21013	C	C	C	C	C			C		C		C	C		
BOTA 21022	C	C	C	C	C			C		C		C	C		
BOTA 22034	C	C	C	C	C					C	E	C		E	E
BOTA 22042	C	C	C	C	C					C	E	C		E	E
CHEM 21012			C	C	C		C	C	C			C	C	C	C
CHEM 21021	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
CHEM 21033	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
CHEM 22042			C	C	C		C	C	C			C	C	C	C
CHEM 22051			C	C	C		C	C	C			C	C	C	C
CHEM 22062			C	C	C		C	C	C			C	C	C	C
COST 21024 ²	C		C			C	C								
COST 22034 ²	C		C			C	C								
ELTU 22032	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
IMGT 22012	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MIBI 21014 ²				C					C					C	
MIBI 21022 ²				C					C					C	
MIBI 22034 ²				C					C					C	
MIBI 22042 ²				C					C					C	
MBBT 22034 ²								C					C		
PMAT 13015 ²	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
ZOOL 21014		C			C	C	C	C	C	E	C	E	E	E	C
ZOOL 21022		C			C	C	C	C	C	E	C	E	E	E	C
ZOOL 22034		C			C	C	C	C	C	E	C	E	E	E	C
ZOOL 22042		C			C	C	C	C	C	E	C	E	E	E	C
No of Credits from Core Units	33	37	31	34	33	34	32	32	35	25	25	22	20	23	23

^aRestricted enrolment

Students should pass a minimum of two General Studies Course Units within 3 years.

Students should follow two Faculty of Science Auxiliary Course Units within 1st two years.

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

¹Compulsory to follow.²Offered throughout the year.

3.1.5 B.Sc. Degree Programme – Year 3 - Biological Sciences

Possible combinations to select course units

Course code	Course unit combination														
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
GNST 14012 ¹	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14022	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14052	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14062	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14072	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
BIOC 31012	C	C	E		E	C	E			C	C	E			E
BIOC 31022	C	C	E		E	C	E			C	C	E			E
BIOC 31031	C	C	E		E	C	E			C	C	E			E
BIOC 32042	E	E	E		E	E	E			E	E	E			E
BIOC 32052	E	E	E		E	E	E			E	E	E			E
BIOC 32061	E	E	E		E	E	E			E	E	E			E
BOTA 31014	C	C	C	C	C					C		C			
BOTA 31022	C	C	C	C	C					C		C			
BOTA 32033	C	C	C	C	C					C		C			
BOTA 32043/32053	E	E	E	E	E					E		E			
CHEM 31012			C	C	C		C	C	C			C	C	C	C
CHEM 31021			C	C	C		C	C	C			C	C	C	C
CHEM 31032			C	C	C		C	C	C			C	C	C	C
CHEM 32042			E	E	E		E	E	E			E	E	E	E
CHEM 32051			E	E	E		E	E	E			E	E	E	E
CHEM 32062			E	E	E		E	E	E			E	E	E	E
CHEM 32072			E	E	E		E	E	E			E	E	E	E
CHEM 32082			E	E	E		E	E	E			E	E	E	E
COST 31024 ²	C		C	C		C	C								
COST 32014 ²	E		E	E		E	E								
IMGT 22012	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
INTR 32012	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
MIBI 31014 ²				C					C						C
MIBI 31022 ²				C					C						C
MIBI 33034 ²				E					E					E	
MIBI 32041 ²				E					E					E	
MIBI 32052 ²				E					E					E	
MIBI 32062 ²				E					E					E	
MBBT 31014 ²								C					C		
MBBT 31022 ²								C					C		
MBBT 32034 ²								C					C		
MBBT 32044 ²								E					E		
MBBT 32052 ²								E					E		
PHYS 32132	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
PHYS 32142	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
PMAT 13015 ²	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
ZOOL 31014 ³	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
ZOOL 31022 ³	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
ZOOL 32034 ³ /32054 ³	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
ZOOL 32042 ³ /32062 ³	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
No of Credits from Core Units	18	14	18	24	14	9	9	15	11	14	5	9	15	11	5

²Restricted enrolment

Students should pass a minimum of two General Studies Course Units within 3 years.

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

¹Compulsory to follow.²Offered throughout the year.³Those who intend following Zoology as a subject should follow all the core course units and at least one of the following combinations of elective course units. Students may follow either combinations 1 and 2 or 1 and 3 as 2 and 3 will be conducted concurrently: 1. ZOOL 31014 and ZOOL 31022; 2. ZOOL 32034 and ZOOL 32042; 3. ZOOL 32054 and ZOOL 32062

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

3.2.1 With three subjects

Year	General Studies ¹	Faculty Auxiliary	First Subject	Second & Third Subjects	Elective/Auxiliary Units ^{4,5}
1 st		<u>ONLY</u> <u>two</u> Course Units	Core Course Units in Pure Mathematics	Core Course Units in <u>two</u> of the following subjects: Applied Mathematics, Chemistry ² , Computer Studies ² , Electronics ^{2,3} , Physics ² , Statistics & Computer Science ²	In each year Elective/Auxiliary Course Units should be selected such that total number of Course Units taken in the year aggregate to a minimum of <u>thirty</u> credits excluding General Studies Units
2 nd	Minimum of <u>two</u> Course Units		Core Course Units in Pure Mathematics	Core Course Units in the two subjects selected above	
3 rd		None	At least <u>two</u> Elective Course Units in Pure Mathematics	If one of the subjects selected above is not Applied Mathematics then the Core Course Units in the two subjects, and if one of the subjects is Applied Mathematics then at least <u>two</u> Elective Course Units in Applied Mathematics and the Core Course Units in the other subject	

Core Course Units in a subject are compulsory for a student following that subject as one of the main subjects for the degree.

¹ Does not carry credits for B.Sc. degree programme.

² Restricted enrolment.

³ Electronics is available as a main subject only if a student selects Physics also as a main subject for the degree.

⁴ A student who selects Physics as a main subject for the degree but not Applied Mathematics must take AMAT 11015, and a student who selects Applied Mathematics as a main subject for the degree but not Physics must take PHYS 12034.

⁵ Subject to constraints imposed by the time table, pre requisites, co requisites, and limited enrolments, a student may take Core/Elective Course Units, in a subject other than the main subjects, as Auxiliary Course Units.

3.2.2 With two subjects

Year	General Studies ¹	Faculty Auxiliary	First Subject	Second & Third Subjects	Elective/Auxiliary Units ^{3,4}
1 st	Minimum of <u>two</u> Course Units	<u>ONLY</u> <u>two</u> Course Units	Core Course Units in Pure Mathematics	Core Course Units in one of the following subjects: Chemistry ² , Physics ² , Statistics & Computer Science ²	In each year Elective/Auxiliary Course Units should be selected such that total number of Course Units taken in the year aggregate to a minimum of <u>thirty</u> credits excluding General Studies Units
2 nd			Core Course Units in Pure Mathematics	Core Course Units in the subject selected above	
3 rd		None	At least <u>two</u> Elective Course Units in Pure Mathematics	Core Course Unit in the subject selected above	

Core Course Units in a subject are compulsory for a student following that subject as one of the main subjects for the degree.

¹ Does not carry credits for B.Sc. degree programme.

² Restricted enrolment.

³ Subject to constraints imposed by the time table, pre requisites, co requisites, and limited enrolments, a student may take Core/Elective Course Units, in a subject other than the main subjects, as Auxiliary Course Units.

⁴ A student who selects Physics as a main subject for the degree must take AMAT 11015.

3.2.3 B.Sc. Degree Programme – Year 1 - Physical Sciences**Possible combinations to select course units**

Course code	Course unit combination												
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
GNST 14012	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14022	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14032	A		A			A			A		A	A	
GNST 14042	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14052	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14062	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14072	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14012	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14022	A	A	A		A	A		A	A		A	A	
FSAC 14032	A	A		A	A		A				A		A
FSAC 14042		A	A	A				A	A	A		A	A
FSAC 14052	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14062	A	A	A	A	A	A	A	A	A	A	A	A	A
AMAT 11015	C	C	C	C	A	C*	A	C*	C*	C*	A	C*	A
AMAT 12025	C	C	C	C	A	A	A	A	A	A	A	A	A
CHEM 11014 [#]	C				C	C	C				C		
CHEM 11021 [#]	C				C	C	C				C		
CHEM 12032 [#]	C				C	C	C				C		
CHEM 12042 [#]	C				C	C	C				C		
CHEM 12051 [#]	C				C	C	C				C		
COST 11014 [#]		C			C			C					
COST 12034 [#]		C			C			C					
ELEC 11014 [#]									C				
ELEC 11021 [#]									C				
ELEC 12034 [#]									C				
ELEC 12041 [#]									C				
PHYS 11014 [#]			C			C		C	C	C		C	
PHYS 11021 [#]			C			C		C	C	C		C	
PHYS 12034 [#]	C*	C*	C	C*		C		C	C	C		C	
PHYS 12041 [#]			C			C		C	C	C		C	
PMAT 11025	C	C	C	C	C	C	C	C	C	C	C	C	C
PMAT 12035	C	C	C	C	C	C	C	C	C	C	C	C	C
STCS 11015 [#]				C			C			C			C
STCS 11034	A	A	A	E	A	A	E	A	A	E	A	A	E
STCS 12045 [#]				C			C			C			C
ZOOL 12032	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
No of Credits from Core Units	34	28	30	34	28	35	30	28	35	35	20	25	20

[#]Restricted enrolment

Students should pass a minimum of two General Studies Course Units within 3 years.

Students should follow two Faculty of Science Auxiliary Course Units within 1st two years.

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

3.2.4 B.Sc. Degree Programme – Year 2 – Physical Sciences**Possible combinations to select course units**

Course code	Course unit combination												
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
GNST 14012	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14022	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14032	A		A			A			A	A	A		
GNST 14042	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14052	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14062	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14072	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14012	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14022	A	A	A		A	A		A	A	A	A		
FSAC 14032	A	A		A	A		A				A		A
FSAC 14042		A	A	A				A	A	A		A	A
FSAC 14052	A	A	A	A	A	A	A	A	A	A	A	A	A
FSAC 14062	A	A	A	A	A	A	A	A	A	A	A	A	A
AMAT 21015	C	C	C	C	A	A	A	A	A	A	A	A	A
AMAT 22025	C	C	C	C	A	A	A	A	A	A	A	A	A
BOTA 12032	A	A	A	A	A	A	A	A	A	A	A	A	A
CHEM 21012 [#]	C				C	C	C				C		
CHEM 21021 [#]	C				C	C	C				C		
CHEM 21033 [#]	C				C	C	C				C		
CHEM 22042 [#]	C				C	C	C				C		
CHEM 22051 [#]	C				C	C	C				C		
CHEM 22062 [#]	C				C	C	C				C		
COST 21024 [#]		C			C			C					
COST 22034 [#]		C			C			C					
ELEC 21054 [#]									C				
ELEC 21061 [#]									C				
ELEC 22074 [#]									C				
ELEC 22081 [#]									C				
IMGT 22012	A	A	A	A	A	A	A	A	A	A	A	A	A
PHYS 21064 [#]			C			C		C	C	C		C	
PHYS 21071 [#]			C			C		C	C	C		C	
PHYS 22084 [#]			C			C		C	C	C		C	
PHYS 22091 [#]			C			C		C	C	C		C	
PMAT 21015	C	C	C	C	C	C	C	C	C	C	C	C	C
PMAT 22025	C	C	C	C	C	C	C	C	C	C	C	C	C
STCS 11034	A	A	A	E	A	A	E	A	A	E	A	A	E
STCS 21015 [#]				C			C			C			C
STCS 22025 [#]				C			C			C			C
ZOOL 12032	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
No of Credits from Core Units	31	28	30	30	29	31	31	28	30	30	21	20	20

[#]Restricted enrolment

Students should pass a minimum of two General Studies Course Units within 3 years.

Students should follow two Faculty of Science Auxiliary Course Units within 1st two years.

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

3.2.5 B.Sc. Degree Programme – Year 3 - Physical Sciences**Possible combinations to select course units**

Course code	Course unit combination												
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
GNST 14012	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14022	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14032	A		A				A		A	A	A		
GNST 14042	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14052	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14062	A	A	A	A	A	A	A	A	A	A	A	A	A
GNST 14072	A	A	A	A	A	A	A	A	A	A	A	A	A
AMAT 31013	E	E	E	E	A	A	A	A	A	A	A	A	A
AMAT 31023	E	E	E	E	A	A	A	A	A	A	A	A	A
AMAT 32033	E	E	E	E	A	A	A	A	A	A	A	A	A
AMAT 32043	E	E	E	E	A	A	A	A	A	A	A	A	A
BOTA 12032	A	A	A	A	A	A	A	A	A	A	A	A	A
CHEM 31012 [*]	C				C	C	C				C		
CHEM 31021 [*]	C				C	C	C				C		
CHEM 31032 [*]	C				C	C	C				C		
CHEM 32042 [*]	E				E	E	E				E		
CHEM 32051 [*]	E				E	E	E				E		
CHEM 32062 [*]	E				E	E	E				E		
CHEM 32072 [*]	E				E	E	E				E		
CHEM 32082 [*]	E				E	E	E				E		
COST 31024 [*]		C			C			C					
COST 32014 [*]		E			E			E					
ELEC 31094 [*]									C				
ELEC 31101 [*]									C				
ELEC 32114 [*]									E				
ELEC 33122 [*]									C				
IMGT 22012	A	A	A	A	A	A	A	A	A	A	A	A	A
PHYS 31102 [*]			C			C		C	C	C		C	
PHYS 31112 [*]			C			C		C	C	C		C	
PHYS 31121 [*]			C			C		C	C	C		C	
PHYS 32132 [*]	A	A	E	A	A	E	A	E	E	E	A	E	A
PHYS 32142 [*]	A	A	E	A	A	E	A	E	E	E	A	E	A
PHYS 32151 [*]			C			C		C		C		C	
PMAT 31013	E	E	E	E	E	E	E	E	E	E	E	E	E
PMAT 31023	E	E	E	E	E	E	E	E	E	E	E	E	E
PMAT 31033	E	E	E	E	E	E	E	E	E	E	E	E	E
PMAT 32043	E	E	E	E	E	E	E	E	E	E	E	E	E
PMAT 32053	E	E	E	E	E	E	E	E	E	E	E	E	E
PMAT 32063	E	E	E	E	E	E	E	E	E	E	E	E	E
STCS 11034	A	A	A	E	A	A	E	A	A	E	A	A	E
STCS 31015 [*]				C			C			C			C
STCS 31025 [*]				C			C			C			C
STCS 32035 [*]				E			E			E			E
STCS 32045 [*]				E			E			E			E
STCS 32051 [*]				E			E			E			E
ZOOL 12032	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
No of Credits from Core Units	5	4	6	10	9	11	15	10	10	16	5	6	10

^{*}Restricted enrolment

Students should pass a minimum of two General Studies Course Units within 3 years.

Students must select at least two Elective Course Units in Pure Mathematics.Students should follow at least two Elective Course Unit in Applied Mathematics for combinations 1, 2, 3, and 4.

Students may take courses 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		
	Year 1	Year 2	Year 3
GNST 14012	A	A	A
GNST 14022	A	A	A
GNST 14082	A	A	A
FSAC 14012	A	A	
FSAC 14022	A	A	
FSAC 14032	A	A	
BIOL 11022	C*		
BIOL 11033	C*		
BIOL 11041	C*		
BIOL 11062	C*		
BOTA 22034		C	
BOTA 22042		C	
CHEM 11014	C		
CHEM 11021	C		
CHEM 12032	C		
CHEM 12042	C		
CHEM 12051	C		
CHEM 21033		C	
CHEM 32042			C
CHEM 32051			C
ENCM 12012	C		
ENCM 21013		C	
ENCM 21022		C	
ENCM 21032		C	
ENCM 21043		C	
ENCM 31014			C
ENCM 31022			C
ENCM 31033/31043/31053			C*
ENCM 32063			C
ENCM 32072			C
ENCM 32085			C
MIBI 22054		C	
MIBI 22062		C	
PHYS 32132			C
ZOOL 12014	C		
ZOOL 12022	C		
ZOOL 22053		C	
ZOOL 22042		C	
ZOOL 31014			C
ZOOL 31022			C
No of Credits from Core/Compulsory Units	26	30	30

Students should pass a minimum of two General Studies Course Units within 3 years.

Students should follow two Faculty of Science Auxiliary Course Units within 1st two years.

Students may take courses 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

Year	General Studies ¹	Faculty Auxiliary	First Subject	Main Subjects	Elective/Auxiliary Units
1 st	Minimum of <u>two</u> Course Units	<u>ONLY</u> <u>two</u> Course Units	Core Course Units in Pure Mathematics	Core Course Units in Management, Information Technology and PMAT 11025 for Physical Science students and PMAT 13015 ¹ for Biological Science students	In each year Elective/ Auxiliary Course Units should be selected such that total number of Course Units taken in the year aggregate to a minimum of <u>thirty</u> credits excluding General Studies Units
2 nd			Core Course Units in Pure Mathematics	Core Course Units in Management and Information Technology and PMAT 11025 for Biological Science students	
3 rd		None	At least <u>two</u> Elective Course Units in Pure Mathematics	Core Course Units in Management and Information Technology	

Core Course Units in a subject are compulsory for a student following that subject as one of the main subjects for the degree.

¹ Does not carry credits for B.Sc. MIT degree programme.

4. COURSE STRUCTURE SPECIAL DEGREE

4.1 Special Degree – First Year Course Structure
Botany, Chemistry, Environmental Conservation and Management, Microbiology, Molecular Biology & Plant Biotechnology and Zoology

Combinations	FY SD I	FY SD II	FY SD III	FY SD IV	FY SD V	FY SD VI	FY SD VII	FY SD VIII	FY SD IX	FY SD X	FY SD XI	FY SD XII
Course Units												
BIOC 31012			C						C			
BIOC 31022			C						C			
BIOC 31031			C						C			
BIOC 32042			E						E			
BIOC 32052			E						E			
BIOC 32061			E						E			
BOTA 31014	C	C	C							C		
BOTA 31022	C	C	C							C		
BOTA 32033	C	C	C							C		
BOTA 32043	C	C	C							E		
BOTA 41016	C*	C*	C*									
BOTA 42026	C*	C*	C*									
CHEM 31012	C					C		C			C	
CHEM 31021	C					C		C			C	
CHEM 31032	C					C		C			C	
CHEM 32042	E				C	E		E			E	
CHEM 32051	E				C	E		E			E	
CHEM 32062	E					E		E			E	
CHEM 32072	E					E		E			E	
CHEM 32082	E					E		E			E	
CHEM 43014				C*								
CHEM 43024				C*								
CHEM 43034				C*								
CHEM 43044				C*								
CHEM 43052				C*								
CHEM 43062				C*								
CHEM 43072				C*								
CHEM 43082				C*								
CHEM 43092				C*								
ENCM 31014					C							
ENCM 31022					C							
ENCM 31033					C							
ENCM 31063					C							
ENCM 41014					C*							
ENCM 42023					C*							
ENCM 42034					C*							
ENCM 42041					C*							
MIBI 31014						C	C					C
MIBI 31022						C	C					C
MIBI 32034						C	C					E
MIBI 32041						C	C					E
MIBI 32052						C	C					E
MIBI 43016						C*	C*					
MIBI 43026						C*	C*					
MBBT 31014								C				
MBBT 31022								C				
MBBT 32034								C				
MBBT 32044								C				
MBBT 32052								C				
MBBT 41016								C*				
MBBT 42026								C*				
ZOOL 31014		E					E		C	C	C	C
ZOOL 31022		E					E		C	C	C	C
ZOOL 31073				C*								
ZOOL 32034		E					E					
ZOOL 32042		E					E					
ZOOL 32054		E					E		C	C	C	C
ZOOL 32062		E					E		C	C	C	C
ZOOL 41014									C*	C*	C*	C*
ZOOL 41022									C*	C*	C*	C*
ZOOL 42034									C*	C*	C*	C*
ZOOL 43042									C*	C*	C*	C*

4.2 Special Degree – First Year Course Structure

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

Combinations Course Units	FY SD XII	FY SD XIII	FY SD XIV	FY SD XV	FY SD XVI	FY SD XVII	FY SD XVIII
AMAT 21015				E	E		
AMAT 31013			C				
AMAT 32043				C	C		
AMAT 41014	C*	C*					
AMAT 41024	C*	E					
AMAT 42034	C*	C*					
AMAT 42044	C*		C*				
ELEC 31094					C		
ELEC 32114					E		
IMIT 32042							C
IMIT 32052							E
IMIT 33066							C
IMIT 43016#							C*
IMIT 43026#							C*
IMMG 31023							C
IMMG 31033							E
IMMG 32042							C
IMMG 32052							E
IMMG 32072							E
IMMG 32082							E
IMMG44014#							C*
IMMG 44034#							C*
IMMG 44044#							C*
PHYS 13052				C	C		
PHYS 31102			C	C	C		
PHYS 31112				C			
PHYS 31121			C	C	C		
PHYS 32132				C	C		
PHYS 32151				C			
PHYS 44014			C*	C*	C*		
PHYS 44024			C*	C*	C*		
PHYS 44034				C*			
PHYS 44044	C*		C*		C*		
PHYS 43053				C*	C*		
PMAT 31013						C	
PMAT 31023			C	C	C		
PMAT 32043			C	C	C		
PMAT 32063			C			C	
PMAT 41014	C*	C*	C*				
PMAT 41024	C*	C*					
PMAT 41034	C*	C*	C*				
PMAT 42044	C*	C*					
PMAT 42054	C*	E					
STCS 31025		C				C	
STCS 32035						C	
STCS 32045		E				C	
STCS 44013		C*				C*	
STCS 44023		C*				C*	
STCS 44036						C*	

These course units will be offered either in the First Year or Second Year of the B.Sc. MIT Special Degree programme. At least a total of 12 credits will be offered in the First Year of the Special degree programme.

Note: Some of the electives 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 courses.

4.3 Special Degree – Second Year Course Structure

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

Combinations Course Units	SY SD I	SY SD II	SY SD III	SY SD IV	SY SD V	SY SD VI
BOTA 41036	C*					
BOTA 41046	C*					
BOTA 42056	C*					
BOTA 42066	C*					
BOTA 43078	C*					
BOTA 43082	C*					
BOTA 43092	C*					
BOTA 43102	C*					
CHEM 43105		C*				
CHEM 43115		C*				
CHEM 43125		C*				
CHEM 43135		C*				
CHEM 43145		C*				
CHEM 43155		C*				
CHEM 43165		C*				
CHEM 43175		C*				
CHEM 43185		C*				
ENCM 41054			C*			
ENCM 41062			C*			
ENCM 41074			C*			
ENCM 41084			C*			
ENCM 41094			C*			
ENCM 42103			C*			
ENCM 42113			C*			
ENCM 43122			C*			
ENCM 43132			C*			
ENCM 43148			C*			
MIBI 43036				C*		
MIBI 43046				C*		
MIBI 43056				C*		
MIBI 43066				C*		
MIBI 43074				C*		
MIBI 43088				C*		
MBBT 41034					C*	
MBBT 41044					C*	
MBBT 41055					C*	
MBBT 43066					C*	
MBBT 42074					C*	
MBBT 43083					C*	
MBBT 43092					C*	
MBBT 43108					C*	
ZOOL 41056						C*
ZOOL 41062						C*
ZOOL 41076						C*
ZOOL 41082						C*
ZOOL 41092						C*
ZOOL 42104						C*
ZOOL 42112						C*
ZOOL 42123						C*
ZOOL 43131						C*
ZOOL 43148						C*

4.4 Special Degree – Second Year Course Structure Management and Information Technology, Mathematics, Mathematical Physics, Physics and Statistics & Computer Science

Combinations Course Units	SY SD VI	SY SD VII	SY SD VIII	SY SD IX	SY SD X	SY SD XI	SY SD XII
AMAT 21015				E	E		
AMAT 41204	C*						
AMAT 41214	E						
AMAT 42224	E		C*				
AMAT 42234	E		C*	E	E		
AMAT 43278	C*		C*				
ELEC 31094				E			
IMIT 43016#							C*
IMIT 43026#							C*
IMIT 44034							C*
IMIT 44044							E
IMIT 44054							E
IMIT 43098							C*
IMMG44014#							C*
IMMG 44024							C*
IMMG 44034#							C*
IMMG 44044#							C*
IMMG 44054							E
IMMG 44064							E
IMMG 44074							E
IMMG 44084							E
PHYS 44064			C*	C*	C*		
PHYS 44074			C*	C*	C*		
PHYS 44084			C*	C*	C*		
PHYS 44094	E		C*	C*	C*		
PHYS 43104				C*	C*		
PHYS 43115				C*	C*		
PHYS 43128			C*	C*	C*		
PMAT 41204	C*	C*					
PMAT 41214	C*	C*	C*				
PMAT 41224	C*	C*					
PMAT 42234	C*	C*					
PMAT 42244/ PMAT 42254	C*	C*					
PMAT 42264		C*					
PMAT 43278	C*	C*					
STCS 44046		C*				C*	
STCS 44053						C*	
STCS 44063						C*	
STCS 44073						C*	
STCS 44083						C*	
STCS 44093						C*	
STCS 44103						C*	
STCS 44113		C*				C*	
STCS 44123		C*				C*	
STCS 44136						C*	

SYDS VI : A student should take at least two of the electives, and either AMAT 43278 or PMAT 43278

SYDS VIII: A student should take either AMAT 43278 or PHYS 43128

These course units will be offered either in the First Year or Second Year of the B.Sc. MIT Special Degree programme. At least a total of 12 credits will be offered in the First Year of the Special degree programme.

Note: Some of the electives 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 courses.

5. COURSE UNITS

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

General Studies Course Units (GNST)	
Year 1, Year 2 or Year 3	Course Units
	GNST 14012 Communication skills and Personality Development ¹
	GNST 14022 Science, Technology and Society
	GNST 14032 Computer Literacy ^{1,2,3}
	GNST 14042 Environmental Studies ³
	GNST 14052 National Heritage
	GNST 14062 Aesthetic Studies
	GNST 14072 English for the Sciences ³
	GNST 14082 English for Biology ^{1,4}

¹ Not offered for students following MIT Programme.² Not offered for students following Computer Studies, Statistics and Computer Science as subjects.³ Not offered for students following subjects in Biological Sciences.⁴ Not offered for students following subjects in Physical Sciences.

Faculty of Science Auxiliary Course Units (FSAC)	
Year 1 or Year 2	Course Units
	FSAC 14012 Management Theory and Practice ¹
	FSAC 14022 Statistics for Natural Sciences ^{1,2}
	FSAC 14032 Physics for Understanding Nature ³
	FSAC 14042 Chemistry in Context ⁴
	FSAC 14052 Logic and Reasoning
	FSAC 14062 Fundamentals of Modern Biology ⁵

¹ Not offered for students following MIT Programme.² Not offered for students following Statistics and Computer Science as a subject.³ Not offered for students following Physics as a subject.⁴ Not offered for students following Biochemistry/Chemistry as a subject.⁵ Not offered for students following subjects in Biological Sciences.

Compulsory Course Units for Biological Science Stream (BIOL)		
Year 1 Sem 1	Course Units	Status
	BIOL 11012 Introductory Microbiology	C*
	BIOL 11022 Genetics	C*
	BIOL 11033 Introductory Biochemistry	C*
	BIOL 11041 Biochemistry Laboratory	C*
	BIOL 11062 Computer Literacy ¹	C*

¹ Not offered for students following Computer Studies as a subject.

Subject: Applied Mathematics¹ (AMAT)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	AMAT 11015 Vector Algebra and Vector Analysis ²	C/C*/E	A/L Combined Mathematics	
Year 1 Sem 2	AMAT 12025 Mechanics I ¹	C/E	AMAT 11015	
Year 2 Sem 1	AMAT 21015 Mechanics II	C/E	AMAT 12025/ PHYS 11014	
Year 2 Sem 2	AMAT 22025 Numerical Methods	C/E	PMAT 12035	
Year 3 Sem 1	AMAT 31013 Numerical Methods Using Matlab and Mathematica ³	E	AMAT 22025	
	AMAT 31023 Mathematical Modelling	E	PMAT 12035	
Year 3 Sem 2	AMAT 32033 Computational Mathematics ²	E	AMAT 31013	
	AMAT 32043 Introduction to Fluid Dynamics	E	AMAT 11015	PMAT 32043
Special				
Year 3 Sem 1	AMAT 41014 Qualitative and Quantitative Behaviour of the Solutions of Ordinary Differential Equations	C*	AMAT 22025	
	AMAT 41024 Advanced Mathematical Modelling ⁴	C*/E	PMAT 12035	
Year 3 Sem 2	AMAT 42034 Advanced Computational Mathematics	C*	AMAT 41014	
	AMAT 42044 Fluid Dynamics ⁵	C*	AMAT 11015	PMAT 42044
Year 4 Sem 1	AMAT 41204 Boundary Values Problems ⁴	C*	PMAT 41024	
	AMAT 41214 Quantum Mechanics ⁵	E	AMAT 21015	
	AMAT 43278 Research/Study Project	C*		
Year 4 Sem 2	AMAT 42224 Quantum Field Theory ⁵	E	AMAT 41214/ PHYS 41014	
	AMAT 42234 General Relativity ⁵	E	PHYS 43044	

¹ Student following Applied Mathematics as a main subject for the degree but not Physics must take PHYS 12034.

² Compulsory for PHYS stream.

³ Restricted enrolment.

⁴ Compulsory for AMAT & PMAT stream, and Elective for PMAT & STAT stream.

⁵ Not offered for students following PMAT & STAT stream.

Subject: Biochemistry (BIOC)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	CHEM 11014 Inorganic Chemistry I	C	A/L Chemistry	CHEM 11021
	CHEM 11021 Inorganic Chemistry Laboratory I	C	A/L Chemistry	CHEM 11014
Year 1 Sem 2	CHEM 12032 Physical Chemistry I	C	CHEM 11014	
	CHEM 12042 Organic Chemistry I	C	CHEM 11014	CHEM 12051
	CHEM 12051 Organic Chemistry Laboratory I	C	CHEM 11021	CHEM 12042
Year 2 Sem 1	BIOC 21014 Functional Biochemistry	C/E	BIOL 11033	BIOC 21021
	BIOC 21021 Biochemistry Laboratory II	C/E		BIOC 21014
	CHEM 21021 Physical Chemistry Laboratory	C	CHEM 12032	
	CHEM 21033 Analytical Chemistry	C	CHEM 12032 CHEM 12042	
Year 2 Sem 2	BIOC 22034 Molecular and Cell Biology/Analytical and Medicinal Biochemistry	C/E	BIOC 21014	BIOC 22041
	BIOC 22041 Biochemistry Laboratory III	C/E		BIOC 22034
Year 3 Sem 1	BIOC 31012 Immunochemistry and Neurochemistry	C/E	BIOC 21014	BIOC 31031
	BIOC 31022 Pharmaceutical Chemistry	C/E	BIOC 22034	BIOC 31031
	BIOC 31031 Biochemistry Laboratory IV	C/E		BIOC 31012 BIOC 31022
Year 3 Sem 2	BIOC 32042 Food and Agricultural biochemistry	E	BIOC 22034	BIOC 32061
	BIOC 32052 Biotechnology	E	BIOC22034	BIOC 32061
	BIOC 32061 Biochemistry Laboratory V	E		BIOC 32042 BIOC 32052

Subject: Botany (BOTA)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year1 Sem 2	BOTA 12013 Morphology, Anatomy and Taxonomy of Angiosperms	C	A/L Biology	BOTA 12022
	BOTA 12022 Morphology, Anatomy and Taxonomy of Angiosperms Laboratory	C	A/L Biology	BOTA 12013
	BOTA 12032 Plants and People	A		
Year 2 Sem 1	BOTA 21013 Plant Physiology	C	BOTA 12013 BOTA 12022	BOTA 21022
	BOTA 21022 Plant Physiology Laboratory	C		BOTA 21013
Year 2 Sem 2	BOTA 22034 Plant Diversity	C	A/L Biology	BOTA 22042
	BOTA 22042 Plant Diversity Laboratory	C	A/L Biology	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
Year 3 Sem 2	BOTA 32033 Molecular Genetics and Gene Technology	C		
	BOTA 32043 Post Harvest Biology and Plant Pathology	E	BOTA 21013	
	BOTA 32053 Horticulture	E	BOTA 21013	
	INTR 32012 Industrial Training	E		

Subject: Botany (BOTA)			
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	BOTA 41016 Plant Systematics and Plant Physiology	C*	All BOTA Core Course units
Year 3 Sem 2	BOTA 42026 Molecular & Microbial Genetics and Advanced Mycology		All BOTA Core Course units
Year 4 Sem 1	BOTA 41036 Plant Pathology		All BOTA Core Course units and BOTA 32043
	BOTA 41046 Plant Biochemistry & Applied Microbiology		All BOTA Core Course units
	BOTA 43078 Research Project - Dissertation ¹		All BOTA Core Course units and BOTA 32043
	BOTA 43082 Herbarium ¹		All BOTA Core Course units
	BOTA 43092 Term Paper/Presentation ¹		All BOTA Core Course units and BOTA 32043
	BOTA 43102 Bioinformatics for Plant Taxonomy ¹		All BOTA Core Course units
Year 4 Sem 2	BOTA 42056 Advanced Ecology		All BOTA Core Course units
	BOTA 42066 Economic Botany and Plant Breeding		All BOTA Core Course units

¹ Offered throughout the year.

Subject: Chemistry ¹ (CHEM)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	CHEM 11014 Inorganic Chemistry I	C	A/L Chemistry	CHEM 11021
	CHEM 11021 Inorganic Chemistry Laboratory I	C		CHEM 11014
Year 1 Sem 2	CHEM 12032 Physical Chemistry I	C	CHEM 11014	
	CHEM 12042 Organic Chemistry I	C	CHEM 11014	CHEM 12051
	CHEM 12051 Organic Chemistry Laboratory I	C	CHEM 11021	CHEM 12042
Year 2 Sem 1	CHEM 21012 Physical Chemistry II	C	CHEM 12032	CHEM 21021
	CHEM 21021 Physical Chemistry Laboratory I	C	CHEM 12032	CHEM 21012
	CHEM 21033 Analytical Chemistry	C	CHEM 12032 CHEM 12042	
Year 2 Sem 2	CHEM 22042 Organic Chemistry II	C	CHEM 12042 CHEM 21033	CHEM 22051
	CHEM 22051 Organic Chemistry Laboratory II	C	CHEM 12051	CHEM 22042
	CHEM 22062 Inorganic Chemistry II	C	CHEM 11014 CHEM 11021	
Year 3 Sem 1	CHEM 31012 Inorganic Chemistry III	C	CHEM 22062	CHEM 31021
	CHEM 31021 Inorganic Chemistry Laboratory II	C		CHEM 31012
	CHEM 31032 Bio- organic Chemistry	C	CHEM 22042	
Year 3 Sem 2	CHEM 32042 Environmental Chemistry ²	E	CHEM 21033	CHEM 32051
	CHEM 32051 Environmental Chemistry Laboratory ²	E	CHEM 21033	CHEM 32042
	CHEM 32062 Earth Resources ²	E/A	All year I CHEM units	
	CHEM 32072 Industrial Chemistry ²	E/A	All year I CHEM units	
	CHEM 32082 Agro-industrial Chemistry ²	E/A	All year I CHEM units	

¹ Restricted enrolment for Physical Sciences.² Restricted enrolment.

Subject: Chemistry (CHEM)			
Special			
	Course Units	Status	Pre-requisite
Year 3	CHEM 43014 Advanced Inorganic Chemistry I	C*	Year 1 & 2 CHEM Core Course Units
	CHEM 43024 Advanced Organic Chemistry I		
	CHEM 43034 Biochemistry I		
	CHEM 43044 Advanced Physical Chemistry I		
	CHEM 43053 Organic Chemistry Laboratory		
	CHEM 43063 Inorganic Chemistry Laboratory		
	CHEM 43073 Physical Chemistry Laboratory		
	CHEM 43083 Biochemistry Laboratory		
	CHEM 43093 Environmental and Analytical Chemistry Laboratory		
Year 4	CHEM 43104 Advanced Inorganic Chemistry II		
	CHEM 43114 Advanced Organic Chemistry II		
	CHEM 43124 Biochemistry II		
	CHEM 43134 Advanced Physical Chemistry II		
	CHEM 43144 Advanced Analytical Chemistry		
	CHEM 43154 Environmental Chemistry		
	CHEM 43164 Materials Chemistry		
	CHEM 43175 B.Sc. Dissertation		
	CHEM 43182 Seminar and Industrial Training		

Subject: Computer Studies¹ (COST)			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	COST 11014 Fundamentals of Computer Science and Computer Applications	C	
Year 1 Sem 2	COST 12034 Structured Programming Concepts	C	COST 11014
Year 2 Sem 1	COST 21024 Fundamentals of Database Management Systems	C	COST 12034
Year 2 Sem 2	COST 22034 Information Systems & Decision Support Systems	C	COST 21024
Year 3 Sem 1	COST 31024 Visual Programming	C	COST 21024
Year 3 Sem 2	COST 32014 Web Technology and e-commerce Applications	E	COST 31024

¹ Restricted enrolment.

Subject: Electronics¹ (ELEC)				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	ELEC 11014 Analogue Electronics – I	C	A/L Physics	ELEC 11021
	ELEC 11021 Analogue Electronics – I Laboratory	C		ELEC 11014
Year 1 Sem 2	ELEC 12034 Digital Electronics	C	ELEC 11014	ELEC 12041
	ELEC 12041 Digital Electronics Laboratory	C	ELEC 11021	ELEC 12034
Year 2 Sem 1	ELEC 21054 Analogue Electronics – II	C	ELEC 12034	ELEC 21061
	ELEC 21061 Analogue Electronics – II Laboratory	C	ELEC 12041	ELEC 21054
Year 2 Sem 2	ELEC 22074 Signal Processing and Data Acquisition	C	ELEC 21054	ELEC 22081
	ELEC 22081 Signal Processing and Data Acquisition Laboratory	C	ELEC 21061	ELEC 22074
Year 3 Sem 1	ELEC 31094 Computer Architecture ^{2,3}	C/E	ELEC 22074/ PHYS 31112 and 42034	ELEC 31101
	ELEC 31101 Computer Architecture Laboratory	C	ELEC 22081	ELEC 31094
	ELEC 33122 Research Project ⁴	C	All ELEC Core Course units	
Year 3 Sem 2	ELEC 32114 Special Topics in Electronics	E	ELEC 31094	

¹ Restricted enrolment.² Elective only for students in B.Sc. (Special) degree in Physics.³ No Co-requisite for students in B.Sc. (Special) degree in Physics.⁴ Offered throughout the year.

Subject: Environmental Conservation and Management (ENCM)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 2	ENCM 12012 Earth Resources, Man and the Environment	C	A/L Biology	-
Year 2 Sem 1	ENCM 21013 Atmospheric, Aquatic and Soil Pollution	C	ENCM 12012	-
	ENCM 21022 Soil Conservation and Land Use Planning	C	ENCM 12012	ENCM.21013
	ENCM 21032 Solid Waste and Hazardous Waste Management	C	ENCM 12012	ENCM 21013
	ENCM 21043 Environmental Economics	C	ENCM 12012	-
Year 3 Sem 1	ENCM 31014 Biodiversity Conservation and Management	C	ZOOL 12014 BOTA 22034	-
	ENCM 31022 Environmental Policies and Legislation	C	ENCM 12012	ENCM 31014
	ENCM 31033 Forest Resources Management	E	ENCM 21022 BOTA 22034 ZOOL 22053	ENCM 31014
	ENCM 31043 Urban Environment Management	E	ENCM 21013 ENCM 21022 ENCM 21032	-
	ENCM 31053 Water Resources Management	E	ENCM 21013	-
Year 3 Sem 2	ENCM 32063 Environmental Impact Assessment and Environmental Monitoring	C	ENCM 31022 CHEM 21033	CHEM 32042
	ENCM 32072 Industrial Training	C	All ENCM core units offered in the previous semesters	-
	ENCM 32085 Environmental Project	C	All ENCM core units offered in the previous semesters	ENCM 32063

Subject: Environmental Conservation and Management (ENCM)				
Special				
	Course Units	Status	Pre-requisite	Co-requisite
Year 3 Sem 1	ENCM 41014 Air and Water Quality Management	C*	ENCM 21013 MIBI 22054	-
Year 3 Sem 2	ENCM 42023 Geographical Information Systems in Environmental Studies	C*	All Level 1 & 2 ENCM core units	-
	ENCM 42034 Marine and Coastal Resources Management	C*	ZOOL 31073	-
	ENCM 42041 Seminar	C*	All Level 1, 2 & 3 ENCM core units	-
Year 4 Sem 1	ENCM 41054 Applied Ecology	C*	ZOOL 22053	ENCM 41062
	ENCM 41062 Applied Ecology Laboratory	C*	ZOOL 22042	ENCM 41054
	ENCM 41074 Conservation Biology and Wild Life Management	C*	ENCM 31014	
	ENCM 41084 Environmental Toxicology	C*	ENCM 21013	-
	ENCM 41094 Urban Environment Management	C*	ENCM 21013, ENCM 21022, ENCM 21032, ENCM 31022	-
	ENCM 43148 Research Project ¹	C*	All ENCM Core Course units offered in the first three years	-
Year 4 Sem 2	ENCM 42103 Reserve Design and Protected Area Management	C*	ENCM 41054	-
	ENCM 42113 Management of Wetlands and Their Resources	C*	ENCM 31014 ENCM 41054 ENCM 41074	-
	ENCM 43122 Special Topics in Environmental Management	C*	All ENCM Core Course units offered in the first three years	-
	ENCM 43132 Industrial Training	C*	All ENCM Core Course units offered in the first three years	-

¹ Offered throughout the year.

Subject: Industrial Management¹ (IMGT)		
	Course Units	Status
Year 2 Sem 2	IMGT 22012 Business Planning and Operational Tools ¹	A

¹ Restricted enrolment and the medium of instructions and examinations will be only in English.

Subject: Information Technology (IMIT)			
General			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	IMIT 11013 Computer and Information Systems	C	
	IMIT 11022 Programming Concepts	C	
Year 1 Sem 2	IMIT 12032 Data Structures and Algorithms	C	
	IMIT 12033 Object-Oriented Programming	E	
	IMIT 12043 Database Management Systems	C	
Year 2 Sem 1	IMIT 21012 Structured Systems Analysis and Design	C	
	IMIT 21024 Data Communication and Computer Networks	E	
	IMIT 21032 Visual Programming	C	
	IMIT 21042 Business Information Systems	C	
Year 2 Sem 2	IMIT 22053 Software Engineering	C	
	IMIT 22062 Object Oriented Systems Analysis and Design	C	
Year 3 Sem 1	IMIT 31012 Web Programming	C	
	IMIT 31022 Advanced Databases	E	IMIT 12043
	IMIT 31033 Human Factors in Information Technology	E	
	IMIT 33066 ¹ Computer Projects	C	
Year 3 Sem 2	IMIT 32042 Information Systems Management	C	
	IMIT 32052 Emerging Technology	E	
Special			
Year 1	IMIT 43026 E-commerce & Web Technology	C	
	IMIT 44054 Knowledge-based Systems	E	
Year 2	IMIT 43016 Data Engineering ¹	C	
	IMIT 44034 Systems Modeling and Simulation	C	
	IMIT 44044 Human Computer Interaction	E	
	IMIT 43098 Research Project	C	

¹ Offered throughout the year.

Subject: Management (IMMG)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	IMMG 11012 Principles of Management	C		
	IMMG 11023 Economics for Managers	C		
	IMMG 11033 Business Statistics	E		
	IMMG 14052 Industrial and Business Law	C		
Year 1 Sem 2	IMMG 12062 Organizational Behaviour	C		
	IMMG 12043 Operation Research I	C		
	IMMG 12072 Industry and Technology	C		
	IMMG 14052 Industrial and Business Law	E		
Year 2 Sem 1	IMMG 21012 Leadership & Communication	C	ELTU 13012	ELTU 21012
	IMMG 21023 Marketing Management	C		
	IMMG 21032 Human resource Management	C		
	IMMG 21063 Operations Management	C		
Year 2 Sem 2	IMMG 22043 Operation Research II	C	IMMG 12043	
	IMMG 22052 Financial Accounting	C		
	IMMG 22072 Industrial Training	C		
Year 3 Sem 1	IMMG 31013 Management of Technology	C		
	IMMG 31023 Cooperate Finance	C		
	IMMG 31033 International Trade and Export Marketing	E		
Year 3 Sem 2	IMMG 32042 Strategic Management	C	ELTU 21012	ELTU 33012
	IMMG 32052 Cross cultural Management	E		
	IMMG 32062 Advanced Operational Management	C	IMMG 22063	
	IMMG 32072 Global Trends in Business Management	E		
	IMMG 32082 Small Business Management	E		

Subject: Management (IMMG)			
Special			
	Course Unit	Status	Pre-requisite
Year 1	IMMG 44014 Strategic Marketing	C	
	IMMG 44034 Research Methodology	C	
	IMMG 44044 Management of Technology for Competitiveness	C	
Year 2	IMMG 44024 Strategic Accounting & Corporate Finance	C	
	IMMG 44054 Quantitative Techniques in Decision Making	E	
	IMMG 44064 Investment Management	E	
	IMMG 44074 Business Process Engineering	C	
	IMMG 44084 Economic Environment of Business	E	

Subject: Microbiology¹ (MIBI)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 2	MIBI 12014 Introduction to Applied Microbiology, Taxonomy of Bacteria & Other Microorganisms and Viruses	C	A/L Botany/Zoology or Biology	MIBI 12022
	MIBI 12022 Introduction to Applied Microbiology, Taxonomy of Bacteria & Other Microorganisms and Viruses Laboratory	C	A/L Botany/Zoology or Biology	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 12014 MIBI 12022	MIBI 22042
	MIBI 22042 Environmental and Agricultural Microbiology Laboratory	C	MIBI 12014 MIBI 12022	MIBI 22034
Year 3 Sem 1	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	E	MIBI 21014 MIBI 21022	MIBI 32041
	MIBI 32041 Medical, & Veterinary Microbiology and Microbial Technology Laboratory	E	MIBI 21014 MIBI 21022	MIBI 32034
	MIBI 32052 Internship in Microbiology		MIBI 31014, MIBI 31022,	
	MIBI 32062 Industrial Microbiology Laboratory	E	MIBI 31014, MIBI 31022,	MIBI 33034
	INTR 32012 Industrial Training	E		

¹ Restricted enrolment.

Subject: Microbiology¹ (MIBI)			
Special			
	Course Units	Status	Pre-requisite
Year 3	MIBI 43016 Bacterial Taxonomy, Physiology & Biochemistry and Virology	C*	All General MIBI 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 2	MBBT 12013 Cell Biology	C	A/L Biology	MBBT 12022
	MBBT 12022 Cell Biology Laboratory	C	A/L Biology	MBBT 12013
Year 2 Sem 1	BOTA 21013 Plant Physiology	C	A/L Biology	BOTA 21022
	BOTA 21022 Plant Physiology Laboratory	C		BOTA 21013
Year 2 Sem 2	MBBT 22034 Introduction to Molecular and Microbial Biology	C		
Year 3 Sem 1	MBBT 31014 Principles of Molecular Genetics and Plant Biotechnology	C		MBBT 31022
	MBBT 31022 Principles of Molecular Genetics and Plant Biotechnology Laboratory	C		MBBT 31014
Year 3 Sem 2	MBBT 32034 Eukaryotic Gene Expression and Advanced Techniques in Biotechnology	C		
	MBBT 32044 Plant Pathology and Tissue Culture	E		MBBT 32052
	MBBT 32052 Plant Pathology and Tissue Culture Laboratory	E		MBBT 32044
	INTR 32012 Industrial Training	E		

¹ Restricted enrolment.

Subject: Molecular Biology and Plant Biotechnology¹ (MBBT)			
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	MBBT 41016 Advanced Microbial Genetics	C*	All MBBT Core and Elective units
Year 3 Sem 2	MBBT 42026 Plant Genetic Engineering		
Year 4 Sem 1	MBBT 41034 Molecular Plant Pathology		
	MBBT 41044 Genetic Manipulation of Microorganisms		
	MBBT 41055 Developmental Gene Regulation		
	MBBT 43066 Special Topics in Molecular Biology and Biotechnology ²		
	MBBT 43083 Computer Applications in Molecular Biology and Biotechnology ²		
	MBBT 43092 Term Paper/Presentation ²		
	MBBT 43108 Research Project – Dissertation ²		
Year 4 Sem 2	MBBT 42074 Ethics in Biotechnology		

² Offered throughout the year.

Subject: Physics ¹ (PHYS)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
Year 1 Sem 1	PHYS 11014 Mechanics, Properties of Matter and Electric Circuit Fundamentals	C	A/L Physics	AMAT 11015
	PHYS 11021 Elementary Physics Laboratory – I	C		PHYS 11014
Year 1 Sem 2	PHYS 12034 Modern Physics ^{2,3}	C/C*	A/L Physics	PHYS 12041
	PHYS 12041 Elementary Physics Laboratory – II	C	PHYS 11021	PHYS 12034
Year 2 Sem 1	PHYS 21064 Physics of Waves and Optics	C	PHYS 11014	PHYS 21071
	PHYS 21071 General Physics Laboratory – I	C	PHYS 12041	PHYS 21064
Year 2 Sem 2	PHYS 22084 Solid State Physics and Thermodynamics	C	PHYS 12034	PHYS 21091
	PHYS 22091 General Physics Laboratory – II	C	PHYS 21071	PHYS 22084
Year 3 Sem 1	PHYS 31102 Electromagnetism	C	PHYS 11014	PHYS 31121
	PHYS 31112 Electronics ⁴	C	PHYS 11014	PHYS 31121
	PHYS 31121 Electricity and Magnetism Laboratory	C	PHYS 22091	PHYS 31102
Year 3 Sem 2	PHYS 32132 Environmental Physics	E	A/L Physics	
	PHYS 32142 Introduction to Cosmology and Astrophysics	E	A/L Physics	
	PHYS 32151 Electronics Laboratory ⁴	C	PHYS 31112	

¹ Restricted enrolment.² Compulsory for AMAT stream.³ Co-requisite ONLY for PHYS stream.⁴ Offered for students who have not followed Electronics as a subject.

Subject: Physics ¹ (PHYS)			
Special			
	Course Units	Status	Pre-requisite
Year 3	PHYS 13052 Computer Applications in Physics ³	C*	All AMAT/PHYS Core Course units
	PHYS 44014 Quantum Mechanics		
	PHYS 44024 Statistical Physics		
	PHYS 44034 Advanced Electronics ²		
	PHYS 44044 Theory of Relativity ⁴		
	PHYS 43053 Advanced Physics Laboratory - I ³		
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 ³		
	PHYS 43115 Advanced Physics Laboratory - II ³		
	PHYS 43128 Research Project ³		

² Offered for students who have not followed Electronics as a subject.

³ Offered throughout the year.

⁴ Offered for students who have followed Electronics as a subject.

Subject: Pure Mathematics (PMAT)			
General			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	PMAT 13015 Applicable Mathematics ¹	A	
	PMAT 11025 Discrete Mathematics I	C	A/L Combined Mathematics/ Mathematics
Year 1 Sem 2	PMAT 12035 Advanced Calculus	C	PMAT 11025
Year 2 Sem 1	PMAT 21015 Discrete Mathematics II	C	PMAT 11025
Year 2 Sem 2	PMAT 22025 Infinite Series and Ordinary Differential Equations	C	PMAT 12035
Year 3 Sem 1	PMAT 31013 Introduction to Functions of Several Variables	E	PMAT 22025
	PMAT 31023 Partial Differential Equations and Integral Transforms	C ² /E	PMAT 22025
	PMAT 31033 Sequences and Series of Functions, and Theory of Integration	E	PMAT 22025
Year 3 Sem 2	PMAT 32043 Complex Variables	C ² /E	PMAT 12035
	PMAT 32053 Geometry	E	PMAT 21015
	PMAT 32063 Graph Theory and Abstract Algebra	C ³ /E	PMAT 11025

¹ Offered throughout the year only for Biological Science .students.

² Core only for students following the Special Degree Programmes in Mathematical Physics and Physics

³ Core only for students following the Special Degree Programmes in Mathematical Physics

Subject: Pure Mathematics (PMAT)			
Special			
	Course Units	Status	Pre-requisite
Year 3 Sem 1	PMAT 41014 Functions of Several Variables	C*	PMAT 22025
	PMAT 41024 Mathematical Methods	C*	PMAT 22025
	PMAT 41034 Real Analysis and Riemann Theory of Integration	C*	PMAT 22025
Year 3 Sem 2	PMAT 42044 Complex Analysis	C*	PMAT 22025
	PMAT 42054 Differential Geometry ²	C*/E	PMAT 22025
Year 4 Sem 1	PMAT 41204 Topology	C*	PMAT 41034
	PMAT 41214 Functional Analysis	C*	PMAT 41034
	PMAT 41224 Group Theory	C*	PMAT 21015
	PMAT 43276 Research/Study Project ¹	C*	
Year 4 Sem 2	PMAT 42234 Measure Theory	C*	PMAT 41034
	PMAT 42244 Ring Theory and Field Theory ³	C*	PMAT 41224
	PMAT 42254 Graph Theory and Number Theory ⁴	C*	PMAT 41224
	PMAT 42264 Special Topics in Mathematics and Statistics ⁵	C*	PMAT 41034

¹ Offered throughout the year.² Compulsory for AMAT & PMAT stream, and Elective for PMAT & STAT stream.³ Compulsory for students not offering PMAT 42254.⁴ Compulsory for students not offering PMAT 42244.⁵ Only for student following PMAT & STCS stream.

Subject: Statistics & Computer Science (STCS)			
General			
	Course Units	Status	Pre-requisite
Year 1 Sem 1	STCS 11015 Probability and Statistics ¹	C	A/L Pure Mathematics or Combined Mathematics
	STCS 11034 Theoretical Foundations in Computer Science	E/A	
Year 1 Sem 2	STCS 12045 Introduction to Programming and Program Design ¹	C	
Year 2 Sem 1	STCS 21015 Data Structures and Algorithms ¹	C	STCS 12045
Year 2 Sem 2	STCS 22025 Statistical Inference ¹	C	STCS 11015
Year 3 Sem 1	STCS 31015 Database Management Systems ¹	C	
	STCS 31025 Sampling Techniques and Statistical Methods ¹	C	STCS 11015
Year 3 Sem 2	STCS 32035 Intelligent Knowledge Based Systems ¹	E	STCS 21015
	STCS 32045 Operations Research ¹	E	STCS 22025
	STCS 32051 Applicable Statistics ¹	E	STCS 31025

¹ Restricted enrolment.

Subject: Statistics & Computer Science (STCS)			
Special			
	Course Units	Status	Pre-requisite
Year 3	STCS 44013 Time Series Analysis	C*	
	STCS 44036 Design and Implementation of Database Systems	C*	
	STCS 44023 Statistical Laboratory	C*	
Year 4	STCS 44046 Stochastic Processes	C*	
	STCS 44053 Theoretical Aspects of Computer Graphics	C*	
	STCS 44063 Object-Oriented Design and Programming	C*	
	STCS 44073 Systems Analysis and Design	C*	
	STCS 44083 Computer Architecture and Design	C*	
	STCS 44093 Artificial Neural Networks	C*	
	STCS 44103 Data Communication and Networks	C*	
	STCS 44113 Design and Analysis of Experiments	C*	
	STCS 44123 Bayesian Inference and Decision Theory	C*	
	STCS 44136 Research Project	C*	

Subject: Zoology (ZOOL)				
General				
	Course Units	Status	Pre-requisite	Co-requisite
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 22034 Animal Ecology, Zoogeography and Ethology	C	ZOOL 12014	ZOOL 22042
	ZOOL 22042 Animal Ecology Laboratory	C	ZOOL 12022	ZOOL 22034
	ZOOL 22053 Ecology and Zoogeography ²	C	ZOOL 12014	ZOOL 22042
Year 3 Sem 1	ZOOL 31014 Fisheries Biology and Aquaculture ³	C ¹ /E	A/L Biology	ZOOL 31022
	ZOOL 31022 Fisheries Biology and Aquaculture Laboratory ³	C ¹ /E	A/L Biology	ZOOL 31014
Year 3 Sem 2	ZOOL 32034 Applied Entomology and Plant Nematology ³	E	ZOOL 12014	ZOOL 32042
	ZOOL 32042 Applied Entomology and Plant Nematology Laboratory ³	E	ZOOL 12022	ZOOL 32034
	ZOOL 32054 Parasitology & Plant Nematology ³	C ¹ /E	ZOOL 12014	ZOOL 32062
	ZOOL 32062 Parasitology & Plant Nematology Laboratory ³	C ¹ /E	ZOOL 12022	ZOOL 32054
	INTR 32012 Industrial Training	E		

¹ Compulsory only for the Zoology (Special) students.² Offered only for the students following ENCM programme.³ Those who intend following Zoology as a subject should follow all the core course units and at least one of the following combinations of elective course units. Students may follow either combinations (i) and (ii) or (i) and (iii) as (ii) and (iii) will be conducted concurrently.

(i) ZOOL 31014 and ZOOL 31022

(ii) ZOOL 32034 and ZOOL 32042

(iii) ZOOL 32054 and ZOOL 32062

Subject: Zoology (ZOOL)				
Special				
	Course Units	Status	Pre-requisite	Co-requisite
Year 3 Sem 1	ZOOL 31073 Fisheries and Aquaculture Management	C* ¹	A/L Biology	
	ZOOL 41014 Insect Biology and Systematics	C*	ZOOL 12014	ZOOL 41022
	ZOOL 41022 Insect Biology Laboratory	C*	ZOOL 12022	ZOOL 41014
	ZOOL 43042 Guided Reading and Essay on Special Topics in Zoology ²	C*	All ZOOL Core Course units offered in the first two years	
Year 3 Sem 2	ZOOL 42034 Comparative Animal Physiology	C*	ZOOL 21014 ZOOL 21022	
Year 4 Sem 1	ZOOL 41056 Applied Ecology and Environmental Management	C*	ZOOL 22034	ZOOL 41022
	ZOOL 41062 Ecology Laboratory	C*	ZOOL 22042	ZOOL 41056
	ZOOL 41076 Capture Fisheries and Aquaculture Management	C*	ZOOL 31014	ZOOL 41082
	ZOOL 41082 Fisheries Biology and Aquaculture Management Laboratory	C*	ZOOL 31022	ZOOL 41076
	ZOOL 41092 Histological and Museum Techniques	C*	ZOOL 12014 ZOOL 21014	
	ZOOL 43131 Seminar ²	C*	All ZOOL Core Course units offered in the first three years	
Year 4 Sem 2	ZOOL 43148 Research Project ²	C*	All ZOOL Core Course units offered in the first three years	
	ZOOL 42104 Agricultural and Medical Entomology	C*	ZOOL 41014	ZOOL 42112
	ZOOL 42112 Agricultural and Medical Entomology Laboratory	C*	ZOOL 12022 ZOOL 41022	ZOOL 42104
	ZOOL 42123 Conservation Biology and Wildlife Management	C*	ZOOL 12014 ZOOL 22034	

¹ Compulsory only for the Environmental Conservation and Management (Special) students.

² Offered throughout the year.

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

Auxiliary Units Offered by the Faculty of Humanities

BUDDHIST CULTURE

Level One

- BUCU 12052 An Introduction to Ancient Buddhist Monasteries
BUCU 12062 An Introduction to Buddhist Art and Architecture

Level Two

- BUCU 22062 Buddhist concept of Management

Level Three

- BUCU 32052 Buddhist Concept of Environment Ethics

BUDDHIST PHILOSOPHY

Level One

- BUPH 12052 Buddhism and Social Problems

Level Two

- BUPH 21052 Buddhist Conception of Communication
BUPH 22062 Buddhist Attitude Towards Law, Crime and Punishment

Level Three

- BUPH 32052 Buddhist Attitude to Economy, Politics and Health.
BUPH 32062 Buddhist Meditation.

CHRISTIAN CULTURE

Level One

- CHCU 12052 Introduction to the Bible.
CHCU 12062 Introduction to Christianity.

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, Communication and Literature

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 (Level One)

Level Two

- GERM 23052 German Language and Culture (Level Two)

Level Three

- GERM 33052 German Language and Culture (Level Three)

HINDI

Level One

- HIND 11052 Introduction to Modern Standard Hindi (Sinhala Medium)
HIND 12062 Introduction to Modern Hindi Literature (Sinhala Medium)

Level Two

- HIND 21052 History of Hindi Literature (Sinhala Medium)
HIND 22072 North Indian Culture (Sinhala Medium)

Level Three

- HIND 31052 Hindi Folk Literature (Sinhala Medium)

JAPANESE

Level One

JAPA 13052 Japanese Grammar & Vocabulary

Level Two

JAPA 23052 Grammar & Vocabulary of the initial half of the Beginners Level Japanese

Level Three

JAPA 33052 Grammar & Vocabulary of the last half of the Beginners Level Japanese

KOREAN

Level One

KORE 13052 Fundamental Korean Language Basic Korean Culture LEVEL 1& II

Level Two

KORE 23052 Intermediate Korean Language Basic Korean Culture LEVEL 3 & 4

Level Three

KORE 33052 Intermediate Korean Language Basic Korean Culture

LINGUISTICS

Level One

LING 11032 Introduction to Language

Level Three

LING 31032 Language and Mind

LING 31042 Language Teaching and Learning

LING 32072 Language and Society

LING 32082 Communication Disabilities

PALI

Level One

PALI 12052 An Introduction to the Tripitaka

Level Two

PALI 21052 Pali Sources and Sri Lankan History

PALI 22052 Conceptual Trends in Early Buddhism

RUSSIAN

Level One

RUSS 13052 Russian Language Part I & II

Level Two

RUSS 23052 Russian Language Grammar and Syntax. Part I & II

Level Three

RUSS 33052 Russian Classical Literature (Novels & Short Stories)
Part I & II

SANSKRIT

Level One

SANS 13053 Introduction to Sanskrit Language & Literature

Level Two

SANS 23053 History of Sanskrit Poetics & Dramaturgy

Level Three

SANS 33053 History of Sanskrit Literature

SINHALA

Level I

SINH 13054 Practical Sinhala I

Level Two

SINH 22052 Practical Sinhala II

TRANSLATION METHODS

Level One

TRMD 21052 Introduction to Translation

WESTERN CLASSICAL CULTURE

Level One

WCCU 12052 Greek and Roman Drama

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 Units Offered by the Faculty of Social Sciences

ARCHAEOLOGY

Level One

ARCH 11032 Archaeological Heritage of Sri Lanka

Level Two

ARCH 21042 Archeological Theory & Practice

Level Three Prehistory & Environmental Archaeology

ARCH 32034** Environmental and settlement Archaeology

** Any one unit to be selected.

ECONOMICS

Level One

ECON 11032 Economics and Contemporary Economics Issues

ECON 12042 Globalisation and Regional Economic Cooperation

Level Two

ECON 21032 Contemporary Economic Problems of Sri Lanka

ECON 22062 Economics Trends in Asian Countries

Level Three

ECON 31032 International Economic Activities

ECON 32062 Trends in Sri Lanka Money Market

GEOGRAPHY

Level One

GEOG 11032 Population and Society

GEOG 12042 Environment and Sustainable Development

Level Two

GEOG 21032 Cultural Regions in the World

Level Three

GEOG 32062 Changing Political Map of the World

HISTORY

Level One

HIST 11032 Tendencies of Sri Lankan History

HIST 12042 Tendencies of South Asian History

Level Two

HIST 21032 Highlights of the Cultural Revival and National Movement of Sri Lanka in the 19th and 20th Centuries

HIST 22042 Asia in the Twentieth Century

INTERNATIONAL STUDIES

Level One

INST 11032 Technological Progress and International Development

INST 12042 World Economy and Sri Lanka

Level Two

INST 21032 International Relation and Policies of Sri Lanka

INST 22062 Regional Co-operation and Regional Development

Level Three

INST 31032 International Financial Institutions

INST 32062 International Trade

MASS COMMUNICATION

Level One

MACO 11032	Mass Media and Society
MACO 12042	Mass Media Law and Ethics

PHILOSOPHY

Level One

PHIL 11052	Basic Psychology
PHIL 11062	Problems of Philosophy
PHIL 12072	Scientific Methods

Level Two

PHIL 21032	Contemporary Philosophy
PHIL 22042	Philosophy of Language

POLITICAL SCIENCE

Level One

POLS 11032	Political Trends and issues in South Asian Countries
POLS 12042	Contemporary World Politics

Level Two

POLS 21032	A Basic Introduction to Patterns of Decentralisation in the West and the East
POLS 22062	International Organizations and Law Making

Level Three

POLS 31032	Political Process and Analysis
POLS 32062	Political and Economics Development in the Third world

SOCIOLOGY

Level One

SOCI 11032	Social Problems
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Level Two

SOCI 21032	Combine Sociology
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SPORT AND RECREATION MANAGEMENT

Level One

SRMG 11042	Introduction to fitness
SRMG 12052	Leadership and Interpersonal Skills

Level Two

SRMG 22032	Sport Event Management
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Level Three

SRMG 31052	Sport Promotion and Sponsorship
SRMG 32062	Olympic Movement and Olympism

Auxiliary Units Offered by the Faculty of Commerce & Management

Level One

MGMT 11012	Principles of Accounting
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

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

Level One

ELTU 13012	English for Communication
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Level Two

ELTU 21012	English in Today's World
ELTU 22022	Introduction to Literature

Level Three

ELTU 33012	English for Professional Purposes
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