1.1 Preamble

The Faculty of Science of the University of Kelaniya consists of eight academic Departments, namely the Departments of Chemistry, Industrial Management, Mathematics, Microbiology, Physics and Electronics, Plant & Molecular Biology, Statistics & Computer Science, and Zoology & Environmental Management. 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 that are designed to provide maximum possible flexibility in the choice of subjects.

The Faculty of Science offers a Bachelor of Science (External) Degree Programmes of 3-year duration.

The duration of a semester is 15 weeks. After 15 weeks of teaching, a study leave period of 2 weeks is given followed by the end of course examinations that are conducted within a period of 3 to 4 weeks. Examinations of laboratory course units are usually conducted either during the last week of the semester or during the examination 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 three levels namely level 1, level 2 and level 3.

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

For course units with lectures only

15 contact hours = 1 credit

For course units with laboratory work only

30 – 45 hours of laboratory work = 1 credit

60 – 75 hours of laboratory work = 2 credits

For course units with both lectures and laboratory/field work

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

(or any combination of contact hours (< 15) and practical work where one contact hour to be replaced by 3 hours of laboratory/field work = 1 credit)

1.2   Sri Lanka Qualifications Framework

The Sri Lanka Qualifications Framework (SLQF) is a nationally consistent framework for all higher education qualifications offered in Sri Lanka. The SLQF applies to all higher education institutions (HEIs) both public and private, which comprises of 12 Levels. SLQF recognizes the volume of learning of students and identifies the learning outcomes that are to be achieved by the qualification holders.

SLQF level	Qualification awarded	Minimum Volume of Learning for the Award
SLQF 5	Bachelor of Science	90 credits after GCE (A/L) of which 60 credits after SLQF 3, of which 30 credits after SLQF 4
SLQF 4		60 credits after GCE (A/L) of which 30 credits after SLQF 3
SLQF 3		30 credits after GCE (A/L)

The **SLQF levels** 3, 4 and 5 are corresponding sequentially to the first, second and third years of an undergraduate study programme leading to Bachelor's qualification.

According to SLQF guidelines, **1 credit** is equivalent to **50 notional learning hours** for a taught course, laboratory studies course or field studies. In case of industrial training/professional placement/internship/research projects, **1 credit** is equivalent to a minimum of **100 notional learning** hours.

1.3   Notations of Course Units and Abbreviations Used
There is one type of course units, namely **Compulsory (C)**

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

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

The first digit denotes the level of the course unit whereas the fifth digit signifies its credit value. The second digit indicates the semester in which the course unit is offered where 6 denotes the first semester and 7 denotes 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
Computer Science*	COSC
Computer Studies*	COST
Pure Mathematics	PMAT
Statistics*	STAT

* - with a practical component

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

1.4   Bachelor of Science (External) Degree Programme (SLQF 5)

1.4.1 Eligibility

A student should pass three subjects including Combined Mathematics as a subject. Selection of students is done by according to the z-score from the A/L examination when demand exceeds the capacity.

1.4.2 Registration for Courses

Students are strongly advised to obtain advice from relevant external degree coordinators of of the respective academic Departments prior to registration for course units, and must complete their registration for selected course combinations at the beginning of the commencement of each academic year. Once a student is registered for a given subject combination, he/she is not allowed to change the combination after two weeks of registration. A student must also ensure that he/she fulfils the required prerequisites.

1.4.3 Attendance

Students are strongly advised to attend and actively participate in allocated lecture hours and seminars regularly, as it has proven that there is a highly significant relationship with the grades obtained for a particular course unit and attendance.

2. ASSESSMENT CRITERIA

2.1 Assessment Procedure

Student performance at a course unit is generally assessed through assignments, reports, presentations, practical examinations, and end of course examinations. The method of assessment will be announced by the relevant Department at the commencement of a course unit.

2.2 Grading System

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

Range of Marks	Grade	Grade Point Value
85 - 100	A⁺	4·0
70 - 84	A	4·0
65 - 69	A⁻	3·7
60 - 64	B⁺	3·3

55 - 59	**B**	3·0
50 - 54	**B⁻**	2·7
45 - 49	**C⁺**	2·3
40 - 44	**C**	2·0
35 - 39	**C⁻**	1·7
30 - 34	**D⁺**	1·3
25 - 29	**D**	1·0
00 - 24	**E**	0·0

Students should complete all course units that they are registered for and if they fail to complete a particular course unit, it will be indicated in the transcript as "absent" and a zero (0·0) grade point value will be assigned to it.

2.3   Repeating a Course Unit Examination

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

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

Example: A student who has completed one course unit with two credits, three course units each of three credits and two course units each of 1 credit with grades A, C, B, D, C+ and A+ respectively would have the GPA of 2·48 as calculated below.

$$\frac{(2\times4\cdot0)+(3\times2\cdot0)+(3\times3\cdot0)+(3\times1\cdot0)+(1\times2\cdot3)+(1\times4\cdot0)}{2+3+3+3+1+1}=\frac{32\cdot3}{13}=2\cdot4846$$

Grade Point Average   = 2·48

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

2.5 Award of the Bachelor of Science (External) Degree

2.5.1   Eligibility for the Award of the Bachelor of Science (External) Degree

To be eligible for the BSc (External) Degree a student must

(i) accumulate grades of D or better in course units, aggregating to at least 60 credits during the first two academic years, and aggregating to at least 90 credits during the entire three academic year period, of which at least 30 credits must be from each academic year separately,

(ii) obtain a GPA of 2·00 or greater, and

(iii) complete the relevant requirements within a period of five consecutive academic years.

2.5.2   Award of Classes
2.5.2.1 First Class
A student who is eligible for the BSc (External) Degree may be awarded First Class provided he/she

(i) obtains grades of C or better in course units aggregating to at least 90 credits, considered under 2.5.1 (i),

(ii) obtains grades of A or better in course units aggregating to at least half the number of total credits for the course units considered under 2.5.1 (i),

(iii) obtains a GPA of 3·70 or greater, and

(iv) completes the relevant requirements within three consecutive academic years.

2.5.2.2 Second Class (Upper Division)

A student who is eligible for the BSc (External) Degree may be awarded Second Class (Upper Division) provided he/she

(i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of D or better in the remaining course units, considered under 2.5.1 (i),

(ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.5.1(i),

(iii) obtains a GPA of 3·30 or greater, and

(iv) completes the relevant requirements within three consecutive academic years.

2.5.2.3 Second Class (Lower Division)

A student who is eligible for the BSc (External) Degree may be awarded Second Class (Lower Division) provided he/she

(i) obtains grades of C or better in course units aggregating to at least 80 credits and grades of D or better in the remaining course units, considered under 2.5.1(i),

(ii) obtains grades of B or better in course units aggregating to at least half the number of total credits for the course units considered under 2.5.1(i),

(iii) obtains a GPA of 3·00 or greater, and

(iv) completes the relevant requirements within three consecutive academic years

2.5.3 Award of the Degree

A student who intends to enhance the grade(s) obtained at the examination(s) of a course unit(s) should request the Director/CDCE in writing to refrain from processing her/his results, within a

week of completion of releasing the results of all the course unit examinations in the relevant semester.

On successful completion of the BSc Degree, and after the confirmation of results by the University Senate, a student is entitled to have an official transcript giving the grades in the respective course units.

3. COURSE STRUCTURE BSC (EXTERNAL) DEGREE

3.1 Course Structure for BSc (External) Degree Program

The Department of Statistics & Computer Science and the Department of Mathematics propose the following subject combinations for the Bachelor of Science (External) Degree:

Combination 1: Pure Mathematics, Applied Mathematics, Statistics

Combination 2: Pure Mathematics, Applied Mathematics, Computer Science

Combination 3: Pure Mathematics, Applied Mathematics, Computer Studies

Combination 4: Pure Mathematics, Computer Science, Statistics

Combination 5: Pure Mathematics, Computer Studies, Statistics