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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.

## DEGREE OF MASTER OF SCIENCE IN INTEGRATED COASTAL ENVIRONMENTAL RESOURCE MANAGEMENT (ICERM)

(Faculty of Technology)

### BY-LAWS

1. These By-Laws may be cited as the Master of Science in Integrated Coastal Environmental Resource Management (ICERM) (Faculty of Technology) By-Laws No. 23 of 2019.

### PART I - GENERAL

#### Award of Degree

2. Subject to these By-Laws, a person may be awarded the Degree of Master of Science in Integrated Coastal Environmental Resource Management (ICERM) (hereinafter sometime referred to as 'the MSc'), if he/she has -
  - a) been a registered student of the University of Colombo (hereinafter sometime referred to as 'the University') for the period prescribed by these By-Laws,
  - b) thereafter pursued, the programme of study in the University to the satisfaction of the Vice-Chancellor, as prescribed by these By-Laws, and other Regulations and Rules of the University,
  - c) satisfied the Examiners in the different forms of examination and assessment including written examinations, *viva voce* examinations, assignments, reports, dissertations, defence of dissertations etc. as may be prescribed by these By-Laws or any other By-Laws, Regulations or Rules of the University,
  - d) paid such registration, tuition, library and examination fees and other dues as may be payable by him/her to the University and
  - e) fulfilled all other requirements prescribed by these By-Laws and the Regulations and Rules of the University.

#### Administration of the Programme

3. The Department of Environmental Technology of the Faculty of Technology (hereinafter referred to as 'the Department') shall be in charge of the administration of the programme leading to the MSc (hereinafter sometime referred to as 'the programme').

4. There shall be a Co-ordinator for the programme and he/she shall be appointed by the Dean, Faculty of Technology on the recommendation of the Head of the Department.

#### Eligibility for Admission

5. No person shall be considered for admission to the programme leading to the MSc unless that person satisfies the following minimum requirements:
  - i. a Bachelors degree from a recognized University in coastal resource management / related subject, or
  - ii. any other relevant qualification accepted, on the recommendation of the Faculty Board of the Faculty of Technology (hereinafter sometime referred to as 'the Faculty Board'), by the Senate of the University of Colombo

and

- iii. other requirements stipulated in these By-Laws

#### Application and Admission Procedure

6. Applications for admission to the programme shall be invited by notice in the newspapers and/or the web site of the University of Colombo. A person who wishes to enrol for the programme may 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.
7. Applications received shall be referred to the Department. The Department having examined the applications for necessary initial qualifications shall call the eligible candidates for an interview / *viva voce* examination and in some cases an aptitude / subject based test. The selection will be based on academic merit and the performance at the interview / *viva voce* examination and, where it is considered suitable by the Faculty Board, at a written examination. The final list of candidates to be enrolled shall be recommended to the Faculty Board and the Senate. The decision of the Senate shall be final with regard to the admission to the programme.

#### Registration for the programme

8. A person whose application for the programme is accepted by the Senate 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 prescribed by the Council. The Council may, on the recommendation of the Faculty Board, revise such fees from time to time.
9. (1) On payment of the prescribed fees a person shall be registered as a student of the programme leading to the MSc.
 

(2) Such registration shall be valid for the period specified in these By-Laws from the date of registration. In the case of the programme leading to the Degree of Master of Science by Course Work the period of validity shall be 1 ½ academic years. In the case of students who are permitted to proceed to Part III to read for the Degree of Master of Science by Course Work and Research the period of validity shall be 2 academic years from the beginning



provided they pay additional registration fees for Part III of the programme. Every student shall ensure that his/her registration remains in force throughout the duration of the programme.

- (3) The effective date of registration shall be the date of commencement of the academic activities of the programme. The Senate may, on the recommendation of the Faculty Board, nominate a different date as the date of commencement in exceptional circumstances.
10. 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 or extend his/her registration, with the permission of the Faculty Board and the Senate, for a further period by paying the prescribed fees, provided that he/she is still eligible to be registered for the programme.
11. Registration may be cancelled by the Senate, on the recommendation of the Faculty Board for any valid reasons including non-adherence to the provisions of these By-Laws and the other Rules, Regulations and By-Laws of the University.
12. A candidate may postpone his/her registration or obtain leave of absence by writing to the Dean, Faculty of Technology giving reasons acceptable to the Faculty Board. In the case of a postponement or leave of absence the candidate shall indicate the period of duration of the postponement or being absent from the programme. Each request for postponement or leave of absence shall be considered on its own merit by the Faculty Board.
13. The University shall not, under any circumstances whatsoever, repay or refund to any person any fees paid except where the number of applicants registered for the programme does not make it viable for the University to conduct it, in which case the University shall refund all fees minus the application fee.

## **PART II – PROGRAMME STRUCTURE AND DURATION**

14. (1) The MSc programme shall be of 45 credits made of two components: Part I and Part II.
- (2) Part I shall carry 30 credits (including 5 credits secured from an independent study).
- (3) Part II shall carry 15 credits.
- (4) Upon successful completion of Parts I and II, a student shall become eligible to receive the Degree of Master of Science in Integrated Coastal Environmental Resource Management by Course Work (SLQF 9).
- (5) Students may opt to proceed to Part III, which shall have 15 additional credits. No student shall be eligible to proceed to Part III unless he/she has successfully completed Parts I & II by obtaining a GPA of not less 2.30 for Part I and a GPA of not less than 3.00 for Part II.
- (6) Upon successful completion of Part III as well, students shall become eligible to receive the Degree of Master of Science in Integrated Coastal Environmental Resource Management with Course Work and Research (SLQF 10).
15. In a theory course fifteen hours of instruction represent one credit while thirty hours of laboratory and field work represent one credit.

**Course Work Component (Part I)**

16. Part I shall consist of theory, laboratory and field work and any other activities decided by the Department.

**Course Work Component (Part II)**

17. To proceed to Part II students shall achieve a minimum GPA of 2.3 in Part I.

Part II shall carry 15 credits of course work.

**Research Component (Part III)**

18. To proceed to Part III students shall achieve a minimum GPA of 3.0 for Part II.

Part III shall carry 15 credits of research. Students shall be required to carry out their research work/project at an academic/research/industrial institution recommended by the Department and submit a dissertation which shall be defended in a *viva voce* examination. The students may be required to defend their research proposal before a panel appointed by the Department. The research proposal and the supervisor/s shall be approved by the Higher Degrees Committee, the Faculty Board of Faculty of Technology and the Senate, prior to commencement of research work.

**Duration**

19. The duration of the MSc by course work shall be of 1 ½ academic years. The duration of the MSc with course work and research shall be 02 academic years.

The maximum period allowed to complete the degree is 05 academic years from the date of first registration. Students who fail to complete Part I and Part II within 03 academic years from the date of first registration will not be allowed to register for Part III. However, registration to Part III shall depend on eligibility criteria to be determined by the Faculty Board and approved by the Senate.

**Examination and Scheme of Evaluation**

20. The performance of a student shall be evaluated by end-semester examinations including presentations, written reports, laboratory examinations and / or continuous assessments. Evaluation of the independent study shall be based on demonstrations/presentations, written report, and a *viva voce* examination, as specified. Evaluation of the research work/project shall be on the dissertation and *viva voce* examination.
21. The Grade Point Average (GPA) shall be computed using grades assigned for all courses /papers including the research work/project. The minimum grade a student shall achieve to pass a course/paper/ research work/project is C. No Grade Point Value of a course/paper / research work/project shall be taken into account for the computation of Grade Point Average if the Grade Point Value is less than C Grade. The Grades shall be assigned as shown below:



Marks Range	Grade	Grade Point Value
85 and above	A+	4.00
80-84	A	4.00
75-79	A-	3.70
70-74	B+	3.30
65-69	B	3.00
60-64	B-	2.70
55-59	C+	2.30
50-54	C	2.00
45-49	C-	1.70
40-44	D+	1.30
35-39	D	1.00
0-34	E	0.00

The GPA will be computed using the following formula,

Where,

$w_i$  = number of credit units for the  $i^{\text{th}}$  course  
 $g_i$  = grade points for the course

When the GPA is an integer & fraction, the fraction shall be rounded off at two decimals.

### Repeat Examinations

22. If a student does not complete successfully the entire examination or some courses and / or research project / work in the examination, he/she shall repeat the entire examination or the required courses and/ or research project / work in the examination, at the next available opportunity. Candidates are allowed to repeat an examination paper / course or research project/work up to a maximum of two attempts.

### PART III- THE DISSERTATION

#### 23. (i) Initial Submission

Two copies of the dissertation based on the research project, in temporary bound form, shall be submitted to the Examination branch of the University of Colombo or shall be submitted to the examination branch available in the Faculty. The dissertation shall be certified by the supervisors by signing the form given in schedule 1.

#### (ii) Evaluation

The Examination branch shall send a copy of the dissertation to the examiners approved by the Senate on the recommendation of the Faculty Board and the Higher Degrees Committee of the Faculty. At least one of the examiners shall be external to the place where the research was carried out. The examiner/s shall send the evaluation report to the Examination branch.

#### (iii) Viva Voce Examination

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The Examination branch shall make arrangements to hold the *viva voce* examination after receiving the evaluation reports from the examiners. In case where major revisions are required in the dissertation, the students shall be informed to resubmit the dissertation after addressing the examiner/s comments given at the *viva voce* examination, and the re-submitted dissertation shall be re-examined for their recommendation.

The panel for the *viva voce* examination shall be,

- a) Dean of the Faculty (Chairman)
- b) Head of the Department or representative
- c) Coordinator of the Programme
- d) Examiners of the dissertation
- e) Supervisor/s as observer/s

Based on the dissertation and the performance at the *viva voce* examination the examiners shall assign a grade for the dissertation. The grades shall be assigned as shown below.

Marks Range	Grade	Grade Point Value
85 and above	A+	4.00
80-84	A	4.00
75-79	A-	3.70
70-74	B+	3.30
65-69	B	3.00
60-64	B-	2.70
55-59	C+	2.30
50-54	C	2.00
45-49	C-	1.70
40-44	D+	1.30
35-39	D	1.00
0-34	E	0.00

(iv) *Final Submission*

Three copies of the dissertation, permanently bound with revisions, if any, together with an electronic copy shall be submitted to the Examination branch. The internal Examiner shall certify that corrections, revisions etc. have been duly effected by the candidate by signing the certificate in schedule 2.

**Eligibility for the MSc Degree**

24. The candidates are required to obtain a GPA of **2.30** or above and shall fulfil other requirements as prescribed by these By-Laws and Rules and Regulations of the University to be eligible for the award of the MSc degree.
25. Candidates who obtain a GPA of **2.00** or above for Part I may be eligible for the award of the Postgraduate Diploma where applicable, provided the candidates fulfil other requirements as prescribed by these By-Laws and Rules and Regulations of the University. Candidates who obtain a GPA of **2.30** or above for Part I and Part II may be eligible for the award of the MSc by course work, provided the candidates fulfil other requirements as prescribed by these By-Laws and Rules and Regulations of the University. Candidates who obtain a GPA of **3.00** or above for Part III of the programme may be eligible for the award of the MSc with course

work and research provided the candidates fulfil other requirements as prescribed by these By-Laws and Rules and Regulations of the University.

#### PART IV – INTERPRETATION

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

“Council” means the Council of the University of Colombo constituted under the Universities Act No 16 of 1978;

“Department” means Department of Environmental Technology;

“Faculty” means Faculty of Technology, University of Colombo;

“Registrar” means the Registrar, Acting Registrar, Deputy Registrar, Senior Assistant Registrar, Assistant Registrar and any other officer authorised to sign for and on behalf of the Registrar of the University of Colombo;

“Senate” means the Senate of the University of Colombo constituted under the Universities Act No.16 of 1978;

“SLQF” means the Sri Lanka Qualifications Framework;

“University” means the University of Colombo constituted under the Universities Act No. 16 of 1978.

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

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## SCHEDULE

Module	Module Name	Credits
<b>Semester 1</b>		
1 1	Introduction to Management of Coastal Resources and Environmental Technology	1
1 2	Research Methodologies and Scientific Writing	3
1 3	Oceanographic processes and productivity	1
1 4	Coastal Zone and Ecological systems, Coastal Fisheries & Aquaculture	2
1 5	Marine and Coastal tourism	2
1 6	Other Coastal Livelihoods and Economic activities	2
1 7	Coastal Processes	2
1 8	Coastal Pollution	2
<b>Semester 2</b>		
2 1	Analysis of Threats to Coastal Ecosystems	2
2 2	Climate Change and Impacts	2
2 3	Coastal Governance	2
2 4	Regulating development activities in the coastal zone	2
2 5	Conservation of coastal environment	2
2 6	Independent Study	5
<b>Semester 3</b>		
3 1	Remote sensing and GIS for coastal planning	2
3 2	Environment Impact Assessments	2
3 3	Information and Communication Technology for MCRET	2
3 4	Application of Entrepreneurial concepts in Management of Coastal Resources and Environmental Technology	2
3 5	Statistics for natural resources management	2
3 6	MCRET Process, Tools and Strategies	2
3 7	Economics of Nature	2
3 8	International Conventions and collaboration	1
<b>Semester 4</b>		
4 1	Research Project & Dissertation	15
	Total	60



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.

*Certified by*

Supervisor 1 Name ..... Date .....

Signature .....

Supervisor 2 Name ..... Date .....

Signature .....

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 .....

Faculty of Technology

December 2017

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 Meeting No. 555th  
 Date 10/07/2019

**Approved by the Council**

Meeting No .....

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