

UNIVERSITY OF COLOMBO
FACULTY OF TECHNOLOGY

THE DEGREE OF BACHELOR OF BIOSYSTEMS TECHNOLOGY HONOURS IN
AGRICULTURE

THE DEGREE OF BACHELOR OF BIOSYSTEMS TECHNOLOGY HONOURS IN
ENVIRONMENTAL TECHNOLOGY

THE DEGREE OF BACHELOR OF ENGINEERING TECHNOLOGY HONOURS IN
INSTRUMENTATION AND AUTOMATION

THE DEGREE OF BACHELOR OF INFORMATION & COMMUNICATION TECHNOLOGY
HONOURS

BY-LAWS

By-Laws made by the Council of the University of Colombo under Section 135 of the Universities Act No. 16 of 1978, as subsequently amended.

These By-Laws may be cited as the Degree of Bachelor of Biosystems Technology Honours in Agriculture, the Degree of Bachelor of Biosystems Technology Honours in Environmental Technology, the Degree of Bachelor of Engineering Technology Honours in Instrumentation and Automation and the Degree of Bachelor of Information & Communication Technology Honours, By-Laws No. 11 of 2023.

These By-Laws shall come into operation on its receiving approval by the Council or on such other date as decided by the Council.

Approved by the Council
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Date 16/05/2023

PART I – GENERAL

1. The council of the University of Colombo shall have authority to confer any one of the Degrees of Bachelor of Biosystems Technology Honours in Agriculture, Bachelor of Biosystems Technology Honours in Environmental Technology, Bachelor of Engineering Technology Honours in Instrumentation and Automation and Bachelor of Information & Communication Technology Honours (hereinafter referred to as “the Degree”) 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 Programme leading to the Degree of Bachelor of Biosystems Technology Honours in Agriculture, Degree of Bachelor of Biosystems Technology Honours in Environmental Technology, Degree of Bachelor of Engineering Technology Honours in Instrumentation and Automation and Degree of Bachelor of Information & Communication Technology Honours (hereinafter sometimes referred to as the Degree Programme) shall be four (04) academic years. Any person admitted to the Degree Programme shall complete it within a period of six (06) academic years from the date of first registration.

PART II – ADMISSION AND REGISTRATION

4. Admission of a person to the Degree Programme shall be carried out by the authorized statutory body under the Universities Act No. 16 of 1978 as subsequently amended and/or relevant Regulation, or by any Law or Regulation that replaces them/it.
5. A person who has been admitted to the Degree Programme under the law or relevant regulation in force shall register himself/herself with the University of Colombo by submitting/returning the duly perfected registration form.
6. It shall be the duty and responsibility of the student who is registered with the Faculty of Technology to keep his/her registration valid by paying the prescribed fees in time until he/she completes the Degree Programme.
7. The registration shall be, unless otherwise decided by the Senate on the recommendation of the Faculty Board of the Faculty of Technology, valid for one academic year at a time and shall be renewed annually subject to the provisions of these By-Laws.

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PART III – THE DEGREE PROGRAMME

8. The Degree Programme shall be a full time four (04) years' duration and is conducted on a semester basis. The sequential academic years shall be known as the Degree Level I, Degree Level II, Degree Level III, and Degree Level IV.
9. The Degree Programme shall consist of course units (academic) which are GPA based and non-GPA based as may have been prescribed by these By-Laws, Rules and Regulations. A course unit shall carry a time-based credit value as specified in the Schedule.
10. (a) In each Level of the Degree Programme, a student shall register for GPA based subject course units carrying a minimum of 28 and a maximum of 33 Credits, totaling a minimum of 120 Credits but not exceeding a total of 125 credits.

(b) In each Level of the Degree Programme the student shall register for all course modules as defined by the selected Degree Programme.

(c) In Level III of the Degree Programme, the student shall register for the "Industrial Training/ Internship" credits that carry 6 credits and in level IV of the Degree Programme, the student shall register for the "Research Project" that carry 8 credits.
11. The titles and syllabi of course units offered in each Degree Programme, the nature of individual systems of evaluation, and other relevant requirements leading to the Degree shall be prescribed by Regulations made by the Senate on the recommendation of the Faculty Board of the Faculty of Technology and shall be contained in the student handbook of the Faculty of Technology.
12. The Senate shall have the power, on the recommendation of the Faculty Board, to change, amend or add to the course units, syllabi and to change or amend or add any Rules and Regulations relating to any requirements leading to the Degree. Due notice shall be given to the students of such amendments, changes or additions.
13. Each Level of the Degree Programme shall, unless otherwise decided by the Senate on the recommendation of the Faculty Board, be divided into two semesters.
14. Instructions at each Level of the Degree Programme shall take the form of onsite and/or blended mode lectures, practicals, tutorials, assignments, reports, presentations, seminars, research, and/or any other forms approved by the Faculty Board. The Faculty Board shall have authority to decide the method/s of imparting instructions at each Level.
15. (a) A Student shall earn a cumulative GPA of 2.0 or above during the first three semesters to be permitted to register for the fifth semester.

(b) If a student has not obtained the required cumulative GPA during the first three semesters, he/she will not be permitted to register for the fifth semester until the cumulative GPA is improved as required. Grade(s) obtained for English language will not be a barrier, provided that cumulative GPA and other criteria are satisfied.

16. The language of instruction and evaluation shall be English.

PART IV – EVALUATION

17. The Degree Programme 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.

18. A student shall not be permitted to take an end of semester (or final) examination unless the Head/s of the relevant Department/s has 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, field work and submission of assignments at the appropriate time, as prescribed by the Senate on the recommendation of the Faculty Board.

19. (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 forms of evaluation.

(c) It may take into consideration the assignments, class presentations, reports and/or practical courses/fieldwork done during any course prescribed under continuous assessments for any of the examinations.

20. Pass/ Fail criteria

(a) Percentage pass mark for continuous assessments (CA) is equivalent to the minimum mark assigned for Grade D+ while the percentage pass mark for the end of semester examination (SA) is equivalent to the minimum mark assigned for Grade D. It is required to adopt 30% for CA and 70% for ESA for theory-oriented modules and 40% for CA and 60% for ESA for practically oriented modules. There may be modules with higher percentage for CA or assessed entirely by CA.

(b) References to indicate the status when a module is not completed

Following references may be used to indicate the status when a student has not completed a course unit. This is for record keeping of the university and for the information of the students.

Reference	Grade Point	Description
E (CA & ESA)	0.0	Both CA and ESA marks are below the prescribed minimum. Incomplete CA and ESA.
E (CA)	0.0	CA mark is below the prescribed minimum. Incomplete CA.
E (ESA)	0.0	ESA mark is below the prescribed minimum. Incomplete ESA.
N	-	Academic concession
W	-	Withdrawn.

- (c) Grade D or above is required to earn credit value for a module.
- (d) Student failing in CA, ESA or both CA and ESA must repeat respective components.
- (e) Grades C-, D+, D, which are conditional passes or E, which may be improved to Grade C in a subsequent attempt, are considered for calculating Semester Grade Point Average (SGPA).

21. Student is considered to have completed a semester successfully, only if he/she has no E grades and no more than three grades at the levels of C-, D+ and D in each semester. (Note: For academic progression, E grades will be included in calculating SGPA during the first three semesters)

22. (a) Every student following a Level of the Degree Programme shall take the relevant examinations for course units in that 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 if the student has registered for the course unit irrespective of the fact 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 valid reason.

(d) A student who fails or does not complete any course unit/s in the first attempt shall be eligible to repeat such course unit/s in two (2) more attempts only. No further attempts shall be permitted to any student to sit for the course unit/s. In counting the number of

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attempts a student has exhausted, the attempts deemed under Paragraph (c) of this Section shall also be considered.

(e) Notwithstanding Paragraph (d) of this section, no student shall be permitted to continue to be in the Degree Programme beyond a period of six (6) academic years from first registration.

23. The "Percentage Mark Ranges" for the purpose of reference is given below:

Percentage Marks for Reference	Grade
90 and above	A+
80 to 89	A
75 to 79	A-
70 to 74	B+
65 to 69	B
60 to 64	B-
55 to 59	C+
50 to 54	C
45 to 49	C-
40 to 44	D+
35 to 39	D
0 to 34	E

**Percentage marks ranges given above are for the guidance of Examiners. Marks ranges for a particular module may be decided by the examiners, based on the marks distribution and taking the above reference marks ranges into consideration. Marks ranges adopted for a particular module must be declared to the Board of Examiners.*

24. (i) A student registered for the Degree Programme shall be required to obtain a grade of not less than D for each of the English course modules amounting to not less than four (04) credits, in order to complete the requirements for the Degree with regard to non GPA based course modules.

(ii) A student registered for the Degree Programme shall be required to obtain a grade of not less than C for each of the non-GPA based course modules other than English course modules, in order to complete the requirements for the Degree.

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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. Each such grade 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	Description
A+	4.00	Excellent
A	4.00	
A-	3.70	
B+	3.30	Good
B	3.00	
B-	2.70	
C+	2.30	Pass
C	2.00	
C-	1.70	
D+	1.30	Conditional Pass
D	1.00	
E	0.00	Fail

Note: In order to earn grade D or above, student must score more than the minimum prescribed marks for both Continuous Assessment (CA) and End Semester Assessment (ESA). If the assessment is only by CA, minimum prescribed mark for CA will apply.

26. (a) A Grade Point Average (GPA) shall be calculated for each student taking into account the Grade Point Value of **every** GPA based subject course unit for which the student has registered in his/her Degree Programme, with each such course unit being weighted according to its Credit Value.

(b) The calculation of the Semester Grade Point Average (SGPA) will be based on the summation of the Grade Points for all GPA based course modules registered (except those awarded with academic concession or withdrawn. In a semester weighted according to number of credits as per the following formula, where C_i is the number of credits for the i^{th} module in a given semester an G_{P_i} is the grade points earned for that module and n is the number of GPA modules in the semester).

$$SGPA = \frac{\sum_{i=1}^n C_i G_{P_i}}{\sum_{i=1}^n C_i}$$

Note: It must be noted that weightage for Continuous Assessments may vary depending on the module and therefore, fixed weightages must be brought into the SGPA calculation equation.

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(c) The Cumulative Grade Point Average (CGPA) describes a student's current standing in terms of grade points earned for all GPA modules registered up to a given point of time (except those awarded with academic concession or withdrawn) weighted according to number of credits as per the following formula, where C_i is the number of credits for the i^{th} module and GP_i is the grade points earned for that module and n is the number of GPA modules registered up to a given point of time (except those awarded with academic concession or withdrawn).

$$CGPA = \frac{\sum_{i=1}^n C_i GP_i}{\sum_{i=1}^n C_i}$$

Note: The weightage for each semester is taken as uniform for the calculation of CGPA. All semesters must be successfully completed for the award of the degree.

27. (a) All requirements for the award of the degree must be completed in four academic years to earn a class.
- (b) The maximum period for the completion of all requirements for the award of the degree is recommended to be 6 academic years. The Senate of the University may grant one academic year at a time, beyond initial 6 academic years, based on the merit of individual applications, for a maximum of 3 years.
28. (a) A candidate shall be considered to have qualified for the award of the Degree, provided that he/she has
- i. completed GPA based subject course units totaling a minimum of 120 Credits, with a minimum of 28 Credits each from Levels I, II III and IV, including an internship training of 6 credits in Level III and a research project of 8 credits in level IV
 - ii. shall obtain a grade D or above to earn a credit value for all the GPA based course modules except the internship training and research project and no E grades are allowed
 - iii. Shall obtain grade C or above for internship training and research project
 - iv. obtained **no** grade of NC (Not Complete), subject to the provision that, in the event of the candidate being unable to sit for the final examination of a course unit for approved medical 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 complete, the overall Mark computed and the final Grade assigned on that basis, this provision being

- applicable for course units totaling no more than 8 credits, provided these do not include the credits from the research project or the industrial training/ internship,
- v. fulfilled non-GPA based course module requirements as defined by the Degree Programme
 - vi. Shall obtain a grade D or above for the non-GPA based English course modules and grade C or above for the other non-GPA based course modules
 - vii. fulfilled any other requirements approved by the Faculty Board, and
 - viii. Obtained a minimum CGPA 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. This grade shall be changed to the appropriate grade once the student has completed the course.

29. The credits allocated to the English language modules are non-GPA credits. It is required passing these modules (minimum D) to earn the degree.

30. A candidate who satisfies the requirements of the Degree may be awarded First Class Honours, Second Class (Upper Division) Honours, Second Class (Lower Division) Honours, or a Pass, as the case may be, on the result of the Grades and the GPA.

31. (a) A candidate shall be eligible for the award of classes only if he/she completes all required GPA and non-GPA based subject course modules and achieves the relevant qualifications within four consecutive academic years.

(b) A student obtaining a grade below C may re-sit the course examination for the purpose of improving the grade. The grades obtained in the first and subsequent attempts shall all be listed in the academic transcript. The highest grade obtained is used for the calculation of the final GPA. However, the highest grade considered for the determination of award of a class is a C. 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.

32. Subject to sections 19, 20, 21, 22, 26 and 29 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) Honours at the Degree on the basis of the following scheme:

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First Class:

If he/she

- i. obtains Grades not lower than D in all GPA based subject course units and
- ii. has a minimum GPA of 3.70

Second Class (Upper Division)

If he/she

- i. obtains Grades not lower than D in all GPA based course units and
- ii. has a minimum GPA of 3.30

Second Class (Lower Division)

If he/she

- i. obtains Grades not lower than D in all GPA based course units and
- ii. has a minimum GPA of 3.00

34. The Vice-Chancellor shall have the authority, in consultation with the Dean of the Faculty of Technology, 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 to 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 states 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 Technology of the University of Colombo constituted under the Universities Act No. 16 of 1978, as amended subsequently.

‘Semester’ means a period of twenty six (26) weeks from the first day of the commencement of a Semester till the day prior to the commencement of the next Semester and shall include the intervening periods of vacation, study leave, written examinations, unless the Senate on the recommendation of the Faculty Board decides otherwise.

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36. These By-Laws will be effective for students who register for the Degree of Bachelor of Biosystems Technology Honours in Agriculture, Degree of Bachelor of Biosystems Technology Honours in Environmental Technology, Degree of Bachelor of Engineering Technology Honours in Instrumentation and Automation and Degree of Bachelor of Information & Communication Technology Honours from the Year 2023.
37. 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.

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SCHEDULE

Guidelines for volume of learning (based on SLQF)

The volume of learning at each Level is described in terms of credits. A course unit shall carry a time-based Academic Credit Value as specified below. The minimum number of Credits per course unit is one.

Course unit description	Credit value (minimum)	Direct student contact hours	Notional hours (direct contact hours plus independent learning) *
Lecture course	1	15	50
Laboratory course	1	30	50
Field studies course	1	30	50
Research project	8	Variable	800
Industrial training/ Internship	6	Variable	600

*One credit is considered equivalent to 50 notional learning hours for a taught course, laboratory course or field studies course

In the case of industrial training/ internship and research, one credit is considered equivalent to a minimum of 100 notional hours.