

UNIVERSITY OF COLOMBO, SRI LANKA
FACULTY OF SCIENCE
DEGREES OF MASTER OF SCIENCE
BY-LAWS
of the
Degree of Master of Science

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

BY-LAWS

Whereas the University of Colombo has been conducting the programmes leading to the Degree of Master of Science since 1985 under its Master of Science By-Laws No.7 of 1985;

Whereas the said By-Laws have subsequently been amended by the University in 2007 and the said Degree programmes have been conducted in terms of the said By-laws as amended since 2007 and that students have been registered under the said amended By-Laws whose registration is still in operation;

Whereas the University Grants Commission has published Qualifications Framework norms, duration, credit values, etc. of different levels of academic qualification and has impressed upon the University to revise the existing programmes to fall in line with the requirements in the published Qualifications Framework;

Whereas it has become necessary to revise and revamp the programme leading to the Degree of Master of Science to bring them on par with the requirements laid down in the Sri Lanka Qualifications Framework as updated and published by the University Grants Commission in 2015;

Whereas it is recognized that there has been revisions of the curricula and syllabi taking in to consideration the rapid development in the field of Science which has necessitated the incorporation of innovative, advanced and multidisciplinary themes, which would increase the relevance and value of the awarded Degree. Such revisions may have to take place on an annual basis so facilitating the Degree holders to be up-to-date in skills & knowledge to respond to contemporary needs of the profession and industry;

Whereas a new batch of students has been admitted to the University under the newly formulated curriculum which has already been approved by the Higher Degrees Committee and the Faculty Board of the Faculty of Science and the Senate and the Council of the University of Colombo, in terms of which approval the students have been following the said revamped and revised programme leading to the Degrees of Master of Science; and,

Whereas it has become necessary to enact By-Laws to prescribe the revised and revamped curricula, and other provisions including those relating to procedural and substantive aspects of the Degrees Programmes,

The Council of the University of Colombo on the recommendation of the Senate and the Higher Degrees Committee and the Faculty Board of the Faculty of Science, enacts the following By-Laws:

- (1) These By-Laws may be cited as the Master of Science By-Laws No. 8 of 2021.
- (2) These By-Laws shall be deemed to have come into operation with effect from January 2021.

The Master of Science Degree Programmes covered by the By-laws shall include the following:

- MSc in Applied Organic Chemistry
- MSc in Analytical Chemistry
- MSc in Chemistry Education
- MSc in Mathematics Education
- MSc in Financial Mathematics
- MSc. in Nuclear Science
- MSc in Medical Physics
- MSc in Applied Electronics
- MSc in Physics Education
- MSc in Atmospheric Physics
- MSc in Plant Pathology
- MSc in Plant Cell and Tissue Culture
- MSc in Agricultural Microbiology
- MSc in Weed Science
- MSc in Applied Statistics
- MSc in Actuarial Science
- MSc in Environment Science
- MSc in Climate Change and Environmental Management

PART I- GENERAL

Award of Degrees

2. Subject to these By-Laws, a student may be awarded the Degree of Master of Science (hereinafter sometimes referred to as “the Masters Degree”) if he/she has -
 - (1) been a registered student of the University of Colombo, (hereinafter sometimes referred to as “the University” for the relevant period prescribed by these By-Laws;
 - (2) completed thereafter, to the satisfaction of the Council and the Senate of the University, Vice-Chancellor, satisfies the requirements for the programme as prescribed by these By-Laws, and/or other Regulations and/or Rules of the University and/or Faculty;
 - (3) satisfied the relevant Board of Examiners in different forms of Examinations and Assessments including written examinations, practical examinations, oral examinations, assignments, seminars, individual projects, individual research projects, reports, dissertations, oral defenses, etc., as may be prescribed by these By-Laws and/or any other Regulations and/or Rules of the programmes coming under these By-Laws, and those of the University and the Faculty of Science;
 - (4) paid all prescribed and relevant fees including library fee, registration fee, course fee, supervision fee, examination fee and all other payable dues to the University;
 - (5) completed the relevant requirements for the award of the Master of Science Degree as the case may be, within a period of five (5) academic years including the first academic year of registration, subject to the provisions of these By-Laws; and,
 - (6) fulfilled all other relevant requirements prescribed by these By-Laws and/or other relevant Regulations and/or Rules of the University and/or the Faculty.

Administration of the Programmes

3. The relevant Department of Study of the Faculty of Science shall be in charge of the administration of the Master of Science Degree Programme.
4. The Head of the relevant Department of Study shall function, *ex-officio*, as the Director of the Programme and the Dean of the Faculty of Science as Supervisor of the Programme.
5. There shall be a Co-ordinator for each programme and he/she shall be appointed by the Dean, Faculty of Science on the recommendation of the Head of the relevant Department of Study. Documents relating to the programme shall be recommended by the Higher Degrees Committee (HDC) and approved by the Faculty Board and Senate.

Eligibility for Admission to the Master of Science (MSc) Degree Programme

6. (1) No person shall be eligible to be admitted to the Master of Science Degree Programme unless he/she satisfies the minimum requirements specified in the following paragraphs:
 - i. a B.Sc. degree from a recognized University in the relevant subject / field **or**

- ii. any other relevant qualification acceptable to the Senate of the University of Colombo and
 - iii. any other requirement stipulated in the relevant MSc programme
- (2) A student shall not be eligible to be registered for the Master of Science Degree Programme unless he/she satisfies the relevant requirements prescribed in the By-Laws.

Application for Admission to the Master of Science Degree Programme

7. (1) A person who wishes to enrol for a programme must make an application to the Registrar, University of Colombo, when the programme is advertised. The application shall be on a prescribed form providing the information as he/she may be required to submit, including his/her qualifications for undertaking the programme of study.
- (2) Applications received shall be referred to the relevant Head of the Department of Study. The Department having examined the applications for necessary initial qualifications shall call the qualified candidates for an interview / *viva voce* examination and in some cases an aptitude / subject based test. The selection shall be based on academic merit and the performance at the interview / *viva voce examination* and where applicable the written examination. The final list of candidates to be enrolled shall be recommended by the Higher Degrees Committee (HDC) of the Faculty of Science and approved by the Faculty Board (FB) and Senate of the University of Colombo.

Registration for the Master of Science Degree Programme

8. (1) A person whose application for a Programme of study is accepted shall be required to register for the Programme on or before a specified date and to pay to the University the prescribed registration, tuition, library, laboratory, examination and other fees specified by the programme.
- (2) On payment of the prescribed fees a person shall be registered as a student of the Programme. Such registration shall be valid for the period of five years from the date of registration. The student shall ensure that his/her registration remains in force throughout the duration of the programme.

The effective date of registration shall be the date of commencement of the programme.

(3) The registration shall be deemed to have lapsed at the expiration of its period of validity. A person whose registration has so lapsed may renew his/her registration, with recommendation of the HDC and FB and approval by the Senate, for a further period by paying the prescribed fees, provided that he/she is still eligible to be registered for the Programme.

(4) A registration may be cancelled for the following reasons on the recommendations of the HDC and FB and approval by the Senate.

i. Non-adherence to Rules and Regulations of the University

(5) A student may request for a leave of absence or deferment; the student should indicate the period of leave or deferment. The request shall be recommended by the HDC, FB and approved by the Senate. The overall period of registration shall remain as five years from the original date of registration.

(6) The University shall not repay or refund to any person any fees paid to it on any ground whatsoever.

(7) If the number of persons who have applied and/or who are registered for the study program in any given academic year is not sufficient to ensure the financial viability of the programme, in the opinion of the HDC, FB and Senate, the Senate reserves the right to cancel the programme in that year, subject to the University refunding any fees except the application fees, that may have been received from candidates.

PART II – PROGRAMME STRUCTURE AND DURATION

9. (1) All Master of Science Degree programmes shall have a minimum of 30 credits from the two components; **Part I and Part II**. In a theory course, fifteen direct teaching hours (50 notional hours) is considered as one credit and in laboratory and field course thirty hours of direct teaching (50 notional hours) is considered as one credit. In some programmes, students, upon the successful completion of Part I and II, shall have the option of proceeding to **Part III**.

(2) **Part I** shall consist of theory, laboratory and field work. **In total, Part I** shall consist of a minimum of 25 credits and is equivalent to **Level 8 of the SLQF** (Sri Lanka Qualifications Framework).

(3) To proceed to **Part II** students should achieve a **minimum GPA of 3.00 in Part I**.

(3) **Part II** shall carry a minimum of 5 credits and shall consist of a mini research project, or component(s) equivalent to such. Part II Students undertaking a mini research project are required to carry out research at an academic/research/industrial institution where necessary facilities are available and submit a report on the research carried out. Parts I and II combined containing a minimum of 30 Credits is equivalent to Level 9 of the SLQF.

(4) To proceed to **Part III** students should **achieve a GPA of 3.00 for Part II and complete parts I and II within three years from the date of registration**.

(5) **Part III** shall carry 30 credits and shall include an individual research project of not less than 15 Credits, and/or course work of not more than 15 Credits. Students undertaking a research project are required to carry out research at an academic/research/industrial institution where necessary facilities are available and submit a dissertation on the research carried out. The title of the research project, place where the research work shall be carried out, and the supervisor/s should be recommended by the HDC, FB and approved by the Senate prior to commencement of

research. Parts I, II and III combined containing a minimum of 60 Credits is equivalent to Level 10 of the SLQF.

(6) The duration of the Parts I and II of the Master of Science programme shall be 24 months while that of Part III shall be of a further 12 months.

(8) The maximum period allowed to complete the degree is five (05) years from the date of first registration.

(9) Students who fail to complete Part I and Part II within 3 years from the first registration shall not be allowed to register for Part III.

(10) The Senate shall, on the recommendation of the HDC and FB, have the power to change, amend, add to or delete existing courses and change their status as compulsory or optional, syllabi as well as the number, structure and rubric of question papers in such courses.

Medium of Instruction

10. The medium of instruction as well as that of assessment/examinations shall be English, and the medium for correspondence shall also be English.

PART III- ASSESSMENT & EXAMINATIONS

11. (1) The performance of a student shall be subjected to a system of examinations including presentations, written reports, laboratory examinations and / or continuous assessments. Evaluation of the Part II of the programme shall be based on demonstrations/presentations, written reports, and/or a viva-voce examination. Evaluation of Part III of the programme shall be on the dissertation and viva-voce examination.

(2) Each student registered for the Programme shall make an application in the form provided by the university to sit the relevant Examination.

(3) No application for an Examination made by any student shall be entertained by the Faculty without the recommendation of the Coordinator and the Head of the Department.

(4) A student shall be permitted to retake an assessment/examination **only once** for the purpose of improving the GPA, with the recommendation of the HDC and FB.

(5) If such a student makes use of the opportunity to retake the evaluation of such a course, the highest mark scored shall be taken into consideration for the computation of the GPA.

(6) It shall be lawful for the University, following due process, to terminate the registration of any student after one warning in writing, if the progress of study made by such student and/or his/her conduct and behaviour are unsatisfactory. No refund of any fees shall be payable if and when the registration of such a student is terminated.

(8) No Grade or a percentage score or the result of the evaluation of any course shall receive official recognition for any purpose unless such a Grade or percentage or the result of such evaluation, as the case may be, has been approved by the relevant Board of Examiners and the final results pertaining to the award of the Masters Degree in the relevant year have been confirmed by the Senate.

Grading System and Calculation of Grade Point Average (GPA)

12. (1) The Grade Point Average (GPA) shall be computed using grades assigned for all papers in Parts I and for Part II, and where applicable for Part III. The minimum grade a student should achieve to pass a paper/mini project/research component is B-. The grades shall be assigned as shown below.

Marks Range	Grade	Grade Point
85 – 100	A+	4.00
70 – 84	A	4.00
65 – 69	A-	3.70
60 – 64	B+	3.30
55 – 59	B	3.00
50 – 54	B-	2.70
45 – 49	C+	2.30
40 – 44	C	2.00
35 – 39	C-	1.70
30 – 34	D+	1.30
25 – 29	D	1.00
00 – 24	E	0.00

(2) If the Grade Point Average (GPA) of a student is required for any purpose, it shall be calculated using the following equation:

$$\text{GPA} = \frac{\sum w_i g_i}{\sum w_i}$$

Where, w_i = number of credit units for the i^{th} and g_i = grade points for the courses

The GPA is rounded to the second decimal place.

(3) Any student who has not appeared for the evaluation of a course may be assigned a GPV of 0.00 Value for such for the purpose of calculating his/her GPA.

13. The evaluation of the dissertation shall be as follows;
- (1) Two copies of the dissertation (Part III) based on the research project, in temporary bound form, shall be submitted initially through the supervisor/s, Coordinator of the programme to the Head of the relevant Department. The dissertation should be certified by the supervisors by signing the form given in Schedule 1.
- (2) The Head shall send a copy of the dissertation to two examiner/s recommended by the HDC, FB and approved by the Senate. At least one of the examiners should be

external to the place where the research was carried out and to the Faculty of Science. The supervisor/s and external examiner should not be from the same institution. The examiner/s shall send the evaluation report to the Head of the relevant Department.

(3) If the examiner/s recommends the acceptance of the dissertation, the Department shall make arrangements to hold the *viva voce* examination. If one examiner accepts and the other rejects or requests for major revision, the dissertation shall be sent to a third examiner following the due procedure given in section 13(2). In case where major revisions are required by both examiners, the *viva voce* examination should be held only after the dissertation has been re-examined and recommend for acceptance by the examiner/s.

(4) The panel of examiners for the *viva voce* examination shall comprise the Head of the relevant Department or representative (Chairman), the Coordinator of the Programme, Examiner/s of the dissertation and the Supervisor/s as observer/s.

(5) The panel of examiners shall grade and submit a report on the dissertation to the Department of Examinations, through the Dean.

(6) Two copies of the dissertation, permanently bound with revisions, if any, together with an electronic copy should be submitted to the Head of the relevant Department. The internal Examiner/s should certify that corrections, revisions etc. have been duly effected by the student by signing the certificate in Schedule 2. In the absence of the internal Examiner/s, the Supervisor/s shall certify.

PART IV – AWARD OF Degree of Master of Science

14. (1) A student who obtains a GPA of **3.00** or above for Part II may be eligible for the award of the Degree of Master of Science, provided the student fulfills other requirements as prescribed by these By-Laws and Rules and Regulations of the University of Colombo.

(2) No student shall be entitled to the award of the Degree of Master of Science unless he/she has satisfied all the prescribed requirements and he/she has supplicated for the award of the Masters Degree at the relevant Convocation of the University of Colombo.

PART V – AWARD OF Postgraduate DIPLOMA

15. Students who obtain a GPA of **2.70** or above for Part I may be eligible for the award of the Postgraduate Diploma, where applicable, and upon request, provided the student fulfills other requirements as prescribed by these By-Laws and Rules and Regulations of the University of Colombo.

PART VI – AWARD OF MASTER OF SCIENCE (RESEARCH)

16. Students who obtain a GPA of **3.00** or above for Part III of the programme may be eligible for the award of the Degree of Master of Science (Research), provided the students fulfill other requirements as prescribed by these By-Laws and Rules and Regulations of the University of Colombo.
17. A student who fails to achieve a GPA of 3.00 or above for Part III shall be eligible to be awarded the Degree of Master of Science, upon request, provided the student fulfills other requirements as prescribed by these By-Laws and Rules and Regulations of the University of Colombo.

PART VII – TRANSITIONAL PROVISIONS

176. (1) Notwithstanding anything contained in these By-Laws, the students who have already been registered under the provisions of the Master of Science By-Laws No. 08 of 2008 as subsequently amended in 2009 (hereinafter referred to as the 2009 By-Laws) may continue their programme under and subject to those provisions until December 2020.

(2) Subject to Sub-Section (1) above, the 2009 By-Laws are hereby repealed.

PART VII – REMOVAL OF DIFFICULTIES

17. The Vice Chancellor of the University shall have the authority, in consultation with the Dean of the Faculty of Science, to take such actions or give such directions not inconsistent with the spirit and 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 interpretation of the provisions or for which there is no provision in these By-Laws or in the case of students who had followed or have been following the Masters Degree Programmes under the earlier arrangements.

PART VIII-INTERPRETATION

18. In these By-Laws, unless the context requires otherwise:

“The Act” means the Universities Act No. 16 of 1978 as amended subsequently;

“Council” means the Council of the University of Colombo;

“Dean” means the Dean of the Faculty of Science;

“ Head” means the Head of the Department which offers a particular Masters Degree Programme;

“ Coordinator ” means the Coordinator of the relevant Masters Degree Programme;

“Prescribed” means prescribed by the University/Faculty as the case may be either by these By-Laws, or Regulations or Rules or by decisions made by these authorities;

“Registrar” means the Registrar, Acting Registrar, Deputy Registrar, Senior Assistant Registrar, Assistant Registrar or any other Officer authorized to sign for and on behalf of the Registrar of the Faculty of Science.

“Faculty” means The Faculty of Science

“Senate” means the Senate of the University of Colombo;

“University” means the University of Colombo.

19. Any question regarding the interpretation of these By-Laws shall be referred to the Council whose decision thereon shall be final.

SCHEDULE 1

This is to certify that this dissertation is based on the work carried by Mr/Mrs/Ms under my/our supervision at the The dissertation has been prepared according to the format stipulated and is of acceptable standard.

It is recommended that the dissertation is suitable for evaluation.

Certified by

Supervisor 1 Name Date.....
Signature

Supervisor 2 Name Date.....
Signature

SCHEDULE 2

This is to certify that Mr/Mrs/Ms has carried out the corrections and/or modifications on the dissertation as recommended by the examiners.

The revised/corrected dissertation is recommended for acceptance.

Certified by

Internal Examiner Name

Date.....

Signature