

By-Laws made by the Council of the University of Colombo under Section 135 of the Universities Act No. 16 of 1978, as amended subsequently and in terms of Section of the University of Colombo, Institute of Agro-Technology and Rural Sciences Ordinance No.2 of 2008.

THE DEGREE OF BACHELOR OF AGRO-TECHNOLOGY

BY-LAWS

1. These By-Laws may be cited as the Bachelor of Agro-technology Honours (B. Ag.Tec.Hon.) Degree By-Laws No. 30 of 2019.

PART I - INTRODUCTION

2. The Council of the University of Colombo shall have authority to confer the Degree of Bachelor of Agro-Technology Honours on a person who has been recommended for the conferment of the said Degree by the Senate of the University.
3. 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.
4. The minimum period of study for which a person shall be a registered student of the programme leading to the Degree of Bachelor of Agro-Technology Honours shall be four academic years and any person admitted to the programme shall complete it within a period of seven academic years from the date of first registration.

PART II - ADMISSION AND REGISTRATION

5. The admission of a person to the programme leading to the Degree of Bachelor of Agro-Technology Honours (hereinafter sometime referred to as "the programme") conducted by the University of Colombo Institute for Agro-technology and Rural Sciences (the UCIARS) shall be done by the Senate of the University of Colombo.
6. A person who has been admitted to the programme under the law or relevant regulation in force shall register himself/herself with the UCIARS by returning the duly perfected registration form.
7. It shall be the duty and responsibility of the student who is admitted to the UCIARS to keep his registration valid by paying the prescribed fees in time until he/she completes the programme.
8. The registration shall be, unless otherwise decided by the Senate on the recommendation of the Board of Management (hereinafter sometime referred to as "the Board") of the UCIARS, valid for four academic years and shall be renewed semester wise subject to the provisions of these By-Laws.
9. A person willing to register for the programme shall submit his/her application to the designated officer when the said programme is advertised. The advertisement shall nominate the designated officer.

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10. No person shall be considered for admission to the programme unless that person satisfies the following requirements:

1. Three passes in G.C.E (A/L) in Agricultural Science or Bio- system Technology or Bio Science or Mathematic subjects

Or

2. Three years experience in the field of Agriculture (Certified by Agriculture Instructor and Development Officer in Agrarian Center in relevant area of residence) and 03 passes in GCE (A/L) in other subjects other than subjects mentioned in the section 10.1

Or

3. Five years experience in the field of Agriculture (Certified by Agriculture Instructor and Development Officer in Agrarian Center in relevant area of residence) and pass in the GCE (O/L) including Science and Mathematics subjects

Or

4. Any other equivalent qualifications acceptable to the Senate of the University of Colombo

Or

5. Applicants who complete a Diploma (NVQ Level 05) or Higher Diploma (NVQ Level 06) in Agriculture from recognized institutes can enter to the second year or third year correspondingly after completing 30 credits Bridging course

11. Eligible applicants may be called for an interview and / or selection test and admissions will be made based on their performance at the interview / selection test and the number of students which could be admitted in a given year.
12. If the number of persons who have applied or who have been registered for the programme is insufficient in the opinion of the UCIARS to make the conduct of the programme financially viable, the UCIARS reserves the right not to conduct the programme, subject to refunding any fees that may have been received by the UCIARS.
13. On acceptance by the UCIARS, a person shall register as a student by paying the prescribed registration, tuition and other fees and any other dues.
14. Subject to these By-Laws, the minimum period for which a student shall be a registered student for the Bachelor of Honors Degree program shall be four years. However the students will be required to update their registration semester wise.
15. A person who has been accepted as a student shall devote his / her time to studies at the UCIARS. No student shall keep away from classes or leave the country or withdraw from the examination or class room test or any other form of examination without prior approval of the UCIARS.

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PART III - THE PROGRAMME

16. The minimum duration of the programme leading to the Degree of Bachelor of Agro-Technology Honours at the UCIARS is four academic years.
17. (1) An 'Academic Year' shall, unless otherwise decided by the Senate on the recommendation of the UCIARS, consist of two Semesters of fifteen weeks each and academic programme is based on 'Course Credit System',
- (2) Students shall be assessed continuously throughout the Semesters (i.e. formative) and subjected to end-semester evaluation (i.e. summative) held at the end of the semester for the designated courses.
- (3) The students shall be informed about the type and schedule of continuous assessment at the beginning of each course.
18. The Degree of Bachelor of Agro-Technology Honours shall consist of courses [GPA courses] making up 120 Credits that contribute to the final computation of GPA and also courses [Non GPA courses] making up 12 Credits which do not contribute to the final computation of GPA. A student shall have to be successful at GPA courses making up 120 credits and at Non-GPA courses making up 12 credits in order to be awarded the Degree of Bachelor of Agro-Technology Honours.
19. The yearly breakdown of courses is summarized below:
- (Year 1) – Thirty (30) credits of GPA courses and four (4) credits of Non-GPA courses.
- (Year 2) – Thirty (30) credits of GPA courses and three (3) credits of Non-GPA courses
- (Year 3) – Thirty-two (32) credits of GPA courses and three (3) credits of Non-GPA courses.
- (Year 4) – Twenty eight (28) credits of GPA courses and two (2) credits of Non-GPA courses.
20. The title of courses, their GPA status, syllabi, course codes, credit values, number of question papers for each course shall be those set out in the Schedule and the Senate shall have power on the recommendation of the Board to amend the list of courses, course codes, credit values and the number of question papers to be set in respect of each course.
21. The Senate shall have the power, on the recommendation of the Board, to change, amend or add to the, Courses, Syllabi and to change or amend or add any Regulations and Rules relating to any requirements for Bachelor of Agro-Technology Honours Degree. Due notice shall be given to the students of such amendments, changes or additions.
22. Medium of instructions shall be Sinhala / Tamil / English and the mode of instructions shall be Blended mode in LMS, class room lecture / discussion, practical and field visits.

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PART IV - EVALUATION: ASSESSMENT & EXAMINATION

23. Continuous assessments, assignments, practical examinations, field works etc. shall be conducted during the course of study and the end of the semester examination shall be held. The examination and evaluation shall be carried out by a Board of Examiners as approved by the Senate.
24. A student shall not be permitted to take any examination unless the Co-ordinator has certified that she / he has completed the course by attending the required proportions of lectures, tutorial classes and other forms of instructions as prescribed by regulations.
25. In order to achieve the objectives of each course, it is expected that the student will attend all teaching sessions, tutorial classes, practical etc. conducted by the UCIARS. Minimum of 80% of practical and field visit attendance must be put in by a student in order to be eligible for sitting the relevant papers(s) of each course at all examinations.
26. A student who does not record 80% attendance for practical and field works shall not be eligible to sit the examination and will be considered as a 'referred' candidate and he/she shall sit the next immediate attempt. In such an event, the grade of the student which shall be counted for the computation of his/her result shall be the actual grade obtained by him/her or a grade of B whichever is the lower. In the computation of his/her result a Grade of A for the course shall not be taken into account even if he/she has obtained such a Grade.
27. (1) If a student fails to attend academic activities (i.e. lectures, tutorial classes, practical session) or examinations due to medical reason, such absence should be reported to the respective administrator assigned by valid Medical Certificate immediately after the examination returning to the UCIARS.
- (2) All Medical Certificates should confirm to the format of a Medical Certificate issued by a Government Hospital and should only be obtained from one of the following medical officers, including: Approved Medical Officer, District Medical Officer, Consultant Specialist in the relevant field, Head of Government Base Hospital, and Ayurvedic Physician registered in the Ayurvedic Medical Council. Under exceptional circumstance Medical Certificates issued by Private Hospitals or private practitioners might be accepted by the University Medical Officer or the medical board.
- (3) If a student falls ill during an examination session, such illness should immediately be reported to the supervisor of the examination or Head of the Department.
- (4) If such illness occurs at residence or elsewhere during an examination session. the student or his/her guardian should inform the Senior Assistant Registrar/Examinations within seven (7) days by a letter indicating the nature of illness, doctor consulted, name of examination paper of which he/ she is unable to appear, together with the relevant Medical Certificate.
- (5) In the case of a student who, having completed the theory paper is unable to appear for the practical due to a valid medical reason, the results (including the theory paper) will not be released until the practical paper is completed on a later occasion.
28. **Number of Attempts for Sitting Examinations.** A student shall not be permitted to sit for the examination of any course in more than three (03) sittings.
29. **Re-sitting of Examination.** A student who obtains either a Grade of C- or above the C- in a particular course may re-sit the examination in respect of the course for the purpose of improving the Grade on condition that the best Grade obtainable is A-. If a student obtains a lower grade in attempting to improve the Grade of the later attempt, will be entitled to the previous Grade obtained on the first attempt.
30. **Re-scrutiny of Marks & Grades:** A student may submit a request for verification of their marks and grades of an examination during the two weeks immediately following the release of results

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of the examination. An application form issued by the administration office shall be duly filled and forwarded along with a receipt of non-refundable payment of Rs. 500/= (per a course) made to the account branch. Provided the payment shall be refunded to the applicant by the UCIARS if the re-scrutiny results in a better mark and/or grade for the course than what was released to him/her originally.

EXAMINATION

31. All the theory examinations of a Semester shall be conducted during or at the end of the given Semester unless otherwise decided by the Senate.
32. A student shall not be permitted to take an end of semester (or final) examination unless the Head/Heads of the relevant Department/Departments have certified that he/she has satisfied all the requirements of the relevant Course/s, including but not limited to regular attendance at practical and field visits and submission of assignments at the appropriate times, as prescribed by the Senate on the recommendation of the Board.
33. The assessment of the performance of students shall consist of Continuous Assessment and End of Semester Examination (Theory and Practical). The marks allocation for the different components of evaluation is as follows: Continuous Assessment 40% and End of Semester Examination 60% (Theory 40%, Practical Evaluation 20 %).
34. (1) The Examinations prescribed by these By-Laws shall be conducted by Boards of Examiners appointed by the Senate on the recommendation of the Board of Management.
 - (2) A Board of Examiners shall, if the Senate on the recommendation of the Board of Management so decides, test any candidate in writing and/or orally and may adopt any other forms of evaluation. Provided there shall be a minimum of two examiners present when a student is examined orally.
 - (3) The Board of Examiners may take into consideration the performance at assignments, class presentations, reports, practical courses, field work done during any course prescribed for any of the examinations.
35. (1) Every student shall take the relevant examinations of each Course in the relevant Semester of the Level at the very first occasion they are held.
 - (2) A student who is unable to sit for any examination due to medical or other valid reason shall inform the Director of his/her inability to do so in writing with supporting documents.
 - (3) A student shall be deemed to have sat the first scheduled examination 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 reasonable cause.
 - (4) A student who fails to complete any Course/s in the first attempt shall be eligible to repeat the Course/s in two more attempts only. No further attempts shall be permitted to any student to sit for the Course/s . In counting the number of attempts a student has exhausted, the attempts deemed under sub-section (3) of this Section shall also be taken into account.

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PART V - AWARD OF THE DEGREE

36. (1) A student shall be eligible to the award of the Degree of Bachelor of Agro-Technology Honours when he/she obtains a minimum of Grade C- at each of the GPA course making up 120 Credits and at each of the Non GPA course making up of 12 Credits, provided he/she satisfies other requirements under these By-Laws, and other relevant Regulations and Rules.

(2) No student who obtains a Grade less than C- for any of the GPA courses and/or Non GPA courses shall be eligible to be awarded the Degree of Bachelor of Agro-Technology Honours. Such a student shall be deemed to have incomplete result for the course/courses as the case may be.

(3) A student who has incomplete result having obtained a Grade less than C- in any course/s during a particular semester shall repeat the written examinations of the respective course/s at the next available occasion. Such student shall be given the option of carrying forward the continuous assessment marks earned for that course/s conducted during the particular semester.

37. The marks obtained for all Courses shall be graded as given below. The marks shall carry a Grade and a Grade Point Value according to the Range in which it falls, with, for example, Grade A carrying a GPV of 4 points, Grade B carrying a GPV of 3 points and Grade C carrying a GPV of 2 points.

Marks	Grade	Grade point Value
> 90	A+	4.0
85-89	A	4.0
80-84	A-	3.7
75-79	B+	3.3
70-74	B	3.0
65-69	B-	2.7
60-64	C+	2.3
55-59	C	2.0
50-54	C-	1.7
45-49	D+	1.3
40-44	D	1.0
<40	E	0.0

38. (1) Grades of GPA Courses shall be taken into account and all Courses shall be weighted according to their corresponding Credit Values when Grade Point Average (GPA) is calculated.

(2) The formula for the calculation of the GPA shall be as follows:

Eg: Consider 02 Courses X and Y having credit values of 03 and 02 respectively. If a student earns an A Grade for X and a B Grade for Y, his/her GPA will be calculated as follows:

$$\text{GPA} = \frac{03 (\text{credit value}) \times 4.00 (\text{GPV}) + 02 (\text{credit value}) \times 3 (\text{GPV})}{\text{Total no. of Credits (05)}} = 3.60$$

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39. A candidate who satisfies the requirements of Bachelor of Agro-Technology Honours 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 results of the Grades and the GPA.
40. (1) A candidate shall be eligible for the award of classes only if he/she passes all the required Academic Courses of Bachelors Honours Degree Examination within four consecutive academic years or deemed four consecutive academic years.
41. Subject to this By-Law 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 Bachelors Honours Degree on the basis of the following scheme.

Classes will be awarded based on the Cumulative Grade Point Average (CGPA) as follows:

First Class:

A student may be awarded a 'First Class' provided he/she;

- (i) Obtains a minimum CGPA of 3.70, and
- (ii) Completes the relevant requirements within stipulated time period

Second Class (Upper Division):

A student may be awarded a 'Second Class (Upper Division)' provided he/she;

- (i) Obtains a minimum CGPA of 3.30, and
- (ii) Completes the relevant requirements within stipulated time period

Second Class (Lower Division):

A student may be awarded a 'Second Class (Lower Division)' provided he/she;

- (i) Obtains a minimum CGPA of 3.00, and
- (ii) Completes the relevant requirements within stipulated time period

42. A student may become eligible to exit from the Bachelor's Degree programme and become eligible to be awarded the Higher Diploma in Agro-Technology if he/she has obtained –

- (a) a Grade not less than C- for each of the GPA courses making up 30 credits and each of the Non GPA courses making up 04 credits in the Semesters I and II of Year I; and,
- (b) a Grade not less than C- for the GPA courses making up 30 credits and Non GPA courses making up 03 credits in the Semesters I and II of Year II.

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Part VI – Transitional provisions

43. Existing students who have followed the Bachelor of Agro-technology Degree program, can either select,
1. To continue their studies under the old By-Laws (Bylaws No 33 of 2012 attached)
 - or
 2. To join new degree programme under the new By Laws

Part VII– Interpretation

44. The Vice Chancellor shall have the authority, in consultation with the Director of the UCIARS, 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.
45. Any question regarding the interpretation of these By-Laws shall be referred to the Council whose decision thereon shall be final.

In these By-Laws unless the context otherwise requires :

“University ” means the University of Colombo,

“Council” means the Council of the University of Colombo constituted by Act. No. 16 of 1978 as amended by Act No. 7 of 1985 and Act. No. 26 of 1988.

46. “Senate” means the Senate of the University of Colombo constituted by the Universities Act No. 16 of 1978 as amended by Act No. 7 of 1985 and Act No. 26 of 1988.

“Institute” means the Institute for University of Colombo Institute for Agro-Technology and Rural Sciences.

“Director” means the Director, Acting Director of the University of Colombo Institute for Agro-Technology and Rural Sciences or any other Officer authorized by the University to perform the duties of the Office of the Director.

“Registrar” means the Registrar, Acting Registrar, Deputy Registrar, Senior Assistant Registrar, Assistant Registrar or any other Officer authorized to perform the duties of the Office of the Registrar of the University of Colombo.

“Board of examiners” means the examiners appointed by the senate with approval of BOM.

“Board/BOM” means the Board of Management of the University of Colombo Institute for Agro-Technology and Rural Sciences.

Grade Point Average (GPA) means the credit–weighted arithmetic mean of the Grade Point Values, and GPA is calculated by dividing the total credit–weighted Grade Point Value by the total number of credits and GPA shall be computed to the second decimal place

Cumulative Grade Point Average (CGPA) means the weighted average of GPA of different years calculated by assigning equal weight to each year.

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Schedule : Curriculum -

Bachelor of Agro-technology Honours (B. Ag.Tec.Hon.)

**Table 1: Curriculum - Bachelor of Agro-Technology
T: Theory, P: Practical, IL: Self Learning through LMS**

1. The following give the Course Codes, Course Names, GPA Credit Courses, Non GPA Credit Courses, Contact hours of each Course of the Compulsory Courses of the programme leading to the Degree of Bachelor of Agro-Technology Honours.

Course code	Course Name	GPA credits	NGPA credits	Total contact hours T:P:IL
Level 3 (Year 1) - Semester I				
AT1101	Principles of Agronomy and Horticulture	3	-	15:60:90
AT1102	Principles of crop biology	2	-	15:30:60
AT1103	Irrigation and water resource engineering	3	-	15:60:60
AT1104	Anatomy and Physiology of Farm Animals	2	-	15:30:60
AT1105	Principles of Agricultural Economics and Extension	2	-	15:30:60
AT1106	Principles of Soil Science	2	-	15:30:60
AT1107	Agricultural meteorology	1	-	00: 30:60
AT1108	English	0	2	15:30:90
Total Credits		15	2	105:300:540
Level 3 (Year 1) - Semester II				
AT1201	Production and Management of Vegetables & Field crops	2	-	15:30:60
AT1202	Pest and disease management	2	-	15:30:90
AT1203	Management of Farm Animals	3	-	15:60:60
AT1204	Farm power and Mechanization	2	-	15:30:60
AT1205	Commercial Floriculture	2	-	15:30:60
AT1206	Soil and plant nutrient Management	2	-	15:30:90
AT1207	Introduction to Food and Nutrition	2	-	15:30:90
AT1208	Information Communication Technology	0	2	00:30:30
Total Credits		15	2	105:270:540
Total Credits at Level 3		30	4	210:570:1080
Level 4 (Year 2) - Semester I				
AT2101	Production and Management of Plantation crops	3	-	15:60:90
AT2102	Crop improvement and Biotechnology	2	-	15:60:90
AT2103	Production and Management of Fruit crops	2	-	15:30:60
AT2104	Post Harvest Handling and Food technology	2	-	15:30:90

AT2105	Agrostology and Grassland management	2	-	15:30:60
AT2106	Agribusiness Management	2	-	15:30:60
AT2107	Basic statistics	2	-	15:30:60
AT2108	Computer Assisted Language Learning (CALL)	0	2	15:30:90
Total Credits		15	2	120:270:600

Level 4 (Year 2) - Semester II				
AT2201	Production and Management of Export Agricultural Crops	2	-	15:30:90
AT2202	Protected Agriculture	2	-	15:30:60
AT2203	Animal Breeding & Stock Management	3	-	15:60:60
AT2204	Farm planning and designing	2	-	15:45:90
AT2205	Agricultural extension and communication Technology	2	-	15:30:90
AT2206	Aquaculture production technology	2	-	15:30:60
AT2207	Plant tissue culture technology	2	-	15:30:60
AT2208	Life-Skills Development	0	1	00:30:30
Total Credits		15	1	105:285:540
Total Credits at Level 4		30	3	225:555:1140
Level 5 (Year 3) - Semester I				
AT3101	Landscape horticulture	3	-	30:60:90
AT3102	Agro-ecology	2	-	15:30:60
AT3103	Animal Product Processing Technology	2	-	15:30:60
AT3104	Food Processing & Value Addition	2	-	15:30:90
AT3105	Applications of crop improvements and Bio-technology	2	-	15:30:90
AT3106	Production and Management of Medicinal plants	2	-	15:30:60
AT3107	Agro forestry and silviculture	2	-	15:30:60
AT3108	Principles of Humanities and Social Sciences	0	2	15:30:60
Total Credits		15	2	135:270:570
Level 5 (Year 3) - Semester II				
AT3201	Crop Production Practices	4	-	00:120:90
AT3202	Livestock production practices	3	-	00:90:90
AT3203	Agriculture Engineering practices	2	-	00:60:90
AT3204	E-Commerce for Agriculture	2	-	30:30:60
AT3205	Precision Agriculture	2	-	30:30:60
AT3206	Entrepreneurship & Business Planning	2	-	30:60:90

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AT3207	Case study	2	-	30:30:60
AT3208	Presentation Skills	0	1	
Total Credits		17	1	120:420:540
Total Credits at Level 5		32	3	255:690:1110

Level 6 (Year 4) - Semester I				
AT4101	Research Methodology & Proposal Development	2	-	15:30:90
AT4102	Agricultural experimentation and data analysis	3	-	15:60:90
AT4103	Agricultural Project Analysis & Management	2	-	15:30:90
AT4104	Agricultural Waste Management	2	-	15:30:90
AT4105	Renewable Energy Systems	2	-	15:30:60
AT4106	Crop modeling	2	-	15:30:60
AT4107	Applications of e-agriculture	2	-	30:30:60
AT4108	Bio-ethics	1	-	15:00:60
AT4109	English	0	2	15:30:60
Total Credits		16	2	150:270:660
Level 6 (Year 4) - Semester II				
AT4201	Agro-Technology Research Project	12	0	0
Total Credits		12	0	0
Total Credits at Level 6		28	2	150:270:660

2. The following give the Course Codes, Course Names, GPA Credit Courses, Non GPA Credit Courses, Contact hours of each Course of the Optional Courses of the programme leading to the Degree of Bachelor of Agro-Technology Honours.

Optional courses

T: Theory, P: Practical, IL: Individual Learning through LMS

Course Code	Course Name	GPA credit	NGPA credit	Total contact hours T:P:IL
AT1109	Career Guidance and Development	2	-	15:30:60
AT1209	Agro-tourism	2	-	15:30:60
AT2109	Electronics and Instrumentation	2	-	15:30:60
AT2209	Disaster Management	2	-	15:30:60
AT3109	Industrial training	2	-	00:60:60
AT3209	Animal welfare and ethics	2	-	15:30:60
AT4209	Wild life management	2	-	15:30:60

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3. An alpha numeric code shall be used to identity a course. The code consists of four digits prefixed by the two letters, namely AT, to denote 'Agro-Technology'.
4. The first digit denotes the 'Year' at which the course is offered and the second digit denotes the 'Semester' in which the course is offered. The third and fourth digit denotes the 'Serial number' assigned for the course. (Refer curriculum outline in section 1).

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