By-Laws made by the Council of the University of Colombo under the Section 135 of the Universities Act No. 16 of 1978, as amended by the Universities (Amendment) Act No. 7 of 1985.

# THE DEGREE OF BACHELOR OF SCIENCE/ BACHELOR OF SCIENCE (HONOURS)

# **BY-LAWS**

These By-Laws may be cited as the Bachelor of Science (BSc) Degree or Bachelor of Science Honours (BScHons) Degree By-Laws (Amendment) No. 23 of 2022

#### PART 1 – INTRODUCTION

- 1. The Council of the University of Colombo shall have authority to confer the Degree of Bachelor of Science/ Bachelor of Science Honours on a person who has been recommended for the conferment of the said Degree by the Senate of the University.
- 2. The Senate shall not make such a recommendation unless the person has successfully fulfilled all requirements and conditions, including those relating to the Programme of Study and assessment, laid down in these By-Laws and has complied with other Rules and Regulations of the University.
- 3. The minimum period of study for which a person shall be a registered student of the Bachelor of Science Degree Programme shall be three academic years, and the minimum period of study for which a person shall be a registered student of the Bachelor of Science Honours Degree Programme shall be four academic years. Any person admitted to the Bachelor of Science/ Bachelor of Science Honours Degree Programme shall complete it within a period of six academic years from the date of first registration.

# PART II – ADMISSION AND REGISTRATION

4. The admission of a person to the Bachelor of Science/ Bachelor of Science Honours Degree Programme conducted by the University of Colombo shall be done by the authorized statutory body under the Universities Act No. 16 of 1978 or any other relevant law that replaces it.

- 5. A person who has been admitted to the Bachelor of Science/ Bachelor of Science Honours Degree Programme under the law or relevant regulation in force shall register himself/ herself with the University of Colombo.
- 6. It shall be the duty and responsibility of the student who is admitted to the Faculty of Science to keep his registration valid by paying the prescribed fees on time until he/ she completes the Programme.
- 7. The registration shall be, unless otherwise decided by the Senate on the recommendation of the Faculty of Science, valid for one academic year at a time and shall be renewed annually subject to the provisions of these By-Laws.

#### PART III – THE PROGRAMME

- 8. The Bachelor of Science Degree Programme shall be of three years duration, while the Bachelor of Science Honours Degree Programme shall be of four years duration. The Bachelor of Science Honours Degree Programme is of two types. They have either an Academic & Research orientation or an Industrial orientation. The sequential academic years of the Degree Programme shall be known as the Level I, Level II, Level III, and where relevant, Level IV.
- 9. The Bachelor of Science Degree Programme shall consist of two broad areas of study, viz., the Biological and the Physical Sciences. Additional intakes of students following dedicated programmes may be included in these broad areas. The first two Levels of the Degree Programme shall consist of different streams with specific subject combinations, as prescribed and permitted by the Faculty Board.
- 10. The Programme of Study shall consist of Subject Course Units (academic) and Enhancement Course Units (non-academic) as may have been prescribed by these By-Laws, Rules and Regulations. Academic Course Units may or may not contribute to the Grade Point Average (GPA) as determined by the Faculty Board. A Subject Course Unit shall carry a time based academic credit value as specified in the schedule. Subject Course Units shall be of two types: Course Units which are required to be taken by students following a given stream (Compulsory Units), and Course Units designed to provide a broader or deeper knowledge of a given subject or discipline, from which the student can select one or more in order to make up a required number of course credits (Elective Units). Course Units which are compulsory in a given stream may be elective in another.

- 11. (a) The Programme of Study leading to the Degree of Bachelor of Science shall consist of three Levels spread over three academic years.
  - (i) In each Level of the pogramme, a student shall register for Course Units carrying a minimum of 30 and a maximum of 33 academic credits, totalling a minimum of 90 academic credits for the three Levels. In addition, during the three academic years, the student shall register for Course Units carrying a minimum of 04 non-academic credits, i.e., Enhancement Courses.
  - (ii) In Level I of the programme, the student shall register for **all** compulsory Course Units pertaining to each of three disciplines or subjects, hereinafter referred to as Main Subjects, as defined by the stream selected, as well as other compulsory Course Units prescribed for that stream.
  - (iii) In Level II of the programme, the student shall register for **all** compulsory Course Units pertaining to each of the Main Subjects selected at Level I, as well as other compulsory Course Units prescribed for that stream. Under special circumstances, one Main Subject may be changed for another, with the permission of the Faculty Board, provided that all necessary pre-requisites for Level II of the new Main Subject have been met.
  - (iv) In Level III of the programme, the student shall register for all compulsory Course Units prescribed for that stream, *in at least* **two** of the Main Subjects selected at both Levels I and II.
  - (v) Students in three-year Degree Programme may register for Internship/ Service Learning. If it is necessary to schedule such Internships/ Service Learning Programmes after the final examinations at the end of the third year, an additional period of up to 3 months after such final examinations may be considered as part of the academic year for that purpose only.
  - (vi) A student registered for Internship/ Service Learning Programme cannot revert back to register for academic course credits within the same academic year after the period allowed for registration of courses has lapsed. If a student registers for academic course credits in the following year it will be considered as his/ her second attempt.
  - (b) The Programme of Study leading to the Degree of Bachelor of Science Honours with Industrial orientation shall consist of four Levels spread over four academic years.

- (i) This Programme of Study is offered in several "themes", each under the supervision of a particular Academic Department, Division or Unit within the Faculty, or the Faculty as a whole.
- (ii) In each Level of the programme, a student shall register for Course Units carrying a minimum of 30 and a maximum of 33 academic credits, totalling a minimum of 120 academic credits for the four Levels, including an Industrial Training and a Research Project in Level IV (see below). In addition, during the four academic years, the students shall register for Enhancement Course Units carrying a minimum of 04 credits.
- (iii) In Level I of the programme, a student shall register for **all** compulsory Course Units pertaining to each of three disciplines or subjects, hereinafter referred to as Main Subjects, as defined by the stream selected, as well as other compulsory Course Units prescribed for that stream.
- (iv) In Level II of the programme, the student shall register for **all** compulsory Course Units pertaining to each of the Main Subjects selected at Level I, as well as other compulsory Course Units prescribed for that stream. Under special circumstances, one Main Subject may be changed for another, with the permission of the Faculty Board, provided that all necessary pre-requisites for Level II of the new Main Subject have been met.
- (v) In Level III of the programme, the student shall register for Subject-relevant Course Units carrying a minimum of 30 academic credits in the Subject/s pertinent to the theme he/ she has chosen. These may be compulsory or elective, as prescribed and permitted by the Faculty Board.
- (vi) In Level IV of the programme, the student shall register for Subject-relevant Course Units carrying a minimum of 30 academic credits in the Subject/s pertinent to the theme in which he/ she has already registered in Level III. These may be compulsory or elective, as prescribed and permitted by the Faculty Board, and shall include an Industry Research Project with a credit value of **06** credits and an Industrial Training component with a maximum credit value of **06** credits. The credits earned for the Industrial Training component shall **not** contribute to the GPA but add to the total credit requirement.

- (c) The Programme of Study leading to the Degree of Bachelor of Science Honours with Academic & Research orientation shall consist of four Levels spread over four academic years.
  - (i) In each Level of the programme, a student shall register for Course Units carrying a minimum of 30 and a maximum of 33 academic credits, totalling a minimum of 120 academic credits for the four Levels. In addition, during the four academic years, the students shall register for Enhancement Course Units carrying a minimum of 04 credits.
- (ii) In Level I of the programme, a student shall register for **all** compulsory Course Units pertaining to each of three disciplines or subjects, hereinafter referred to as Main Subjects, as defined by the stream selected, as well as other compulsory Course Units prescribed for that stream.
- (iii) In Level II of the programme, the student shall register for **all** compulsory Course Units pertaining to each of the Main Subjects selected at Level I, as well as other compulsory Course Units prescribed for that stream. Under special circumstances, one Main Subject may be changed for another, with the permission of the Faculty Board, provided that all necessary pre-requisites for Level II of the new Main Subject have been met.
- (iv) In Level III of the programme, the student shall register for Subject-relevant Course Units carrying a minimum of 30 academic credits in the Subject/s he/ she has chosen for specialization. These may be compulsory or elective, as prescribed and permitted by the Faculty Board.
- (v) In Level IV of the programme, the student shall register for Subject-relevant Course Units carrying a minimum of 30 academic credits in the Subject/s in which he/ she has already registered in Level III. These may be compulsory or elective, as prescribed and permitted by the Faculty Board, and shall include a Research Project, the credit value of which shall be a maximum of 08 credits.
- (d) The first numeral describing a given Course Unit shall denote the respective Level of the Study Programme, and the number of credits assigned to that Course Unit will be based on the number of lecture/ contact hours.
- 12. The titles and syllabi of Course Units offered in each Subject, the nature of individual systems of evaluation, and other relevant requirements leading to the Degree of Bachelor of Science and Bachelor of Science Honours shall be prescribed by Regulations made by the Senate and shall be contained in the Faculty of Science Handbook.

- 13. The Senate shall have the power, on the recommendation of the Faculty Board, to change, amend or add to the Subjects, Course Units, Syllabi and to change or amend or add any Rules and Regulations relating to any requirements leading to the Degree of Bachelor of Science and/ or Bachelor of Science Honours. Due notice shall be given to the students of such amendments, changes or additions.
- 14. Each Level of the Programme of Study shall, unless otherwise decided by the Senate on the recommendation of the Faculty Board, be divided into two semesters.
- 15. Instruction at each Level of the Bachelor of Science/ Bachelor of Science Honours Degree Programme shall take the form of lectures, practicals, tutorials, assignments, reports, presentations, seminars, research, and/ or any other form approved by the Faculty Board. The Faculty Board shall have authority to decide the method/s of imparting instruction at each Level.
- 16. Medium of instruction at each Level of the Bachelor of Science/ Bachelor of Science Honours Degree Programme shall be English.
- 17. A student who obtains a grade of at least C in Course Units totaling a minimum of 15 academic credits in a Level other than the last Level of a Bachelor of Science/ Bachelor of Science Honours Degree Programme shall be eligible to be admitted to the next Level of the Programme. Such a student shall register for that Level and follow the instruction provided for it.
- 18. (a) Students shall be selected to follow a Programme of Study leading to the Bachelor of Science Honours Degree (Academic & Research orientation) based on the results of the first two Levels and any other criteria specified by the Faculty Board, inclusive of such additional courses as may be specified as pre-requisites by the Faculty Board. The students so selected shall proceed to the Bachelor of Science Honours Degree Programme (Academic & Research orientation).
  - (b) Students shall be selected to follow a Programme of Study leading to the Bachelor of Science Honours Degree (Industrial orientation) based on the results of the first two Levels and any other criteria specified by the Faculty Board, inclusive of such additional courses as may be specified as pre-requisites by the Faculty Board. The students so selected shall proceed to the Bachelor of Science Honours Degree Programme (Industrial orientation).

(c) All other students who have completed Course Units securing the minimum number of required credits in the Levels I and II of the Degree Programme, as specified in Section 17, shall proceed to follow the Bachelor of Science Degree Programme in accordance with these By-Laws.

#### **PART IV – EVALUATION**

- 19. The Degree of Bachelor of Science/ Bachelor of Science Honours shall be conducted under the semester system and all theory examinations shall be held within a given semester and/ or at the end of each semester unless otherwise decided.
- 20. A student shall not be permitted to take an end of semester (or final) examination unless the Head/ Heads of the relevant Department/s have certified that he/ she has satisfied all the requirements of the relevant Course Units, including but not limited to regular attendance at lectures, laboratory classes and submission of assignments at the appropriate time, as prescribed by the Senate on the recommendation of the Faculty Board.
- 21. (a) The Examinations prescribed by these By-Laws shall be conducted by Boards of Examiners appointed by the Senate on the recommendation of the Faculty Board.
  - (b) A Board of Examiners shall, if the Senate has on the recommendation of the Faculty Board so decided, test any candidate in writing and/ or orally and may adopt any other form of evaluation.
  - (c) It may take into consideration the assignments, class presentations, reports and/ or practical courses/ field work done during any Course Unit prescribed for any of the examinations.
- 22. (a) Every student following the Programme of Study in a Level of the Bachelor of Science/ Bachelor of Science Honours Degree Programme shall take the relevant examinations for Course Units in the Level at the very first occasion they are held.
  - (b) A student who is unable to sit for any examination due to medical or other valid reason shall inform the Dean of his/ her inability to do so in writing with supporting documents.
  - (c) A student shall be deemed to have sat the first scheduled examination irrespective of whether he/ she has actually sat or not, unless the Senate is satisfied that the candidate

has been prevented from sitting the examination due to illness or any other reasonable cause.

- (d) A student who fails or does not complete any Course Unit/s in the first attempt shall be eligible to repeat the Course Unit/s so failed/ not completed in two more attempts only. No further attempts shall be permitted to any student to sit for the Course Unit/s. In counting the number of attempts a student has exhausted, the attempts deemed under Paragraph (c) of this Section shall also be taken into account.
- (e) Notwithstanding paragraph (d) of this Section, no student shall be permitted to continue to be in the Programme of Study leading to the Bachelor of Science/ Bachelor of Science Honours Degree beyond a period of six academic years from first registration.
- 23. A candidate who obtains a C- or lower grade in a Course Unit may re-sit that examination for the purpose of improving the grade in respect of that Course Unit within the stipulated period.
- 24. (a) A student registered for a Programme of Study leading to the Bachelor of Science/Bachelor of Science Honours Degree shall obtain a grade of not less than **Satisfactory** for each of the Enhancement Course Units carrying a minimum total of four (04) credits, in order to complete the requirement for a Bachelor of Science/Bachelor of Science Honours Degree
  - (b) Enhancement credits shall not carry a Grade Point Value.

### PART V – AWARD OF THE DEGREE

25. The total marks obtained for each academic Course Unit shall result in a Grade being assigned according to schemes approved by the Faculty Board. Course Units determined by the Faculty to contribute to the final Grade Point Average (GPA), shall carry a corresponding Grade Point Value (GPV) as set forth in the table below, e.g., a Grade of A carrying a GPV of 4.00, a Grade of B a GPV of 3.00, etc.

Grade	Grade Point Value
A+	4.00
A	4.00
A-	3.70
B+	3.30
В	3.00
B-	2.70
C+	2.30
С	2.00
C-	1.70
D+	1.30
D	1.00
Е	0.00

- 26. (a) A Grade Point Average (GPA) shall be calculated for each student, taking into account the Grades of academic Course Units for which the student has registered in his/her Programme of Study, and determined by the Faculty Board to contribute to the final GPA, with each such Course Unit being weighted according to its Credit Value.
  - (b) The GPA shall be calculated to two decimal places, using the following formula:

$$GPA \ = \ \frac{\sum C_i V_i}{\sum\limits_i C_i}$$

where  $C_i$  is the credit value of Course Unit i that contributes to the GPA, and  $V_i$  the corresponding GPV earned by the student for that Course Unit.

- (c) All academic Course Units shall be considered in calculating the total number of academic credits.
- (d) All Enhancement Course Units shall carry a letter grade only, as specified below, assigned according to schemes approved by the Faculty Board for each such Course Unit:

- O: Outstanding
- M: Meritorious
- S: Satisfactory
- U: Unsatisfactory
- 27. (a) A candidate shall be considered to have qualified for the award for the Degree of Bachelor of Science provided that he/ she has
  - (i) completed Course Units totaling a minimum of 90 academic credits, with a minimum of 30 academic credits each from Levels I, II, and III,
  - (ii) completed the prescribed number of academic credits in each of three Main Subjects in each of Levels I and II,
  - (iii) completed the prescribed number of academic credits in each of two Main Subjects in Level III,
  - (iv) obtained a Grade not lower than C in Course Units aggregating a minimum of 72 academic credits, with a minimum of 24 academic credits in each of Levels I, II, and III,
  - (v) obtained **no** grade of NC (Not Complete), subject to the proviso that, in the event of the candidate being unable to sit for the final examination of a Course Unit for approved medical or other unavoidable reasons **during his/ her final year only**, a mark of zero may be assigned to such final examination at the request of the candidate and with the approval of the Faculty Board, the Course Unit considered completed, and the overall Mark computed and the final Grade assigned on that basis, this proviso being applicable for Course Units totalling not more than 06 credits.
  - (vi) obtained grades of **E** in **no more than** 06 credits,
  - (vii) obtained a Grade of S (Satisfactory) or better in Enhancement Course Units totaling a minimum of 04 credits, **and**
  - (viii) obtained a minimum Grade Point Average of 2.00,

as prescribed by these By-Laws and/ or any other Rules and Regulations made by the University.

(b) The word "completed" in the above Sections shall be interpreted to mean that the candidate has completed and/ or submitted all required projects and assignments, and sat for the final examination, if any. If these requirements have not been met, the student shall be assigned a provisional Grade of NC (Not Complete) for that Course Unit. This

Grade shall be changed to the appropriate Grade once the student has completed the Course Unit.

- 28. (a) A candidate shall be considered to have qualified for the award for the Degree of Bachelor of Science Honours provided that he/ she has
  - (i) completed Course Units totalling a minimum of 120 academic credits, with a minimum of 30 academic credits each from Levels I, II, III, and IV including the Research Project and where relevant the Industrial Training component in Level IV.
  - (ii) completed prescribed number of academic credits in each of three Main Subjects in each of Levels I and II,
  - (iii) completed a minimum of 30 academic credits relevant to the Programme followed in each of Levels III and IV, as prescribed and permitted by the Faculty Board,
  - (iv) obtained a Grade not lower than C in Course Units aggregating a minimum of 96 academic credits, with a minimum of 24 academic credits (including non-GPA credits) in each of Levels I, II, and III, and IV,
  - (v) obtained a Grade not lower than C in the Research Project, Industry Research Project and where relevant Industrial Training,
  - (vi) obtained **no** grade of NC (Not Complete), subject to the proviso that, in the event of the candidate being unable to sit for the final examination of a Course Unit for approved medical or other unavoidable reasons **during his/ her final year only**, a mark of zero may be assigned to such final examination at the request of the candidate and with the approval of the Faculty Board, the Course Unit considered completed, and the overall Mark computed and the final Grade assigned on that basis, this proviso being applicable for Course Units totaling not more than 08 credits,
  - (vii) obtained grades of E in **no more than** 08 credits,
  - (viii) obtained a Grade of S (Satisfactory) or better in Enhancement Course Units totaling a minimum of 04 credits,
  - (ix) fulfilled any other requirements approved by the Faculty Board for a given Honours Degree; e.g. professional requirements **and**
  - (x) obtained a minimum Grade Point Average of 2.00,

as prescribed by these By-Laws and/ or any other Rules and Regulations made by the University.

(b) The word "completed" in the above Sections shall be interpreted to mean that the candidate has completed and/ or submitted all required projects and assignments, and sat for the final examination, if any. If these requirements have not been met, the student

shall be assigned a provisional Grade of NC (Not Complete) for that Course Unit. This Grade shall be changed to the appropriate Grade once the student has completed the Course Unit.

- 29. A candidate who satisfies the requirements of the Bachelor of Science/ Bachelor of Science Honours Degree may be awarded a First Class, Second Class (Upper Division), Second Class (Lower Division), or a Pass as the case may be, on the result of the Grades and the GPA.
- 30. (a) A candidate shall be eligible for the award of Classes only if he/ she completes all required Academic and Enhancement Course Units and achieves the relevant qualifications within three consecutive academic years in the case of the Bachelor of Science Degree or within four consecutive academic years in the case of the Bachelor of Science Honours Degree.
  - (b) In the case of a candidate who repeats and obtains a Grade of **C** or better for any Academic Course Unit/s, the Grades to be taken into consideration for those Course Units, for the purpose of determining the award of a Class only, shall be **C**, irrespective of the actual Grades obtained as determined by the total marks. In the event that the candidate is unable to obtain a Grade of at least C after repeating, the highest Grade obtained shall be used.
- 31. Subject to Sections 22, 23, 24, 27 and 30 of these By-Laws, a student shall be deemed to have qualified for the award of First Class, Second Class (Upper Division), or Second Class (Lower Division) at the Bachelor of Science Degree on the basis of the following scheme:

#### **First Class**

If he/ she

- (i) obtains Grades not lower than C in Academic Course Units aggregating to at least 80 academic credits, and
- (ii) has a minimum GPA of 3.70

# **Second Class (Upper Division)**

If he/ she

- (i) obtains Grades not lower than C in Academic Course Units aggregating to at least 75 academic credits, and
- (ii) has a minimum GPA of 3.30

# **Second Class (Lower Division)**

If he/ she

- (i) obtains Grades not lower than C in Academic Course Units aggregating to at least 75 academic credits, and
- (ii) has a minimum GPA of 3.00
- 32. Subject to Sections 22, 23, 24, 28 and 30 of these By-Laws, a student shall be deemed to have qualified for the award of First Class, Second Class (Upper Division), or Second Class (Lower Division) at the Bachelor of Science Honours Degree, on the basis of the following scheme:

#### **First Class**

If he/ she

- (i) obtains Grades not lower than C in Academic Course Units aggregating to at least 105 academic credits, and
- (ii) has a minimum GPA of 3.70

# **Second Class (Upper Division)**

If he/ she

- (i) obtains Grades not lower than C in Academic Course Units aggregating to at least 100 academic credits, and
- (ii) has a minimum GPA of 3.30

# **Second Class (Lower Division)**

If he/ she

- (i) obtains Grades not lower than C in Academic Course Units aggregating to at least 100 academic credits, and
- (ii) has a minimum GPA of 3.00
- 33. A student reading for the Bachelor of Science Honours Degree Programme may request the award of the Bachelor of Science Degree, foregoing the Four Year Degree for which he/ she was registered, upon satisfying the requirements for the award of the Bachelor of Science Degree (three year), with the proviso that the requirement for completing the prescribed number of academic credits from each of **two** Main Subjects at Level III be waived. This request shall be made after completing Level III of the Programme, during the Level IV academic year, or within two weeks of the release of the Level IV Course Unit Examination Results.
- 34. The Vice-Chancellor shall have the authority, in consultation with the Dean of the Faculty of Science, to take such action or give such direction not inconsistent with the

principles underlying the provisions of these By-Laws, as appears to him/ her be necessary or expedient for the purpose of removing any difficulties that may arise in the implementation of these By-Laws.

# **PART VI - INTERPRETATION**

35. In these By-Laws unless it is specifically stated otherwise,

The "University" means the University of Colombo established in terms of the Universities Act No. 16 of 1978 as amended subsequently.

The "Senate" means the Senate of the University of Colombo constituted under the Universities Act No. 16 of 1978 as amended subsequently.

The "Faculty Board" means the Faculty Board of the Faculty of Science of the University of Colombo constituted under the Universities Act No. 16 of 1978 as amended subsequently.

36. Any question regarding the interpretation of these By-Laws shall be referred to the Council of the University of Colombo which after obtaining the views of the Senate makes a decision on such question. The decision of the Council thereon shall be final.

Office of the Dean, Faculty of Science.