ACADEMIC BULLETIN

2022-2023

VOLUME –I (REGULATIONS)

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

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CONTENTS

PREFACE

This edition of the Academic Bulletin aims at giving a brief overview of the course structure as well as regulations for the various graduate and post- graduate programmes offered in the University. We believe that this bulletin will enable the students to choose electives according to their interest in the topic. The details of the faculty in each Department along with their specialisations are given in the text. Information in this bulletin is organised faculty wise and Department wise- within each faculty. Clarifications regarding any detail which is not included in the bulletin can be obtained from the concerned Head of the Department. It may be noted that the rules and regulations are subject to changes, depending on subsequent decisions taken by the academic bodies.

The Academic Bulletin Committee is thankful to all the Directors of Schools/ Heads of Departments and the University authorities for extending all sort of Co-operation inbringing out this bulletin. We would also like to place on record our appreciation to the staff of Academic Section for their administrative help and support.

Sri. Baby Chakrapani

Dr. S Sabu

Dr. Suja Haridas

Dr. S.M. Sunoj (Convenor)

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22	Sri. Roy V. Paul	:	Associate Professor, Kunjali Marakkar School of Marine Engineering
23	Dr. P. S. Sunil	:	Associate Professor, Department of Marine Geology and Geophysics.
24	Dr. P. G. Romeo	:	Professor, Department of Mathematics.
25	Dr. P. K. Saji	:	Assistant Professor, Department of Physical

			Oceanography
26	Dr. M. Junaid Bushiri	:	Professor, Department of Physics
27	Dr. Honey John	:	Professor, Department of Polymer Science & Rubber Technology.
28	Dr. Rajesh P. Nair	:	Assistant Professor, Department of Ship Technology
29	Dr. Zakkariya K. A.	:	Professor & Director, DDU Kaushal Kendra.
30	Dr. Sunil Kumar N.	:	Professor, Cochin University College of Engineering, Kuttanad
31	Dr. Valsamma Joseph	:	Associate Professor & Director, National Centre for Aquatic Animal Health.
32	Dr. Glory Joseph	:	Professor, Civil Engineering Division, School of Engineering

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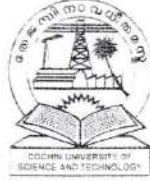
No. Conf.II/2941(1)/2020

Date: 19.11.2020

NOTIFICATION

In exercise of the powers conferred by Section 24(ii) read with Section 42(1) of the CUSAT Act 1986, the Academic Council at its meeting held on 08.07.2020 vide Item No. II (36) resolved to authorize the Vice-Chancellor for consideration and approval of the Ph.D Regulations 2020.

The Syndicate at its meeting held on 18.09.2020, vide Item No. 679.34 resolved to approve Ph.D Regulations 2020 with modifications. The Syndicate further resolved that the Regulation will be effective from 2020-21 academic year.

REGISTRAR

To:

1. All Heads/Principals of Teaching Departments/Schools
2. All Recognized Research Centres
3. The Controller of Examinations/Joint Registrars (Exams/Academic)/ Deputy Registrar (Exam)/Assistant Registrar (Academic)
4. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar
5. Academic A/B/Exam T/Exam E/UGC (SC/ST)/Exam Confidential Sections
6. Day file/Stock file/File copy.

RPR.5

PH.D REGULATIONS – 2020
(Appendix to U.O.No.Ac.B2/Ph.D Regulations/2020 dated 10.11.2020)

Preamble

Preamble

These regulations, named as **Cochin University of Science and Technology Ph.D Regulations 2020,** are framed in accordance with the University Grants Commission (Minimum Standards and Procedure for the Award of M.Phil/Ph.D. degrees) Regulations 2016, which are in supervision of the 2009 Regulations, notified in the Gazette of India [No.278, Part III- Section 4]

Extra Ordinary on July 5th, 2016 vide No.F.1-2/2009(EC/PS)V(I)Vol.II – in exercise of the powers conferred by Clauses (f) and (g) of sub-section (1) of Section 26 of the University Grants Commission Act, 1956 (3 of 1956).

Cochin University of Science and Technology is conducting research programmes in various subjects and inter-disciplinary areas in its Schools/Departments/Centres and other Recognized Institutions leading to the award of Degree of Doctor of Philosophy, under the Faculties listed in the Statutes. The Standards and Procedures for registration, research and award of Ph.D Degree of the University shall be as per this Regulation.

1. **Short title, Application and Commencement:**

   1.1 These Regulations shall be called Cochin University of Science and Technology Ph.D Regulations – 2020.

   1.2 These Regulations shall apply to every **Academic Unit of Research** (School/Department/Centre of the University) and Recognized Institutions, where research programme leading to Ph.D of Cochin University of Science and Technology is being conducted.

   1.3 These Regulations shall come into force from the date decided and notified by the University and shall govern all Ph.D Registrations from the date it comes into force.

2. **Recognised Institutions:**

   The University may decide to accord recognition, in specified Faculties, on the recommendation of the Academic Council, to a Research/Educational Institution under the control of Central/State Government as per the provisions of the Cochin University of Science and Technology (CUSAT) Act 1986 and the relevant statutes and ordinances in this regard, provided the University is satisfied that the institution will be able to provide the required facilities to candidates to persue their studies in the Institution for the Degree of Doctor of Philosophy (Ph.D) of the University in the Faculties concerned and to fulfill such other conditions that the Syndicate may stipulate from time to time.

3. **Research Supervisor:**

   3.1 Any Full-Time regular faculty member of the University/Scientist of Equivalent Grade of the Recognized Research Institution with a Ph.D degree and atleast two research publications in referred journals may be recognized as a Research Supervisor. Provided that in areas/disciplines where there is no or only a limited number of referred journals, the University may relax the above condition for recognition of a person as Research Supervisor with reasons recorded in writing. All Teachers/Scientists who are Research Supervisors under the immediate previous regulations shall continue to serve as Research Supervisors under these regulations also.

   3.2 A person who has joined in an academic unit of research in the University under Inspire faculty scheme/tenure track/faculty recharge scheme, etc. for a period not less than five years can also be recognized as Research Supervisor, fulfilling the other conditions of research publications.

   3.3 The allocation of Research Supervisor for a selected Research Scholar shall be decided by the Department/School/Centre Research Committee concerned depending on the number of scholars per Research Supervisor, the available specialization among the Supervisors and research interests of the scholars as indicated by theme at the time of selection interview. Joint-Supervisor can be allowed in inter-disciplinary areas from other departments of the same institute or from other recognized institutions.

   3.4 The number of research scholars that a Professor, Associate Professor and Assistant Professor shall supervise at any given time is 8, 6 and 4 respectively. The maximum number mandated

above also includes the number of Ph.D Scholars supervised/co-supervised by the Supervisor in any other Universities/Institutes. Those who are presently guiding a number more than what is mentioned above are allowed to retain theme till their completion of research. A declaration to the above effect shall be submitted by the supervisor on accepting new doctoral student(s). Persons mentioned under item 3.2 above, will be treated as equivalent to Assistant Professor in this case.

3.5 A Research Supervisor can take one foreign student sponsored under a scholarship scheme by the Government for undergoing Ph.D Programme in India over and above the allotted number.

3.6 A Research Supervisor should have at any point of time atleast one Research Scholar under reserved category under his guidance. Here, preference shall be given to SC/ST candidates; if SC/ST candidate is not available, seats may be filled from other reservation category.

3.7 A Research Supervisor may be recognized under more than one faculty if the person is eligible for the same. The total number of scholars in all faculties under a Supervisor shall also be limited to the number as per rules.

3.8 A Research Supervisor on retirement may be allowed to continue to guide the scholars already registered under their supervision at the time of retirement. They will not be allowed to register fresh candidates for supervision.

3.9 If a Research Supervisor leaves the present job and takes up another assignment in an Institution which is not a recognized Research Centre of the University, the Supervisor may be allowed continue to guide the scholars already registered under their supervision. They will not be allowed to register fresh candidates for supervision.

4. **Joint Supervisor**

4.1 If the Research Committee feels, for valid academic reasons, that the service of an additional supervisor is desirable it may recommend a Joint-Supervisor provided both the supervisors are willing. For reckoning the maximum number of students who may register under a Research Supervisor, the students under joint guidance shall be treated as 0.5 for each Supervisor.

4.2 In the case of interdisciplinary/multidisciplinary subjects, there shall be two Research Supervisors, one in scholar's own PG based subject according to which the candidate is registered in a Research Centre and another in the area of subject in which he combines the core subject. In this case, for reckoning the maximum number of students who may register under a Research Supervisor, the students under joint guidance shall be treated as 0.5 for each Supervisor.

4.3 Scientists/Researchers working in partnering institutions having MoU on specific projects with a department of the University may be permitted to be a Joint Supervisor for the students working in that project, irrespective of the geographical jurisdiction.

5. **Research Committee (RC)**

5.1 Every Department/School/Centre of research in the University shall have a Research Committee (RC) with the Head of the Department/Division/School/Centre as Chairman, and all the recognized Research Supervisors of the University serving in the Department/School/Centre as members. The Vice-Chancellor may, on the recommendation of the Dean of the Faculty concerned, nominate additional members from other relevant Department/School/Centre/Recognized Institutions to the Research Committee. In Departments where interdisciplinary/multidisciplinary research is pursued, the Committee shall consist of the Research Supervisor(s) from other subject(s) who has (have) consented to supervise the candidate(s).

5.2 Every Recognized Institution shall similarly have a Research Committee with the Head of the Recognized Institution or a Research Supervisor working in the Institution nominated by the Chairman as Convener, all the recognized Research Supervisors working in the Recognized Institution, the Deans of the Faculties concerned and the Heads of the Department/Division/School/Centre of the University concerned or their nominees as members.

5.3 The Research Committee in the University Department/Division/School/Centres/ Recognized Institutions shall decide upon the number of research students who can be admitted during the next academic year with the areas of specialization.

5.4 The Research Committee shall meet atleast twice in a year to review the progress of research work of the registered research students in the Department/Division/ School/Centres/Recognized Institution and record the minutes of the meeting in a Register kept for the purpose. The Chairman shall submit the minutes of the meetings to the University.

6. Doctoral Committee (DC)

6.1 There shall be a Doctoral Committee (DC) to monitor the progress of each student registered for research in the University Department/School/Centre/Recognized Institution. The Doctoral Committee shall provide necessary guidance to the research student shall take efforts to ensure that good progress is made by him/her.

6.2 In the case of a University Department/School/Centre, the Head concerned in consultation with the Research Supervisor shall constitute the Doctoral Committee with the Research Supervisor as Convenor, Joint Supervisor (if any) and an approved Research Supervisor from the Department in the same area as members. The Head of the Department/Division/Centre shall be the Chairman of the Doctoral Committee.

6.3 In the case of a Recognized Institution, the Head of the Recognized Institution in consultation with the Research Supervisor shall constitute the Doctoral Committee with the Research Supervisor as Convener, the Joint Supervisor, if any, and an approved Research Supervisor from the same or allied area in the University as members. Head of the Institution (or his nominee) will be the Chairman of the Doctoral Committee.

6.4 The Doctoral Committee shall be constituted and conduct its first meeting within a month of admission of the candidate. The meetings of the DC should be convened regularly atleast once in every semester for the entire duration of research of the candidate.

6.5 The Doctoral Committee shall be in existence during the full period of registration of a candidate and shall be reconstituted on the recommendations of the Supervisor with such changes in membership as may become necessary from time to time in accordance with relevant Clauses.

6.6 All research students shall submit progress reports to the respective Research Supervisors every six months which shall be discussed in the Doctoral Committees to assess the progress of the work.

6.7 The Doctoral Committee shall make recommendations on matters such as (a) the conversion of registration from Full-Time to Part-Time or vice-versa, (b) granting leave of the candidate for short term assignments, training, etc, (c) presentation of synopsis and (d) cancellation of registration in case of unsatisfactory progress, unethical practices in research committed by the student, or misconduct of the student.

6.8 The Doctoral Committee shall be responsible for the preparation of the confidential panel of adjudicators for evaluation of the thesis with the recommendation of the Dean of the Faculty concerned to the Controller of Examination for further necessary action.

7. **Notification for Ph.D Programme.**

7.1 The Notification for Ph.D admissions shall be issued once a year through notification in atleast two national newspapers, of which one shall be in the regional language. The details shall also be available in the University website.

7.2 All Academic Unit of Research of the University and Recognized Research Institutions that are allowed to conduct Ph.D programmes shall decide on an annual basis through their Research Committee (RC) the number of Ph.D Scholars to be admitted as per the norms regarding the Scholar-Supervisor ratio and the facilities available.

7.3 A candidate who wishes to pursue a programme of study and research leading to the degree of Doctor of Philosophy (Ph.D) will be required to seek registration to the programme under these regulations as Full-Time or Part-Time research student in an Academic Unit of study or in an institution recognized for this purpose by the University, under an appropriate Faculty. In the case of recognized institutions, Part-Time registration shall be granted only for the permanent employees of the respective institutions.

7.4 Application for admission shall be submitted to the Head of the Academic Unit of Research concerned in the prescribed form on payment of the required fees. Candidates intending to do research in Recognized Institutions shall submit their applications through the Head of Institution to the Head of concerned Academic Unit of Research.

8. **Eligibility for Admission**

8.1 Candidates for admission to the Ph.D programme shall have a Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least **55%** marks in aggregate (or an equivalent grade) or an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

8.2 A relaxation of 5% of marks in the qualifying examination, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC (non-creamy-layer)/Differently abled and other special categories of candidates as per the decision of the University from time to time. This relaxation to the categories mentioned above are permissible based on the qualifying marks without including the grace mark procedures.

9. **Admission procedure: Departmental Admission Test (DAT)**

9.1 The admission shall be based on the criteria notified by the University, keeping in view of the guidelines/norms in this regard issued by the UGC and other statutory bodies concerned and any other rules framed by the University from time to time.

9.2 Candidates are submitted through a Departmental Admission Test (DAT) which will be conducted only once in a year before the end of August. DAT for Ph.D Programme (including admission to Recognized Institutions) shall be conducted by concerned Department of University.

9.3 The Departmental Admission Test (DAT) shall have two parts – Written test and Interview. In the case of candidates undertaking interdisciplinary/multidisciplinary research, the written test can be on a subject offered by the academic unit where the candidate is seeking registration.

9.4 The syllabus of the Entrance Test shall consist of subject/subjects specific to the Academic Unit of Research concerned.

10.   **Exemption from DAT**

10.1   The following candidates are exempted from the written examination part of the DAT and they shall be ranked separately as per the norms laid down in relevant clauses for the same of these regulations.

10.1.1 Candidates who have been awarded Fellowships by agencies such a UGC/CSIR/AICTE/etc. or similar agencies of the Government of India or the Government of Kerala for pursuing doctoral research leading to Ph.D degree.

10.1.2 Candidates who are working in funded research projects in the department/academic unit of research with assured fellowship for at least two years and have qualified NET/GATE/ or other similar examinations conducted by national agencies.

10.1.3 Foreign students who have been sponsored under a Scholarship scheme by the Government of India for undergoing Ph.D programme in India.

10.1.4 Students from India or abroad coming from Ph.D based on specific agreements or MoUs of the University.

10.1.5 Candidates who have provisionally qualified for INSPIRE fellowship. (If they don't get the final selection, registration will be cancelled).

10.1.6 Regular and permanent teachers from University Departments, Government & Aided Colleges within the State with a minimum continuous service of 5 years as permanent Teachers.

10.1.7 Scientists working in R&D Institutions/Industry with a minimum continuous service of 5 years as permanent employees.

10.1.8 Candidates working/residing outside India (NRI status) shall not be eligible for registration for Ph.D, except for as per Clause 10.1.4.

10.1.9 Foreign students shall not be allowed to do Part-Time research.

10.2   All candidates who have passed the written part of DAT with a minimum of 50% marks as well as those exempted from DAT shall be required to present themselves for an interview with the Research Committee (RC) or with a sub-committee constituted for the same. In the case of admission for interdisciplinary research the Committee or sub-committee shall consist of the

Research Supervisor(s) from other subject(s) who has (have) consented to co-supervise the candidate.

10.3   Only DAT qualified candidates are considered for University Research Fellowship which will be awarded based on a separate rank list prepared for the same.

10.4   Candidates applying for registration as Part-Time Research Scholars shall be considered for registration only in cases where the Research Committee (RC) is convinced that effective supervision can be ensured. The RC shall also check on the regularity and progress of the Ph.D work being carried out by the Scholar.

11. **Preparation of Rank list**

11.1 The rank list will be prepared for with the following weightage of marks.

DAT qualified candidates

(a)	Written Test	:	50%
(b)	Master's Degree	:	25%
(c)	NET/GATE/similar exams	:	5%
(d)	Interview	:	20%

DAT exempted candidates

(a)	Master's Degree	:	50%
(b)	Interview	:	50%

11.2 The admission lists and the waiting list of all eligible candidates shall be displayed on the notice boards of the respective academic unit of research/Recognized Institutions and also put in the University Website. The rank list shall be valid till 31st December of the year.

12. **Admission and Registration**

12.1 A candidate who has been ranked and recommended for provisional admission shall take the admission within fifteen days from the date of issue of memo after paying the required fees and fulfilling such other requirements as per the admission rules.

12.2 The Head of the academic unit of research/Recognized Institution shall be empowered to give an extension of time for a further period upto three months to the candidate, if so requested by the candidate and recommended by the Research Supervisor (within the validity period of the rank list).

12.3 The Head of Department/Recognized Institution shall forward to the University a consolidated list of all those who are admitted to the Ph.D programme within ten days after the validity of the rank list.

12.4 The University shall allot registration numbers to students admitted for the Doctoral Programme with effect from the date on which he/she paid the prescribed fees and was admitted to the respective Department/School/Centre/Recognized Institution concerned.

12.5 The time schedule for the admission and registration process will be as decided by the University form time to time and shall be published in its website.

12.6 Candidates who are exempted from DAT under the Clause 10.1.1 to 10.1.4 (with assured fellowship) may be admitted at any time during the academic year on submission of applications in the prescribed format with the consent from a recognized research supervisor and the recommendations of the Research Committee.

12.7 The University shall maintain the list of all Ph.D registered students on its website with the details such as the name of registered candidate, topic of research, name of Supervisor/Co-supervisor, and date of registration. All Academic Units of Research shall provide these details on year-wise basis to the Registrar before 31st December.

13. **Course Work**

13.1 After having been admitted, each Ph.D student (Both Full-Time and Part-Time) shall be required to undertake course work on a Full-Time basis for a minimum period of one semester with a minimum total of 18 credits. The course work should be completed within TWO years of joining for research, by all research scholars, failing which they will be deemed to have discontinued the Ph.D programme (Part-Time Research Scholars will have to take leave from their regular job and attend the course work for a semester on Full-Time basis). The course work shall be done along with the ongoing semester in the Department.

13.2 The course work shall be treated as pre-PhD preparation. The structure of the course work shall be as follows:

Course Number	Credits	Marks		Total marks
		Continuous Evaluation	End Semester Examination	
I	4	50	50	100
II	4	50	50	100
III	4	50	50	100
IV	2	50	50	100
V	4	-	100	100

The details of course shall be follows:

Course I   **4** Credits: Shall be covering the Board area of Research of the candidate. Syllabus and Title for this course shall be prepared by DC and approved by RC.

Course II   **4** Credits: Shall be covering the Specific topic of Research of the candidate. Syllabus and Title for this course shall be prepared by DC and approved by RC.

Course III **4** Credits: Shall focus on **Research Methodology** which covers areas such as quantitative methods, computer applications, research ethics, training, field work, etc. This course shall be designed for each faculty/department and shall be approved by the Faculty/RC concerned and may be conducted simultaneously in one or more academic unit of research.

Course IV   **2** Credits: This course on Research and Publication Ethics (RPE) is to create awareness about publication ethics and publication misconducts. The course structure and syllabus is as prescribed by UGC, and is mandatory in Ph.D course work.

Course V   **4** Credits: Shall be devoted to the preparation of a comprehensive report of review of literature relevant to the candidate's research and preparation, submission and defence of the Research Proposal.

13.3 Ph.D students with M.Phil degree, awarded complying with the UGC Regulations for awarding M.Phil/Ph.D in the same field of study, may be exempted from registering for Course I and Course III of the course work, if the Research Committee is satisfied that similar courses have been undergone by the students in the M.Phil. Programme.

13.4 Candidate may undergo course work in any academic unit of research with the approval of the concerned DC and RC.

13.5 Continuous evaluation shall be done by the teachers offering the courses. An end-semester examination (except course V) shall be carried out by a Board of Examiners approved by Research Committee. For course V, at the end of the semester, the student shall submit a report on the scope, relevance and purpose of the research work, its identified objectives, review of literature, research methodologies to be followed and expected outcome of the thesis work. The

evaluation of Course V shall be done by the Research Committee or a subcommittee nominated by the Research Committee at the end of the semester, through an open seminar.

13.6 Based on the marks obtained in the examinations, the students may be awarded grades as detailed below:

Range of Marks	Grades	Weightage
90% and above	S – Outstanding	10
(80-89)	A – Excellent	9
(70-79)	B – Very Good	8
(60-69)	C – Good	7
(50-59)	D – Satisfactory	6
Below 50%	F – Failed	0

Overall performance of the candidate will be indicated by Grade Point Average (GPA) calculated as follows:

$$GPA = \frac{G1 \times C1 + G2 \times C2 + G3 \times C3 + G4 \times C4 + G5 \times C5}{C1 + C2 + C3 + C4 + C5}$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of the corresponding course undergone by the student.

13.7 Students who are not able to acquire a minimum grade in each course shall be given one more chance to complete the course work successfully in the next semester when the course is offered. If he/she cannot acquire the required 18 credits within a period 24 months from the date of his/her Ph.D registration, his/her registration will be cancelled.

13.8 The research committee will scrutinize the grades awarded to the candidate in each course, and finalize the results. On successful completion of the course work by acquiring minimum of 18 credits, the candidate shall be given a certificate for eligibility for continuing doctoral research (both the Grade Cards and Certificate or Eligibility will be issued by the Chairman of Research Committee).

14. **Attendance**

14.1 A student registered as Full-Time research student will be required to have atleast 80% attendance in every semester failing which his/her name shall be removed from the rolls of the University subject to the existing provisions.

14.2 Every research student shall submit an attendance certificate and a report of the progress of research countersigned by the Supervisor and HOD/Head of the Institution pertaining to the previous semester before the payment of the next semester fees.

14.3 The Research Committee shall be empowered to condone the shortage of attendance upto 10% on an application made by the student, duly recommended by the Research Supervisor and endorsed by the Doctoral Committee.

14.4 A Research student will be eligible to attend conferences/seminars/symposia/specialized training programmes connected with his/her area of research or participate in research cruises or visit other places for collecting data, and all such days (including University holidays) when they were away from the Department/School/Centre or Recognized Institution, including days of travel,

shall count for attendance or for periods of being in residence at the University, if they have been duly authorized to do so by the Research Supervisor with intimation to the Head of the academic unit.

14.5 A candidate registered for Full-Time research shall be eligible to avail of leave for thirty days in one calendar year and maternity leave as per University rules, leave without fellowship for three months on medical grounds or for any other genuine reasons duly recommended by the Research Supervisor.

14.6 A Part-Time Research Scholar shall have a minimum attendance of 60 days each in a calendar year or on a pro-rata basis for part of the year. The days of minimum attendance shall also include days of eligibility of attendance as per relevant clauses.

14.7 Notwithstanding anything contained in these regulations a candidate who comes under the National/State or such other fellowship or scheme/project etc,. shall be governed by the respective rules governing the award of such fellowship/scheme/project, regarding attendance, leave etc.

15. Change of Research Supervisor

15.1 The Research Committee (DRC) shall have the power to consider the request of candidate to change his/her Supervisor or to have a Joint Supervisor provided that the request supported by his/her Supervisor and the prospective Joint Supervisor, and the request is recommended by the Doctoral Committee. If the Research Committee gives assent to the request, the matter shall be reported to the University.

15.2 However, such request for change of Supervisor or Joint Supervisor shall be made atleast one year prior to the candidate's giving notice for submission of the thesis for adjudication by examiners, provided that, this limitation shall not be applicable in the case where in the present supervisor is unable to continue supervision due to reasons of health, shifting of place of work/residence to a distant place etc.

16. Change of Academic Unit of Research

The Research Committee shall have the power to consider and to give assent to the request of the candidate for change of Academic Unit of Research, provided the request is recommended by the Research Supervisor and the Doctoral Committee and is accompanied by a 'No Objection Certificate' from the Head of the present and newly proposed recognized Academic Unit of Research. Such instances of request for change in the Academic Unit of Research shall be submitted to the University, which shall obtain the comments of the Dean of the Faculty concerned on the matter and inform the candidate of its decision.

17. Change of Area of Research

17.1 A Candidate who has registered for research shall be eligible to apply for the change of the topic or the area of research on payment of the prescribed fee and the Research Committee shall be competent to give assent to the request, which has been duly supported by the Research Supervisor, the Doctoral Committee and the University shall be informed accordingly. The Doctoral Committee shall examine if the change in topic or area is allowable with the course work already completed or if additional course work needs to be prescribed, considering that the topic or area of research has changed. Their explicit comments on the matter of adequacy of course work done shall accompany the topic or area change request/decision. If additional course work is required considering the change in topic or area the course work done earlier may be cancelled in full or part and the necessary additional course work completed within one year of the change being provisionally allowed. However, such an application for change of topic/the area of research shall be permitted only once during the period of registration, and further that the application for the same shall be made at least one year prior to the notice for submission of thesis.

17.2 A research student shall be eligible to request for approval of the title of his/her thesis and the Doctoral Committee shall be competent to give assent to the request. In case there is a change in the title of research, the request shall be made at least one month prior to the submission of the synopsis.

18.   Conversion of Registration from Full-Time to Part-Time

18.1 A Candidate who has registered for the Ph.D. Programme shall be eligible to apply for conversion of research work from full-time to part-time and vice versa. The request shall be duly recommended by the research supervisor and endorsed by the Doctoral Committee. The Research Committee shall be empowered to grant the conversion which shall be reported to the University for confirmation.

18.2 Conversion from part-time to full-time or vice versa will not be allowed more than three times during the period of registration.

19.   Progress of Research and Publications

19.1 All research students should give an open presentation on an annual basis in the Department (with due notification) on his/her progress of research, which will be duly certified by the Research Committee.

19.2 A research student shall have at least TWO research papers published/accepted in SCI/SSCI/SCOPUS indexed or UGC recognized journals (peer reviewed/refereed journals with ISSN numbers for humanities) and TWO paper presentations in conferences/seminars before the submission of synopsis. They should produce evidence for the same in the form of reprints/acceptance letters from the Journal and presentation certificates in conference/seminars. Out of the two journal papers required, one may be substituted by a patent application with number allocated by the concerned authorities.

19.3 While publishing any paper at the recognized institution under the Ph.D. program with CUSAT, the research scholar should additionally mention the affiliation with CUSAT, along with their parent institute address. The Doctoral Committee shall submit a certificate to this effect at the time of submission of thesis.

20.   Submission of the Thesis for Ph.D. Degree

20.1 Every candidate of the degree of Doctor of Philosophy shall be required to submit a thesis embodying the results of his/her research finding to the University for Adjudication by examiners.

20.2 A candidate who is registered for the Ph.D. Degree and has completed the course requirements shall be eligible to submit his/her thesis for adjudication, on completion of a minimum period of two years of registration for Full-Time research scholars and three years for Part-Time research scholars.

20.3 The thesis shall be written in English, except the case of these from the Faculty of Humanities where the language of the thesis shall be in the language of study and should conform to the format and standard prescribed by the University from time to time.

20.4 A Candidate proposing to submit the thesis shall submit a synopsis of the same at least one month in advance to the University, and such intimation shall be accompanied by a certificate from the Head of Academic Unit of Research that he/she has presented the salient features of the proposed thesis in a pre-synopsis seminar in the Academic Unit of Research with notice to all RC members and the Research Scholars. If the presentation is not found satisfactory and major changes are recommended by the RC members, the candidate shall have to repeat the presentation.

Recommendations for any changes if made during the pre-synopsis seminar have to be examined by the DC for incorporation at that stage and appropriate decision taken. After successful presentation, the Scholar shall submit the synopsis as given below:

a) 5 copies of the Synopsis of the thesis not exceeding ten pages, highlighting the literature review, problem selected, objectives, methods used in the research, observations, findings, a brief discussion and conclusion. It shall also have a list of references cited in the synopsis.

b) Copy of the Grade cards in respect of the Ph.D. course work.

c) Copy of at least two published research paper/letter of acceptance with a copy of the manuscript along with a certificate from the Doctoral Committee to the effect that the paper is published in a refereed journals as specified in para 20.2, and certificate of at least two conference paper presentations during the period of Ph.D. registration. The above published papers and conference papers should be related to the work presented in the thesis.

d) Attendance certificate from the Head of Academic Unit of Research.

e) A certificate from the Head of Academic Unit of Research stating that the candidate has presented his/her pre-submission synopsis seminar.

f) A certificate from the Research Supervisor to the effect that all the relevant corrections and modifications suggested by the audience during the pre-synopsis Seminar and recommended by the Doctoral Committee of the candidate has been incorporated.

g) Recommendation of the Doctoral Committee to the effect that work of the candidate is adequate and complete for the award of the Ph.D. degree.

h) Evidence of having paid the required fees prescribed by the University.

20.5 The candidate shall submit the thesis within THREE months from the date of submission of synopsis. The delay in submitting the thesis beyond THREE months, but within SIX months may be condoned by the Research Committee on the recommendation of the Doctoral Committee. The Vice-Chancellor may condone delay for a further period of six months in exceptional cases, provided further that the candidate shall submit the thesis only during the period of his/her registration.

20.6 The candidate shall submit FIVE copies of the thesis prepared in the language proposed to be used in the thesis, and conforming to the specification if any prescribed by the University along with a CD containing soft copy of the thesis in PDF format.

20.7 The thesis shall be accompanied by the following:

a. A declaration signed by the candidate to the effect that the thesis is the outcome of the original work done by the candidate and that the work did not form part of any dissertation submitted for the award of any degree, diploma, associate ship, or any other title or recognition from any University/Institution.

b. A Certificate by the Research Supervisor (s) to the effect that to the best of his/her/their knowledge the thesis is a bonafide record of research carried out by the candidate under his/her/their supervision and that the work has not been submitted for the award of any other degree/diploma of the same Institution where the work was carried out, or to any other Institution.

c. The University Library shall make available a facility for plagiarism checking and shall on the request of a supervisor assist in running the plagiarism check and issue the plagiarism report. The supervisors should assure that the plagiarism level shows less than 15 percent values for the overall thesis. Similarity with self-declared published work of the Scholar will be permitted. While submitting for the thesis for evaluation, the supervisor should issue a certificate vouching that the plagiarism level is below 15%.

d. An appendix containing list of research articles published by him/her jointly with the supervising guide and others in the same area of study as evidence of the research work done by the candidate.

21. **Procedure for Adjudication of the Thesis**

21.1 The Panel of experts prepared by the Doctoral Committee shall be forwarded to the University duly verified by the concerned Dean of Faculty. In the case of recognized institutions, panel of experts prepared by the Doctoral Committee shall be submitted to the University by the concerned Head of Institution which will be forwarded to the Dean of the Faculty concerned for verification. The panel should contain names of at least ten experts not below the rank of an Associate Professor of a University or an equivalent rank in a reputed research institution working in the area of research of the thesis. At least SEVEN experts of this panel should be from outside the State/Country.

21.2 The thesis to be adjudicated shall be forwarded to THREE external examiners nominated by the Vice-Chancellor from the panel of experts of which at least TWO shall be from outside the State/Country.

21.3 Each examiner shall be requested to send a report on adjudication of the thesis, wherein it shall be specifically stated, whether or not the examiner recommends the award of the degree based on the written thesis, with reasons for the recommendation. If the thesis does not meet the standard expected of a Ph.D. thesis, the examiner may recommend that the thesis be rejected or resubmitted after doing additional work.

21.4 In the event of the receipt of the evaluation reports from all the examiners, if any two out of the three examiners recommend the thesis for the award of Ph.D. Degree, the University shall make arrangements for the conduct of the open defence and viva voce examination.

21.5 In case only one examiner has recommended and the other two have not recommended, then the thesis shall be sent to a fourth examiner whose recommendations shall be binding on the University for accepting or rejecting the thesis.

21.6 But if any of the examiners suggests resubmission of the thesis, the candidate may resubmit the thesis incorporating the changes proposed by the examiner (s) after payment of such fees as may be prescribed by the University.

21.7 On resubmission, the thesis shall again be sent for adjudication to the same examiner who had recommended revision. If the same examiner is not available, another examiner shall be selected from the same panel by the Vice-Chancellor.

21.8 The candidate shall have no further chance for resubmission of the thesis and the decision to accept or reject the thesis at this stage shall be final.

22. **Open defence and viva voce**

22.1 If the examiners recommend for the award of the Ph.D. Degree, the University shall make arrangements for the conduct of open defence and a viva voce examination. If corrections or modifications are suggested by the examiners the candidate shall be required to submit the hard copy of the thesis along with a soft copy in PDF format after incorporating all correction/suggestions made by the examiners along with a certificate from the supervisor to this effect before scheduling of the Open Defence.

22.2. The open defence/viva voce board shall consist of the Dean of the Faculty as Chairman and any one of the examiners (preferably one among the thesis examiners) nominated by the Vice-Chancellor from the panel of adjudicators of the thesis, the Research Supervisor and Joint Supervisor, if any, as members. The Supervisor shall be the convener of the Open Defence.

22.3. Open defence and viva voce examination shall be held at a place and time decided by the University after making prior announcement of the same in the website and issuing the notice to all the Departments/Schools/Centres/Recognized Institutions coming under the faculty.

22.4. During the Open Defence of the thesis, the candidate has to explain the motivation and relevance of the work, innovation in methodology and salient features of the findings. He/She shall satisfactorily answer the questions put forward by the audience and the examiners.

22.5. The Chairman and the external expert shall necessarily be present at the Open Defence/viva voce examination.

22.6. If, in the opinion of the board of examiners, the candidate is successful in defending the thesis satisfactorily, a consolidated report is prepared and presented to the University recommending the award of the Degree.

22.7. If, in the opinion of the board, the candidate is not successful in defending the thesis, he/she shall be given an additional opportunity after one month, after payment of the prescribed fee, and the decision of the board at this examination shall be final.

22.8. The award of Ph.D. Degree will be with effect from the date of successful completion of viva voce examination as noted by the consolidated report of the Board of Examiners. On successful completion of the viva-voce examination, a notification shall be issued which shall contain the Name of the Candidate, Name(s) of the Supervisor(s), Title of Thesis, Subject and Faculty under which the Degree is awarded.

22.9 The University shall issue a provisional certificate to the candidate to the effect that he/she has successfully fulfilled the entire requirement including course work for the award of the degree of Doctor of Philosophy in accordance with the UGC guidelines. The regular Ph.D. Degree Certificate shall be issued thereafter.

23. Period of Registration/Duration of the Programme

23.1 A candidate who is registered as a research student shall remain on the rolls of the University for a maximum period of FIVE years provided that he/she satisfies the periodic progress and the dues are cleared as per rules. On receipt of an application for extension duly recommended by the Doctoral Committee (DC) of the research scholar concerned along with the fees for the application duly paid, the Research Committee (RC) shall have the powers to grant an extension for a maximum period of one year, which will be intimated to the University for recording the same. However, the application should be submitted before the expiry of the registration period.

23.2 If the candidate (a) completes the research work, (b) has two UGC approved journal publications/at least one research Publication in a UGC approved Journal and one conference paper presentation (c) presents the Pre-Synopsis submission seminar within the extended period of one year granted by the Research Committee (RC), then the scholar is eligible to seek another extension for a maximum period of one more year for completing the publication requirements and submission of the thesis. The Vice-Chancellor shall have the powers to sanction this extension of one year based on the application of the candidate and recommendations of the DC and RC concerned.

23.3 No more extension will be granted after the expiry of SEVEN years.

23.4 The candidate shall cease to be on the rolls of the University as a research student on submission of the thesis or from the date on which his/her registration is cancelled or lapsed for any reason.

24. Publication of the Thesis

24.1 Following the successful completion of the evaluation process and announcement of the award of the Ph.D. degree to the candidate, the Ph.D. Thesis shall be uploaded to the National Repository

for hosting the same so as to make it accessible to all Institutions, after a period of six months from the date of award.

24.2 A candidate who has been awarded the Degree of Doctor of Philosophy shall be free to publish his/her thesis with a proper acknowledgement to the University. A copy of the thesis so published shall be given by the candidate to the University.

25. Transitory Provisions

25.1 The present regulations shall supersede all earlier regulations in the matter, and all registrations of candidates from the date notified by the University, for the degree of Ph.D. shall be made under these regulations.

25.2 A student registered under the earlier regulations shall be eligible to opt to come under these regulations, but such options shall be exercised within a period of six months from the date of notification of these regulations. All students who do not exercise their option to move to this regulation by submitting an option letter to the University through proper channel shall be deemed to have decided to continue under their present regulations.

26. Payment of Fees

Every research student shall be required to pay, in time, the fees prescribed by the University every semester. The registration of the research student will be cancelled, if he/she fails to pay the fee in the stipulated time (December 31st for odd semester and June 30th for even semester). The University shall fix the fees to be paid by the student for applying for various permissions and relaxations provided for in these regulations, such as condonation of attendance shortage, conversion of registration from Full-Time to Part-Time, or any other matter. Any modifications in this regard will be binding on all research scholars on the rolls at that time.

File Ref.No.Ac.B2/Ph.D Admission/2021 (P/F)

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY
(Abstract)

Ph.D. Regulations 2020 – Modification of Clause 11.1– Sanctioned by the Vice-Chancellor – Subject to reporting to the Academic Council – Reg.

ACADEMIC 'B' SECTION

No. CUSAT/AC(B).B2/3268/2021   Dated, Kochi-22, 23.09.2021

Read: 1.   Letter No.ISP2/Ph.D/69/2021-22/250 dated 25.08.2021, from the Director, International School of Photonics.
         2.   Letter No.DS/Ph.D Admission/2021-22 dated 12.08.2020 from the Head, Department of Statistics.
         3.   U.O.No. Ac.B2/Ph.D Regulations/2020 dated 11.08.2021.

ORDER

The Director, International School of Photonics & the Head, Department of Statistics, vide papers read as (1) & (2) above respectively, have sought clarifications on Clauses 10.1.2, 10.1.6 & 11.1 of Ph.D Regulations, 2020.

Considering the above, the Vice-Chancellor has accorded sanction for the modification of Clause 11.1 of Ph.D Regulations, 2020 as follows:

Existing Provision of Ph.D Regulations, 2020	Modifications approved by the Vice-Chancellor
Preparation of Rank list Clause 11.1:- The rank list will be prepared with the following weightage of marks **DAT qualified candidates** a) Written Test : 50% b) Master's Degree : 25% c) NET/GATE/similar exams : 5% d) Interview : 20%	**a) Preparation of Rank list** Clause 11.1:- The rank list will be prepared with the following weightage of marks **DAT qualified candidates** a) Written Test : 50% b) Master's Degree : 30% c) Interview : 20% d) **In addition to the above, 10 marks will be awarded to those who have qualified NET/GATE/similar exams.** e) **Total marks will be 110**
DAT exempted candidates a) Master's Degree : 50% b) Interview : 50%	**DAT exempted candidates** a) Master's Degree : 50% b) Interview : 50% c) **In addition to the above, 10 marks will be awarded to those who have qualified NET/GATE/similar exams.** d) **Total marks will be 110** **b)Separate rank lists shall be prepared for** (i) Candidates with DAT written test exemption and (ii) Candidates with DAT c) **Admission shall be made from DAT qualified candidates first and on exhausting the same, from DAT exempted candidates**

Sanction is also accorded by the Vice-Chancellor for the following:-

1. Not to consider Teachers from CAPE/IHRD under DAT exempted category and there is no modification to Clause 10.1.6 of Ph.D Regulations 2020, i.e. Regular and permanent teachers from University Departments, Government & Aided Colleges within the State with a minimum continuous service of 5 years as permanent teachers.

2. There is no modification to Clause 10.1.2 of Ph.D Regulations 2020.

3. The modifications and resolutions will be effective for Ph.D Admission with effect from 2021 onwards, subject to reporting to the Academic Council.

Orders are issued accordingly.

Dr. MEERA V.
REGISTRAR

To

1. The Heads/Directors/Principals of all Research Departments & Colleges of the University.
2. The Heads/Directors/Scientist-in-Charge/Principals of all Recognized Research Centres of CUSAT.
3. All Deans of the Faculties.
4. The Controller of Examinations/Joint Registrar (Exams/Academic).
5. The Joint Director, Kerala State Audit Department/Director, Directorate of Public Relations and Publications/Statistical Officer
6. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar
7. Examination 'T'/Academic 'C' Sections.
8. The Director, CIRM – with a request to publish the same in the University website.
9. Day File/Stock File/File Copy.

കൊച്ചി ശാസ്ത്ര സാങ്കേതിക സർവ്വകലാശാല
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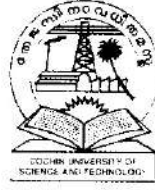
COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No. Ac.C1/Dean's Committee/2021   Date: 13.08.2021.

NOTIFICATION

In exercise of the powers conferred by Section 24(ii) read with Section 42(1) of the Cochin University of Science and Technology Act 1986, the Academic Council at its meeting held on 03.03.2021, resolved to approve the P.G. Regulation with effect from 2021 Admissions onwards as in the Appendix.

The Syndicate at its meeting held on 26.07.2021, vide Item No. 688.26, considered and resolved to approve the above decision of the Academic Council.

REGISTRAR

To

1. The Dean's of all Faculties, Cochin University of Science and Technology, Kochi – 22.
2. The Head/Directors of all Departments, CUSAT, Kochi – 22
3. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar
4. The Controller of Examinations/The Director, Directorate of Admissions/
   Joint Registrar (Exams)/ Deputy Registrar (Exams/Directorate of Admissions).
5. All Exam Sections/Academic A/B Sections
6. Day File/Stock File/File Copy

REGULATION FOR POST GRADUATE PROGRAMMES UNDER CHOICE BASED CREDIT SYSTEM (CBCS) OFFERED BY THE UNIVERSITY DEPARTMENTS / SCHOOLS / CENTRES
(To be effective from 2021 admissions)

1. **SCOPE**

    1.1 These Regulations shall apply to all M. Sc., MA, MBA and MCA, programmes conducted by the Departments/Schools of the Cochin University of Science and Technology with effect from 2021 admissions.

    1.2 The provisions herein supersede all other Regulations with respect to such PG programmes unless otherwise provided.

2. **DEFINITIONS**

    2.1 *Academic Committee* means the committee constituted by the Vice-Chancellor under this regulation to monitor the conduct of the programmes.

    2.2 *Core course* means a course that the student admitted to a particular programme must successfully complete in order to receive the Degree and which cannot be substituted by any other course.

    2.3 *Elective course* means a course, which can be substituted by equivalent courses from the same or other Departments/Schools.

    2.4 *Audited course* means a course which can be opted by a student but which will not accrue any credit.

    2.5 *Department/School* means Departments/Schools instituted in the University as per Statutes and Act.

    2.6 **All PG programmes following this regulation will be of Second Level.**

3. **ELIGIBILITY FOR ADMISSION**

    As per the eligibility criteria prescribed by the University from time to time.

4. ADMISSIONS

    As per the Regulations prescribed by the University from time to time. After completing the admissions, each student shall be assigned a Unique Registration Number, in a format suggested by the university, by the concerned department which will be valid throughout his/her programme of study in the University.

5. COURSE REGISTRATION

5.1   Every Department/School shall have faculty members as student advisors. Each student will be assigned to an Advisor/Mentor, within one week from the commencement of the course, by the department council. He/She will advise the student about the academic programme and counsel the student on the choice of courses for the coming semester depending on the student's academic background and objective. The student will then register for the courses he plans to take for the semester before the classes begin and within the time prescribed by the University. The student should have completed the prescribed prerequisites if any for a course before registration. The Advisor/Mentor can be a contract/adjunct faculty. The student has to be closely monitored and motivated by the Advisor. The Advisor/Mentor should have up-to-date knowledge on the performance of the students as he/she go through the programme and must keep frequent contact with the students. In addition, one faculty coordinator will be assigned to an incoming batch of students to each Programme by the Department council. The faculty-coordinator will synchronize the activities of the batch.

The Department offering any course shall prescribe the maximum number of students that can be admitted taking into consideration the facilities available. Core courses of any programmes are to be compulsorily offered by the respective Department that offers the programme.

In any Department, preference shall be given to those students for whom the course is a core-course.

A student can drop an elective/audit course(s) within *10* working days after the commencement of the classes.

5.2   University shall make available to all students through CUSAT website a Bulletin in listing all the courses offered in every semester specifying the credits, prerequisites, list of topics, the course intends to cover, the instructor who is giving the courses, the time and place of the classes for the courses. Each course shall have a code consisting of first two digits indicating the year of revision of syllabus/curriculum, following three characters/digits denoting the department and the next four digits of which the first digit will be 2 indicating the level of the course, second indicating the Semester and third and fourth digits the serial number of the course. However in such Departments having more than one Masters Programme of the same level, of the three characters/digits denoting the Department, the third one will represent the course of study.

6. COURSE STRUCTURE

6.1   The CBCS system will be fully internal in all sense. There shall be three kinds of courses: Core, Elective and Audit courses. Normally all core courses shall have two / three / four credits except in cases where only project/dissertation including seminars are involved in which case the minimum credit shall be sixteen. Elective courses, if any offered through Massive Open Online Course (MOOC) can have two/three/four credits. Any such online courses should be pre- approved by the Department Council before the beginning of a semester to ensure quality and suitability.

In the case of online courses attended by the student, a proof of satisfactory completion and marks/grade issued by the authority who conducted the course must be submitted to the Head of the Department. Head/mentor/advisor may conduct a viva on the subject of the online course if found necessary.

6.2   The minimum number of the Credit in a semester shall not be less than 16. For Departments under Science faculty conducting Integrated Programmes, the minimum total credits required for the last four semesters of integrated programmes should be 80 and it should be the same as total credits required for two year M.Sc. Programmes.

6.3   The Department Council shall make recommendations on the content of core and elective courses including the detailed syllabus pertaining to each programme offered by the Department to the University to be approved by the concerned Board of Studies, Faculty and Academic Council. The Department Council shall have the freedom to design and introduce new electives and audited courses, to modify/redesign existing electives and to replace any existing electives with new or modified/redesigned electives to facilitate better exposure and training for the students. Prior approval from the Board of Studies and Academic Council is not required for such modifications in the electives, but shall be done only with the approval of the Academic Committee. Such changes shall be placed in the Board of Studies, Faculty and Academic Council in the next meeting for ratification.

6.4   The general structure of the programme shall be as given below:

A minimum 75 % attendance is compulsory. Heads of Department can give five percent condonation with the approval of Department Council. The Vice- Chancellor shall have the power to condone shortage of attendance upto 10% on medical grounds on the recommendations of the Head of Department. However, such condonation for shortage of attendance shall be given only once during the entire programme of study.

	MA/ M.Sc other than from the Faculty of Science	M.Sc from the Faculty of Science	MBA (Full Time)	MBA (Part Time)*	MCA
Programme duration	4 Sem	4 Sem	4 Sem	6 Sem	4 Sem
Accumulated minimum credit required for successful completion of the programme	72	80	102	102	72

Note: *MBA (Part Time) Programme is stretched to 6 semesters with the same content as the full-time programme with 4 semesters.

Each semester shall have a minimum of 16 weeks duration and one credit shall be given for one-hour lecture or 2 hours of practical work per week. No regular student shall register for more than 24 credits per semester and less than 16 credits per semester. In the case of MBA (PT) programme, the minimum and maximum credits per semester will be 12 and 19 respectively.

6.5   A student shall compulsorily register and complete atleast one Online course/ Interdisciplinary Elective (IE) course/ Industry based course (one of the Electives) from other Departments/Schools/Industry before registering for the final semester of the Programme. However, MBA (PT) programme may be exempted from this clause. For the 'Industry based course' one faculty member from the department will be responsible along with the industry partner in designing course and evaluating the student and awarding the grade.

Each department shall encourage the students to register for MOOC/ SWAYAM/ NPTEL Courses during the second or third semester. The credit for the online courses shall be 2. The Students in consultation with the course adviser or the Department council have to register for the course.

6.6   At the end of the second semester, students should be encouraged to go for an internship or carry out a mini project in the area of their interest. For the internship/mini project, a candidate can have an internal guide and external guide (Institution /Industry).

7. EVALUATION

7.1   The entire system of evaluation is internal. The evaluation scheme for each semester contains two parts, a continuous assessment and a semester end examination. The continuous assessment shall consist of minimum of two tests and assignments/seminars/quizzes etc. which shall be notified to the students at the beginning of the semester. The marks obtained in the continuous assessment shall be displayed on the notice board and grievances if any may be addressed to the Head of the Department. The Department Council shall finalise the marks of the continuous assessment of each course after addressing such grievances.

           The semester end examination will be of 3 hours duration and shall cover the entire syllabus of the course. Equal weightage shall be given for the continuous assessment and the semester end components.

           All practical examinations will be internally evaluated as per the procedures laid down by the Department Councils concerned.

7.2   The question paper for the semester end examination shall be set by the concerned teacher in advance, which shall be scrutinized by the respective department council or by a committee consisting of the HOD and faculty members offering courses in that semester to ensure that questions are within the scope of the syllabus and that the entire syllabus of the course is fairly covered in the question paper. Modifications can be suggested by the council if necessary and such suggestions shall be incorporated in the final version of the question paper.

           There shall be only a single evaluation for the semester end examination. Immediately after the examination is over, the Head of the Department shall make arrangements to complete the evaluation and finalize the results within 10 working days from the date of the last examination. The marks and grade in all the courses obtained by the students have to be displayed in the notice board and the answer scripts can be shown to the students for scrutiny if requested.

7.3   For each course there shall be a separate minimum of 50% marks for both the semester end examination and the continuous assessment part. A student who fails to obtain 50% marks in the continuous assessment part of a course will have tore-register and repeat the course at a suitable later time when the course is offered again (if the failed course is a core course) or re-register for the same or a different course (if the failed course is an elective).

7.4   The Department shall publish the marks obtained by the students, in the continuous assessment and semester end examination. If the student has any grievance, he/she can approach the concerned teacher and submit his/her grievance with supporting documents/arguments. The teacher and the HOD will examine the case and decide on his/her grievance. If the student is not convinced with the decision, he/she can approach the appellate authority, which is the department council, in writing and the council shall examine the same and take a final decision which has to be intimated to the student in writing. **The decision of the appellate authority shall be final**. Finalized continuous assessment marks should be uploaded in the University Examination web portal at least 5 working days before the commencement of the end semester examinations.

7.5   The final marks and grades obtained by the students shall be published in the notice board. Those who fail in the end-semester examination of any core or elective course shall approach the concerned teacher if necessary, for a re-examination. Within ten days of the display of the results in the notice board, the department shall conduct an additional semester end examination for these candidates. This re-examination is only to provide the student a chance to pass the examination by completing the course successfully. If he/she completes the course successfully making use of this additional chance, he/she will be awarded only a 'D' grade enabling the candidate to be declared successful in that course. If he/she cannot make it up, he/she may repeat the semester end examination of that course in the next available chance. If the student re- registers and repeats the course, he/she may be awarded the actual grade he/she obtains. The maximum duration for completing any PG degree programme will be 4 years except for MCA/MBA (PT) for which it will be 6 years from the date of commencement of first semester. The marks of the end-semester examinations should be uploaded in the University Examination web portal.

7.6   The result of the examinations will be finalized and published by the department council, which will act as the passing board and the minutes shall be sent to the controller of examinations for issue of semester grade transcript.

8.   <u>SEMESTER GRADE-TRANSCRIPT</u>

8.1 The University under its seal shall issue a semester Grade transcript to the students on completion of each semester. The semester Grade transcript shall contain the following:

a.   Title of the course taken as core, elective and audit. (An audit course shall be listed only if the student has secured a pass).

b.   Title of the online course.

c.   Title of the Major project if any.

d.   The credits associated with and the grades awarded for each course.

e.   The number of credits (core and elective separately) earned by the student and the Grade Point Average.

f.   The total credits (core and elective) earned till that semester.

8.2 The following grading system shall be adopted for all the programmes. The following grades will be awarded based on the overall performance in each subject.

Range of Marks	**Grades**	**Weightage**
90 and above	S-Outstanding	10
80 to 89	A-Excellent	9
70 to 79	B-Very good	8
60 to 69	C-Good	7
50 to 59	D-Satisfactory	6
Below 50%	F-Failed	0

Overall performance at the end of the semester will be indicated by Grade Point Average (GPA) calculated as follows.

$$GPA = \frac{G1C1+G2C2+G3C3+ \ldots\ldots GnCn}{C1+C2+C3+\ldots\ldots\ldots\ldots\ldots\ldots Cn}$$

'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student. At the end of the final semester Cumulative Grade Point Average (CGPA) will be calculated based on the above formula, considering the Credits and Grades earned during the entire programme of study.

Classification for the Degree/Diploma will be given as follows based on the CGPA:

First Class with distinction	8 and above
First Class	6.5 and above
Second Class	6 and above

8.3   The Semester Grade transcript issued at the end of the final semester shall contain the details of all the courses taken which shall include the titles of the courses, the credits associated with each course, the CGPA and the class.

8.4   **The CGPA to percentage conversion may be done via the formula %marks = (CGPA-0.5)*10.**

9. **MONITORING AND MANAGEMENT OF PROGRAMMES**

9.1   Every post graduate programme conducted in the Departments shall be Monitored by the Department Council subject to these regulations. Such monitoring shall include design of programmes, prescribing the mode of conduct of the programmes and monitoring the evaluation process of students.

10. ACADEMIC COMMITTEE

10.1 There shall be an Academic Committee constituted by the Vice-Chancellor to monitor and co-ordinate the working of the CBCS System. The committee can approve the elective courses suggested by the respective departments, and ensure that the syllabi of such elective courses are passed by respective Board of Studies and Academic Council.

The Committee shall consist of:

a The Pro-Vice-Chancellor - Chairman

b The Registrar - Secretary

c The Controller of Examinations

d One Teacher from each Department

10.3 A Senior Professor nominated by the Vice-Chancellor from among the members of the Committee shall be the Vice-Chairman of the Committee.

10.4 The term of the office of the committee shall be two years, but the committee once constituted shall continue in office until a reconstituted committee assumes office.

11. TRANSITORY PROVISION

Notwithstanding anything contained in these regulations, the Vice-Chancellor shall, for a period of one year from the date of coming into force of these regulations, have the power to provide by order that these regulations shall be applied to any programme with such modifications as may be necessary.

12. REPEAL

The Regulations now in force, in so far as they are applicable to programmes offered in the University Departments and to the extent they are inconsistent with the existing regulations, and the regulations relating to the CBCS System in their application to any programme offered in a University Department, the latter shall prevail.

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No.Ac.C1/Faculty of Technology/2020-21(III)   Dated: 17.02.2021

NOTIFICATION

In exercise of the powers conferred by Section 24(ii) read with Section 42(1) of the CUSAT Act 1986, the Academic Council at its meeting held on 06.11.2020, resolved to approve the revised Regulation for P.G. Programmes in Engineering/Technology under Choice Based Credit System as in Appendix, with effect from 2020 admissions onwards.

The Syndicate at its meeting held on 25.01.2021, vide Item No.683.29 considered and resolved to approve the above decision of the Academic Council.

REGISTRAR

To
1. Dr. C.K. Aanandan, Dean, Faculty of Technology and Professor (Retd), Department of Electronics, CUSAT, Kochi-22
2. The Chairman of all Board of Studies under the Faculty of Technology/Engineering, CUSAT, Kochi-22
3. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar
4. The Controller of Examinations/Joint Registrar (Academic/Exams)/ Deputy Registrar (Exams)/Assistant Registrar (Exam/Academic)
5. Academic A/C/Exam B/D/E/Y/P/Exam Confidential Sections
6. Day File/Stock File/File Copy

Sr.

REGULATION FOR POST GRADUATE PROGRAMMES IN ENGINEERING /TECHNOLOGY UNDER CHOICE BASED CREDIT SYSTEM (CBCS) OFFERED BY THE UNIVERSITY DEPARTMENTS/SCHOOLS

1. SCOPE

1.1 These Regulations shall apply to all M.Tech programmes conducted by the Departments/Schools of the Cochin University of Science and Technology.

1.2 The provisions herein supersede all other Regulations with respect to such programmes unless otherwise provided.

2. DEFINITIONS

Department/School means Departments/Schools instituted in the University as per Statutes and Act. Core course means a course that the student admitted to a particular programme must successfully complete in order to receive the Degree and which cannot be substituted by any other course. Core course is offered by the Department where the student takes admission.

Elective course means a course, which can be substituted by equivalent courses from the same or other Departments/Schools.

Audited course means a course which can be opted by a student but which will not accrue any credit.

3. ELIGIBILITY AND ADMISSION PROCEDURE

As per the rules prescribed by the University from time to time.

4. ADMISSIONS

As per the Regulations prescribed by the University from time to time.

Each student admitted to a program shall be assigned a Unique Registration Number by the department concerned in a format prescribed by the university, which will be valid throughout his/her programme of study in the University.

5. COURSE STRUCTURE

5.1 The course content of M.Tech. Programmes shall consist of theory courses, practical courses, seminar, industrial training (optional) and project work.

5.2 The Department Council shall make recommendations on the content of core and elective courses including the detailed syllabus pertaining to each programme offered by the Department to the University to be approved by the concerned Board of Studies, Faculty and Academic Council

5.3 The curriculum for the first two semesters shall generally consist of theory courses, practical courses and seminar. There shall be three kinds of courses: Core, Electives and Audit courses. All core courses shall have three or four credits except in cases where only project/dissertation including seminars are involved in which case the minimum credit shall be sixteen. In all the programmes of study the elective courses (including inter departmental electives) shall have only three credits. Elective courses, if any offered through Massive Open On line Course (MOOC) can have two credits. Practical course / seminar will have one or two credits.

5.4 In the case of online courses attended by the student, a certificate of satisfactory completion and marks/ grade if any issued by the authority who conducted the course must be submitted to the Head of the Department. The Department can conduct a viva on the subject of the online course if necessary. On the completion of this, department council can award the respective weightage/grade to the student.

5.5 The number of credits for the project work in third and fourth semesters shall be in the range of 15 – 18 each.

6. COURSE REGISTRATION

6.1 Every Department/School shall have Faculty Members as Student Advisors. Each student will be assigned to an Advisor/Mentor, by the Department council within one week from the commencement of the classes, who will counsel the student on the choice of elective courses depending on the student's academic background and objective. The student will then register for the courses he plans to take for the semester within the time prescribed by the University. The student should have completed the prescribed prerequisites if any for a course before registration.

6.2 The Department offering a course shall prescribe the maximum number of students that can be admitted taking into consideration the facilities available.

6.3 The student can drop any elective/audit course(s) within 15 working days after the commencement of the classes.

6.4 University shall publish a Bulletin listing all the courses offered in every semester specifying the credits, prerequisites, list of topics the course intends to cover, the instructor who is giving the courses, the time and place of the classes for the courses. Each course shall have a code consisting of first two digits indicating the year of revision of syllabus/curriculum, following three digits denoting the program code, the next two digits indicating the semester and last two digits denote the serial number of the course.

6.5 A student shall register and complete at least one Interdisciplinary / industry based/online course as one of the Electives before registering for the final semester of the Programme.

6.6 Each Department/School will announce at least one interdisciplinary course (Elective) to be offered by them, in the "E" slot of the Common Time-table. This interdisciplinary course (Elective) shall not have any prerequisite.

6.7 No regular student shall register for more than 24 credits per semester and less than 16 credits per semester

7. EVALUATION

7.1 A student would be considered to have progressed satisfactorily at the end of a semester if he/she has a minimum of 75 % attendance. The evaluation is completely internal.

7.2 The entire system of evaluation is internal. The evaluation scheme for each semester contains two parts, a continuous assessment and a semester end examination. The student shall be evaluated continuously throughout the semester and marks shall be awarded on the basis of tests / assignments as detailed below:

7.3 There shall be two class tests, assignment and an end semester examination. The first class test carries 20 marks and will be based on the portions of the syllabi covered till then. The second class test also carries 20 marks and will be based on the portions covered till then after the first class test. A maximum of 10 marks will be awarded for the assignments

7.4 The end semester examination will be for 50 marks and shall contain questions from the entire syllabus of the course. The duration of the end semester examination shall be three hours.

7.5 All practical examinations will also be internally evaluated as per the procedures laid down by the Department Councils concerned.

7.6 Marks obtained in the continuous assessment shall be displayed on the notice board and grievances if any may be addressed to the teacher concerned/Head of the Department with supporting documents. The teacher and the HOD will examine the case and decide on his/her grievance. If the student is not convinced with the decision, he/she can approach the appellate authority, which is the department council, in writing and the council shall examine the same and take a final decision which has to be intimated to the student in writing. The decision of the appellate authority shall be final.

7.7 There shall be only a single evaluation for the semester end examination. Immediately after the end semester examination is over, the Head of the Department shall make arrangements to complete the evaluation and finalize the results within 10 working days.

7.8 The pass minimum in a subject is 50 %, with a separate minimum of 45% for end semester examination

7.9 The final marks and grade in all the courses obtained by the students in that semester will be displayed in the notice board. Those who could not obtain 50% marks (Grade D) in total for a course will be declared as failed in that course.

Those who fail in any course shall approach the teacher concerned if necessary, for a reexamination of the semester end examination. Within ten days of the display of the results in the notice board, the department shall conduct an additional semester end examination for these candidates. This reexamination is only to provide the student a chance to pass the examination by completing the course successfully. If he/she completes the course successfully making use of this additional chance, he/she will be awarded only a D grade enabling the candidate to be declared successful in that course.

If he/she cannot make it up, he/she may repeat the semester end examination of that course along with the subsequent batches, or re-register and repeats the course. In this case he/she will be awarded whatever grade he/she has secured.

8. PROJECT WORK

8.1 Project evaluation shall be done at the end of III and IV semesters in the case of full time programmes and at the end of V and VI semesters in the case of part time programmes.

8.2   The evaluation at the end of III Semester (Full time)/ V Semester (Part time) shall be conducted by an examination committee consisting of the head of the department /school / division, a senior teacher nominated by the head and the project guide.

8.3   At the end of IV or VI semester, the students will have to submit a dissertation on his / her project work to the Head of the Department/School within the last date prescribed for the purpose

8.4   The dissertation will be evaluated by an examination committee consisting of the head of the department /school /division, another faculty member and the project guide. The candidate shall make an open presentation of his/her dissertation which will be followed by a viva-voce examination.

For the purpose of assessment, the performance of a student in the project dissertation may be divided into the following sub components:

At the end of III semester (Full time) / V Semester (Part time)

Assessment by the project guide

(Based on periodic assessment of the work of the candidate) -   50%

Assessment by the examination committee   -   50%

At the end of IV semester (Full time) / VI Semester (Part time)

 Assessment by the project guide

(Based on periodic assessment of the work of the candidate) -   50%

Assessment by the examination committee   -   50%

9. DECLARATION OF RESULTS

9.1   The result of the examinations will be finalised and published by the department council, which will act as the passing board   and the minutes shall be sent to the controller of examinations for   issue of grade card. The University shall issue mark lists/grade card at the end of each semester.

9.2   GRADE CARD

9.2.1 The University under its seal shall issue a Grade Card to the students on completion of each   semester. The Grade card shall contain the following:

a.   Title of the course taken as core, elective and audit. (An audit course shall be listed only if the student has secured a pass)

b.   The grades awarded for each course along with the course credit.

c. The number of credits (core and elective separately) earned by the student and the Grade point Average.

d. The total credits (core and elective) earned till that semester.

9.2.2 The following grades will be awarded based on the overall performance in each subject.

Range of marks	Grades	Weightage
90 and above	S-Outstanding	10
80 to 89	A-Excellent	9
70 to 79	B-Very good	8
60 to 69	C-Good	7
50 to 59	D-Satisfactory	6
Below 50%	F-Failed	0

Overall performance at the end of the semester will be indicated by Grade Point Average (GPA) calculated as follows.

$$GPA = \frac{(G1C1+G2C2+G3C3+\ldots\ldots GnCn)}{(C1+C2+C3+\ldots\ldots\ldots\ldots\ldots Cn)}$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student. At the end of the final semester Cumulative Grade Point Average (CGPA) will be calculated based on the above formula, considering the Credits and Grades earned during the entire programme of study. Classification for the Degree/Diploma will be given as follows based on the CGPA:

First Class with distinction   8 and above
First Class   6.5 and above
Second Class   6 and above

9.3 The Grade Card issued at the end of the final semester shall contain the details of all the courses taken which shall include the titles of the courses, the credits associated with each course, the CGPA and the class.

9.4 A student shall acquire a minimum of 36 credits in the first two semesters before he/she registers for third semester. A student shall complete the M.Tech programme in 8 (eight) consecutive semesters in the case of full time programme and 10 (ten) consecutive semesters in the case of part time programme by acquiring the minimum total credit requirement of 72.

9.5 A student who wishes to take up professional employment after completing the second semester shall obtain permission from the Head of the Department/School. The student will be permitted to carry out the project work in the institution / organisation where they are employed on production of a certificate from the Head of that institution/organisation to the effect that the student is permitted to carry out the project at the institution/ organisation.

Such candidates shall carry out the project work under the joint supervision of a project guide from the Department/School and an external guide from the Institution/ Organization concerned. The Department / School Council shall verify the academic/ research credentials of the proposed external guide before granting permission.

In the case of students who propose to carry out their project work in National Laboratories on full time basis, the provision regarding having a project guide from the Department/School concerned may be exempted by the Department / School Council, if the situation warrants.

9.6 This clause will be applicable to the sponsored candidates also if they wish to carry out their project work in their parent organisation.

10 MONITORING AND MANAGEMENT OF PROGRAMMES

Every post graduate programme conducted in the Departments shall be monitored by the Department Council subject to these regulations. Such monitoring shall include design of programmes, prescribing the mode of conduct of the programmes and monitoring the evaluation process of students.

11 TRANSITORY PROVISION

Notwithstanding anything contained in these regulations, the Vice-Chancellor shall, for a period of one year from the date of coming into force of these regulations, have the power to provide by order that these regulations shall be applied to any programme with such modifications as may be necessary.

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY
Center for Integrated Studies

5 -Year Integrated M. Sc. (*Biological Sciences*/ Chemistry/ Mathematics/ Physics/ Statistics)

Regulation, 2021

Preamble*: This Regulation shall be called 'Regulation for 5-Year Integrated M. Sc(Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics), Amendment 2021'. This regulation is applicable for the students up to the 6th Semester. From 7th Semester onwards, the PG regulations in force will be applicable.*

1. Introduction

In the process of the fulfillment of the set objects of the Cochin University of Science and Technology, a Centre for Integrated Studies (CIS) was established in the year 2018-19 to offer 5 year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) for imparting specialized education to the students on completion of their +2 level of education.

2. Courses offered by the Centre

The CIS offers 5-year integrated M. Sc (Biological Sciences, Chemistry, Mathematics, Physics and Statistics). The nomenclature of the course shall be 5-Year Integrated M.Sc. (Biological Sciences / Chemistry/ Mathematics/ Physics/ Statistics).

3. Overview of the Course

The 5-Year Integrated M.Sc (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) of the Cochin University of Science and Technology is a non-professional course. It is not merely an integrated program that combines pre-graduate and post-graduate studies, but is also trans-disciplinary, cutting across several disciplines.

The curriculum is common to all the disciplines for the first four semesters. Students with biology background at the +2 stage and who had left mathematics after the 10th class are expected to put in the required efforts to learn mathematics. Similarly, students who left biology at the +2 stage are expected to learn biology with extra effort. Students of Science subjects require significant amount of Mathematics and Computation throughout the 5-Year program. The University offers bridge courses in the first semester to facilitate this process. The students spend first two years of their programs at the CIS. The students are transferred to their parent Departments at the end of the fourth semester.

4. Admission

The present intake for the 5-Year Integrated M. Sc (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) is **75** (15 x 5). At the end of 2nd year, the students will move to their respective Departments based on the choice of their subject of preference and SGPA

obtained during the 4 Semesters.15 +/- 3 number of students will move to each Department. Wherever possible, the courses from VIIth Semester onwards shall be conducted along with the two year M. Sc. Courses already existing in the Departments or shall be conducted separately.

4.1. Eligibility and Entrance Examination

i   Admission will be given to students possessing KVPY Scholarship. They need not have to appear for the entrance Test. But they also have to submit the requisite Application and should pay the application fee.

ii   All other eligible applicants will be called for the written test to be held at various Centers.

iii   Candidates with a minimum of 75% marks at +2 level of education (Intermediate, CBSE/ICSE/HSC/ and all State Boards or Equivalent with science subjects [Biology, Chemistry, Mathematics, Physics]) and who are below the age of 23 years (as on 1st January of the year in which the candidate is seeking admission) are eligible to apply.The programis open to all students who have completed/ expect to complete +2 stage with at least three of the four subjects (Physics, Chemistry, Mathematics and Biology) as their optional subjects with a minimum of 75% at +2 level. The 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) is designed to be suitable for students who have an inclination and aptitude to study Science and have plans to build a career by studying Science.

4.1.1 Entrance Examination

The admission to 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) will be through a common entrance examination (CAT of CUSAT). The entrance examination consists of a written test for 450 marks. The written test paper contains 50 objective questions each in Mathematics, Physics, Chemistry and Biology at +2 level. Written test for this program is of three hours duration. It will consist of multiple choice (of four options) questions to be answered as Computer based Online Test. The level of questions shall be consistent with +2 level of education. There is negative marking: each right answer will be given 3 marks; and each wrong answer will be given -1 mark.

The entrance test (**Test Code 101**) is common for 5-Year Integrated M.Sc (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics), 5- Year Integrated M. Sc. in Photonics and the B. Tech. Degree programs. The pattern is:

Physics   - 75 Questions (225 Marks)   - 60 Minutes

Chemistry   - 50 Questions (150 Marks)   - 30 Minutes

Mathematics - 125 Questions (375 Marks) - 90 Minutes

The students applying for 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) can either write the same entrance examination (Test Code 101) along with 5- Year Integrated M. Sc. in Photonics and the B. Tech. Degree programs or they can opt for **Test Code 104**. The pattern of Test Code 104 is as follows:

Physics   - 75 Questions (225 Marks)   - 60 Minutes

Chemistry   - 50 Questions (150 Marks)   - 30 Minutes

Biology   - 75 Question (225 Marks)   - 60 Minutes

The tests for 101 and 104 will be conducted in such manner that the Physics section will be conducted first (60 Minutes) and then Chemistry section (30 Minutes). The test for Mathematics / Biology will be conducted based on the test code selected by the candidate as the third section.

There will be a separate selection list for admission to the 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics). Marks obtained for Mathematics/ Biology and Physics out of 375, 225 and 225 respectively will be re-calculated to be out of 150 each. Thus the total marks will be 450.

4.2.Selection List

Students possessing KVPY Scholarship will be admitted directly if 4.1.iii holds. The admission will be through common counselling process. Initially, there will not be any classification of students between the five subjects. After 2 years, the students have to opt their subject of choice. Allotment to their choice will be depending on their performance (SGPA) in the four semesters. But attempts will be made to keep a balance in the number of students admitted to the 3rd year of the program among the various Departments, by allowing a variation of +/- 3 from the normal value of 15.

While preparing the Selection List, if tie arises, the following criteria shall be followed, one after the other, to resolve the ties, when more than one candidate secures the same total marks in the entrance examination:

(a) *First criterion*: Total marks obtained by the candidates for Chemistry and Physics taken together in the entrance examination.

(b) *Second criterion*: Marks obtained for Chemistry. If the tie has not been broken still, the marks obtained for Physics will be counted.

(c) If the tie has not been broken still, the normal procedure of the University will be followed.

5. Reservation

All relevant reservation rules (Kerala State) will be followed for admission. Similarly, concession in fees for the course also will be based the Government of Kerala Rules. The seat matrix based on reservation similar to other non-professional courses in the University is applicable.

Reservation norms will be followed while allotting the students to the 5 branches of study after the 4th Semester.

6. **5- Year Integrated M. Sc.** (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics)

The subjects for the 5-Year Integrated M. Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) are common in the first 4 semesters. The students with Biology background at +2 stage, who left Mathematics after 10th are expected to put in necessary effort to learn Mathematics needed for other courses. Similarly, the students who studied Mathematics at +2 stage and left Biology after 10th are expected to learn necessary biology. To provide necessary help in this direction, the University runs bridge courses in the first semester. The students who join the program are required to attend the relevant bridge courses. They are also encouraged to approach and seek help of the faculty members concerned and their Mentors.

7. **Extra Course/Credits**

A student can take courses over and above those stipulated for a semester and can accumulate extra credits in a given semester. During the first two Semesters, Courses on English and French/ German/ Hindi/ Malayalamwill be offered. These courses cannot be taken in lieu of the regular subject credit course/s.

8. **Audit Course**

There is a provision for auditing of not more than one course in each semester. Students who desire to audit courses over and above the number of courses prescribed have to choose from amongst the courses offered by different Departments in that semester and inform the CIS in writing. Courses thus audited should also be indicated in the Registration forms along with other courses opted for that semester. Only one Audit Course is allowed per semester.

9. **Possibility of Tutorials**

On the basis of the request of a sizeable number of students for additional guidance in coping up with the subjects; the Heads/ Directors of the participating Departments/Schools will be requested to provide tutorial support for small groups subject to availability of human resources.

10. **Enrichment Program**

CUSAT Carrier Guidance Bureau organizes Spoken English / UGC NET Classes / CSIR-UGC/JRF/NET Classes (Paper-1) for the benefit of students. The students are encouraged to undertake internships/ summer research programs during the winter and summer breaks.

11. **Course Registration and Attendance**

The Integrated M. Sc. Course is conducted under OBE based CBCS. Students have to register for the courses of their choice within 10 days of commencement of a Semester. All students have to

register for the core courses. They can choose the elective courses of their choice. If a student feels that a particular elective course which he has selected is difficult for him to study, with in 10 days of commencement of the Semester, he can substitute that course with another course, offered during that Semester. Similarly, if a student fails in an elective course, which he had selected, at the end of the Semester, he can either repeat the same course in the next chance or he can substitute that course with another one. The students can choose courses from MOOC/ SWAYAM platform. There will be provision for credit transfer for the credits acquired from the MOOC/SWAYAM platform. The students should choose only those courses which have at least 12 weeks duration. The general rules prevailing in the University regarding the administration of MOOC/SWAYAM courses shall be followed.

A student needs to attend at least 75% of the classes held in each course in order to be eligible to write the end-semester examination. If the student has been absent for medical reasons, the shortfall of attendance would be condoned up to 5% subject to submission of the relevant medical certificate to the Coordinator, CIS. If, due to unusual circumstances, the student's attendance falls far short of the required percentage, he/she may bring it to the notice of his/her course instructor/ teacher/Coordinator/AssistantCoordinator well in advance. He/she can then explore the possibility of dropping the semester and opt for registration during the next semester as per University rules. Students, who are not found eligible to take semester examinations due to shortfall of attendance, may make up the loss by appearing in the Summer Semester (Offered during May-June) of every year. He/ she may also be considered for re-admission to the course concerned when it is offered in the following academic year. It may be noted that it is the responsibility of student to monitor his/her attendance and inform the course teacher about his/her absence. 75% attendance is the norm for writing end-semester examinations.

12. Continuous Assessment

CUSAT has a scheme of rigorous and continuous internal assessment. The student can get the best out of this system if he/she is well informed about how it works right from the beginning. Schedule and nature of tests/assignments/quizzes that are relevant may be followed. The specific nature of the assignments/tests is discussed by the faculty in the class and can vary from course to course. In case of any doubt, the student may get in touch with the faculty concerned. The student will be given a minimum of three assessments (internal examinations) per semester in each course.. The faculty concerned can choose the mode of evaluation/ compilation of final marks of CA.For continuous assessments, the course teacher can adopt either written examinations, assignments, quizzes or seminar presentations. This will make part of one's final grade in the course. The Laboratory Courses will have only Continuous Assessment.

End-semester Examination

A final examination at the end of the semester in each course will follow the internal assessments during the semester. The end semester examination is conducted in a totally internal manner. The setting of question papers and evaluations are done by the concerned course teacher. The final result in each course is calculated on the basis of continuous assessment and performance in the end-semester examination. For Semester End Examination, the students have to score a minimum of 45% marks to get a pass. Also, the students should get a total of 50 % marks for each course (Sum of CA and ESE) to get a pass in the course.

13.1Scheme of Examination

The performance of each student enrolled in a course will be assessed at the end of each semester. Evaluation of 5 - Year Integrated M. Sc (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) is done under the Grading System. There will be 6 letter grades; S, A, B, C,D and F on a 10-point scale which carries 10, 9, 8, 7, 6, 0 grade points respectively. The final result in each course will be determined on the basis of continuous assessment and performance in the end semester examination which will be in the ratio of 50:50 in the case of theory courses. For Laboratory Courses (Practical Courses) and Open Ended Laboratory Courses, there will be only Continuous Assessment. For the Open Ended Laboratory Courses, at the end of each Semester, the Students will have to submit a report of the work done; they will present the results in a Seminar and should defend the work in a Viva- voce.

13. 2 Computation of SGPA / CGPA

Evaluation of 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) is done under the Grading System. There will be 6 letter grades; S, A, B, C,D and F on a 10-point scale which carries 10, 9, 8, 7, 6, 0 grade points respectively. The following is the procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student,

i.e., SGPA (Si) = $\sum$(Ci x Gi) / $\sum$Ci

Where Ci is the number of credits of the i th course and Gi is the grade point scored by the student in the i th course.

ii. The CGPA is also calculated in the same manner taking into account all the courses done by a student over all the semester of a programme,

i.e. CGPA = $\sum(C_i \times S_i)/ \sum C_i$

Where S_i is the SGPA of the i th semester and C_i is the total number of credits in that semester.

In order for a student to get a pass in a course, he/she has to score at least 50% marks in the End – Semester Examination as well as for the Continuous Assessment. The students who pass all the courses and secure SGPA 6.0 (D Grade) or above in a semester will be given Semester Grade Transcript indicating the marks secured, grades for all the courses and SGPA. The nomenclature for the course shall be 5-Year Integrated M. Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics).

13.3 Supplementary Examinations

Students should obtain a minimum of 'D' grade in each course in order to pass in the 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics). Students who obtain less than 'D' Grade in any course, may be permitted to take the supplementary examination in the course/s concerned within a week after the commencement of teaching of the next semester or in accordance with the schedule notified. The higher marks obtained in the Regular Examination or the Supplementary Examination will be counted for assessing the Grade. Those students who get less than 'D' grade in the supplementary examination also, shall have to reappear for the End Semester Examination during the succeeding year with the approval of the Head/Director of the Department/School concerned and the Coordinator of the CIS. Such approval should be obtained at the beginning of the semester concerned. Those students who are not satisfied with the grades obtained (C or D), in a course in a semester can opt for improving the grade by appearing in the exam during the supplementary exams conducted after each semester. Such students can opt for improvement for only one course after the first semester, two courses after the second semester (if the facility was not exercised after the first semester), three courses after the third semester (if the facility was not exercised after the first and second semesters) and so on. Better of the two cases will be counted for calculating the Grades.

13.4. Special Supplementary Examinations

The 5-year Integrated M.Sc.(Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) students, who after completion of the prescribed duration of the course, are left with backlogs, are eligible to appear for special supplementary exams. The students shall have to clear all the backlogs and should get a pass before the expiry of Two Years after the completion of the regular course.

13.5. Improvement Examinations

Students securing 'C or D' grade in the course of a semester may be allowed to improve their marks through the Improvement Examinations. Appearance at such an examination in the course will be allowed as per Clause 13.3 above. The improvement examinations will be conducted along with the supplementary examinations within a week of the commencement of the teaching of the next semester or as per the schedule prescribed. For the purpose of determining the Grades, the better of the two performances in the examinations will be taken into consideration.

13.6. Summer Semester

Those students who have failed in certain courses, or who were unable to write the end semester exams or who did not have sufficient attendance for writing the exams can register themselves for the summer semester offered during May-June and make up their losses. The usual CA and ESE pattern will be followed for the evaluations during the Summer Semester. 'Additional Supplementary Examinations' shall be conducted at the end of the Summer Semester.

13.7. Readmission

Students who are not found eligible to take semester examinations and also those who are not promoted to the next semester of the course may be considered for readmission to the semester concerned of the immediately following academic year. Such students should seek readmission before the commencement of classes for the semester concerned or within a week of the commencement of the semester concerned, if they are appearing in the supplementary examinations. Such students are given an option either to undergo instruction for all the courses of the semester concerned or instruction in only such courses in which they have failed on the condition that the option once exercised will be binding on the student concerned.

13.8. Backlogs

No student of the 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) shall be allowed to move to the next semester, if he/she has a backlog of more than 2/3 of the courses of that semester subject to a maximum of 6 backlogs at any given point of time including the backlogs of previous semester/s, if any.

13.9. Re-evaluation

After the evaluation of the answer scripts of the End Semester Examination, the Students shall be allowed to check their answer scripts. If the students have any complaint regarding the award of marks, the course teacher has to verify the complaints and should try to resolve them then and there. The Students can also request for re-evaluation of the answer scripts if they wish so. Requests from the students for re-evaluation should reach the Head of the Department/ Coordinator, CIS within 5 days of the announcement of the results. On the basis of representation

submitted by students every School/Department/Centre will constitute a Grievance Committee consisting of 3 or 4 teachers to examine the complaints received from the students regarding their assessment.

14   Exit Option

The 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) is a full time regular course. Option of Exit with a Bachelor's degree shall be introduced for desiring students. The distinguishing features of the exit option are:

I.   The Exit Option will be available at the end of three years in the case of the 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) students. Exit with a Bachelor's degree is subject to fulfillment of the requirements of the First Degree Programs consistent with other Universities in the State.

II. Students who seek to opt out after 3 years (six semesters) should have passed all the courses of the preceding six semesters. The option will not be available to students who have back logs. For exercising the Exit Option, the students should have secured a minimum of 136 Credits during the 6 Semesters.

III. Students who exercise 'Exit option' at the end of three years of 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) will be given B.Sc. Degree Certificates. The students will be given B. Sc. Degree in Botany or Zoology (based on Students' Choice) or B. Sc. Degree in Chemistry or B. Sc. Degree in Mathematics or B. Sc. Degree in Physics, on the basis of the subject of choice. The students, who have opted for studying Statistics after the 4th Semester, will be conferred with B.Sc. degree in Mathematics, if they avail the exit option.

IV. Students who do not exercise 'Exit option' will be given 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) at the end of five years.The minimum number of credits required to successfully complete an individual Semester is 18 and the 5 Year Integrated M. Sc. in toto is 208.

V.   The Students who exercise the Exit Option have to surrender the Mark lists of the previous semesters. They will be issued new mark lists in conformity with the B. Sc. Degree that will be conferred to them.

15 Merger with the 2 Year M. Sc.

In the Fourth Year, students of the 5-Year Integrated M.Sc. (Chemistry/ Mathematics/ Physics/ Statistics) may be integrated with the students admitted for the 2 Year M. Sc. courses conducted by the Departments, if the respective Departments opt for it. Otherwise, they can conduct both the courses parallel. The 5-Year Integrated M.Sc. (Biological Sciences) shall be conducted separately by the Department of Biotechnology, since, the Department is not offering similar courses. However, the students will continue to be attached with the CIS for all the administrative matters.

16 Research orientation

There will be a component of research project in the last year (5th year) of the 5-Year Integrated M.Sc. (Biological Sciences/ Chemistry/ Mathematics/ Physics/ Statistics) and students are also encouraged to take up internships in the winter and summer breaks. There will be provisions for open ended labs or minor projects from the Vth Semester onwards.

17 Students' Welfare

The office of the Director of Students' Welfare will look after the welfare of the students with active support from the elected representatives of the students, Faculty and administration. A Student Counseling Service by professionals is available in the University. In the case of any student requiring parental guidance, his/her parents will be informed accordingly. There is a Students' Union which caters to the students' interests and promotes cultural and sports activities.

18 Gender Justice Committee

CUSAT is committed to providing a place of work and study, free of sexual harassment, intimidation or exploitation. The Committee Against Sexual Harassment (CASH) at CUSAT is the University's instrument for addressing issues/grievances/cases of sexual harassment and recommending their redressal. The Constitution of India entitles every individual the right to live with human dignity, free from exploitation. It is in this spirit that CUSAT expects that its entire community, including students, faculty, staff and officers – will treat each other and visitors to the University with respect. Anyone violating this principle is subject to disciplinary action.

19 CIS Grievance Committee

To attend to the student's general grievances, to conduct general counseling from time to time and to counsel the students individually on various issues and whenever the need arises, CIS Grievance Committee will be constituted. This Committee will look into the grievances of CIS students.

Post Script: *The new regulations (Regulations 2021) shall be made applicable to the students of the 2021 admission onwards.*

കൊച്ചി ശാസ്ത്ര സാങ്കേതിക സർവ്വകലാശാല
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COCHIN UNIVERSITY P.O.,
COCHIN - 682 022
KERALA, S. INDIA

No.Conf.II/2941/1/2019 (4)

Dated: 06.09.2019

NOTIFICATION

In exercise of the powers conferred by Section 24(ii) read with Section 42(1) of the CUSAT Act 1986, the Academic Council at its meeting held on 11.04.2019 resolved to approve the revised Regulations and scheme of Examinations of I to VIII semesters of various B.Tech programmes run in School of Engineering/CUCEK/KMSME with effect from 2019 admissions as in Appendix.

1. B.Tech Degree programme in Civil Engineering
2. B.Tech Degree programme in Mechanical Engineering
3. B.Tech Degree programme in Safety and Fire Engineering
4. B.Tech Degree programme in Information Technology
5. B.Tech Degree programme in Computer Science and Engineering
6. B.Tech Degree programme in Electronics and Communication Engineering
7. B.Tech Degree programme in Electrical and Electronics Engineering
8. B.Tech Degree programme in Marine Engineering

The current complex system of awarding moderation of marks in semester end examinations for B.Tech be replaced with a new system where the student stands chance to get more marks. In this new system all B.Tech theory paper semester end examinations will have questions for 72 marks for every student to attempt and answer. The maximum marks awarded will be limited to 60 marks.

In the case of KMSME B.Tech programme which has a different question paper format there will be questions for 75 marks for every student to attempt and answer. The maximum marks awarded will be limited to 60 marks.

The Syndicate at its meetings held on 20.07.2019 vide item No.666.15 considered and approved the above resolution of the Academic Council.

REGISTRAR

To
1. Dr. K.S. Beena, Dean, Faculty of Engineering and Professor, Division of Civil Engineering, School of Engineering, CUSAT, Kochi -22
2. The Principal/Director of CUCEK/SOE/KMSME
3. The Heads of all Divisions in School of Engineering/CUCEK
4. The Controller of Examinations/Joint Registrar (Academic)/Assistant Registrar (Academic)
5. Academic A.C/Exam 'A'/Exam F/G/I/J/K/L/P/R/Exam Confidential Sections
6. Day File/Stock File/File Copy

Sr.

REGULATIONS FOR THE B.TECH.DEGREE PROGRAMMES (Except Marine Engineering) Offered under Faculty of Engineering (With effect from 2019 Admissions)

The following regulations are made applicable to all the B.Tech. programmes offered by the University under Faculty of Engineering except Marine Engineering with effect from the academic year 2019-20.

1. B.Tech. Programme

The duration of the B.Tech. programme shall be eight semester spanning over four academic years. Each semester shall consist of 15weeks.

1.1 Branch
   a) Civil Engineering
   b) Computer Science and Engineering
   c) Electrical and Electronics Engineering
   d) Electronics and Communication Engineering
   e) Information Technology
   f) Mechanical Engineering
   g) Safety and Fire Engineering

1.2 Structure of the B. Tech. Programme

1.2.1 The programme of instruction will consist of the following:
   a) General (common) core courses comprising basic sciences, mathematics, and basic engineering;
   b) Engineering core courses introducing the student to the foundations of engineering in the respective branch;
   c) Elective courses enabling the student to opt and undergo a set of courses of interest to him/her;
   d) Professional practice including project, seminar, and industrial training; and
   e) Humanities courses on softskills.

1.2.2 Every branch of the B.Tech. programme will have a curriculum and syllabus for the courses approved by the Academic Council.

1.2.3 The B.Tech. programmes offered by the University Departments / Schools / Cochin University College of Engineering, Kuttanad shall follow the credit system.

1.2.4 The curriculum of any branch of the B.Tech.. programme shall have a total of 160 credits as minimum.

1.3 **Course Registration**

It is mandatory for the students to register for the courses in each semester.

Before registration, the students should

a) Clear all dues including any fees to be paid and should not have any disciplinary issues pending.
b) Meet the requirements regarding the minimum number of credits for promotion stipulated in clause1.10.

The dates for registration will be announced by the School/College in their academic calendar. Late registration will be allowed up to 7 working days from the commencement of the semester with late registration fee.

1.4 Mode of Evaluation

1.4.1 The performance of the students in theory courses will be evaluated based on continuous assessment and semester end examination. In the case of laboratory courses, the evaluation will be based on continuous assessment and semester end assessment which will be carried out internally.

1.4.2 For theory courses, there will be 40% weightage for internal assessment and 60% weightage for semester end examination. For practical courses, continuous assessment and semester end assessment will carry 50% weightage each.

1.4.3 For theory courses, the assessment pattern will be as follows:

Continuous Assessment:

a)	First Periodical Test	- Maximum marks: 12.5
b)	Second Periodical Test	- Maximum marks: 12.5
c)	Assignments	- Maximum marks: 10
d)	Attendance	- Maximum marks: 5

Semester End Examination

a)	Exam shall be shall be of 3hours duration.
b)	Maximum marks: 60

1.4.4 For laboratory courses, the assessment pattern will be as follows:

Continuous Assessment:

The marks may be awarded on the basis of the performance of the student in the laboratory sessions. The break-up of marks for continuous assessment of laboratory courses shall be:

a)	Practical records/Outputs	- Maximum marks: 10
b)	Lab work	- Maximum marks: 10
c)	Attendance	- Maximum marks: 5

Semester End Assessment:

The semester end assessment will consist of an examination and a vivavoce.

Maximum marks for semester end examination: **25**

1.4.5 At the end of the semester, semester examination will be conducted in all the theory courses offered in the semester and they will be of three hours duration unless otherwise specified. The Controller of Examinations will make necessary arrangements for setting the question papers and valuation of answer books for the semester end examination of theory courses.

1.4.6 The semester end assessment for the laboratory courses shall be conducted internally by the respective department / division with atleast two faculty members as examiners. One of the examiners for conducting the semester end laboratory examination shall be at the level of Associate Professor or above in the regular cadre.

1.4.7 In the case of project work, the project guide concerned shall make the continuous assessment. A committee consisting of the Project Coordinator (nominated by the Head of the Department / Division), project guide, and at least one senior faculty member at the level of Associate Professor or above will carryout the final review.

The weightages for the assessment of project work shall be as follows:

Continuous assessment	-	40 percent
Project Report	-	20percent
Final review	-	40percent

1.4.8 The Viva-voce examination at the end of VIII semester will be conducted by a panel of three examiners consisting of the Head of the Department / Division or his/her nominee and one senior faculty at the level of Associate Professor or above of the Department/Division and Preferably, one external expert.

1.4.9 A candidate shall not be allowed to improve the continuous assessment marks in theory/laboratory courses. A candidate who desires to improve his/her marks in the semester end examination in theory courses shall be permitted to do so in the next available chance. This facility will be available only once for a theory course.

1.5 Course Completion and Earning of Credits.

Students registered for a course have to attend the course regularly and meet the attendance rules of the University and appear for all the internal evaluation procedures for the completion of the course. However, credits can be earned only on completion of the semester end examination and on getting a pass grade. Students, who have completed a course, but could not write the semester end examination for valid reasons, are permitted to write the examination at the next available chance and earn the credits without undergoing the course again.

1.6   Eligibility to Appear for the Semester End Examination

1.6.1   A candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for the completion of a semester.

A student shall secure not less than 75% of overall attendance in a semester taking into account the total number of periods in all courses attended by the candidate as against the total number of periods in all courses offered during that particular semester.

1.6.2   The Principal/Head of the School/College shall have the power to condone shortage of attendance up to 5% (between less than 75% and 70%) in a particular semester due to medical reasons (hospitalization /accident/ specific illness) duly verified and recommended by the Head of the Division /Department and on production

of medical certificate from a registered medical practitioner endorsed by the University Medical Officer and on payment of the required fee. However, such condonation for shortage of attendance shall be given only twice during the entire duration of the B.Tech. programme.

1.6.3   The Vice Chancellor shall have the power to condone short age of attendance up to additional 5% (between less than 70% and 65%) in a particular semester   due   to   medical   reasons (hospitalization / accident specific illness) duly verified and recommended by the Principal /Head of the School/College and on production of Medical certificate from a registered medical practitioner endorsed by the University Medical Officer and on payment of the required fee. However, such condonation for shortage of attendance shall be given only twice during the entire duration of the B.Tech. programme.

1.6.4   Candidates who secure overall attendance of less than 65% (subject to clauses1.6.2and1.6.3above) will not be permitted to write the semester end examinations and will not be permitted to go to next/ subsequent semester. They are required to repeat the incomplete semester in the next academic year.

1.7   Eligibility to Write the Supplementary Examination

Failed candidates and those who could not write the semester end examination due to health reasons or other contingencies that are approved by the Head of the School/College can register for the supplementary examination. Those who wish to improve their performance in the semester end examinations can also register for the same, subject to the provisions of clause 1.4.9. Grades awarded in the supplementary examination will be taken as semester grades in these subjects and will be based on the semester examination grading pattern in that subject. In the case of candidates appearing for improvement of marks, the higher mark obtained will be considered for the purpose of grading.

A candidate who fails to obtain a pass in courses having only continuous assessment will be permitted to repeat the course along with the junior batches.

1.8 Revaluation

A candidate can apply for revaluation of his/her semester end examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee along with prescribed application to the Controller of Examinations through the Head of Department/School/College. The Controller of Examination will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Department/School/College. Revaluation is not permitted for laboratory courses, courses having only continuous assessment, seminar and project work.

1.9 Pass Requirements

A candidate has to obtain a minimum of 50% marks for continuous assessment and semester end examination put together with a minimum of 40% marks in the semester end examination for a pass in theory and laboratory courses.

In the case of theory/laboratory courses having only continuous assessment, a candidate has to obtain a minimum of 50% marks in continuous assessment for a pass.

1.10 Promotion to Higher Semesters

A student will be given atleast one regular chance and one supplementary chance for the semester end examination of a particular semester in both theory and practical courses to obtain a pass grade before he/she is assessed for promotion to higher semesters.

Promotion to III, V and VII semesters shall be subject to the following conditions:

Promotion to	Minimum number of credits to be earned
III Semester	10 out of 20 credits of Semester I
V Semester	30 out of 60credits of Semesters I, II, &III
VII Semester	50 out of100 credits of Semesters I to V

1.11 Grading

1.11.1 Grades shall be awarded to the students in each course based on the total marks obtained in continuous assessment and at the end semester examination and as per the provisions of clause 1.4.1.

The grading pattern shall be as follows:

Marks obtained (Percentage)	Grade	Grade points
90 to 100	S	10
80 – 90	A	9
70 – 80	B	8
60 – 70	C	7
50 – 60	D	6
<50	F	0

Note: Where X –Y range denotes 'X' inclusive and 'Y' exclusive

1.11.2 A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F for that course.

1.11.3 Grade Point Average.

The academic performance of a student in a semester is indicated by the Grade Point Average (GPA).

$$GPA = \frac{G_1C_1 + G_2C_2 + G_3C_3 + \text{------------------} G_nC_n}{C_1 + C_2 + C_3 + \text{--------------------} C_n}$$

Where 'G' refers to the grade point and 'C' refers to the credit value of the corresponding course undergone by the student.

The Grade Point Average (GPA) for each semester will be calculated only for those students who have passed all the registered courses of that semester. Similarly, Cumulative Grade Point Average (CGPA) upto any semester will be calculated only for those students who have passed all the courses up to that semester.

1.11.4 Grade Card

The Grade Card issued at the end of the semester to each student by the Controller of Examinations, will contain the following:

a) The code, title, number of credits of each course registered in the semester,

b) The letter grade obtained,

c) The total number of credits earned by the student upto the end of that semester and

d) GPA & CGPA.

1.11.5 Classification

On successful completion of the programme, CGPA will be calculated as follows:

$$CGPA = \frac{C_1 GP_1 + C_2 GP_2 + C_3 GP_3 + \text{-----------------} C_n GP_n}{C_1 + C_2 + C_3 + \text{--------------------} C_n}$$

Where 'GP' refers to the grade point average (GPA) and 'C' refers to the total number of credits obtained by a student in a particular semester.

The classification based on CGPA is as follows:

CGPA 8 and above	:	First Class with distinction
CGPA 6.5 and above ,but less than 8	:	First Class
CGPA 6 and above, but less than 6.5	:	Second Class

1.11.6 Conversion of GPA/CGPA to Percentage marks

The following formula shall be used to convert the SGPA/CGPA obtained by a student to percentage marks.

Percentage marks= (GPA/CGPA–0.5)10

1.12 Electives

The curriculum for each programme consists of four Professional Electives and

two Open Electives. The students shall select one Open Elective from among the courses offered in that particular semester by a Division/Department other than his/her Division/Department.

1.13 Faculty Advisor

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach a certain number of students to a teacher of the Department who shall function as Faculty Advisor for these students throughout their period of study. Such Faculty Advisor shall advise the students and monitor the courses taken by the students, check the attendance and progress of the students attached to him/her and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress/performance of the students concerned.

1.14   <u>Class Committee</u>

A class committee consists of teachers of the class concerned, student representatives and a chairperson who does not handle any subject for the class. It is like the 'Quality Circle' (more commonly used in industries), with the overall goal of improving the teaching-learning process. The functions of the class committee include:

a. Solving problems experienced by students in the classroom and in the laboratories in consultation with Head of the Division/Principal/Director.

b. Clarifying the regulations of the degree programme and the details of rules therein.

c. Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.

d. Informing the student representatives, the details of regulations regarding weightage used for each assessment.

e. Discussing in the class committee meeting the breakup of marks for each experiment/exercise/module of work, Incase of practical course (laboratory/drawing/project work/seminar etc.) and in forming the students.

f. Analysing the performance of the students of the class after each test and finding ways and means of improving the performance of the students.

g. Identifying the students who are low achievers or weak in their subjects if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.

The class committee is normally constituted by the Head of the Division. However, if the students of different branches are mixed in each class the class committee is to be constituted by the Principal/Director. The class committee shall be constituted within a week from the date of commencement of a semester. At least 4 student representatives from the respective class (usually 2 boys and 2 girls) shall be included in the class committee. The student representatives shall be nominated on the basis of their academic performance since the first semester of the B.Tech. programme. In the case of first and second semesters, the rank obtained in the Common Admission Test (CAT) shall be the criterion for nominating the student representatives. The Chairperson of the class committee may invite the Faculty Advisor(s) and the Head of the Division to the meeting of the class committee. The Chairperson of the class committee is required to prepare the minutes of every meeting, submit the same to the Head of the Division within two days of the meeting and arrange to circulate the same among students concerned and teachers. If there are some points in the minutes requiring action by the University, the same shall be brought to the attention of the Principal/Director and the Registrar.

The first meeting of the class committee shall be held within fifteen days from the date of commencement of the semester. The nature and weightage of internal assessments shall be decided in the first meeting, within the framework of the regulations and the same shall be communicated to the students. Two or three subsequent meetings in a semester may be held at suitable intervals. During these meetings the student members representing the entire class, shall meaningfully interact and express their opinions and suggestions of the class to improve the effectiveness of the teaching-learning process.

1.15   Course Committee for Common Courses

Each common theory course offered to more than one discipline or group of disciplines shall have a "Common Course Committee" comprising all the teachers teaching the common course with one of them nominated as Common Course Coordinator. The nomination of the Course Coordinator shall be made by the Principal/Director in consultation with Heads of Divisions from among the teachers teaching the common courses. The "Common Course Committee" shall meet as often as possible and ensure uniform evaluation of internal assessments after arriving at a common scheme of evaluation for the tests. Wherever feasible, the common course committee shall prepare a common question paper for the test(s).

1.16   Discipline

Every student is required to observe discipline and decorous 8otmail 8e both inside and outside the campus and refrain from any activity which may tarnish the image of the University as per the provisions of the Cochin University Students' (Conduct and Disciplinary) Code – 2005. Any act of indiscipline, 8otmail8ed8r including unfair practice in examinations will be referred to the authorities of the University that will make a detailed enquiry on the matter and decide on the course of action to be taken.

1.17   Amendment to Regulations

Not withstanding all that has been stated above, the University has the right to modify any of the above regulations from time to time.
(Amendment –pattern of QP-U O No .CUSAT/CEO.A1/597/2019 dated 19.11.2019).

REGULATIONS FOR B.TECH. MARINE ENGINEERING DEGREE COURSE OFFERED IN KUNJALI MARAKKAR SCHOOL OF MARINE ENGINEERING
(With effect from 2019 Admissions)

The following regulations are made applicable to B.Tech. Programme in Marine Engineering in the University under Faculty of Engineering with effect from the academic year 2019-20.

1 B.Tech. Programme

The duration of the B.Tech. course in Marine Engineering shall be eight semesters spanning over four Academic years. Each semester shall consist of 18 weeks except 7th semester. 7th semester consist of 26 weeks.

1.1 Structure of the B.Tech. Programme

1.1.1 The programme of instruction will consist of the following:

i) General (common) core courses comprising basic sciences, mathematics and basic engineering

ii) Engineering core courses introducing the student to the foundations of engineering in the Marine Engineering;

iii) Elective courses enabling the student to opt and undergo a set of courses of interest to him/ her;

iv) Professional practice including project, seminar, and industrial training and

v) Humanities courses on Communication Skills and Environmental Studies.

1.1.2 The B.Tech. Marine Engineering programme will have a curriculum and syllabus for the course approved by the Academic Council.

1.1.3 The B.Tech. Programme in Marine Engineering offered by the University shall follow the credit system.

1.1.4 The curriculum of any branch of the B.Tech. Marine Engineering shall have a minimum total of 172 credits.

1.2 Course Registration

It is mandatory for the students to register for the courses in each semester.

Before registration, the students should

a) Clear all dues including any fees to be paid and should not have any disciplinary issues pending.

b) Meet the requirements regarding the minimum number of credits for promotion stipulated in clause1.9.

The dates for registration will be announced by the School in the academic calendar. Late registration will be allowed up to 7 working days from the commencement of the semester with late registration fee.

1.3 Mode of Evaluation

1.3.1 The performance of the students in theory courses will be evaluated based on continuous assessment and semester end examination. In the case of practical courses, the evaluation will be based on continuous assessment and semester end assessment which will be carried out internally.

1.3.2 For theory courses, there will be 40% weightage for internal assessment and 60% weightage for semester end examination. For practical courses, continuous assessment and semester end assessment will carry 50% weightage each.

1.3.3 In theory courses, the assessment pattern will be as follows:

Continuous assessment:

1. I Periodical Test   -   Maximum marks: 12.5
2. II Periodical Test   -   Maximum marks: 12.5
3. Assignments   -   Maximum marks: 10
4. Attendance   -   Maximum marks: 5

The Semester End Examination shall be of 3 hours duration.

At the end of the semester, semester examination will be conducted in all the theory courses offered in the semester and it will be of three hours duration unless otherwise specified. The Controller of Examinations will make necessary arrangements for setting the question papers and valuation of answer books for the semester end examination of theory courses.

Each question will carry 15 marks and the student can attend 5 questions for 75 marks. *The maximum mark that can be awarded for a Semester End Examination (SEE) will be only 60, even though the questions are for 75 marks.*

1.3.4 For each practical course, the assessment pattern will be as follows:

50% marks is earmarked for Continuous Evaluation, and 50% marks for Semester End Examination. The Semester End Examination to be conducted by a minimum of two examiners, one not below the rank of an Associate Professor. A candidate shall secure a minimum of 50% marks in the aggregate and 40% minimum in the Semester End Examination for a pass.

1. Continuous assessment: 25 marks

   For continuous assessment, the marks may be awarded on the basis of the performance of the student in the laboratory sessions. The break-up of marks for continuous assessment of laboratory courses shall be:

a)	Practical records/Outputs	: 10 marks
b)	Lab work	: 10 marks
c)	Attendance	: 5 marks

2. Semester end assessment:25 marks

   The semester end assessment will consist of an examination and a viva voce.
   The semester end assessment for the laboratory courses shall be conducted internally by the department with at least two faculty members as examiners. One of the examiners for conducting the semester end laboratory examination shall be at the level of Associate Professor or above in the regular cadre.

1.3.5 In the case of project work, the project guide concerned shall make the continuous assessment. A committee consisting of the Project Coordinator (nominated by the Head of the Department/Division), project guide, and at least one senior faculty member at the level of Associate Professor or above will carry out the final review.

The weightages for the reviews shall be as follows:

Continuous assessment	:	40 percent
Project Report	:	20 percent
Final review	:	40 percent

1.3.6 The Viva-voce examination at the end of VIII Semester will be conducted by a panel of three examiners consisting of the Head of the Department or his/her nominee and one senior faculty at the level of Associate Professor or above of the Department and one external expert.

1.3.7 A candidate shall not be allowed to improve the continuous assessment marks in theory / laboratory courses. A candidate who desires to improve his/her marks in the semester end examination in theory courses shall be permitted to do so in the next available chance. This facility will be available only once for a theory course.

1.4 <u>**Course completion and earning of credits.**</u>

Students registered for a course have to attend the course regularly and meet the attendance rules of the university and appear for all the internal evaluation procedures for the completion of the course. However, earning of credits is only on completion of the semester examination and on getting a pass grade. Students, who have completed a course, but could not write the semester examination for valid reasons, are permitted to write the semester examination at the next opportunity and earn the credits without undergoing the course again.

1.5 <u>**Eligibility to appear for the Semester End Examination**</u>

1.5.1 A candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

Ideally every student is expected to attend all classes and earn 100% attendance. However, in order to allow provision for certain unavoidable reasons such as medical / personal grounds / participation in sports, the student is expected to earn a minimum of 75% attendance. Therefore, he/she shall secure not less than 75% of overall attendance in that semester taking into account the total number of days in all courses attended by the candidate as against the total number of days in all courses offered during that particular semester.

1.5.2 The Head of the School shall have the power to condone shortage of attendance up to 5 percent (between less than 75% and 70%) in a particular semester due to medical reasons (hospitalization /accident / specific illness) duly verified and recommended by the Course in Charge and on production of medical certificate from a registered medical practitioner

endorsed by the University Medical Officer and on payment of the required fee. However such condonation for shortage of attendance shall be given only twice during the entire duration of the B.Tech. programme.

1.5.3 The Vice Chancellor shall have the power to condone shortage of attendance up to 10 percent(between less than 70% and 65%) in a particular semester due to medical reasons (hospitalization /accident / specific illness) duly verified and recommended by the Head of the School and on production of Medical certificate from a registered medical practitioner endorsed by the University Medical Officer and on payment of the required fee. However such condonation for shortage of attendance shall be given only twice during the entire duration of the B.Tech. programme.

1.5.4 Candidates who secure less than 65%overall attendance will not be permitted to write the Semester End Examinations and are not permitted to go to next /subsequent semester. They are required to repeat the incomplete semester in the next academic year.

1.6 **Eligibility to write the Supplementary examination**

Supplementary examinations for a particular semester will be conducted along with the regular examination of the next semester.

Failed candidates and those who could not write the semester examination due to health reasons or other contingencies that are approved by the Head of the School can register for the supplementary examination. Those who wish to improve their performance in the semester end examinations can also register for the same, subject to the provisions of clause 1.3.7. Grades awarded in the supplementary examination will be taken as semester grades in these subjects and will be based on the semester examination grading pattern in that subject. In the case of candidates appearing for improvement of marks, the higher mark obtained will be considered for the purpose of grading.

1.7 **Revaluation**

A candidate can apply for revaluation of his/her semester end examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee along with prescribed application to the Controller of Examinations through the Head of School. The Controller of Examination will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the School. Revaluation is not permitted for practical courses, seminar and project work.

1.8 **Pass requirements**

A candidate has to obtain a minimum of 50 percent marks for continuous assessment and semester end examination put together with a minimum of 40 percent marks in the semester end examination for a pass in theory and laboratory courses.

1.9   Promotion to Higher Semesters

Promotion to the Vth semester and VIIth semester shall be subject to the following conditions:

Promotion to Minimum number of credits to be earned V Semester 30 out of 60 credits of Semesters I, II, &III VII Semester 55 out of 106 credits of Semesters I to V.

A student will be given one regular chance and one supplementary chance for the semester end examination of Ist and IInd semesters for considering the promotion to Vth semester and one regular chance and one supplementary chance for semester end examinations of IIIrd and IVth semesters for considering the promotion to the VIIth semester.

1.10   Grading

1.10.1   Grades shall be awarded to the students in each course based on the total marks obtained in continuous assessment and the semester end examination and as per the provisions of clause 1.3.1.

The grading pattern shall be as follows:

Marks obtained (Percentage)	Grade	Grade points
90 to 100	S	10
80 to 90	A	9
70 to 80	B	8
60 to 70	C	7
50 to 60	D	6
Less than 50	F	0

Note: - Where X-Y range denotes 'X' inclusive and 'Y' exclusive.

1.10.2   A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F for that course.

1.10.3   Grade Point Average.

The academic performance of a student in a semester is indicated by the Semester Grade Point Average (SGPA).

$$SGPA = \frac{G1C1 + G2C2 + G3C3 + \text{----------} + GnCn}{C1 + C2 + C3 + \text{------------------} + Cn}$$

Where 'G' refers to the grade point and 'C' refers to the credit value of corresponding course undergone by the student.

1.10.4   Grade Card

The Grade Card issued at the end of the semester to each student by the Controller of Examinations, will contain the following:

a)   The code, title, number of credits of each course registered in the semester,

b)   The letter grade obtained,

c)   The total number of credits earned by the student upto the end of that semester and

d)   SGPA & CGPA.

1.10.5   Classification

The classification based on CGPA is as follows:

CGPA 8 and above	:	First Class with distinction
CGPA 6.5 and above, but less than 8	:	First Class
CGPA 6 and above, but less than 6.5	:	Second Class

1.10.6   Conversion of CGPA to Percentage marks

The following formula shall be used to convert the SGPA/CGPA obtained by a student to percentage marks.

Percentage marks = (SGPA/CGPA – 0.5) 10.

1.11   Faculty Advisor

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department of the student will attach a certain number of students to a teacher of the Department who shall function as Faculty Advisor for those students throughout their period of study. Such Faculty Advisor shall advise the students and monitor the courses taken by the students, check the attendance and progress of the students attached to him / her and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress / performance of the students concerned.

1.12   Class Committee

A class committee consists of teachers of the class concerned, student representatives and a chairperson who does not handle any subject for the class. It is like the 'Quality Circle' more commonly used in industries), with the overall goal of improving the teaching-learning process. The functions of the class committee include:

- Solving problems experienced by students in the classroom and in the laboratories in consultation with the Course in Charge/ Director.

- Clarifying the Regulations of the degree programme and the details of rules therein.

- Informing the student representatives the academic schedule including the dates of assessments and the syllabus coverage for each assessment.

- Informing the student representatives the details of Regulations regarding weightage used for each assessment.

- Discussing in the class committee meeting the breakup of marks for each experiment / exercise / module of work, in case of practical course (laboratory /

drawing / project work / seminar, etc.) and informing the students.

- Analysing the performance of the students of the class after each test and finding ways and means of improving the performance of the students.
- Identifying the students who are low achievers or weak in their subjects if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.

The class committee is normally constituted by the Head of the Department. The class committee shall be constituted within a week from the date of commencement of a semester. At least 3 student representatives from the respective class (usually 3 boys and 1 girl) shall be included in the class committee. The student representatives shall be nominated on the basis of their academic performance since the First Semester of the B.Tech programme. In the case of First and Second semesters, the rank obtained in the Common Admission Test (CAT) shall be the criterion for nominating the student representatives. The Chairperson of the class committee may invite the Faculty Advisor(s), Course in Charge and the Head of the Department to the meeting of the class committee. The chairperson of the class committee is required to prepare the minutes of every meeting, submit the same to the Head of the Division within two days of the meeting and arrange to circulate the same among students concerned and teachers. If there are some points in the minutes requiring action by the University the same shall be brought to the attention of the Director and the Registrar.

The first meeting of the class committee shall be held within fifteen days from the date of commencement of the semester. The nature and weightage of internal assessments shall be discussed in the first meeting, within the framework of the Regulations and the same shall be communicated to the students. Two orthree subsequent meetings in a semester may be held at suitable intervals. During these meetings the student members representing the entire class, shall meaningfully interact and express their opinions and suggestions of the class students to improve the effectiveness of the teaching-learning process.

1.13 **Discipline**

Every student is required to observe discipline and decorous behaviour both inside and outside the campus and refrain from any activity which may tarnish the image of the university. Any act of indiscipline, misbehaviour including unfair practice in examinations will be referred to the authorities of the University that will make a detailed enquiry on the matter and decide on the course of action to be taken.

1.14 **Amendment to Regulations**

Notwithstanding all that has been stated above, the University has the right to modify any of the above regulations from time to time.

COCHIN UNIVER
COCHIN - 682022
KERALA, S. IND

No.Ac.A3/B.Tech NA&SB/Syllabus-Regulation/2021   Dated: 11.05.2(

NOTIFICATION

In exercise of the powers conferred by Section 24 (ii) read with Section 42 CUSAT Act 1986, the Academic Council at its meeting held on 22.03.2022 vide Iten (i), resolved to approve the regulation of B.Tech Naval Architecture and Ship Programme (2020)-Appended, applicable with effect from 2020 Admission.

In exercise of the powers conferred by Section 11(11) of CUSAT Act Vice-Chancellor has approved the above resolution of the Academic Council s reporting to Syndicate.

Dr. MEERA
REGISTRA

Dr. MEEF
Registr
Cochin Univ
Science and Te
Kochi-2 - 682 02

To

1. Dr. C.K. Aanandan, Dean, Faculty of Technology, CUSAT, Kochi-22
2. Dr. A. Mathiazhagan, Chairman, Board of Studies, Department of Ship Tech CUSAT, Kochi-22
3. The Head, Department of Ship Technology, CUSAT, Kochi-22
4. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar/ Controller of Examinations
5. The Joint Registrar (Exams)
6. Exam B/D/E/P/Y/Confidential Sections/DOA Section/Conference Section
7. Day File/Stock File/File Copy

REGULATIONS FOR B.TECH DEGREE PROGRAMME IN NAVAL ARCHITECTURE & SHIP BUILDING (8 SEMESTER DURATION) WITH EFFECT FROM 2020 UNDER OBE SYSTEM

I. Programme of Study:

1) The Programme for the B. Tech degree shall extend over a period of four academic years comprising eight semesters each of four months duration (approx.17weeks).

2) The programme of study shall follow credit system and will be in accordance with the scheme, course content and syllabus prescribed. **The total credit for the entire course shall be 160.**

3) The programme of instruction shall consist of the following:

- Humanities, basic engineering courses, professional core courses, professional electives, and industrial electives related to Naval Architecture and Shipbuilding.

- Workshop practice, laboratory works, Internship, Project work.

- Mandatory Non Credit courses such as Environmental studies, Industrial Safety Engineering, Disaster Management etc., offered in MOOC/ NPTEL / SWAYAM / Edex / Coursera, shall be taken by students after approval from Department Council (DC) and the certificate/ marksheet for these courses may be issued from University Examination section.

- Elective courses (In house electives/Industrial electives/Open electives) enable the students to opt for specialised courses related to the profession. These electives courses may be taken from the courses offered by MOOC/NPTEL/ SWAYAM / Edex / Coursera. The electives will be identified and approved by the DC before commencement of courses.

- The credit obtained from these courses will be transferred to the University and the maximum number of open courses will be 20% of the total electives.

- The industrial elective will be offered jointly with an industry. The evaluation will be done jointly with the industry in a method mutually agreed upon.

4) Training and regular visits to the industry will also form part of the programme. Every academic year, except in the final year, the students will undergo internship for a period of 4 - 6 weeks duration in shipyards, ship repair firms and related industries. Marks for the internship will be counted in the subsequent odd semester (i.e.III,VorVIIsemesters)

II. **Eligibility for the Degree:**

1) No candidate shall be eligible for the B.Tech Degree in Naval Architecture and Ship building unless he/ she has undergone the prescribed programme of study for a period not less than 4 academic years from the date of admission to the first semester and has passed the prescribed examinations in all the semesters.

2) A Student should complete the prescribed programme of study within eight academic years from date of first admission to the programme.

1) Rules regarding Attendance:

1) Every candidate is required to secure a minimum of 75% attendance to be eligible for appearing for the University examinations.

2) The Vice Chancellor shall have the power to condone shortage of attendance up to 10 percent on medical grounds on the recommendation of the Head of Department. However, such condonation for shortage of attendance shall be given only twice during the entire programme.

III. **Rules for Examination:**

1) Internal Assessment:- All sessional works shall be valued and marks shall be awarded on the basis of day-to day work, periodic tests and regular assignments based on the scheme of evaluation as decided by the Department Council.

2) The total sessional marks for theory and laboratory courses shall be made up of 50% for internal tests (minimum two tests), 40% for assignments / quizzes/ seminars and 10% for attendance. However the teachers, depending upon the specific requirements of the subjects, can make changes in the distribution with the permission of the Department Council. Marks for attendance shall be awarded as follows:

% of attendance	Marks awarded
96-100	10
91–95	8
86–90	6
81–85	4
75–80	2
Below 75	0

3) A candidate shall be allowed to improve internal assessment marks in theory/laboratory courses subject to the following conditions:

- The candidate shall not combine the course work with his / her regular course work

- The candidate shall repeat the theory / practical in a particular course only once and satisfy the minimum attendance requirement of 75 % in that particular course to write examination.

- The candidate shall not be allowed to repeat the course work of any semester if the candidate has already passed these mester examination in full.

4) External Assessment:- The University Examination shall be conducted at the end of every semester in the courses as prescribed under the course content.

5) To pass in a course, a candidate has to score not less than 45% of the marks in the University examination and not less than 50% aggregate marks in the University examination and sessional marks put together.

6) In courses where there are no University examinations, a candidate has to score not less than 50% sessional marks for a pass in that course.

IV.   Rules for Promotion:

1) A student will be eligible to be promoted from one semester to the next semester only if the candidate has secured a minimum of 75% attendance.

2) Each candidate shall register for the examination at the end of each semester.

3) A candidate shall not register for the nth semester examination without registering for $(n-1)^{th}$ semester.

4) To get promotion from the nth semester to the $(n+1)^{th}$ semester, a candidate has to pass the $(n-3)^{th}$ semester in full. This rule shall be applicable for promotion from fourth semester (i.e.,n=4) onwards.

V. Rules for Readmission:

1) A Student who is unable to attend classes on medical or other genuine grounds may be readmitted to the respective semester along with the subsequent batch.

2) A student seeking readmission shall give a written application to the Head of the Department, sixty days prior to the commencement of the semester to which readmission is sought.

3) A Student who has been removed from the nominal rolls due to default in payment of the semester fees shall be readmitted subject to the following conditions:

-The Head of the Department can readmit the student within 10 days from the last date of payment of the semester fees.

-Thereafter the University may accord sanction for readmission

- Readmission can be given only if the student can secure a minimum of 75% attendance in each course meeting the eligibility to register for the University examination of the respective semester.

VI. Grading:

1) Grades shall be awarded to the candidates in each course based on the total marks obtained in the internal and external assessments as follows:

Marks obtained (Percentage)	Grade	Grade Points
90-100	S	10
80 tolessthan90	A	9
70 tolessthan80	B	8
60 tolessthan70	C	7
50 tolessthan60	D	6
Less than50	F	0

2) A student is considered to have credited a course or earned credits in respect of the course if the student secures a grade other than F for that course.

3) Grade Point Average:

a) The academic performance of a student in a semester is indicated by the Grade Point Average (GPA)

$$GPA = \frac{G_1C_1 + G_2C_2 + G_3C_3 + \ldots \ldots G_nC_n}{C_1 + C_2 + C_3 + \ldots \ldots C_n}$$

Where G refers to the grade point and C refers to the credit value of corresponding course undergone by the student.

b) The cumulative Grade Point Average (CGPA) will be calculated as

$$CGPA = \frac{S_1T_1 + S_2T_2 + S_3T_3 + \ldots \quad S_nT_n}{T_1 + T_2 + T_3 + \ldots \ldots \quad T_n}$$

Where 'S' refers to the Grade Point Average, 'T' refers to the total credits in that semester.

4) Grade Card

The   Grade Card issued at the end of the semester to each student by the Controller of Examinations, will contain the following:

a. The code, title, number of credits of each course registered in the semester, marks (internal, external, total, month & year of passing the subject)

b. The letter grade obtained (grade number)

c. The total number of credits earned by the student up to the end of that semester and

d. GPA & CGPA (CGPA for final semester only)

5) Overall Classification:

i. *First Class with Distinction*:- Candidates who qualify for the Degree passing all the examinations within 4 academic years after the commencement of the programme of study and securing a CGPA of 8 and above. However, if a candidate has a CGPA of 8 and above, but is not able to complete within 4 years , such candidate is eligible to be classified as First class only.

ii. *First Class: -* Candidates who qualify for the Degree passing all the examinations within 8 academic years after their commencement of the programme of study and securing a CGPA of 6.5 and above.

iii. *Second Class:* Candidates who qualify for the Degree passing all the examinations within 8 academic years after the commencement of the programme of study and securing a CGPA of 6 and above but less than 6.5.

VII. Revision of Regulation and Curriculum:

The University may from time to time revise, amend or change the Regulations, Curriculum, Scheme of Examination and Syllabus.

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No.Conf.II/2941/2/2020 (11)

Dated: 15.01.2021

NOTIFICATION

In exercise of the powers conferred by Section 24(ii) read with Section 42(1) of the CUSAT Act 1986, the Academic Council at its meeting held on 08.07.2020 resolved to approve the revised Regulation and course structure of B.Tech in Instrumentation Technology offered at the Department of Instrumentation with effect from 2020 admissions as in Appendix.

The Syndicate at its meeting held on 21.12.2020 vide Item No.682.07 considered and resolved to approve the above decision of the Academic Council.

REGISTRAR

To

1. Dr. C.K. Aanandan, Dean, Faculty of Technology and Professor (Retd.), Department of Electronics, CUSAT, Kochi – 22.
2. Dr. Johney Issac, Chairman, Board of Studies in Instrumentation and Associate Professor, CUSAT, Kochi – 22
3. The Head, Department of Instrumentation, CUSAT, Kochi-22.
4. The Controller of Examinations/Joint Registrar (Exams/Academic)/ Deputy Registrar (Exam II)/Assistant Registrar (Academic).
5. Academic A.C/Exam. E.V/IRAA/Exam Confidential Sections
6. Day File/Stock File/File Copy

Regulations for the B.Tech. degree programme in Instrumentation Technology offered by Department of Instrumentation under Faculty of Technology

The following regulations are made applicable to the B Tech. programme in Instrumentation Technology offered by The Department of Instrumentation, Cochin University of Science and Technology, under Faculty of Technology with effect from the academic year 2020 -21.

1. Admission requirements

   Candidates seeking admission to the B.Tech Degree program in Instrumentation technology shall be required to posses the following qualification.

1.1   The candidate shall have passed the plus two (12th) examination of any state/ national board with Mathematics, Physics and Chemistry as optional subjects or any other examination accepted as equivalent by the Cochin University of Science and Technology.

1.2   The candidate shall have secured a minimum of 50% marks in Mathematics and 50% marks in Mathematics, Physics and Chemistry put together.

1.3   Relaxations in marks shall be followed for candidates belonging to SC/ST and socially and educationally backward classes as prescribed by the University.

1.4   The candidates shall also satisfy the conditions regarding physical fitness as may be prescribed by the University.

1.5   Admission to the course shall be through Common Admission Test (CAT) conducted by the University every year and admission will be based on the rank in the admission test. If a candidate, after getting admission based on his/her CAT rank, fails to meet the admission requirements as specified in clause 1.1, 1.2 and 1.3 above before commencement of the first semester examination, he/she shall be terminated from continuing the course.

1.6   10% additional seats may be created in a batch in the third semester for lateral entry. Candidate sseeking admission through lateral entry shall have 3 years diploma in Instrumentation or Electronics awarded by a board recognized by the department of technical education, Govt. of Kerala, with not less than 60% marks. Maximum age limit will be 25 years as on1st July of the academic year.

2. Duration of the course

The duration of the B Tech. programme shall be eight semesters spanning over four academic years as prescribed in the curriculum. Each semester shall consist of a minimum of 16 weeks.

3. Course Registration

It is mandatory for the students to register for the courses in each semester.

3.1 Before registration,the students should Clear all dues including any fees to be paid and Should not have any disciplinary issues pending

3.2   The Department will announce the dates for registration in its academic calendar. Late registration will be allowed up to 7 working days from the commencement of the semester with late registration fee.

4. Mode of Evaluation

4.1 The performance of the students in theory courses will be evaluated based on continuous assessment and semester end examination. In the case of laboratory courses, the evaluation will be based on continuous assessment and semester end assessment, which will be carried out internally.

4.2 For theory courses, there will be 50% weightage for internal assessment and 50% weightage for semester end examination. For practical courses, continuous assessment and semester end assessment will carry 50% weightage each.

4.3 For theory courses, the assessment pattern will be as follows :

Continuous assessment:

a)   First periodical test   -   Maximum marks : 15
b)   Second periodical test   -   Maximum marks : 15
c)   Assignments   -   Maximum marks : 15
d)   Attendance   -   Maximum marks : 5

Semester End Examination

a)   Examinations shall be of 3 hours duration.
b)   Maximum marks : 50

4.4   For laboratory courses, the assessment pattern will be as follows:

Continuous Assessment:

The marks may be awarded on the basis of the performance of the student in the laboratory sessions. The break-up of marks for continuous assessment of laboratory courses shall be:

a)   Practical records / Outputs-   Maximum weightage : 20%
b)   Lab work   -   Maximum weightage : 30%

Semester end assessment:

The semester end assessment will consist of an examination and a viva voce. Maximum weightage for semester end examination : 50%

4.5 At the end of the semester, semester examination will be conducted in all the theory courses offered in that semester and they will be of three hours duration unless otherwise specified. The Controller of Examinations will make necessary arrangements for setting the question papers and valuation of answer books for the semester end examination of theory courses.

4.6 The department shall conduct the semester end assessment for the laboratory courses internally with at least two faculty members as examiners.

4.7 In the case of project work, the project guide concerned shall make the continuous assessment. A committee consisting of the Project Coordinator (nominated by the Head of the Department), project guide, and at least one senior faculty member at the level of Associate Professor or above will carry out the assessment of the project report and final review.

The weightage for the assessment of project work shall be as follows:

Continuous assessment : 40 percent

Project report :20 percent

Final review :40 percent

4.8 The Viva-voce examination at the end of VIII semester will be conducted by a panel of minimum three examiners consisting of the Head of the Department or his/her nominee and two or more faculty members with one senior faculty at the level of Associate Professoror above of the Department.

4.9 A candidate shall not be allowed to improve the continuous assessment marks in theory/ laboratory courses. A candidate who desires to improve his/her marks in the semester end examination in theory courses shall be permitted to do so in the next available chance. This facility will be available only once for a theory course.

4.10 For industry elective courses, the evaluation will be done jointly by the resource persons from the industry who handles the course and the faculty in charge of the course.

5. Course Completion and Earning of Credits.

Students registered for a course have to attend the course regularly and meet the attendance rules of the University and appear for all the internal evaluation procedures for the completion of the course. However, credits can be earned only on completion of the semester end examination and on getting a pass grade. Students, who have completed a course, but could not write the semester end examination for valid reasons, are permitted to write the examination at the next available chance and earn the credits without undergoing the course again.

6. Eligibility to Appear for the Semester End Examination

A candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for the completion of a semester.

6.1 A student shall secure not less than 75% of overall attendance in a semester taking into account the total number of periods in all courses attended by the candidate as against the total number of periods in all courses offered during that particular semester.

6.2 The Head of the Department shall have the power to condone shortage of attendance up to 5% (between 75% and 70%) in a particular semester due to medical reasons (hospitalization /accident/ specific illness) on production of medical certificate from a registered medical practitioner endorsed by the University Medical Officer and on payment of the required fee. However, such condonation for shortage of attendance shall be given only twice during the entire duration of the BTech. programme.

6.3 The Vice Chancellor shall have the power to condone shortage of attendance upto additional 5% (between 70% and 65%) in a particular semester due to medical reasons (hospitalization/ accident/ specific illness) duly verified and recommended by the Head of the Department and on production of Medical certificate from a registered medical practitioner endorsed by the University Medical Officer and on payment of the required fee. However, such condonation for shortage of attendance shall be given only twice during the entire duration of the B Tech. programme.

6.4 Candidates who secure overall attendance of less than 65% (subject to clauses 6.2 and 6.3 above) will not be permitted to write the semester end examinations and will not be permitted to go to next/subsequent semester. They are required to repeat the incomplete semester in the next academic year.

7. Eligibility to Write the Suppelementary Examination

Failed candidates and those who could not write the semester end examination due to health reasons or other contingencies that are approved by the Head of the Department can register for the supplementary examination. Those who wish to improve their performance in the semester end examinations can also register for the same, subject to the provisions of clause 4.9. Grades awarded in the supplementary examination will be taken as semester grades in these subjects and will be based on the semester examination-grading pattern in that subject. In the case of candidates appearing for improvement of marks, the higher mark obtained will be considered for the purpose of grading.

A candidate who fails to obtain a pass in courses having only continuous assessment will be permitted to repeat the course along with the junior batches.

8. Revaluation

A candidate can apply for revaluation of his/her semester end examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee along with prescribed application to the Controller of Examinations through the Head of Department. The Controller of Examination will arrange for the revaluation and the results will be intimated to the candidate concerned through the Head of the Department. Revaluation is not permitted for laboratory courses, courses having only continuous assessment, seminar and projectwork.

9. Pass Requirements

A candidate has to obtain a minimum of 50% marks for continuous assessment and semester end examination put together with a minimum of 40% marks in the semester end examination for a pass in theory and laboratory courses.

In the case of theory/ laboratory courses having only continuous assessment, a candidate has to obtain a minimum of 50% marks in continuous assessment for a pass.

10. Promotion to Higher Semesters

10.1   A candidate shall be eligible for promotion from one semester to the next semester only if he/she has

   a) A valid registration for the university examination

   b) Secured the minimum attendance as per Clause 6

10.2   Supplementary university examinations for all semesters shall be held along with the regular examinations.

10.3   Special supplementary examination may be conducted for the seventh and eighth semesters.

10.4   Total number of chances to appear for the examination in any subject is limited to five only.

11. Eligibility for the Degree

11.1   No candidate shall be eligible for the degree, unless he/she has undergone the prescribed course of study for a period of eight semesters in the university and has passed the prescribed examinations in all the semesters.

11.2   All the requirements for the degree shall be completed by the candidate within a period of eight academic years from the date of admission to the first semester.

12. Grading

12.1   Grades shall be awarded to the students in each course based on the total marks obtained in continuous assessment and at the end semester examination and as per the provisions of clause4.
The grading pattern shall be as follows:

Marksobtained (Percentage)	Grade	Grade points
90to100	S(Outstanding)	10
80–90	A(Excellent)	9
70–80	B (Verygood)	8
60–70	C (Good)	7
50-60	D(Fair)	6
<50	F(Fail)	0

   Note: Where X–Y range denotes 'X' inclusive and 'Y' exclusive

12.2 A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F for that course.

12.3 Grade Point Average.

The Grade Point Average (GPA) indicates the academic performance of a student in a semester.

$$\text{GPA} = \frac{G_1 C_1 + G_2 C_2 + \cdots + G_n C_n}{C_1 + C_2 + \cdots + C_n},$$

where 'G' refers to the grade point and 'C' refers to the credit value of the corresponding course undergone by the student.

The Grade Point Average (GPA) for each semester will be calculated only for those students who have passed all the registered courses of that semester. Similarly, Cumulative Grade Point Average (CGPA) up to any semester will be calculated only for those students who have passed all the courses up to that semester.

12.4 Classification:
On successful completion of the program Cumulated GPA (CGPA) will be calculated as follows

$$\text{CGPA} = \frac{GP_1 C_1 + GP_2 C_2 + \cdots + GP_8 C_8}{C_1 + C_2 + \cdots + C_8},$$

where GP_n refers to the GPA and C_n refers to the total number of credits obtained by a student in Semester n.

The classification based on CGPA is as follows

CGPA 8 and above with distinction	: First Class
CGPA 6.5 and above, but less than 8	: First Class
CGPA 6 and above, but less than 6.5	: Second Class.

12.5 Conversion of CGPA to Percentage marks

The following formula shall be used to convert the CGPA obtained by a student to percentage marks.

Percentage marks = $(\text{CGPA} - 0.5) \times 10$

13 Electives and Open courses

The curriculum for the programme consists of Professional Elective Courses, and open courses. In addition, industry based elective courses shall be offered for students as part of the curriculum. A student shall have the choice of taking upto 20% of credit allotted to electives from such industry base elective courses. Three open elective courses are offered in the final semester. The students shall select these courses from the list of courses available from approved national agencies such as SWAYAM, subjected to the approval of the department faculty council. The students are responsible to pay the course fee, if any, attend these online courses, pass the exam and produce the certificate. The percentage of marks/credit will be given according to the marks obtained in the above examination.

14. Faculty Advisor

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach a teacher of the Department to each batch of students, this teacher will be the Faculty Advisor for that batch of students throughout their period of study. These Faculty Advisors shall advise the students and monitor the courses taken by the students, check the attendance and progress of the students and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress/performance of the students concerned.

15. Class Committee

A class committee consists of teachers of the class concerned, student representatives and a chairperson who does not handle any subject for the class. It is like the 'Quality Circle' (more commonly used in industries),with the overall goal of improving the teaching-learning process. The functions of the class committee include:

a. Solving problems experienced by students in the classroom and in the laboratories in consultation with Head of the Department.

b. Clarifying the regulations of the degree programme and the details of rules therein.

c. Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.

d. Informing the student representatives, the details of regulations regarding weightage used for each assessment.

e. Analyzing the performance of the students of the class after each test and finding ways and means of improving the performance of the students.

f. Identifying the students who are low achievers or weak in their subjects if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.

The Head of the Department will constitutes the class committee. The class committee shall be constituted within a week from the date of commencement of a semester. At least 4 student representatives from the respective class (usually 2 boys and 2 girls) shall be included in the class committee. The student representatives shall be nominated on the basis of their academic performance since the first semester of the B Tech. programme. In the case of first and second semesters, the rank obtained in the Common Admission Test (CAT) shall be the criterion for nominating the student representatives. The Chairperson of the class committee may invite the Faculty Advisor(s) and the Head of the Department to the meeting of the class committee. The Chairperson of the class committee is required to prepare the minutes of every meeting, submit

the same to the Head of the Department within two days of the meeting and arrange to circulate the same among students concerned and teachers. If there are some points in the minutes requiring action by the University, the same shall be brought to the attention of the Head of the Department and the Registrar.

The first meeting of the class committee shall be held within fifteen days from the date of commencement of the semester. The nature and weightage of internal assessments shall be decided in the first meeting, within the framework of the regulations and the same shall be communicated to the students. Two or three subsequent meetings in a semester may be held at suitable intervals. During these meetings the student members representing the entire class, shall meaningfully interact and express their opinions and suggestions of the class to improve the effectiveness of the teaching-learning process.

16. Discipline

Every student is required to observe discipline and decorous behaviour both inside and outside the campus and refrain from any activity, which may tarnish the image of the University as per the provisions of the Cochin University Students' (Conduct and Disciplinary) Code - 2005. Any act of indiscipline, misbehaviour including unfair practice in examinations will be referred to the authorities of the University that will make a detailed enquiry on the matter and decide onthecourseof action to be taken.

17. Amendment to Regulations

 Not withstanding all that has been stated above, the University has the right to modify any of the above regulations from time to time.

18. Course Structure and Scheme of Evaluation.

The programme of instruction will consist of the following:

a) Basic Science Courses (BSC) comprising Mathematics, Physics, Chemistry etc;
b) Engineering Science Courses (ESC) introducing the student to the foundations of engineering.
c) Professional Core Courses (PCC) introducing the students to the foundations of Instrumentation and Control engineering.
d) Elective Courses (EC) enabling the student to opt and undergo a set of courses of interest to him/her;
e) Professional practice including project, seminar, and industrial training;
f) Humanities courses (HC) on soft skills; and
g) Mandatory Courses (MC) on Indian Constitution and Environmental Science, in addition to Induction training.

The BTech. Programme will have a curriculum and syllabus for the courses approved by the Academic Council.

The BTech. Programme will follow the credit system.

The curriculum of the BTech. Programme has a total of 160 credits.

കൊച്ചി ശാസ്ത്ര സാങ്കേതിക സർവ്വകലാശാല

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No.Conf.II/2941/2/2020 (12)

Dated: 15.01.2021

NOTIFICATION

In exercise of the powers conferred by Section 24(ii) read with Section 42(1) of the CUSAT Act 1986, the Academic Council at its meeting held on 08.07.2020 resolved to approve the revised Regulation and Course Structure for B.Tech in Polymer Science and Engineering offered at the Department of Polymer Science and Rubber Technology with effect from 2020 admissions as in Appendix.

The Syndicate at its meeting held on 21.12.2020 vide Item No.682.07 considered and approved the above resolution of the Academic Council.

Dr. MEERA V.
REGISTRAR

To

1. Dr. C.K. Aanandan, Dean, Faculty of Technology and Professor (Retd.), Department of Electronics, CUSAT, Kochi – 22.
2. Dr. Sunil K. Narayanankutty, Chairman, Board of Studies in Polymer Science and Rubber Technology, Professor, Department of Polymer Science and Rubber Technology, CUSAT, Kochi – 22
3. The Head, Department of Polymer Science and Rubber Technology, CUSAT, Kochi – 22
4. The Controller of Examinations/Joint Registrar (Academic/Exam)/ Assistant Registrar (Academic/Exam IV)/Deputy Registrar (Exam II).
5. Academic A,C/Exam. E,V/IRAA (Directorate of Admissions)/Exam Confidential Sections
6. Day File/Stock File/File Copy

GRAMS : CUSAT - KOCHI-22
Fax : 0091 - 484-2577595

E-mail : registrar@cusat.ac.in

Telephone: 0484-2575181

REGULATIONS FOR B.TECH DEGREE COURSES IN POLYMER SCINECE AND ENGINEERING
UNDER FACULTY OF TECHNOLOGY, WITH EFFECT FROM 2020

1. **Effective from:** This regulation of the B. Tech. programme in Polymer Science and Engineering offered by the Department of Polymer Science and Rubber Technology is with effect from 2020-21 admission. The B.Tech (Polymer Science and Engineering) course will follow **OBE system**.

2. **Total Credit**: The curriculum of the B. Tech. programme shall have a minimum total of **160 credits.**

   a) This consists of core subjects, professional electives, open electives and industrial electives.

   b) The professional electives may be taken from the Department of from other Departments in the campus. In cases where the elective is from other Departments, the evaluation will be done by them.

   c) The **open elective** is to be taken from the courses offered **by NPTEL / SWAYAM / Edex / Coursera**. The electives from these list will be identified and approved by the Department.

   d) The credit obtained from these courses will be transferred to the University

   e) The maximum number of open courses will be 20% of the total electives.

   f) **The industrial elective** will be offered jointly with an industry. The evaluation will be done jointly with the industry in a method mutually agreed upon.

3. **Mode of Evaluation**: The performance of the students in theory and practical courses will be evaluated based on continuous assessment and end- semester examination. For theory courses and practical courses, continuous assessment and end semester examination will carry 50 % weightage each. The level of difficulty of the questions will be: of 30 % easy, 40 % medium difficulty and 30 % tough.

4. **Assessment**: In each theory courses, the assessment pattern will be as follows:

   a) Continuous Assessment:

Sl. No.	Break up	Maximum marks
1	I Periodical Test	**15**
2	II Periodical Test	**15**
3	Assignments	**15**
4	Attendance	**5**

   b) The marks awarded for attendance will be as follows:

Percentage Attendance	Marks
95-100	5
90 to less than 95	4
85 to less than 90	3
80 to less than 85	2
75 to less than 80	1

c) End Semester Examination:

The examination will be of 3 hours duration for which maximum marks will be 50.

d) Practical Courses

In each practical course, assessment pattern will be as follows:
1. Continuous assessment : 50 marks. For continuous assessment, marks may be awarded on the basis of regularity and performance of the student in the laboratory sessions.
2. End semester examination : 50 marks.

e) Normally both question paper setting and valuation of answer papers for all the periodical tests shall be carried out by the teacher who has handled the course. The question paper for the end semester examination for theory papers will be set by an external examiner. The Controller of Examinations will make necessary arrangement for settling the question papers and valuation of answer books for the end semester examination.

f) The continuous assessment in laboratory course will be based on supervision of the students work, their performance in viva voce examinations and the quality of their work. The end semester examination for the laboratory courses shall be conducted internally by the respective department / division with at least two faculty members as examiners.

g) In the case of project work, a committee consisting of the Project Co-coordinator (appointed by the Head of the Department), project guide and at least one senior faculty member will carry out the assessment based on at least two interim reviews and a final review just before the submission of the project report.

h) The Viva voce examination at the end of VIII Semester will be conducted by a panel of examiners consisting of the Head of the Department and one senior faculty of the Department and one external expert.

i) A candidate shall allowed to improve the continuous assessment marks in theory / laboratory courses subject to the following conditions :

1. He / she shall not combine the course work with his / her regular course work.
2. He / she shall repeat the theory/ practical course in a particular course only once and satisfy the minimum attendance requirement of 75 percent in that particular course.
3. He / shall not be allowed to repeat the course work of any semester if he / she has already passed the semester examination in full.

5. **Pass requirements.**

A candidate has to obtain a minimum of 50 percent marks for continuous assessment and end semester examination put together with a minimum of 45 percent marks in the end semester examination for a pass in both theory and laboratory courses. That is , he / she has to score a minimum of 23 marks out of 50 for the external examination.

6. **Promotion to Higher Semesters**

A candidate shall be eligible for promotion from one semester to the next semester only if the following conditions are satisfied:
He/ she has secured a minimum of 75% attendance.
   a) Promotion from one semester to the next semester shall be subject to the condition that the candidate to be promoted to the nth semester should have earned a minimum of (n-2)15 credits. This norm is applicable only from 5th semester onwards.
   b) His / her progress and conduct have been satisfactory.

7. **Attendance**
   a) The percentage of attendance of a candidate for a semester shall be indicated by a letter code as given below

Percentage Attendance	Letter Code
90 and above	H
75 to less than 90	N
Less than 75	L

   b) A student whose attendance is less than 75% for a semester is not eligible to appear for the end semester examination.
   c) The Vice Chancellor shall have the power to condone shortage of attendance up to 10 percent on medical grounds on the recommendations the Head of Division / Department. However, such condonation for shortage of attendance shall be given only twice during the entire course.

8. **Grading**
   a) Grades shall be awarded to the students in each course based on the total marks obtained in continuous assessment and the end semester examination. The grading pattern shall be as follows:

Marks obtained (Percentage)	Grade	Grade Points
90-100	S	10
80 to less than 90	A	9
70 to less than 80	B	8
60 to less than 70	C	7
50 to less than 60	D	6
Less than 50	F	0

   b) A student is considered to have credited a course or earned credits in respect of a course if he / she secures a grade other than F for that course.

c) Grade Point Average.

The academic performance of a student in a semester is indicated by the Semester Grade Point Average (SGPA)

$$SGPA = \frac{G1C1 + O2C2 + O3C3 + \ldots\ldots GnCn}{C1 + C2 + C3 + \ldots\ldots\ldots Cn}$$

Where G refers to the grade point and C refers to the credit value of corresponding course undergone by the student.

d) The cumulative grade point average (CGPA) will be calculated as

$$CGPA = \frac{S1T1 + S2T2 + S3T3 + \ldots\ldots SnTn}{T1 + T2 + T3 + \ldots\ldots\ldots Tn}$$

Where 'S' refers to the grade point average, 'T' refers to the total credits in that semester.

e) Grade Card

The Grade Card issued at the end of the semester to each student by the Controller of Examinations , will contain the following:
1. The code, title, number of credits of each course registered in the semester, marks (internal, external , total, month & year of pass the subject)
2. The letter grade obtained (grade number)
3. The attendance code
4. The total number of credits earned by the student up to the end that semester and
5. SGPA & CGPA (CGPA for final semester only)

A CGPA of 8.0 and above will be classified as **FIRST CLASS WITH DISTINCTION** and a **CGPA 6.5 above** will be classified as **FIRST CLASS.** The percentage conversion formula is Percentage of marks = (CGPA or SGPA – 0.5) * 10

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

NOTIFICATION

In exercise of the powers conferred by the Section 24(ii) read with Section 42(1) of the CUSAT Act 1986, the Academic Council at its meeting held on 28-07-2021, resolved to approve the Regulation and Scheme of the B.Arch programme prescribed by the Council of Architecture, with effect on 2021 Admissions.

The Syndicate at its meeting held on 29-09-2021 vide Item No.690.10, resolved to authorize Dr. Beena K S, Dean, Faculty of Engineering to make necessary modifications in the Regulations of B.Arch programme.

The Syndicate also resolved to authorize the Vice Chancellor to approve the Regulation of B.Arch Programme with the modifications proposed by the Dean.

Accordingly, the Vice Chancellor has approved the Regulation and scheme of B.Arch programme (Appended) with the modification proposed by the Dean, Faculty of Engineering.

REGISTRAR

To

1. Dr. Ranjini Battathiripad, Dean, Faculty of Architecture and Professor, School of Architecture, Government Engineering College, Thirssur-680009.
2. Dr.Sunil Edward, Chairman of Board of Studies in Architecture and Head, Department of Architecture, College of Engineering, Thiruvanathapuram.
3. All members of the Board of Studies in Architecture.
4. The Principal, TKM School of Architecture, Musaliar Hills, Ezhukone, Kollam, Karuvelil, Kerala691505.
5. The Principal, Nizar Rahimand Mark School of Architecture, Nizar Estates, Roaduvila, Kerala691516
6. The Principal, Marian College of Architecture and Planning, Marian College Rd, Kazhakkoottam, Menamkulam, Kerala 695582

7. The Finance Officer / Controller of Examinations / JR (Exam /Academic) /DR (Exams) /AR(Exams /Academic) /Director of Directorate of Public Admissions /CIRM.

8. PStoVC/PStoPVC/PAtoRegistrar/PAtoCE

9. Exam H/Y/ExamConfidential/Directorate of Public Admissions sections

10. Dayfile/StockFile/Filecopy

*This is a computer generated document. Hence no signature is required.

REGULATIONS 2021 Scheme

PREAMBLE

Architecture education in India is regulated by the Council of Architecture (hereafter, the COA, unless otherwise specified) which was constituted under Architect's Act 1972.The Council has prescribed mandatory 'Minimum Standards of Architectural Education Regulations'. The course regulations of B Arch Degree (2021 Scheme) of the University has been formulated based on the Council of Architecture Regulations, 2020.

1. ADMISSION TO BACHELOR OF ARCHITECTURE (B ARCH)
2. DURATION OF COURSE
3. STRUCTURE OF COURSE
4. ELIGIBILITY FOR DEGREE
5. SUBJECTS OF STUDY
6. ACADEMIC EVALUATION
7. CONTINOUS ASSESSMENT
8. UNIVERSITY EXAMINATIONS
9. GRADES AND GRADE POINTS
10. MINIMUM CRITERIA FOR PASS
11. ELIGIBILITY FOR PROMOTION TO HIGHER SEMESTER
12. IMPROVEMENT OF MARKS
13. STUDY TOURS
14. MISCELLANEOUS
15. AMENDMENT TO REGULATION

1. ADMISSION TO BACHELOR OF ARCHITECTURE (B ARCH)

1.1   Academic eligibility for admission

No candidate shall be admitted to architecture course unless he/ she has passed an examination at the end of the 10+2 scheme of examination with at least 50% aggregate marks in Physics, Chemistry & Mathematics and also at least 50% marks in aggregate of the 10+2 level examination or passed 10+3 Diploma examination with Mathematics as compulsory subject with at least 50% marks in aggregate.

The admissions shall subject to the usual concessions allowed for backward and other communities as specified from time to time. Any change as notified by the COA will also be applicable for the academic eligibility for admission.

1.2 Aptitude Test in Architecture

In addition to clause (1.1) all admission to Architectures degree course shall be subject to passing of National Aptitude Test in Architecture (NATA) conducted by COA.

1.3 The institutions shall give weightage of 50% marks for aptitude tests and 50% marks in the qualifying examinations as provided in sub-regulation(1.1) or as specified by the competent authority approved by the COA.

1.4 Lateral Entry

No lateral admission shall be permitted at any stage of the 5 year degree course.

2. DURATION OF THE COURSE

2.1 The course duration for B Arch degree shall be five academic years comprising of 10 semesters of approximately 15-18weeks, inclusive of six months or one semester of approximately 100 days of practical training during 9th semester.

2.2 The B Arch programme shall be completed within 8 years. However, in special circumstances a candidate may be granted an extra 1 year by the University to complete the course and shall be given only once to the candidate.

3. STRUCTURE OF COURSE

3.1 The B Arch programme offered by Cochin University shall follow Choice Based Credit System. The curriculum shall have a total of 270 credits.

3.2 The courses of study in the Architecture Degree program shall be under:

i.   Professional Core Course (PC): A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

ii.   Basic Sciences and Applied Engineering Course (BS& AE): A course which informs the Professional core and should compulsorily be studied.

iii. Elective Course: Generally a course which can be chosen from a pool of courses and are of two types: (i) Professional Elective (PE) which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope (ii) Open Elective (OE) which enables an exposure to some other discipline/subject/or nurtures the candidate's proficiency/skill.

A candidate can enroll for any one online certified course (MOOC/NPTEL courses) with the prior approval of the University, which can be considered equivalent to an elective IV in the eight semester. However the transfer of credits/marks shall be based on course equivalence as per the rulesf the University.

iv. Professional Ability Enhancement Courses (PAEC) which may be of two kinds: Employability Enhancement Compulsory Courses (EECC) and Skill Enhancement Courses (SEC)

3.3 Course Registration

It is mandatory for the candidates to register for the courses in each semester.

Before registration, the candidates should

a) Clear all dues including any fee to be paid to the Institution and University and should not have any disciplinary issues pending.
b) Meet the requirements regarding the minimum number of credits for promotion stipulated in clause 11.1 to 11.4.

3.4 Course completion and earning of credits

Candidates registered for a course have to attend the course regularly and meet the attendance rules of the University and appear for all the internal evaluation procedures for the completion of the course. However, credits can be earned only on completion of the semester end examination and on getting a pass grade. Candidates who have completed a course, but could not write the semester end examination for valid reasons, are permitted to write the examination at the next available chance and earn the credits without undergoing the course again.

4. ELIGIBILITY FOR DEGREE

4.1 Candidates for the award of the Degree in Bachelor of Architecture shall require to have undergone the prescribed course of studies in an institution affiliated to / recognized by the Cochin University of Science and Technology for a period not less than 10 semesters.

4.2 He/She shall successfully complete and pass all the examination specified in the scheme and syllabi.

4.3 He/She shall earn the minimum credits as specified in the curriculum.

5. **SUBJECTS OF STUDY**

The subjects of study shall be in accordance with the scheme and syllabi prescribed in the programme.

6. **ACADEMIC EVALUATION**

Candidates in each semester will be evaluated by both continuous assessment and semester end examination. The maximum marks allotted for continuous assessment and University examination for each subject is as prescribed by the scheme of study.

7. **CONTINUOUS ASSESSMENT (CA)**

The marks awarded for continuous assessment will be on the basis of day-to-day work, periodic tests (minimum two in a semester) and assignments/class projects (minimum two in a semester). The CA marks for the individual subjects shall be computed on the following basis.

7.1   All the subjects of the B Arch Degree course shall be grouped into four groups as stated below.

Group I (a): Subjects having evaluation through CA and having a final Jury conducted by a team consisting of an Internal and an External Examiner.

The subjects in this group are Architectural Design I, II, III, IV, V, VI, VII & VIII

Group I (b): Subjects having drawing and theory, and evaluation through CA and University examination. These subjects do not have a Jury.
The subject in this group are Building materials and Construction I, II, III, IV, V&VI, Architectural Graphics I&II, Geometrical drawing

Group I (c): Architectural Design Thesis

Group II: Subjects having evaluation through CA and University examination. The subject in this group are all subjects other than those mentioned in Group I (a,b,c) & Group III & IV

Group III: Communication Skill, Workshop practice and Site visit, Computer studio I, II & III, Building Science Lab (Practical/Viva/Report), Dissertation, Architectural travel studies. These subjects shall have the evaluation through CA

and Jury/practical/evaluation of the portfolio/reports/Viva-voce as per the curriculum.

Group IV: Practical Training

7.2 The CA marks shall be awarded as per the following norms for each group

Group I (a, b)	Assignment projects- 70% Test - 20% Attendence-10%
Group II	Assignment - 60% Test - 30% Attendence-10%
Group I (c), III &IV	As per the manuals/scheme and syllabus

7.3 Attendance

CA marks shall be awarded for attendance only if a candidate secures a minimum of 75% attendance. Marks shall be awarded in full only if the candidate has secured 95% attendance in the subject. Proportionate reduction will be made in the case of subjects in which he /she gets below 95% of the attendance.

8. UNIVERSITY EXAMINATIONS

8.1 Conduct of Examination

8.1.1   There shall be University examinations at the end of every semester from Ist semester onwards for all subjects in   Group II & Group I(b) as prescribed in the scheme of examinations for B.Arch. Degree courses.

8.1.2   The conduct of examinations for subjects in Group I(a), I(c), III and IV shall be specified along with the manual/ syllabus of the particular subject.

8.1.3   The University examination will be held twice in a year; April/May session and November/ December session.

8.2 Eligibility to appear for the Semester End Examinations

8.2.1   A candidate also shall secure not less than 75% of overall attendance (including duty leaves sanctioned by the Institution) in a semester taking into account the total no of periods in all courses attended by the candidate during that particular semester.

8.2.2   The Head of Institution shall have the power to condone shortage of attendance up to 5% (between less than 75% and 70%) in a particular semester due to medical reasons (hospitalization/accident/specific illness) on production of medical certificate from a registered medical practioner endorsed by the University medical officer and on payment of the required fee. However, such condonation for shortage of attendance shall be given only twice during the entire duration of the B Arch programme.

8.2.3   The Vice Chancellor shall have the power to condone shortage of attendance up to additional 5% (between 70% and 65%) in a particular semester due to medical reasons (hospitalization/accident/specific illness) duly verified and recommended by the Head of the Institution and on production of medical certificate from a registered medical practioner endorsed by the University medical officer and on payment of the required fee. However, such condonation for shortage of attendance shall be given only twice during the entire duration of the B Arch programme.

8.2.4   Candidates who secure overall attendance of less than 65% (subject to clause 8.2.2 and 8.2.3 above) will not be permitted to write the semester end examinations and will not be permitted to go to the next/subsequent semester. They are required to repeat the incomplete semester in the next immediate academic year.
This provision is allowed only once for a semester. However, prior permission from the University should be obtained before readmitting the student to the respective semester.

8.3   Eligibility to write the Supplementary Examination

Failed candidates and those who could not write the semester end examination due to health reasons or other contingencies that are approved by the Head of the Institution can register for the supplementary examination. Those who wish to improve their performance in the semester end examinations can also register for the same, subject to the provisions in clause 12.2. Grades awarded in the supplementary examination will be taken as semester grades in the subjects and will be

based on the semester examination grading pattern in that subject. In case of candidates appearing for the improvement of marks, the higher marks obtained will be considered for the purpose of grading.

8.4 Revaluation

A candidate can apply for revaluation of his/her semester end University examination answer paper (Group I(b), II) within 2 weeks from the declaration of results on payment of a prescribed fee along with prescribed application to the Controller of Examinations through the Head of Institution. The Controller of Examination will arrange for revaluation and the results will be initiated to the candidate concerned through the Head of the Institution.

9 GRADES AND GRADE POINTS

9.1 The subject shall have an integer number credit assigned to it depending upon the academic load and importance of the subject. The credit associated with each subject is given in the prescribed scheme and syllabi.

9.2 Grades shall be awarded to the candidates in each semester based on the total marks obtained in continuous assessment and semester end examination (as per clause 7.2).

The grading pattern shall be as follows

Marks obtained (%)	Letter Grade	Grade points(GP)
90 to 100	S	10
80-90	A	9
70-80	B	8
60-70	C	7
50-60	D	6
<50	F	0 (Failed)

Where X-Y range denotes, X inclusive and Y exclusive, except for 90-100 where both X-Y inclusive.

9.3 A candidate is considered to have credited a course or earned credits if he/she secures a grade other than F for that course.

9.4 Grade Point

9.4.1 Grade Point Average (GPA)

The academic performance of a candidate in a semester is indicated by the GPA.

$$GPA = \frac{\sum (\text{subject credit x GP obtained for the subject})}{\text{Total credits of the semester}}$$

The GPA for each semester will be calculated only for those students who have passed all the registered courses of that semester

9.4.2 Cumulative Grade Point Average (CGPA)

$$CGPA = \frac{\sum(\text{Total credit for a semester x GPA obtained for the semester})}{\text{Total credits of the course}}$$

The CGPA up to any semester will be calculated only for those candidates who have passed all the courses up to that semester.

9.4.3 Classification based on CGPA

CGPA 8 and above : First Class with distinction
CGPA 6.5 and above, but less than 8 : First Class
CGPA 6 and above, but less than 6.5 : Second Class
Conversion of GPA /CGPA to percentage marks shall be using the formula
Percentage marks = (GPA/CGPA – 0.5)10

10. MINIMUM CRITERIA FOR PASS

10.1 A candidate shall secure a minimum of 50% of aggregate marks (CA + semester end examination) with a minimum of 45% marks in the semester end examination for a pass for all subjects in Group II.

10.2 For subjects in Group I, III, and IV it shall be as per the B Arch degree course manual.

10.3 A candidate shall be declared to have passed an individual subject of a semester if he/she secures grade 'D' or above.

11 ELIGIBILITY FOR PROMOTION TO HIGHER SEMESTER

11.1 A candidate shall not be permitted to enroll for the next semester unless he/she has completed the Architectural Design course of the previous semester. In such cases he/she is required to repeat the course in the next immediate academic year.

11.2 A candidate who does not register for the University examination of a particular semester/evaluation of practical training, will not be eligible to enroll for the higher semester.

11.3 A candidate has to earn a minimum number of credits, as shown in the chart below, in a semester to be eligible to register for the next semester.

Promotion to V, VII& IX semester shall be subject to the following condition

Promotion to	Minimum number of credits to be earned
V Semester	45 credits out of 90 up to III semester
VII semester	75 credits out of 150 up to V semester
IX semester	105 credits out of 210 up to VII semester

11.4 A candidate shall not be permitted to enroll for the tenth semester Architectural Design Thesis unless he has successfully completed Practical Training.

12 IMPROVEMENT OF MARKS

12.1 A candidate shall not be allowed to improve the CA marks of any course.

12.2 A candidate who desires to improve his/her marks in the semester end examination shall be permitted to do so for Group I(b), Group II, subjects alone in the next immediate available chance. This facility will be available only once for a course.

13 STUDY TOURS

Study tours shall be a part of the program and conducted every year. Concerned faculty shall accompany the students during the tour.

The working days used for the educational tour will be considered as working periods of a semester. For students who are unable to attend the tour, measures should be taken to record their attendance in college or make alternate arrangements for academic tasks to compensate for the same.

The tour may be conducted during the vacation/holidays taking not more than 5 working days, combined with the vacation/holidays if required. Total number of tour days shall not exceed 15 days per semester.

14. MISCELLANEOUS

14.1   Class Committee

A class committee consists of teachers of the class concerned, student representatives and a Chairperson who does not handle any subject for the class. It is constituted by the Head of the Department for every semester with the overall goal of improving the teaching/learning process.

The functions of the class committee include:

a. Solving problems experienced by students in the classroom in consultation with the Head of the institution.
b. Reviewing periodically the progress and conduct of students in the class.
c. Analyzing the performance of students of the class after each test and finding ways and means of improving their performance.
d. Identifying the students who are low achievers or weak in their subjects if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students academically weaker students and suggest remedial measures.
e. Reviewing the teaching effectiveness and coverage of syllabus.

The class committee shall be constituted within a week from the date of commencement of a semester. At least 4 student representatives from the respective class (Usually 2 boys and 2 girls) shall be included in the class committee. The student representative shall be nominated on the basis of their academic performance since the first semester of B Arch programme. In case of first and second semester, the rank obtained in NATA shall be the criterion for nominating the student representatives. The Chairperson of the class committee may invite the Faculty Advisor(s) and Head of the Institution to the meeting of the class committee. The Chairperson of the class committee is required to prepare the

minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and arrange to circulate the same among students concerned and teachers. If there are some points in the minutes requiring action by the University, the same shall be brought to the attention of the Registrar.

The first meeting of the class committee shall be held within fifteen days from the date if commencement of the semester. Two or three subsequent meetings in a semester may be held at suitable intervals. During these meetings the student members representing the entire class shall meaningfully interact and express their opinions and suggestions of their class to improve the effectiveness of the teaching - learning process.

14.2 Discipline

Every student is required to observe discipline and decorous behavior both inside and outside the campus and refrain from any activity which may tarnish the image of the Institution/University as per the provision of the Cochin University Students' (Conduct and Disciplinary) Code – 2005. Any act of indiscipline, misbehavior including unfair practice in examinations will be referred to the authorities of the University that will make a detailed enquiry on the matter and decide on the course of action to be taken.

15   AMENDMENT TO REGULATION

Notwithstanding all that has been stated above, the University has the right to modify any of the above regulation from time to time.

B ARCH DEGREE COURSE (10 SEMESTERS)

MANUALS 2021 Scheme

1. GROUP 1A - ARCHITECTURAL DESIGN I TO VIII

1.1   The evaluation of Architectural Design I to VIII is based on continuous evaluation and semester end Jury examination conducted by a panel of Jury members.

1.2   Jury examinations for Architectural Design II, IV, VI, and VIII shall be conducted at the end of even semesters by a Jury panel appointed by the University. The University shall appoint Jury panel and a Chairperson for the conduct of Jury examinations (regular and make up chance Jury examinations). The Jury panel shall consist of an external examiner and an internal examiner.

1.3   Jury examinations for Architectural Design I, III, V, and VII shall be conducted at the end of odd semesters by a two-member Jury panel of internal and/or external examiners appointed by the Head of the Institution. A second pair of examiners shall conduct the make-up improvement chance if required.

The Internal examiner shall be a member from among the faculty members of the teaching institution other than the faculty member who evaluated the work for awarding the internal marks. The External examiner shall be from among the faculty members of other teaching institutions or an Architect registered with the Council of Architecture, incorporated under Architect's Act 1972, with not less than 5 years' experience.

1.4   Candidates shall submit the portfolio consisting of the assignments/ projects done for the subject during the course period, with the approval of the faculty in-charge of the subject. The submission shall be made as per the instructions from the Head of the Institution latest before noon on the previous working day of the commencement of the Jury.

1.5   The faculty in-charge of the subject shall submit a report consisting of the details of assignments/ projects given, its objectives and weightage given to each work to the Jury members through the Head of the Institution.

1.6   The Jury members (internal and external examiners together) shall evaluate the portfolio on the basis of the report.

1.7   Candidates shall be physically present to explain their work to the Jury members at the time of evaluation of their portfolio.

1.8   The Jury members shall submit the signed consolidated mark lists to the Head of the Institution on the last day of Jury.

1.9   The marks list of even semesters signed by each juror, counter signed by the Chairperson shall be forwarded to the Controller of examinations by the Head of the Institution.

The Jury marks in the odd semesters shall be countersigned by the Head of the Institution and forwarded to the University along with the internal marks.

1.10   For promotion to higher semester, a separate minimum mark of 45% must be obtained for the Jury examination for Architecture Design I to VIII and he/she shall also secure 50% marks in aggregate (C.A marks + Jury examination).

1.11   The result of the candidates who fail to secure a minimum of 45% marks in the external Jury and /or a minimum of 50% of aggregate marks (CA marks + Jury marks) will be published by the Head of the Institution within three working days from the last day of the Jury examination, in order to facilitate them to appear for the make-up chance. The candidates who fail for the Jury examination shall get a makeup chance to improve the portfolio of class assignments and get the work done evaluated by another panel of examiners. However, he/she should request to the Head of the Institution and seek permission to avail makeup chance and improve the assignments/projects under the guidance of a faculty nominated by the Head of the Institution. This improvement examinations shall be conducted within one month from the date of announcement of the result of the regular Jury examination by the Head of the Institution.

1.12   Only those candidates who have appeared for the regular chance shall be eligible for the make-up chance. The make-up chance is applicable only to improve the Jury examination marks and not the CA marks.

Candidates who fail to secure the separate minimum of 45% for external Jury examination or aggregate minimum of 50% even after the makeup chance shall register for the course and repeat the course assignments /tests as per the instructions of the Head of the Institution and on satisfactory progress shall register for the University examination, along with the next immediate academic year.

2.   GROUP 1C - THESIS AND VIVA VOCE

2.1   Candidates of B Arch Degree program are required to prepare an Architectural Design Thesis during the last six months of the program. Candidates admitted to the tenth semester shall do a thesis on an approved Architectural Design project under the guidance of the faculty and present it for evaluation and Viva-voce. The approval of the topic for the thesis shall be obtained before the end of the eighth semester from the thesis monitoring committee constituted by the Head of the Institution. The Head of the Institution shall be the chairperson of the committee.

2.2   The duration of the thesis shall be for one semester from the date of commencement of the tenth semester of B.Arch. Degree program.

2.3   The thesis shall be a major live or hypothetical architectural project, where the candidate is expected to individually synthesize the knowledge gained in the previous semesters, conduct the investigative research, including a special topic and come up with a design proposal.

2.4   Special topic shall be relevant to the project and shall have significant application in the solution of the project. Topics can be related to environmental and energy studies, building technology, fire protection, earthquake resistance, design for differently-abled, air conditioning, illumination, landscaping, urban design, interior design or any other suitable topic approved by the Institution.

2.5   The Head of the Institution shall allot a guide to each candidate. The project and its programming shall be worked out by the candidate under the supervision of the guide

Each candidate shall maintain a work diary, schedule their thesis work and get it approved   by the guide at the beginning of the thesis. A copy of the same shall be submitted to the thesis coordinator nominated by the Head of the Institution.

2.6   Internal Assessment

The progress of work shall be periodically assessed through four stage reviews. The review   panel may consist of internal faculty/external practicing architects. Format for the stage presentations and appointment of review panel shall be as decided by the thesis monitoring committee. A total of 500 marks for internal assessment shall be awarded through the four reviews. The split-up of the same shall be normally as follows.

Review 1   Introduction of the Thesis Topic, Feasibility studies, Basic data, Case studies/ Primary surveys, Analysis, synthesis and Design Program, Site analysis and Conceptual development, Introduction of Special Topic.

140 marks

Review 2   Review of the previous stage, arriving at layout plan, Sketch design for various building blocks including Floor Plans, Sections, Elevations, Views, Block Models, etc. Conformity to Relevant Standards, Bye-laws, etc. Achievement of Basic Objectives of Architectural Design and Further studies on Special Topic.

140 marks

Review 3   Review of Previous stages, Final Layout, Final Design for various building blocks through relevant Plans, Sections, Elevations, Views, etc. Details of Building and Site Services, Site Planning and Landscape schemes. Preparation of relevant Detailed Drawings, Application of Special Topic in the design scheme, Preparation of Draft Report.

140 marks

Review 4   Review of Final stage of all finalized drawings and schemes, Structural Details, Working Details, etc. Review of Final Draft of the Report.

80 marks

A candidate who fails to secure minimum 45% marks in each review will have to appear for a supplementary review on the date announced by the Head of the Institution. There shall be only one supplementary review for each stage.

Candidates must obtain a total of 45% marks combining the four stages of reviews to become eligible for the external Jury, failing which he/she shall repeat the thesis with the next immediate batch.

2.7   External Evaluation

The University shall appoint external and internal Jury panel members for the final Jury examination (Thesis and Viva-voce). The Jury panel shall consist of two members (internal and external examiner), either from the faculty of Architecture of the Institution and/or from among the Architects registered with the Council of Architecture, constituted under the architects act 1972, and having not less than ten years' experience. The Jury members appointed by the University shall evaluate the thesis documents and conduct the Viva-voce. Marks shall be independently awarded by the Jury panel out of 500 marks. A consolidated marks list signed by all Jury members shall be forwarded to the Controller of Examinations through the Chairperson by the Head of the Institution. Students shall secure 45% of marks in external Jury and an aggregate of 50% marks (Internal assessment+ External Jury) for the successful completion of the Thesis and Viva-voce.

2.8   The total number of design sheets for final submission shall not normally exceed 30 (thirty) A1 sheets.

2.9   Documents to be submitted for the Jury

Two copies of the Data Collection in the preliminary design stage (up to the design and including the case studies) shall be compiled and presented along with the final submission in A3 size and in the prescribed format, which shall be prescribed by the thesis monitoring committee. -

 Two copies of the Final Report in A4 size shall be submitted in the format and time, prescribed by the thesis monitoring committee.

The format and other instructions regarding the schedule of Jury, preparation of the bound volumes of Data Collection, Final Report, Final Sheets, Model, etc. shall be announced by the Head of the Institution.

2.10   Physical project models, if any shall be produced on the date of the Viva-voce examination announced by the University.

2.11 The supplementary examinations shall be conducted after three months of the date of announcement of the result of the regular Jury examination. This provision is allowed only once for each regular Jury failure

2.12 The Head of the Institution shall have the freedom to send the thesis documents after the final Jury evaluation for participating in competitions organized by the Council of Architecture etc. with due intimation to the candidate.

Anything if not explicitly covered in these regulations shall be decided by the thesis monitoring committee.

3. GROUP 3 - MANUAL FOR DISSERTATION

3.1 Candidates of B Arch Degree program are required to submit a dissertation in the seventh semester. Candidates admitted to the 7th semester shall submit their choices of topic for dissertation for approval from the panel of faculty members appointed by the Head of the Institution. The candidate shall choose any topic related to the built environment.

3.2 The dissertation work shall involve compilation of secondary data followed by a study at the primary level, to achieve the aim and objectives of the research work.

3.3 The Head of the Institution shall allot a guide (faculty member of the Institution) to each candidate for supervising his/ her dissertation work.

3.4 Evaluation:

3.4.1 The 250 marks allotted to the dissertation shall include continuous assessment of 150 marks and a final Jury of 100 marks.

3.4.2 Continuous assessment shall be conducted through a three-stage review process,

by

an independent reviewer and the guide concerned.

3.4.3 The Head of the Institution shall constitute a Jury panel of two members for evaluating the final presentation of the dissertation work, from among the faculty of the Institution and/or from among the Architects registered with the Council of Architecture, incorporated under the architects' act 1972, with not less than ten years' experience. The Jury panel members shall independently evaluate the final presentation which includes a technical paper presentation and final report.

3.5 Failures in Dissertation

A candidate who secures not less than 45% marks in the final presentation and not less than 50% of the total marks assigned to the subject (CA + Final Jury), shall be declared to have passed the examination in that subject.

Candidate failed in dissertation shall register with next immediate batch and attend the internal reviews and final Jury examination.

4. GROUP 4 - PRACTICAL TRAINING

4.1   Eligibility

Candidates who have successfully completed the Design Jury examination of semester VIII are eligible for practical training in the IX semester. They shall undergo practical training for one semester (Minimum of 100 working days) duration immediately after the completion of the eighth semester University examination.

4.2   Selection of Firm

The practical training shall be done in the office of an architect or an organization under a senior architect registered in India or abroad having professional experience of at least five years. Candidates shall select a registered architect and get the approval from the Head of the Institution before the completion of the semester VIII University examination.

4.3   Type of works to be carried out during training period.

The candidates are expected to get exposure in the following aspects:

   i.   Site visit and Site Supervision.
  ii.   Preparation of drawings for getting building permissions, working drawings, service drawings, etc.
 iii.   Preparation of estimates, specifications, contract documents, and tender documents.
 iv.   Discussion with clients and other consultants.

4.4   Monthly work report

The candidates are required to send copies of the monthly report of the work done to the institution, every month. The reports shall be duly signed by the Principal Architect or the authorized officer supervising the work in the prescribed format.

4.5   Documents to be submitted after the completion of training.

The candidates are required to submit to the Head of the Institution, a report including the details of their work with illustrations, sketches, prints, and other documents

connected with the projects on which he/she has worked both in-office and at the site, a work diary, original of monthly reports, a certificate regarding their conduct and performance of work done during the training period and regarding the successful completion of training of six months under the approved Architect /Firm.

4.6   Evaluation

The 1000 marks allotted to the Practical training shall include continuous assessment of 400 marks and a Viva-voce examination of 600 marks.

An evaluation committee of at least 2 faculty members, appointed by the Head of the Institution shall evaluate continuous assessment. The Viva-voce examination shall be conducted at the end of the semester by a Jury panel consisting of an internal and an external examiner appointed by the University.

A candidate who secures not less than 45% marks in the Viva-voce and not less than 50% of the total marks assigned to the subject (CA + viva voce), shall be declared to have passed the examination in that subject.

Makeup chance will be given to those who fail in the Jury of practical training as per the norms applicable for other Jury examinations. In case, a student fails to secure a pass in this makeup chance, the candidate shall repeat the practical training along with the immediate batch, as a repeater candidate without affecting the sanctioned intake of regular batch.
Variation in the opportunities for training available in various architects' firms shall not adversely affect the candidate's marks. Their efforts to gain experience and regularity in conforming to the prescribed norms shall be considered.

Anything if not explicitly covered in the manual shall be decided by the practical training monitoring committee constituted by Head of the Institution.

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COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

(Abstract)

International School of Photonics- Five Year Integrated M.Sc in Photonics and M.Tech Programmes- Syllabus, Electives and amendment in Regulation- Approved- Orders issued.

ACADEMICCSECTION

No.CUSAT/AC(C).C1/3327/2021   Dated,KOCHI-22,25.09.2021

Read:-Minutes of the meeting of the Academic Council, itemI(h)-2(a).

ORDER

The Academic Council at its meeting held on 28.07.2021, considered along with there commendations of its Standing Committee, vide Minutes item read above, the Minutes of the online meeting of the Faculty of Technology, and resolved to approve the following:

1. Outcome Based Syllabus (OBE) for M.Sc (Five Year Integrated) in Photonics Programme from Semester III to X as in appendix I.

2. Introduction of new elective courses and electives with modified syllabi applicable to M.Sc Photonics students coming under 2018 scheme (Appendix II).

3. To change the total credits in the Regulation for M.Sc Photonics 2018 Scheme, making the change effective from 2020 admissions onwards as in Appendix III.

4. Selection of MOOC courses from the SWAYAM platform.

5. To offer a new elective course 20-441-0210 Nano photonics for M.Tech in Optoelectronics and Laser Technology from 2020 batch onwards. The syllabus of the course is appended.(Appendix IV)

Orders are issued accordingly.

Dr.Benjamin Varghese P*
REGISTRARIN-CHARGE

To:

1. Dr.C.K.Aanandan, Dean, Faculty of Technology and Professor (Retd), Department of Electronics, CUSAT, Kochi-22.

2. Dr.AMujeeb,Professor,Chairman,BoardofStudiesinPhotonics,InternationalSchoolofPhotonics,CUSAT,Kochi-22.

3. TheDirector,InternationalSchoolofPhotonics,CUSAT,Kochi-22.

4. PStoViceChancellor/PStoProVIceChancellor/PAtoRegistrar

5. TheControllerofExaminations/JointRegistrar(Academic/Exams)/DeputyRegistrar(Exams)/AssistantRegistrar(Exam/Academic)

6. AcademicA/Conference/ExamB/E/P/YExamConfidentialsections

7. DayFile/StockFile/FileCopy

*Thisisacomputergenerateddocument.Hencenosignatureisrequired

REVISED REGULATION FOR THE M.Sc. (FIVE YEAR INTEGRATED) Degree in Photonics OFFERED BY INTERNATIONAL SCHOOL OF PHOTONICS, CUSAT
(With Effect from 2020-21 Admissions)

1. SCOPE

1.1 These Regulations shall apply to the M.Sc. (Five Year Integrated)Degree in Photonics conducted by International School of Photonics of the Cochin University of Science and Technology.

1.2 The provisions here in supersede all other Regulations unless otherwise provided.

2 DEFINITIONS

2.1 Academic Committee means the committee constituted by the Vice-Chancellor under this regulation to monitor the running of the programme.

2.2 Core course means a course that the student admitted to a particular Programme must successfully complete to receive the Degree and which cannot be substituted by any other course.

2.3 Elective course means a course, which can be substituted by equivalent Courses from the same or other Departments/ Schools.

2.4 Audited course will not accrue any credit.

2.5 Department/ School means Departments /Schools instituted in the University as per Statutes and Act.

2.6 Levels of courses in these Regulations will generally means:

    First Level   : Undergraduate programme (Semester I to Semester VI)

    Second Level : Post graduate programme (Semester VII to Semestr X)

    Third Level   : M.Tech programmes

2.7 Choice Based Credit Semester (CBCS) System shall be followed.

3 ELIGIBILITY FOR ADMISSION

As per the Regulations prescribed by the University from time to time.

4   *ADMISSIONS*

As per the Regulations prescribed by the University from time to time.

After closing the admissions, each student will be assigned a unique registration number by the department which will be valid throughout his course in the University.

5   *COURSE REGISTRATION*

5.1   The School shall have Faculty Members as Student Advisors. Each student at the time of seeking admission will be assigned to an Advisor by the Department Council. She/he will advise the student about the academic programme and counsel on, the choice of courses depending onthe student's academic background and objective. The student will then register for the course she plans to take for the semester before the classes begin.
The Department shall prescribe the maximum number of students that

Can be admitted taking into consideration the facilities available. Preference shall be given to those students for whom the course is a core-course if the demand for registration is beyond the maximum prescribed. The student has to complete the prescribed prerequisites for the course before registration and register before the last date prescribed by the university. The student can drop/re-register any elective/audit courses(s) within *15* working days after the commencement of the classes.

5.2   The University shall make available to all students a Bulletin listing all the courses offered in every semester specifying the credits, prerequisites, list of topics the course intends to cover, the instructor who is giving the courses, the time and place of the classes for the courses and examination schedule. Each course shall have a code consisting of three characters denoting the Department and four digits of which first digit indicating the level of the course, second indicating the Semester and third and fourth digits the serial number of the course. However in such Departments having more than 1 Masters programme of same level, the first 2 characters denote Department and the third, the course of study.

6 *COURSESTRUCTURE*

6.1   The CBCS system will be fully internal in all sense. There shall be three kinds of courses: Core, Electives and Audit courses. Core courses should generally be offered by the Department/ School concerned. Normally no course shall have more than four credits except in cases where only project/dissertation

including seminars are involved in which cases the minimum credit shall be sixteen.

6.2 In the case of integrated MSc Photonics course, the minimum credit required to be awarded the BSc (Photonics) degree is 116 and for MSc(Photonics) degree is 188.

6.3 The Department Council shall make recommendations on the core and elective courses including the detailed syllabus for each programme offered by the Department to the University and approved by the Board of Studies, Faculty and Academic Council. The Department Council shall have the freedom to design and introduce new electives and or audited courses, to modify/ redesign existing electives and to replace any existing electives with new or modified/redesigned electives to facilitate better exposure and training for the students. Prior approval from the Board of Studies and Academic Council is not required for such modifications in the electives, but shall be done only with the approval of the Academic Committee. Such changes shall be brought to the notice of the concerned bodies in the next meeting for ratification.

6.4 The general structure of the programme shall be as given below:

A minimum75 % attendance is compulsory. But the Vice-Chancellor shall have the power to condone shortage of attendance upto 10 percent on medical grounds on there commendations of the Head of Department. However such con donation for shortage of attendance shall be given only twice during the entire course

	Int.MScPhotonics
Programme duration	10sem
Accumulated minimum credit required for successful completion of the programme	188
Minimum Attendancerequired	75%

Note: * Each semester shall have a minimum of 90 working days and one credit shall be given for one hour lecture or 2 hours of practical work per week. No regular student shall register for more than 24creditsper semester and less than 16creditspersemester.

The minimum credit required to continue to level 2 (Sem7toSem10)

From level1(Sem1toSem6)shallbe90.

The student should have a minimum of 75% attendance to appear for the internal examinations as well.

6.5 A student shall compulsorily register and complete at least one Interdisciplinary Elective (IE) course (one of the Electives) from other Departments/Schools before registering for the final semester of the Programme. For Int. MSc Photonics course, Interdisciplinary Elective (IE) need to be completed in level 2 only.

6.6 Each Department /School must announce at least one interdisciplinary course (Electives) to be offered by them, in the "E" slot of the Common Time-table.

6.7 This interdisciplinary course (Elective) shall not have any prerequisite.

7. *EVALUATION*

7.1 The entire system of evaluation is internal. The evaluation scheme for each semester contains two parts, a continuous assessment and an end semester examination. The continuous assessment shall consist of minimum of two tests of twenty marks each and ten marks for assignments/ seminars /quizzes etc. which has to be intimated to the students at the beginning of the semester. Marks obtained in the continuous assessment shall be displayed on the notice board and grievances received if any through the Head of the Department. The Department Council shall finalise the marks of the continuous assessment of each course.

The semester end examination shall cover the entire syllabus of the course. Equal weightage shall be given for the continuous assessment and the semester end components.

All practical examinations will be internally evaluated as per the procedures laid down by the Department Councils concerned.

7.2 Two distinct sets of question papers for the semester end examination are to be set by the concerned teacher in advance, which shall be scrutinized by the department council to ensure that questions are within the scope of the syllabus and also the entire syllabus of the course is fairly covered in the question paper. Modifications can be suggested by the council if necessary and the incorporation of such suggestions should reflect in the final question paper. Out of the two question papers prepared, one shall be selected by the director for Conducting the end semester examination.

There shall be only a single internal evaluation for the end semester examination. Immediately after the examination is over, the Head of the Department shall arrange an Internal valuation camp pertaining to all the end semester examinations conducted in the Department and the results shall be finalized within 10 working days after the examination is over. The marks and grade in all the subjects obtained by the students has to be displayed in the notice board and the answer scripts can be given back to the students for scrutiny if necessary.

7.3 *For each course there shall be a separate minimum of 45% marks for the semester end examinations.*

7.4 The Department shall publish the marks obtained by the students, in the continuous assessment and semester end examination If the student has any grievance, he/she can approach the concerned teacher and submit his/her grievance with supporting documents /arguments within five working days of publication of the results. The teacher and the HOD will examine the case and decide on his/her grievance. If the student is not convinced with the decision, he/she can approach the appealing authority- the department council- in writing and the council shall examine the same and take a final decision which has to be intimated to the student in writing. The decision of the appealing committee shall be final.

7.5 The final marks and grades obtained by the students shall be published in the notice board. Those who could not obtain 50% marks (GradeD) in total for a course will be declared as failed in that course. Those who fail in any core or elective course shall approach the concerned teacher if necessary for are-examination of the semester end examination. Within one week of the display of the results in the notice board, the concerned teacher shall conduct an additional semester end examination for these candidates. This re examination is only to enable the student to pass the examinations o by completing the course successfully. If he/she completes the course successfully making use of this additional chance, he/she will be awarded only a D grade for that course. If he/she cannot make it up, he may repeat the semester end examination of that course in the next available chance. The maximum duration for completing the MSc degree programme will in any case be 9 years from the date of commencement of first semester (A student will have additional two years to complete the first level and additional two years for completing the second level. Total additional years that can be availed is 4)

7.6 The result of the examinations will be declared by the department council within 30 days of the last examination of the semester and the minutes shall be sent to the controller of examinations to issue the mark list of that examination.

8 GRADECARD

8.1 The University under its seal shall issue a Grade Card to the students on completion of each semester. The Grade card shall contain the following:
   a. Title of the course taken as core, elective and audit. (An audit course shall be listed only if the student has secured a pass)
   b. The credits associated with and the grades awarded for each course.
   c. The number of credits (core and elective separately) earned by the student and the Grade point Average.
   d. The total credits (core and elective) earned till that semester.

8.2 The following grading system be adopted for all the courses.

The following grades will be awarded based on the overall performance in each subject.

Range of marks	Grades	Weightage
90andabove	S-Outstanding	10
80to89	A-Excellent	9
70to79	B-Very good	8
60to69	C-Good	7
50to59	D-Satisfactory	6
Below50%	F-Failed	0

Overall performance at the end of the semester will be indicated by Grade Point Average (GPA) calculated as follows.

$$GPA = \frac{G1C1 + G2C2 + G3C3 + \ldots GnCn}{C1 + C2 + C3 + \ldots\ldots\ldots\ldots\ldots Cn}$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student. At the end of the final semester Cumulative Grade Point Average (CGPA) will be calculated based on the above formula, considering the Credits and Grades earned during the entire course of study.

Classification for the Degree/Diploma will be given as follows:

First Class with distinction	8 and above
First Class	7 and above
Second Class	6 and above

8.3 The Grade Card issued at the end of the final semester shall contain the details of all the courses taken which shall include the titles of the courses, the credits associated with each course, the CGPA and the class. The rank shall be awarded based on CGPA corrected to the 2nd Decimal.

9 *MONITORING AND MANAGEMENT OF COURSES*

9.1 Every postgraduate programme conducted in the Departments shall be Monitored by the Department Council subject to these regulations. The Department Council shall design courses, prescribe the mode of conducting the courses and monitor the evaluation of students.

10 *ACADEMIC COMMITTEE*

10.1 There shall be an Academic Committee constituted by the Vice-Chancellor to monitor and co-ordinate the working of the credit and Semester system.

10.2   The Committee shall consist of:

a	The Pro-Vice-Chancellor	Chairman
b	The Registrar	Secretary
c	The Controller of Examinations	
d	One Teacher from each Department	

10.3 A Senior Professor nominated by the Vice-Chancellor from among the members of the Committee shall be the Vice-Chairman of the Committee

10.4 The term of the office of the committee shall be two years, but the committee once constituted shall continue in office until a reconstituted committee assumes office.

11 *TRANSITORY PROVISION*

Not withstanding anything contained in these regulations, the Vice-Chancellor shall, for a period of one year from the date of coming into force of these regulations, have the power to provide by order that these regulations shall be applied to any programme with such modifications as may be necessary.

12 *REPEAL*

The Regulations now in force, in so far as they are applicable to programmes offered in the University Departments and to the extent they are inconsistent with the existing regulations, and the regulations relating to the Credit and Semester System in their application to any course offered in a University Department, the latter shall prevail.

കൊച്ചി ശാസ്ത്ര സാങ്കേതിക സർവ്വകലാശാല
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No.C1/Faculty of Technology/2020-21

Dated: 05.08.2021

NOTIFICATION

In exercise of the powers conferred by Section 24 (ii) read with Section 42 (1) of the CUSAT Act 1986, the Academic Council at its meeting held on 03.03.2021, resolved to approve the Course Structure and Regulation of the Five Year Integrated M.Sc in Computer Science (Artificial Intelligence & Data Science) offered at Department of Computer Science under the Faculty of Technology, with effect from 2021-22 admissions as in Appendix.

The Syndicate at its meeting held on 07.06.2021, vide Item No.687.19, considered and resolved to approve the above decision of the Academic Council.

REGISTRAR

To

1. Dr. C.K. Aanandan, Dean, Faculty of Technology and Professor (Rtd.), Department of Electronics, CUSAT, Kochi - 22
2. Dr.Santlhosh Kumar G, Chairman, Board of Studies in Computer Science, CUSAT, Kochi – 22
3. The Head, Department of Computer Science, Cochin University of Science and Technology, Kochi-22
4. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar/Controller of Examinations/Director of Directorate of Admissions
5. Academic A/IRAA/Conference/Exam B/D/E/H/Y/Confidential Sections
6. Day file/Stock file/File copy.

Rv5

E-mail : registrar@cusat.ac.in

Telephone: 0484-2575181

M.Sc. (Five Year Integrated) in Computer Science (Artificial Intelligence & Data Science) Regulation, 2021

Preamble*: This Regulation shall be called 'M.Sc. (Five Year Integrated) in Computer Science (Artificial Intelligence& Data Science), 2021'.This document shall supersede all previous Regulations.*

1. *Introduction*

In the fulfillment of the set objects of the Cochin University of Science and Technology (CUSAT), the University has taken the lead to offer a M.Sc. (Five Year Integrated) in Computer Science(ArtificialIntelligence&DataScience)forimpartingspecializededucation,especiallyintheemergingareasofComputer Science, to the students on completing their +2 level of education.

2. *Course offered by the Cochin University of Science and Technology*

The Cochin University offers a M.Sc. (Five Year Integrated) in Computer Science(Artificial Intelligence & Data Science) covering introductory and advanced courses in the domain of Data Science and AI. The nomenclature of the course shall be **M.Sc. (Five Year Integrated) in Computer Science (Artificial Intelligence & Data Science)**.

3. *Overview of the Course*

The M.Sc. (Five Year Integrated) in Computer Science(Artificial Intelligence & Data Science) offered by the Cochin University of Science and Technology (CUSAT) is a professional course. It is not merely an integrated program that combines pre-graduate and post-graduate studies. However, it is also trans-disciplinary, cutting across several emerging disciplines in the domain of Computer Science.

Students of Science subjects require exposure to a significant amount of Mathematics and Computation throughout the five year programme. The University offers bridge courses and other training programs to facilitate this process.

4. *Admission*

The present intake for the M.Sc. (Five Year Integrated) in Computer Science (Artificial Intelligence & Data Science) is **20**.

4.1. *Eligibility and Entrance Examination*

1. Admission is open to the students possessing KVPY Scholarship. They need not have to appear for the entrance Test. However, they have to submit the requisite application and should pay the application fee.

2. All other eligible applicants have to appear for a written test conducted by the University Department

3. Candidates with a minimum of 75% marks at +2 level of education (Intermediate, CBSE/ICSE/HSC/All State Boards or Equivalent) with science subjects Physics, Chemistry, and Mathematics are eligible to apply. The Other Backward Classes (OBC) belonging to non-creamy layer / Scheduled Caste (SC) / Scheduled Tribe (ST) / Persons with disability (PWD) category candidates are eligible for concessions in the percentage of marks as per the prevailing government rules and regulations. The M.Sc. (Five Year Integrated) in Computer Science (Artificial Intelligence & Data Science) is for students who have an inclination and aptitude to study emerging areas in Computer Science and have plans to build a career in IT or Research & Development institutions.

The admission to the programme will be based on the Common Admission Test (CAT) conducted by CUSAT for the under-graduate B. Tech. (Test 101) programmes.

4.2. Selection List

Applicants possessing KVPY Scholarship can join directly to the program if clause 4.1.3 holds. The admission will be through a common counseling process. While preparing the Selection List, if there is a tie in the entrance examination marks, the procedure followed in the case of B.Tech. (Test 101) programmes shall be followed.

5. Reservation

All relevant reservation rules (Kerala State) will be followed for admission. Similarly, concession in fees for the course also will be based on the Government of Kerala Rules. The seat matrix based on reservation, similar to other professional courses in the University is applicable.

6. Extra Course/ Credits

A student can take online courses over and above those stipulated for a semester and accumulate extra credits in a given semester. The students can undergo extra online credit-based courses of their interest, coming under the domain of Computer Science/Data Science/Artificial Intelligence, only after forwarding a formal request to the Head of the Department, and getting it approved by the Department Council. The extra credit-based courses, completed by a student, will be shown in the consolidated mark list, issued by the University, as a separate section.

7. *Audit Course*

There is a provision for auditing of not more than one course each semester. Students who desire to audit courses over and above the number of courses prescribed have to choose from among the courses offered by different Departments in that semester and inform the Department in writing and get it approved by the Department Council. Courses thus audited should also be indicated in the registration forms, and other Courses opted for that semester. Only one Audit Course is allowed per semester. The audit courses, completed by a student, will be shown in the consolidated mark list, issued by the University, as a separate section.

1. *Possibility of Tutorials*

Based on the request of a sizable "Cohort profile: social well-being and determinants of health study (SWADES), Kerala " number of students for additional guidance in coping with the subjects, the Head of the Department, after consulting with the concerned Faculty Member, can take the necessary steps to provide tutorial support for small groups of students.

2. *Enrichment Program*

The students are encouraged to undertake internships/ summer research programs during the winter and summer breaks at institutes of national importance such as IISc, IIT, NIT, IIIT, IISER, IIEST, or reputed & Dlabs of Central/State Government. Students are encouraged to attend Workshops/Seminars/Conferences organized by various academic, research, or professional institutions.

3. *Attendance*

A student needs to attend at least75% of the classes held in each course to be eligible to write the end-semester examination. If the student has been absent for medical reasons, the shortfall of attendance would be condoned upto 5% subject to submitting the relevant medical certificate to the Head of the Department. If, due to unusual circumstances, the student's attendance falls far short of the required percentage, he/she may bring it to the notice of his/her Course Coordinator well in advance. He/ she may be considered for re-registration to the course concerned when it is offered in the following academic year. He/She can also explore the possibility of dropping the semester and opt for re-registration to that semester along with the junior batch. It may be noted that it is the student's responsibility to monitor his/her attendance and inform the instructor about his/her absence.

4. *Mode of Evaluation*

The student shall be evaluated continuously throughout the semester, and marks shall be awarded based on tests /assignments. A maximum of 10 marks as awarded for the assignments given to the students by the concerned teacher. There shall be two class tests and an end semester examination. The first test carries 20marks and will be based on the syllabus's portions covered till then. The second class test also carries 20marks and will be based on the portions covered until after the first class test. The end semester examination will be for 50 marks and shall contain questions from the course's entire syllabus. The duration of the end semester examination shall be three hours.

The results of each subject in a semester shall be finalized by the concerned faculty member within 10 days from the last date of the end semester examination and the marks and grades obtained by the candidate shall be displayed on the notice board with the approval of the Course-Coordinator and the Head of the Department.

The passing minimum in a subject is 50 %. If a candidate fails to secure 50% marks, he/she shall be deemed to have failed in the subject. A makeup examination for the end semester examination shall be conducted for the failed candidates within ten days from displaying the marks/grades. Such examination shall carry questions from the entire portion of the syllabus, and the weightage shall be only 75%. It shall substitute one of the three tests that have fetched the least marks.

The candidate's final marks/grade, taking into account his/her performance in the makeup examination and periodic tests and assignments, shall be finalized within five days from the makeup examination date. A candidate securing a minimum of 50 percent marks shall be considered to have passed in that subject. If the candidate fails to meet the minimum requirement for a pass even after two attempts, he/she shall have to repeat the subject at the next available chance.

A pass in the course will entitle the student to acquire the number of credits allotted for that particular course. (for the details of the number of credits, please refer to the course structure.)

No student shall be allowed to move to the next semester, if he/she has failed in 3 or more courses of the previous semester subject to a maximum of 6 arrears at any given point of time including the arrears of previous semester/s, if any. The maximum duration for completing the programme will in any case be9 years from the date of commencement of first semester.

A student who wishes to take up professional employment after completing the ninth semester shall obtain permission from the Head of the Department. The student will be permitted to carry out the project work in the institution /organization where they are employed on production of a certificate from the Head of that institution/organization to the effect that the student is permitted to carry out the project at the institution/organization. Such candidates shall carry out the project work under the joint supervision of a project guide from the Department and an external guide from the Institution/Organization concerned. The Department Council shall verify the academic/research credentials of the proposed external guide before granting permission.

In the case of students who propose to carry out their project work in National Laboratories on a full-time basis, the provision regarding having a project guide from the Department concerned may be exempted by the Department if the situation warrants.

Project evaluation shall be done at the end of IX and X semesters. The evaluation at the end of IX Semester shall be conducted by an Examination Committee consisting of the Head of the Department, a Senior Teacher nominated by the Head, and the Project Guide. At the end of X semester, the students will have to

Submit a dissertation on his/her project work. Three bound copies and a soft copy of the dissertation shall be submitted to the Head of the Department within the last date prescribed by the Department for the purpose. The dissertation will be evaluated by an Examination Committee consisting of the Head of the Department, another Senior Teacher of the Department nominated by the Head of the Department, and the Project Guide. However, an External Examiner may also be included in the Examination Committee with the Department Council's approval. The candidate shall make an open defense of his/her dissertation, which will be followed by a viva-voce examination.

For the purpose of assessment, the performance of a student in the project dissertation may be divided into the following sub-components:

At the end of IX Semester

> Assessment by the project guide (based on periodic assessment of the work of the candidate) - 50%Assessment by the Examination Committee – 50%

At the end of X Semester

> Assessment by the project guide (based on periodic assessment of the work of the candidate) - 50%Assessment by the Examination Committee – 50%

5. Classification

The following grading system is adopted for all the courses. The following grades will be awarded based on the overall performance in each subject.

Range of Marks (in %)	Grades	Weightage
90 and above	S- Outstanding	10
80 – 89	A- Excellent	9
70 – 79	B-VeryGood	8
60 – 69	C- Good	7
50 – 59	D- Satisfactory	6
Below 50%	F- Failed	0

Overall performance at the end of the semester will be indicated by Grade Point Average (GPA) calculated as follows:

GPA=$(G_1C_1+G_2C_2+G_3C_3+$----------$G_nC_n)$ /$(C_1+C_2+C_3+$--------------------$C_n)$

Where 'G' refers to the grade weightage, and 'C' refers to the credit value of the corresponding course undergone by the student. At the end of the final semester, the Cumulative Grade Point Average (CGPA) will be calculated based on the above formula. Classification for the Degree will be as follows :

CGPA	Classification
8.0 and above and upto 10.0	First Class with Distinction
6.5 and above and upto 7.9	First Class
5.5 and above and upto 6.4	Second Class

6. Declaration of Results

An examination committee consisting of the Head of the Department (Chairperson), a Senior Teacher and the Course Coordinator shall scrutinize the marks and grades obtained by the candidates and finalize the results. The Head of the Department will constitute the Examination Committee. The final marks will be reported to the University for Tabulation and declaration of results. The University shall issue mark lists at the end of each semester.

At the end of each semester, the question papers set for class tests and end semester examination will be reviewed by the Department Council. The review report may be placed in the Board of Studies concerned for scrutiny.

The Departmental Council or a Sub-Committee nominated by the Council will act as the grievance cell for the redress of complaints from the students on the conduct of the class test, semester exam, and the valuation methodology. The student shall make such complaints to the Head of the Department within a week of the display of the marks/grades for a particular course on the Notice board of the Department.

7. *Award of Degree*

The students will be awarded M.Sc. (Five Year Integrated) in Computer Science (Artificial Intelligence &Data Science) degree under the Faculty of Technology, after acquiring the required number of credits within the stipulated time period.

8. *Leave for an M.Sc. Student*

Full-time M.Sc. students shall be entitled to the following kinds of leave during every academic year, counted from the date of commencement of the session concerned as prescribed in the institute's academic calendar. Any absence over and above the prescribed type of admissible leave shall entaild eduction from the scholarship, besides other actions decided by the University.

Sl. No.	Leave	Max. No. of Days	Sanctioning Authority
1.	Casual Leave	5 days per semester subject to the Condition that such leave will not be allowed for more than 3 days at a time.	Head of the Department
		Casual leave cannot be combined with medical leave.	
2.	Medical Leave	3days*per semester.	Head of the Department on the basis of a Medical Certificate from a registered Medical Practitioner certified by the University Medical Officer. *Over and above this, appropriate decisions are vested with appropriate statutory bodies.

9. Re-admission

Students who are not found eligible to take semester examinations and those who are not promoted to the next semester of the course may be considered for re-admission to the semester concerned about the immediately following academic year. Such students should seek re-admission before the commencement of classes for the semester concerned or within a week of the semester's commencement if they appear in the supplementary examinations. Such students are given an option either to undergo instruction for all the courses of the semester concerned or instruction in only such courses. The option, once exercised, will be binding on the student concerned.

10. Exit Option

Exit option (after three years) usually is not allowed. However, students are eligible to get their Undergraduate level Degree Certificate after completing six semesters of the program. This provision shall be availed by students only under exceptional circumstances as convinced by the Department Council and approved by the Vice-Chancellor. Such students will be awarded B.Sc. in Computer Science Degree under the Faculty of Technology, provided he/she acquired the required number of credits. The mark lists issued to such students upto sixth semesters have to be surrendered to the University and the University shall re-issue new mark lists with the programme name specified as B.Sc. Computer Science.

11. Students' Welfare

The office of the Director of Students' Welfare will look after the welfare of the students with active support from the elected representatives of the students, faculty, and administration. A Student CounselingServicebyprofessionalsisavailableattheUniversity.Inthecaseofanystudentrequiringparental guidance, his/her parents will be informed accordingly. A Students' Union caters to the students' interestsand promotes cultural and sports activities.

12. Gender Justice Committee

CUSAT is committed to providing a place of work and study, free of sexual harassment, intimidation, or exploitation. The Committee Against Sexual Harassment (CASH) at CUSAT is the

University's instrument for addressing issues/grievances/cases of sexual harassment and recommending their redressal. The Constitution of India entitles every individual the right to live with human dignity, free from exploitation. In this spirit, CUSAT expects that its entire community, including students, faculty, staff, and officers – will treat each other and visitors to the University with respect. Anyone violating this principle is subject to disciplinary action.

13. *Revision of Regulation and Curriculum*

The University may, from time to time, revise, amend or change the regulations, schemes of examinations, and syllabus. In the case of students already undergoing the course, the change will take effect from the beginning of the following academic year after the changes are introduced and shall cover the course's part that remains to be completed.

കൊച്ചി ശാസ്ത്ര സാങ്കേതിക സർവ്വകലാശാല
CHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No.Ac.C1/Faculty of Law/2021 (Part-I)-I

Dated: 26.02.2021

NOTIFICATION

In exercise of the powers conferred by Section 24(ii) read with Section 42(1) of the CUSAT Act 1986, the Academic Council at its meeting held on 06.11.2020, resolved to approve the Regulations of the Masters programme in Bio Ethics (MBE) programme offered at Prof. N.R. Madhava Menon, Inter Disciplinary Centre for Research Ethics and Protocol (ICREP), CUSAT, under the Faculty of Law, as in Appendix, with effect from the Academic Year 2020-21 onwards.

The Syndicate at its meeting held on 25.01.2021, vide Item No.683.29 considered and resolved to approve the above decision of the Academic Council.

REGISTRAR

To
1. Dr. K.C. Sunny, (Dean, Faculty of Law), Vice-Chancellor, National University of Advanced Legal Studies (NUALS Campus), Kalamassery, Kochi.
2. Dr. P.S. Seema, Chairman, Board of Studies in Law (P.G), Associate Professor, School of Legal Studies, CUSAT, Kochi-22
3. The Director, Prof. N.R. Madhava Menon, Interdisciplinary Centre for Research Ethics and Protocol (ICREP), CUSAT, Kochi-22
4. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar/ Controller of Examinations
5. The Joint Registrar (Exam/Academic)/Deputy Registrar (Exams)/ Assistant Registrar (Exams/Academic)
6. Academic A/Exam E/Y/Confidential Sections
7. Day File/Stock File/File Copy

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MASTER OF BIOETHICS (MBE) DEGREE

REGULATIONS AND SYLLABI (Credit System)

</div>

FACULTY OF LAW

REGULATION
I. Admission to the course

Candidates for admission to the MBE Degree course shall be required to have passed the Bachelor's Degree examination in Law/ Bachelors Degree in Life Sciences/ Bachelors Degree in Medicine/ Bachelors Degree in Dentistry/ Bachelors Degree in Vetinary Sciences/Bachelors Degree in Agriculture/Bachelors Degree in Nursing/ Bachelors Degree in Pharmacy/ Bachelors Degree in Hospital Administration / Bachelors Degree in any Para Medical Sciences of any of the Universities in Kerala or an examination of any other University abroad accepted by the Syndicate as equivalent thereto or and to have obtained rank in the Common Admission Test conducted by the University. Scheduled Castes/Scheduled Tribe candidates are eligible for concession admissible under the orders of the Government.

The reservation rules governing Post Graduate Courses made by the Government shall be followed in making admissions.

1. Admission to the course shall be based on the performance of the candidate at the Common Admission Test (CAT), Group Discussion and Interview.

2. The CAT shall consist of two parts as given below:
    Part I – Proficiency in English, Analytical and other abilities and general
        knowledge.
    Part II – Proficiency in the related subjects.

3. Rank list for admission to the course shall be prepared on the following basis :

Part I of CAT	:	20% weightage
Part II of CAT	:	50% weightage
Group Discussion	:	15% weightage
Interview	:	15% weightage

Matters concerning admission procedure, payment of fees, etc., will be prescribed by Rules, published in the prospectus for the course from time to time.

II **Eligibility for the degree**

No candidate is eligible for the Degree of Master of Bioethics unless he/she has undergone the prescribed Core courses of study in the Prof NR Madhava Menon Interdisciplinary Centre For Research Ethics & Protocols (hereinafter ICREP) under the University, for not less than two academic years and has passed the prescribed examinations according at least 72 credits out of which 60 credits could be in core courses offered by the Centre or any of the Schools under the University.

III **Duration and contents of the course**

(i)   The course for the Master of Bioethics Degree of the University is of two   academic years consisting of four semesters. Each semester will be of 16 to 18 weeks of teaching followed by University Examination.*(ii)* A student shall, in the course of four semesters undergo instruction in Core Courses consisting of 60 credits and shall also undertake elective courses which includes Interdisciplinary electives from any other departments under the University or any other University in India recognized by UGC or abroad. This may include core courses also. However the candidate may secure a certificate of completion of such course and the credits procured may be transferred for the program.

Core Courses

MBE I C- OI	Law , Society and Human Rights	4 Credits
MBE IC-02	Fundamentals of Bioethics	4 Credits
MBEIC-03	General MicroBiology	4 Credits
MBE IC 04	Molecular Biology	4 Credits
MBE IIC-05	Molecular Cell Biology	4 Credits
MBE IIC-06	Methodologies In Biosciences Research	4Credits
MBE IIC-07	Legal Regulation of Scientific Research	4 Credits
MBE IIC-08	IPR, Bio Safety and Bio Ethics	4 Credits
MBEIIIC-0 9	Health Care Law and Bioethics	4 Credits
MBEIIIC-10	Clinical Research and Clinical Trials	4Credits

Elective Courses

MBE –E1	Philosophy of Human Rights	3 credits
MBE-E2	Public Health Research : Bioethics and Biosafety	3 credits
MBE- E3	Advances in Reproductive Biotechnology	3 credits
MBE-E4	Animal Welfare, Ethics and Jurisprudence	3 credits
MBE- E5	Plant Biotechnology : Biosafety and Bioethics	3 credits
MBE- E6	Philosophy and Religion in Ethics	3 credits
MBE- E7	Law Relating To Science and Technology	3 credits
MBE –E8	Recombinant DNA Technology	3 credits
MBE – E9	Biodiversity, Biosafety and Bioethics	3 credits

Teachers shall notify the elective courses proposed by them to be offered in subjects in the beginning of the Academic year. This will facilitate the students to choose the elective courses in advance. In case the teacher offers dissertation as an elective course the student in addition to the submission of the written work shall have to conduct a seminar with the help of preliminary research findings and the synopsis of the dissertation in the third semester through a seminar and a viva voce examination after the submission of the dissertation at the end of the IV Semester .The students shall have the option to substitute the elective courses by equivalent courses from the Centre or other Departments/Schools.

IVMode of Instruction

The Centre may decide the mode of instruction and the course may be conducted **online /offline** as deems fit. The Centre may engage visiting faculty/ Adjunct faculty based on the interdisciplinary character of the program.

V Examinations

(i) The evaluation scheme for each semester contains two parts, a continuous assessment and a semester end examination.

(ii) The internal assessment shall be based on an overall assessment of the performance of the student during the semester, such as performance in the test papers and home assignment, participation in the class discussions, seminars and regularity in attendance.

(iii) A student shall compulsorily register and complete at least one Interdisciplinary Elective (IE) course (one of the Electives) from other Departments/Schools before registering for the final semester of the program.

VI   Dissertation

(i) A Candidate is to write a dissertation of 14 credits. having an inter disciplinary character with bioethical and law related aspects

(ii) The dissertation shall be prepared under the guidance of teachers . The topic of the dissertation, methodology, pattern of presentation etc. etc., shall be   determined by the teachers concerned.

(iii) There shall be a presentation on the chosen area of the dissertation course in the third semester of the program.

 (iv) Unless and until the supervising teachers approve and signs up the   dissertation the candidate shall not be permitted to submit the dissertation.

(v) The dissertation shall be submitted to the University 15 days after the completion of the IV Semester .

(vi) There shall be a viva voce examination for the students writing dissertation based on the dissertation work.

(vii) The written work consists of 300 marks and 100 marks for the viva voce examination. The grades obtained for the dissertation shall be added to the aggregate grade obtained for other papers.

(viii) The minimum grade for passing the dissertation shall be 'D'.

(ix) A candidate who has failed to secure the minimum marks for the dissertation may submit following the above a new or revised dissertation before the commencement of the MBE Degree examination of the next year or the year in which he proposes to sit for the MBE Degree Examination within a period of three years from the year of completion of the course.

Explanation:

The identification of the topic for writing dissertation is done by the candidates in consultation with the faculty but the collection and collation of the material have necessarily to be undertaken by the candidate as per the scheme of his/her programme. The organisation of the material and the orderly discussion with appropriate references and suggestions for improvements are to be done by the candidate himself/herself. The research methodology, generally speaking, is to be determined in consultation with the faculty. The idea is to make him/her capable of writing a paper on any subject of importance in his/her professional life.

VII Classification:

The following Grades suggested by the UGC will be awarded based on the overall performance in each course.

Range of marks	Grade	Weightage
90%	S- Outstanding	10
80 - 90 %	A- Excellent	9
70 - 80 %	B-Very Good	8
60 - 70 %	C-Good	7
50 - 60 %	D-Satisfactory	6
50%	Failed	0

Overall performance at the end of the semester will be indicated by Grade Point Average (GPA) calculated as follows:

$$GPA = \frac{G_1C_1 + G_2C_2 + G_3C_3 + \ldots\ldots\ldots\ldots G_nC_n}{C_1 + C_2 + C_3 + \ldots\ldots\ldots\ldots C_n}$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student.

Classification	CGPA
First class with distinction	**8 and above**
First class	6.5 and above
Second class	6 and above

In the final marklist along with the Grade point average percentage of marks obtained by the candidate might be noted in bracket.

VIII *Revision of Regulations and Curriculum*

The University may from time to time revise, amend or change the Regulations, scheme of Examinations and the syllabus. In the case of students already undergoing the course the changes will take effect from the beginning of the following academic year after the changes are introduced, and shall cover the part of the course that remains to be completed.

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No. Ac.A3/Faculty of Law/2021

Dated: 17.08.2022

NOTIFICATION

In exercise of the powers conferred by Section 24 (ii) read with Section 42 (1) of the CUSAT Act 1986, the Academic Council at its meeting held on 26.11.2021 vide Item No. 1 (a), resolved to approve the revised regulation and syllabus of the two year LL.M programme in the School of Legal Studies, in Outcome Based Education (OBE) format.

The Syndicate at its meeting held on 23.04.2022, vide Item No. 698.05 considered the resolution of Academic Council and resolved to authorize the Vice-Chancellor for finalizing the scheme, Regulation & Syllabus of the two year LL.M program in the School of Legal Studies in consultation with the Director, School of Legal Studies.

The Vice-Chancellor has accordingly approved the modified Scheme, Regulation and Syllabus of the two year LL.M programme (2022 admission onwards) submitted by the Director, School of Legal Studies (Appendix - I)

REGISTRAR

Dr. MEERA V.
Registrar
Cochin University of
Science and Technology
Kochi - 682 022, Kerala

To:

1. Dr. K C Sunny, Dean, Faculty of Law
2. Dr. P S Seema, Chairperson, Board of Studies in Law (PG)
3. The Director, School of Legal Studies, CUSAT, Kochi - 22
4. The Joint Registrar (Exams)
5. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar/ PA to Controller of Examinations
6. Exam B/D/E/P/Y/Confidential Sections/Directorate of Admissions
7. Day file/Stock File/File copy

TWO YEAR LL.M. –REGULATIONS

(Effective from 2022 Admission onwards)
(Credit System)

REGULATIONS

The 2-year LL.M. degree offered by the School of Legal Studies is a dual specialization Programme.

I. *Admission to the Programme*: - Students for admission to the LL.M. Degree Programme **with specialization in more than one course (hereinafter LL.M Degree programme)** shall be required to have passed the Bachelor's Degree examination in Law of any of the Universities in Kerala or an examination of any other University accepted by the Syndicate as equivalent there to, and to have obtained rank in the Common Admission Test conducted by the University. Scheduled Castes/Scheduled Tribe candidates are eligible for concession admissible under the orders of the Government.

The reservation rules governing admission to LL.M. programmes made by the Government shall be followed in making admissions.

1. Admission to the programme shall be based on the performance of the student at the Common Admission Test (CAT), Group Discussion and Interview.

2. The CAT shall consist of two parts as givenbelow:

   i. Part I – Proficiency in English, Analytical and other abilities and general knowledge.
   ii. Part II – Proficiency in the related subjects.

3. Ranklist for admission to the programme shall be prepared on the following basis:

   Part I of CAT   :   20% weightage

   Part II of CAT   :   50% weightage

   Group Discussion   :   15% weightage

   Interview   :   15% weightage

Matters concerning admission procedure, payment of fees, etc., will b prescribed by Rules, published in the prospectus for the programme from time tot

II. **_Eligibility for the degree:_** - No Student is eligible for the Degree of Master of Laws, unless he has undergone the prescribed **Core courses** of study running to 72 credits in the School of Legal Studies under the University, for not less than two academic years and has passed the prescribed examinations with a total **credit of 80** in the following manner. 4 **Foundation Courses running to a total of 16 credits, a Dissertation course of 16 Credits, 2 Core Specialisation Courses running to a total of 32 credits (16 credits per specialization), seminar course running to a total of 4 credits, and Clinical Legal Education course running to a total of 4 credits. (Total 72 credits shall be from the School of LegalStudies), and Two Elective Courses running to a total of 8 credits which can be either from the discipline of Law or from any other discipline.**

III. **_Duration and contents of the course:-_**

i. The course for the Master of Laws (LL.M.) Degree of the University is of two academic years consisting of four semesters. Each semester will be of 16 to 18 weeks of teaching followed by End Semester Examination.

ii. A student shall, in the course of four semesters undergo instruction **in Core Courses consisting of 72 credits and Elective Courses consisting of 8 credits as follows:**

Provided that the Department Council may decide to change the papers offered in every semester different from the following order,without changing the number of credits of the total papers in every semester in contingencies like work arrangement of teachers.

Core Courses

a)		**Compulsory Foundation Courses for all the Students**		
	(i)	Law and Social Transformation (100 marks)	100marks	4credits
	(ii)	Theories of Law and Justice (100 marks)	100marks	4credits
	(iii)	Research Methodology and Design of Blueprint of Curriculum (Written paper (100 marks)+ Teaching practice (50marks) + RM practical (50marks)	200marks	4credits
	(iv)	Quantitative Analysis (100marks)	100marks	4credits

		Total for Compulsory Foundation Courses	**500 marks**	**16Credits**
	(v)	Dissertation (400marks)	400marks	14 Credits
	(vi)	Seminars (One seminar course of 50 marks in every Semester with1credit each)	200marks	4 Credits
	(vii)	Clinical Legal Education (One course of 50 marks in every Semester with 1 credit each)	200marks	4 Credits
	(viii)	Presentation of dissertation synopsis	100marks	2credits
		Total of Compulsory courses for ALL	**1400 marks**	**40credits**
b)		**Core Courses for Specialization**		
	(i)	**Specialization–I (4papers)**		16 Credits
	(ii)	**Specialization – II (4 papers)**(A teacher may offer more than one Core specialization course in a semester after Notification in the beginning of the Academic year)		16 Credits
		Total for Core Courses for Specialization		**32Credits**
c)		Elective Courses		8 Credits
		Grand Total		**80Credits**

- Teachers shall notify the Specialisation courses proposed by them to be offered in subjects in the beginning of the Academic year. This will facilitate the students to choose the specialization courses in advance.

- The academic calendar for each year giving details of the courses offered in each semester will be notified in the beginning of the year for each batch of students admitted for the LL.M programme.

IV.   Examinations:-

  i.   There shall be an end semester examination at the end of each semester. For each course, **50 per cent** of marks will be set apart for sessional work by continuous assessment and **50 per cent** for end semester examination, except for the paper **Research Methodology and design of blue print of curriculum. Details of the exception are given in clauses iii (a) and (b).**

  ii.   The continuous assessment shall be based on an overall assessment of the performance of the student during the semester, such as performance in the test papers and home assignment, participation in the class discussions, seminars and regularity in attendance.

  (iii) (a)Teaching Practice: There shall be a practical examination called Teaching Practice which carries 50 marks as **part of Research Methodology and design of blueprint of curriculum course**. For this examination the student should conduct the class on a subject assigned to him/her. The duration of the class shall be 30 to 40 minutes. The student is expected to answer the questions relating to the subject put to him by the members of the class as well as by the examiners. Marks for the practical shall be awarded on the basis of the class conducted by the student and on the basis of his/her participation in the classes conducted by other students. This examination shall be evaluated by a panel of teachers including an external examiner.

  (b) Research Practical: There shall also be a practical examination conducted by the School on Research Methodology, which will carry 50marks as part of thepaper **Research Methodology and design of Blue print of Curriculum**. Students will be given subjects in advance and will be required to gather relevant materials and prepare card based on the same.

  (iv) There shall be a **Clinical Legal Education course** carrying 50marks for eachsemester by way of continuous assessment.The marks shall be awarded on theperformance of the students in Clinical activities formulatedby the Schoolfrom time to time such as Socio-legal survey, Identification of legal problems, Legal advice, spreading legal

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literacy, Participation in Legal Aid Camps, Grievances redressal, Law reforms canvassing and Legal writing.

(v) Dissertation shall commence from the beginning of the third semester and complete the identification and collection of materials. At the end of the third semester he/she shall conduct a seminar with the synopsis of his/ her proposed dissertation. The supervising teacher shall examine the student and award him/her grade marks out of 100 (2 credit hours).There shall be no end semester examination for this course.

V. *Dissertation:-*

i. Dissertation is compulsory for all students. It carries 16 credits, of which 2credits shall be for a presentation of dissertation synopsis in the beginning of the third semester. 14 credits shall be for writing the dissertation and for viva voce examination conducted based on the dissertation.

ii. Dissertations shall be prepared under the guidance of teachers entrusted by the Department Council. The topic of the dissertation, methodology, pattern of presentation and any other relevant matters shall be determined by the teachers concerned in consultation with the department council.

iii. Generally, a teacher may not be allowed to guide more than five students for dissertation writing. However, the Departmental Council may, if the situation so demands, permit a teacher to guide more than five students but in no case shall hebe permitted to guide more than seven students.

iv. The teachers entrusted with the supervision of the dissertation work shall help the student in identifying, analyzing and presentation of the problem in the dissertation.

v. The dissertation work may be organized by the Departmental Council depending upon the infrastructural facilities and availability of faculty in every year.

vi. Unless and until the supervising teachers approve and sign up the dissertation the candidate shall not be permitted to submit the dissertation.

vii. The dissertation shall be submitted to the University 15 days after the completion of the IV Semester.

viii. The evaluation of the same shall be by the guide and 100% internal.

ix. There shall be a viva voce examination for dissertation based on the dissertation work.

x. The written work consists of 300 marks and 100 marks for the viva voce examination. The grades obtained for the dissertation shall be added to the aggregate grade obtained for other papers.

xi. The minimum grade for passing the dissertation shall be 'D'.

xii. A student who has failed to secure the minimum marks for the dissertation may submit following the above aneworrevised dissertation before the commencement of the LL.M Degree examination of the next year or the year in which he/she proposes to sit for the LL.M Degree Examination within a period of two years from the year of completion of the programme.

Explanation:-

The identification of the topic for writing dissertation is done by the students in consultation with the faculty but the collection and collation of the material have necessarily to be undertaken by the candidate as per the scheme of his/ her programme. The organisation of the material and the orderly discussion with appropriate references and suggestions for improvements are to be done by the student himself/herself. The research methodology may be determined in consultation with the faculty. The idea is to make him/her capable of writing a paper on any subject of importance in his/her professional life.

VI. *In view of the above the students' performance may be evaluated in the following method:*

Marks allotted to dissertations	300
Viva Voce	100
Total	**400**

	Dissertation Mark Splitup	
a	Importance and relevance of the topic	10
b	Adequacy of material	70
c	Organisation of the material in the thesis	40
d	Language and style	40
e	Originality in writing	30
f	Suggestions	60
g	Punctuation sand footnoting	50
	Total	**300**

Though this is generally stated, an examiner who is impressed by the general get up of the work may have freedom to make necessary adjustments in marking for the above ingredients. The idea is not at all to restrict the freedom of the examiner. This structuring is resorted to help the examiner decide the publishability of the dissertation.

VII. ***ATTENDANCE***

A minimum of 75% of attendance in aggregate is compulsory for writing the end semester examination. However, a student is required to secure 81% or more of attendance, for the purpose of obtaining marks for attendance for each course. The breakup of the same is given under Clause IX of this regulation. Student who has been detained due to shortage of attendance shall not be allowed to be promoted to the next semester and will be required to

take re-admission and repeat all courses of the said semester with the next batch of students. The Director shall announce the names of all such students who are not eligible to appear in the examination, at least 5 working days before the commencement of the semester examination.

VIII.   EXAMINATION AND EVALUATION

1. The University shall conduct an end semester examination for awarding Master's degree in Law (LL.M.) with the specializations as prescribed in the Examination Scheme of the Two year LLM Degree programme. (For Example LL.M. in Constitutiona Law and Commercial Law).

2. All end semester examination shall be conducted by the University. The schedule of examination shall be notified by the School/Centre along with Academic Calendar in the first week of every Semester.

3. The evaluation of students in a course shall have two components:

    i.   Evaluation through an end semester examination and
    ii. Continuous evaluation by the course teacher(s).

IX.   CONTINUOUSEVALUATIONOFCOURSES

For every course, except otherwise indicated, shall have continuous evaluation done by the course teacher, carrying 50% of the total marks allocated for the subject. For maintaining uniformity and transparency in continuous evaluation the following criteria shall be adopted.

(i)Attendance	05marks [<81%-0marks 81%-84%-1mark >84%-88%-2marks >88%-92%-3marks >92%-96%-4marks >96%-100%-5marks]
(ii) Class Test	15marks
(iii) Assignment Written Submission	10marks
(iv) Assignment Presentation	10marks
(v) Participation in Class Discussion	10marks
Total	**50marks**

However, the concerned course teacher shall have the discretion to change the components and marks with prior approval of the Department Council.

X.   *Seminar Course on Dissertation Topic*

1. The research guide shall undertake continuous evaluation of the dissertation work of the student. The student will be required to present a topic for dissertation, giving the detailed research design. He/she shall also present cases, legislation, bills, articles or any other material of relevance to his topic. The assessment should be continuous, and the progress of the student shall be evaluated through oral as well as written submissions. Based on the presentation, the student is evaluated using the following criteria.

a.	Relevance of the Topic	10
b.	Adequacy of materials	10
c.	Formulation of research problem	20
d.	Formulation of research questions	10

e.	Chapterisation	10
f.	How to solve the research problem	20
g.	Answers to questions	20
	Total Marks	**100**

2. TheevaluationoftheDissertationsubmittedattheendofthecourseshallbebasedonthefollowing criteriaasfaraspossible.

Total Marks Allotted to dissertation		300
a.	Importance and relevance of the topic	10
b.	Materials covered	70
c.	Organisation of the materialinthesis	40
d.	Language and style	40
e.	Originality in writing	30
f.	Suggestions	60
g.	Punctuation and footnoting	50

3. Though this is generally stated an examiner who is impressed by the general get up of the work may have freedom to make necessary adjustments in marking for the above ingredients. The idea is not at all to restrict the freedom of the examiner. This structure is resorted to help the examiner to decide the publishability of the dissertation.

4. There shall be a viva-voce examination based on the dissertation subject and relatedareasofresearchwhichshallcarry100marks.

XI. Grading:

Grades shall be awarded to the students in each course based on the total marks obtained in continuous assessment and in the end semester examination.

The grading pattern shall be as follows:

Marks obtained (Percentage)	Grade	Grade points
90 and above	S	10
80-90	A	9
70-80	B	8
60-70	C	7
50-60	D	6
<50	F	0

Note: Where X–Y range denotes 'X' inclusive and 'Y' exclusive

A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F for that course.

Grade Point Average:

The academic performance of a student in a semester is indicated by the Grade Point Average (GPA).

$$GPA = \frac{G_1C_1 + G_2C_2 + G_3C_3 + \text{-----------} G_nC_n}{C_1 + C_2 + C_3 + \text{------------------} C_n}$$

Where 'G' refers to the grade point and 'C' refers to the credit value of the corresponding course undergone by the student.

The Grade Point Average (GPA) for each semester will be calculated only for those students who have passed all the registered courses of that semester. Similarly, Cumulative Grade

Point Average (CGPA) up to any semester will be calculated only for those students who have passed all the courses upto that semester.

GradeCard:

The Grade Card issued at the end of the semester to each student by the Controller of Examinations, will contain the following:

a) The code, title, number of credits of each course registered in the semester,
b) The letter grade obtained,
c) The total number of credits earned by the student up to the end of that semester,and
d) GPA&CGPA.

Classification:

On successful completion of the programme, CGPA will be calculated as follows:

$$CGPA= \frac{C_1GP_1+ C_2GP_2+ C_3GP_3+\text{-------------} C_nGP_n}{C_1+ C_2+ C_3+\text{--------------------}C_n}$$

Where 'GP' refers to the grade point average e(GPA) and 'C' refers to the total number of credits obtained by a student in a particular semester.

The classification based on CGPA is as follows:

CGPA 8 and above   :First Class with distinction

CGPA 6.5 and above, but less than 8: First Class

CGPA 6 and above, but less than 6.5: Second Class.

Conversion of GPA/CGPA to Percentage marks

The following formula shall be used to convert the SGPA/CGPA obtained by a student to percentage marks.

Percentage marks = [55+10(CGPA–6)] Approximately

In the final mark list along with the Grade point average percentage of marks obtained by the candidate may be noted in bracket.

A student who completes the Programme with a minimum of 80 credits with a grade not less than D shall be declared to have passed the Two Year LL.M. Programme with those specialisations and shall be eligible for the award of Two Year LL.M. Degree with those specializations, which shall be clearly shown in the Mark list as well as the degree certificate of the candidate.

For getting a pass in the examination the student shall secure a minimum of 45% of the marks in the continuous evaluation as well as in the end semester examination and a minimum of 50% mark in the aggregate of each course, except in courses where there is100% internal assessment. In courses where there is 100% internal assessment the student shall secure a minimum of 50% of total marks earmarked for the course.

A candidate, who secures less than 50% of marks or less than the equivalent grade D, in a course, shall be deemed to have failed in that course.

XII. *Grievance Committee:-*

a. The marks of the end semester examination of all the students shall be put up in the Notice board intimating the students that if they are not satisfied with the marks of any course, they can make a written application to get their paper examined by the concerned teacher within 10days of publication of results.

b. The concerned teacher shall explain to the student the mode of awarding the marksand the reasons for the same. If the student still has grievance he/ she may make an application for revaluation of the paper.

c.

d. The Director, within two working days, shall place the matter before the Department Council and the Department Council, if satisfied by the request of the student, shall constitute a Grievance Committee of three teachers other than the teacher/s who offered the course to look into the grievance.

e. The Grievance Committee, within seven working days, after giving opportunity to the student and the teacher/s who offered the course, shall take a final decision. If the Committee is satisfied with the grievance of the student the Committee shall recommend to the Director of the School/Centre to send the written papers to one of the three experts in the field, identified by the Committee from the list of five experts given by teacher who offered the course. In case the teacher fails to give the list, the experts shall be identified by the Grievance Committee.

f. The revision of the mark awarded by the teacher shall be carried out only if the marks awarded by the expert are more than 15% of the maximum marks for the end semester examination of that course.

XIII. MAKEUPEXAMINATION:-

A student who secures less than 50% marks and declared failed in any core or elective course shall make an application for a makeup examination. The makeup examination shall be conducted immediately after the redressal of grievances but prior to result finalization by the Passing Board. The department shall conduct an additional end semester examination for these students. This makeup examination is only to provide the student a chance to pass the examination and complete the course successfully. If the student completes the course successfully making use of this additional chance, he/she will be awarded only a 'D' grade enabling the student to be declared successful in that course.

If the student cannot make it up, he/she shall be allowed to reappear in an end semester examination of the course in a subsequent semester, when the course is offered or an order/sanction is given by the University for a Special Chance to conduct an examination for that course. If the student re-registers and repeats the course, he/she maybe awarded the actual Grade he/she obtains.

The maximum duration for completing the programme will be four years, from the commencement of the first semester.

XIV. AWARDOFDEGREE:-

In order to become eligible for receiving LL.M. Degree the student shall have enrolled as a regular student and undergone the prescribed course of studies and completed all the tasks as specified in the curriculum. He/She should have secured minimum 50% marks or a minimum of D grade in all the courses, including dissertation with a total of 80 credits. The student who completes the programme successfully by choosing any two specialisations shall be awarded LL.M. degree indicating the Branches of specialisation. For example a student who took Criminal Law and Commercial Law as core area for specialisations shall be awarded LL.M. in Criminal Law and Commercial Law.

XV. REVISION OF REGULATIONS AND CURRICULUM
The University may from time to time revise, amend or change the Regulations, Scheme of examinations and the Syllabus. This Regulation shall come into effect from 2022-23 academic year onwards.

കൊച്ചി ശാസ്ത്ര സാങ്കേതിക സർവ്വകലാശാല
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No. Ac.A3/Faculty of Law/2021

Dated: 30.04.2022

NOTIFICATION

In exercise of the powers conferred by Section 24 (ii) read with Section 42 (1) of the CUSAT Act 1986, the Academic Council at its meeting held on 26.11.2021 vide Item No. 1 (b), resolved to approve the revised Regulations and Scheme for BBA LL.B (Hons.), B.Com LL.B (Hons.) and 3 year LL.B programme with modifications in classification and range of marks in accordance with other graduate courses with effect from 2021 admissions.

The Syndicate at its meeting held on 28.01.2022, vide Item No. 695.24, considered the resolution of the Academic Council held on 26.11.2021 and resolved to approve the Regulation and Scheme of BBA LL.B (Hons.), B.Com LL.B (Hons.) and 3 year LL.B programme as appended.

REGISTRAR

Dr. MEERA V.
Registrar
Cochin University of
Science and Technology
Kochi - 682 022, Kerala

To:

1. Prof.(Dr.) K.C Sunny, Dean, Faculty of Law, CUSAT, Kochi - 22
2. Dr. Vani Kesari-A, Chairperson, Board of Studies (Law-UG), CUSAT, Kochi - 22
3. The Director, School of Legal Studies, CUSAT, Kochi – 22
4. PS to Vice-Chancellor/PS to Pro-Vice-Chancellor/PA to Registrar
5. The Joint Registrar (Exams)/Deputy Registrar (Directorate of Admissions)
6. Examination-E/P/Y/Confidential Sections/DoA Section
7. Day file/Stock file/File copy

Regulation for Bachelor's Degree in Law (LL.B.) w.e.f 2021 Admission

- ➢ The Bachelor's Degree in Law (LL.B) Shall consist of regular course of study for a minimum period of six semester after graduation
- ➢ The course of study shall be by regular attendance at the requistic number of lectures, tutorial and practical training.
- ➢ The medium of instruction shall be English

Eligibility

Any person who has passed the Bachelor's Degree with 50% marks in the aggregate (All subjects) in any discipline of a University recognized by the Cochin University of Science and Technology can apply for admission to the course. SC/ST/SEBC candidates are eligible for relaxation of 5 % of marks in their qualifying degree. Candidates who have appeared for the qualifying examination may also apply in anticipation of their results. However, the mark lists obtained in the qualifying examination shall be produced at the time of admission. Those who fail to produce mark lists shall be not be considered for admission

Procedure for selection

Selection shall be made on the basis of the entrance test conducted by the Law School / University. In making selection for admission, the pattern of reservation prescribed by the University shall be followed

Curriculum

1. The curriculum shall consist of 20 compulsory, 6 optional and 4 compulsory practical training courses as prescribed by the Bar Council of India
2. The optional courses will be chosen and offered by the school from among the optional course in the syllabus

Subjects:

A. Compulsory Courses in Law
1. Administrative Law
2. Civil Procedure Code and Limitation Act
3. Company Law
4. Constitutional Law – I
5. Constitutional Law – II
6. Environmental Law
7. Family Law – I
8. Family Law – II
9. General Principles of Contract (Law of Contract – I)
10. Jurisprudence   (Legal Method, Indian Legal System and Basic Theory of Law)
11. Labour Law - I (Trade Unions and Industrial Disputes)
12. Labour Law – II (Social Securities Law)
13. Law of Crimes
14. Law of Criminal Procedure
15. Law of Evidence
16. Law of Torts, Motor Vehicle Accidents and Consumer Protection Law
17. Principles of Taxation Law
18. Property Law
19. Public International Law
20. Special Contracts (Law of Contract – II)
21.

B. Compulsory Clinical Courses in Law

      1. Drafting, Pleading and Conveyancing
      2. Professional Ethics and Professional Accounting System
      3. Mediation, Conciliation and Arbitration
      4. Moot Court Exercise and Internship

C. General Elective Courses in Law

1. Air and Space Law
2. Animal Protection Law
3. Criminology , Penology and Victimology
4. Disability Law
5. Disaster Management Law
6. Forensic science and Medical Jurisprudence
7. Healthcare Law
8. Human Rights Law
9. Intellectual Property Laws
10. International Humanitarian and Refugee Law
11. International Trade Law
12. Interpretation of Statues
13. Land utilization Law
14. Law and Medicine
15. Law Governing Scientific Research
16. Law of Co- operative Societies
17. Law of Local Self Government
18. Law of the Sea
19. Law on Building and Engineering Contracts
20. Law Relating to Child
21. Law Relating to Ships
22. Law, Poverty and Development
23. Laws Relating to Agriculture
24. Laws Relating to Armed Forces
25. Marine Safety Law
26. Private International Law
27. Science , Technology and Law
28. Securities Laws
29. Women and Criminal Law

Examination

1. There shall be a University Examination at the end of each semester. Candidates having attendance not less than 70% in each paper and 75% in aggregate shall alone be admitted to the end semester examination. Marks for attendance will be awarded for attendance above 80% on pro rata basis. Criteria for condonation of shortage of attendance will be decided by CUSAT through its orders from time to time.

2. For each written paper carrying 100 marks, 50% shall be set apart for internal assessment and 50% marks for the end semester examinations, Internal assessment shall be made on the Basis of overall performance during the semester such, as regularity of attendance, preparation anti presentation of assignments, test paper scoring and class room participation. etc. The scheme for internal evaluation may be decided by the Department Council based on University rules

3. The performance in practical training papers shall be assessed internally.

4. A candidate who *is* registered and or is entitled to be presented for the examination in a semester shall be entitled to pursue the studies for the next semester of the course.

5. **Internship:** Each registered student shall have completed an Internship of minimum of 12 weeks during the entire period of legal studies NGO, Trial and Appellate Advocates, judiciary, Legal Regulatory authorities. Legislatures and Parliament Other Legal Functionaries. Market institutions. Law Firms. Companies, Local Self Government and other such bodies as the University shall stipulate. Provided that internship in any year cannot be for a continuous period of more than Four Week. Every student need to maintain an authorised internship diary for the entire period of study reporting the internship work done. 1 Credit will *be* given for Internship.

6. There shall be a Viva-Voce at the end of sixth semester examination which may cover all the courses taught for the whole programme. The viva board shall consist of the Chairman and two examiners at least one of whom shall be an external examiner

7. Internal improvement. Re- admission, and validity of registration to complete the programme will be as per University rules.

Pass minimum and Classification

1. A candidate who secures not less than forty percentage (40%) in the Internal as well as external examinations and also secure an aggregate of fifty percent (50%) of the total marks for individual papers in the semester examination shall be declared to have passed the examination in that paper.

2. The minimum credit to qualify the entire degree is 122 credits.

3. A candidate who passes in all the papers and secures 50% or more of the aggregate marks for all the ten semesters but less than 60% shall be declared to have passed whole examination in second class.

4. Successful candidates with 60% marks and above in the Aggregate for all the ten semesters shall be declared to have passed the whole examination in first class.

5. Successful candidates with seventy-five percentage marks or above in the aggregate for all the ten semesters shall be declared to have passed the examination with distinction provided he/she passes all the examinations within the period of whole programme. Ranking shall be done on the basis of marks obtained by the candidate inthe whole examination passed in the first chance.

Grading
	Grades shall be awarded to the students in each course based on the total marks obtained in continues assessment and at the end semester examination.

Grading pattern shall be as follows:

Marks obtained (Percentage	Grade	Grade Points
90 to 100	S	10
80– 90	A	9
70 - 80	B	8
60 - 70	C	7
50 - 60	D	6
< 50	F	0

Note: Where X – Y range denotes 'X' inclusive and 'Y' exclusive

A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F for that course.

Grade Point Average:

The academic performance of a student in a semester is indicated by the Grade Point Average (GPA).

$$GPA = \frac{G1C1 + G2C2 + G3C3 + ...GnCn}{C1 + C2 + C3 + ...Cn}$$

Where 'G' refers to the grade point and 'C' refers to the credit value of the corresponding course undergone by the student.

The Grade Point Average (GPA) for each semester will be calculated only for those students who have passed all the registered courses of that semester. Similarly, Cumulative Grade Point Average (CGPA) up to any semester will be calculated only for those Students who have passed all the courses up to that semester

Grade Card

The Grade Card Issued at the end of the semester to each student by the Controller of Examination, will contain the following:
(a) The code, title, number of credits of each course registered in the semester,
(b) The letter grade obtained
(c) The total number of credits earned by the student up to the end of that semester and
(d) GPA & CGPA

Classification

On successful completion of the programme, CGPA will be calculated as follows

$$CGPA = \frac{C1GP1 + C2GP2 + C3GP3 + ...CnGPn}{C1 + C2 + C3 + ...Cn}$$

Where 'GP' refers to the grade point average (GPA) and 'C' refers to the total number of credits obtained by a student in a particular semester.

The Classification based on CGPA is as follows:

CGPA 8 and above	: First Class with distinction
CGPA 6.5 and above, but less than 8	: First Class
CGPA 6 and above, but less than 6.5	: Second Class

Regulation for the B.Com., LL.B. (Honours) Course-w.e.f 2021 Admissions

➢ The Bachelor's Degree in Commerce (B.Com.) and Law (LL.B.) (Honours) shall consist of regular course of study for a minimum period of 10 semesters in five years after plus two.

➢ The course of study shall be by regular attendance at the requisite number of lectures, tutorials and practical training.

➢ The medium of instruction shall be English.

➢ Number of seats: Number of students to be admitted each year shall be decided and notified by the University from time to lime.

Eligibility:
- **Minimum qualification for admission:** A candidate who seeks admission to the course shall have passed plus two examinations with the prescribed percentage of marks (including languages) at the time of admission. The candidate should have secured a minimum of sixty percent (60%) marks for the plus two examinations if he/she pursued science group. The candidates who are from the commerce/arts/humanities stream shall have a minimum of fifty five (55%) percentage of marks for the plus two examinations. The relaxation in pass percentage marks for candidates belonging to SC/ST /SEBC communities will be decided by CUSAT through its ordersfrom time to time.

- **Age Limit:** The maximum and the minimum age for seeking admission into a stream of integrated Bachelor of law degree program, if any will also be determined by CUSAT through its orders from time to time

Procedure for selection:
- Admission to the course shall be made from the rank list prepared by the University on the basis of the score obtained by the candidate in the Common Admission Test conducted by the University annually.

- In making selection for admission, the pattern of reservation prescribed by the University shall be followed.

Feestructure
- A student shall pay the fees prescribed by the University from time to time.

Curriculum:

- The B.Com. LL.B. (Hons.) curriculum shall consist of 18 compulsory courses in Commerce and 2 courses in English, 26 compulsory courses in Law including clinical courses and 14 elective courses in Law. Six of the elective courses shall be chosen and offered by the Law School from among the General Elective Courses The other eight elective courses shall be chosen either wholly from a particular group or from various groups such as Special Elective Groups viz., Constitutional Law, Business Law, Law and Agriculture, Intellectual Property Law and such other groups introduced by the University/Bar Council from time to time depending upon the availability of infrastructural facilities,

Subjects:

A. Compulsory Courses in Law:
1. Administrative Law
2. Civil Procedure Code and Limitation Act
3. Company Law
4. Constitutional Law-I
5. Constitutional Law- II
6. Consumer Protection Law
7. Environmental Law
8. Family Law- I
9. Family Law- II
10. General Principles of Contract (Law of Contract -I)
11. Jurisprudence (Legal Method, Indian Legal System and Basic Theory of Law)
12. Labour Law- 1 (Trade Unions and industrial Disputes)
13. Labour Law- II (Social Securities Law)
14. Law of Crimes-I
15. Law of Crimes-II
16. Law of Criminal Procedure
17. Law of Evidence
18. Law of Torts and Motor Vehicles Accidents
19. Principles of Taxation Law
20. Property Law
21. Public International Law
22. Special Contracts (Law of Contract - II)

B. Compulsory Clinical Courses in Law
1. Drafting, Pleading and Conveyancing
2. Professional Ethics and Professional Accounting System
3. Mediation, Conciliation and Arbitration
4. Moot Court Exercise and Internship

C. Courses in Commerce and Management:
1. Accounting for Specialised Institutions
2. Auditing : Principles and Practice
3. Business Communication

4. Business Environment
5. Business Organisation And Management
6. Business Statistics
7. Cooperation and Rural Development
8. Corporate Accounting
9. Cost Accounting
10. Entrepreneurship Development
11. Financial Accounting
12. Financial Management
13. Human Resource Management
14. Information Technology for Business and Law
15. Life Insurance & Social Security
16. Managerial Economics
17. Marketing Management
18. Modem Banking
19. General English- 1
20. General English – II

D. General Elective Courses in Law:
1. Air and Space Law
2. Animal Protection Law
3. Criminology, Penology and Victimology
4. Disability Law
5. Disaster Management Law
6. Forensic Scienceand Medical Jurisprudence
7. Healthcare Law
8. Human Rights Law
9. Intellectual Property Laws
10. International Humanitarian and Refugee Law
11. International Trade Law
12. Interpretation of Statutes
13. Land Utilization Law
14. Law and Medicine
15. Law Governing Scientific Research
16. Law of Co-operative Societies
17. Law of Local Self Government
18. Law of the Sea
19. Law on Building and Engineering Contracts
20. Law Relating to Child
21. Law Relating to Ships
22. Law, Poverty and Development
23. Laws Relating to Agriculture
24. Laws Relating to Armed Forces
25. Marine Safety Law
26. Private International Law
27. Science, Technology and Law
28. Securities Laws
29. Women and Criminal Law

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E. Special Elective Courses in Business Law
1. Banking Law
2. Bankruptcy and Insolvency Law
3. Competition Law
4. Foreign Trade Law
5. Information Technology Law
6. Insurance Law
7. Law of Carriages
8. Law of Corporate Governance
9. Law of Merger and Acquisition
10. Law on Corporate Finance

Teaching Scheme:
- Every teacher shall prepare a teaching plan at the commencement of the course. The teaching
  plan shall contain the details of lectures, seminars, discussions, treatises and other materials relied upon by him or her for handling the classes which shall be participatory. Discussion methods of teaching will be adopted.

Examination:
- There shall be a University examination at the end of each semester. Candidates having attendance not less than 70% in each paper and 75 % in aggregate shall alone be admitted to the end semester examination. Marks for attendance will be awarded for attendance above 80% on pro rata basis. Criteria for condonation of shortage of attendance will be decided by CUSAT through its orders from time to time.

- For each written paper carrying 100 marks, 50% shall be set apart for internal assessment and 50% marks for the end semester examinations. Internal assessment shall be made on the basis of overall performance during the semester such as regularity of attendance, preparation and presentation of assignments, test paper scoring and class room participation etc. The scheme for internal evaluation may be decided by the Department Council based on University rules.

- The performance in practical training papers shall be assessed internally.

- A candidate who is registered and or is entitled to be presented for the examination in a semester shall be entitled to pursue the studies for the next semester of the course.

- Each registered student shall have completed an Internship of minimum of 20 weeks during the entire period of legal studies under NGO, Trial and Appellate Advocates, Judiciary, Legal
  Regulatory authorities, Legislatures and Parliament, Other Legal Functionaries, Market Institutions, Law Firms, Companies, Local Self Government and other such bodies as the University shall stipulate. Provided that internship in any year cannot be for a continuous period of more than Four Weeks. Every student need to maintain an authorized internship diary for the entire period of study reporting the internship work done. 2 Credits arc given for Internship.

- There shall be a Viva-Voce at the end of tenth semester examination which may cover all the
  courses taught for the whole programme. The viva board shall consist of the Chairman and two examiners, at least one of whom shall be an external examiner.

- Internal improvement, Re- admission and validity of registration to complete the programme
  will be as per University rules.

Pass minimum and classification:

- A candidate who secures not less than forty percentage (40%) in the internal as well as external examinations and also secure an aggregate of fifty percent (50%) of the total marks
  for individual papers in the semester examination shall be declared to have passed the examination in that paper.

- The minimum credit to qualify the degree is 300 credits.

- A candidate who passes in all the papers and secures 50% or more of the aggregate marks for
  all the ten semesters but less than 60% shall be declared to have passed whole examination in
  second class.

- Successful candidates with 60% marks and above in the aggregate for all the ten semesters shall be declared to have passed the whole examination in first class.

- Successful candidates with seventy-five percentage marks or above in the aggregate for all the
  ten semesters shall be declared to have passed the examination with distinction provided he/she passes all the examinations within the period of whole programme. Ranking shall be
  done on the basisof marks obtained by the candidate in the whole examination passed in the
  first chance

Grading:

Grades shall be awarded to the students in each course based on the total marks obtained in continuous assessment and at the end semester examination

The grading pattern shall be as follows:

Marks obtained (Percentage)	Grade	Grade points
90 to 100	S	10
80 - 90	A	9
70 - 80	B	8
60 – 70	C	7
50 – 60	D	6
< 50	F	0

Note: Where X -Y range denotes 'X' inclusive and 'Y' exclusive

A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F for that course.

Grade Point Average:

- The academic performance of a student in a semester is indicated by the Grade Point Average (GPA).

$$GPA = \frac{G1C1 + G2C2 + G3C3 + ------- GnCn}{C1 + C2 + C3 + --------- Cn}$$

Where 'G' refers to the grade point and 'C' refers to the credit value of the corresponding course undergone by the student.

The Grade Point Average (GPA) for each semester will be calculated only for those students who have passed all the registered courses of that semester. Similarly, Cumulative Grade Point Average (CGPA) up to any semester will be calculated only for those students who have passed all the courses up to that semester.

Grade Card:

The Grade Card issued at the end of the semester to each student by the Controller of Examinations, will contain the following

a) The code, title, number of credits of each course registered in the semester,
b) The letter grade obtained
c) The total number of credits earned by the student upto the end of that semester and
d) GPA & CGPA.

Classification:

On successful completion of the programme, CGPA will be calculated as follows:

$$CGPA = \frac{C1\ GP1 + C2GP2 + C3\ GP3 + - - - - - - -CnGPn}{C1 + C2 + C3 - - - - - - - - -Cn}$$

Where 'GP refers to the grade point average (GPA) and 'C' refers to the total number of credits obtained by a student in a particular semester.

The classification based on CGPA is as follows:

CGPA 8 and above	: First Class with distinction
CGPA 6.5 and above, but less than 8	: First Class
CGPA 6 and above, but less than 6.5	: Second Class

Conversion of GPA/CGPA to Percentage marks

The following formula shall be used to convert the SGPA/CGPA obtained by a student to percentage marks.

Percentage marks = (GPA or CGPA – 0.5) 10

In the final marklist along with the Grade point average percentage of marks obtained by the candidate may be noted in bracket.

Revision of Regulations and Curriculum:

The University may from time to time revise, amend or change the Regulations, scheme of Examinations and the syllabus. In the case of students already undergoing the course the changes will take effect from the beginning of the following academic year after the changes are introduced, and shall cover the part of the course that remains to be completed.

❖ **This Regulation will be effective from 2021 admission onwards.**

Regulation for the Five Year B.B.A., LL.B. (Honours) Course-w.e.f 2021 Admissions

- ➢ The Bachelor's Degree in Business Administration (B.B.A.) and Law (LL.B.) (Honours) shall consist of regular course of study for a minimum period of 10 semesters in five years after plus two.

- ➢ The course of study shall be by regular attendance at the requisite number of lectures, tutorials and practical training.

- ➢ The medium of instruction shall be English.

- ➢ Number of seats: Number of students to be admitted each year shall be decided and notified by the University from time to time.

Eligibility:
- **Minimum qualification for admission**: A candidate who seeks admission to the course shall have passed plus two examinations with the prescribed percentage of marks (including languages) at the time of admission. The candidate should have secured a minimum of sixty percent (60%) marks for the plus two examinations if he/she pursued science group. The candidates who are from the commerce/arts/humanities stream shall have a minimum of fifty- five (55%) percentage of marks for the plus two examinations. The relaxation in pass percentage marks for candidates belonging to SC/ST,/SEBC communities will be decided by CUSAT through its orders from time to time.

- **Age Limit:** The maximum and the minimum age for seeking admission into a stream of integrated Bachelor of law degree program, if any will also be determined by CUSAT through its orders from time to time.

Procedure for selection:
- Admission to the course shall be made from the rank list prepared by the University on the basis of the score obtained by the candidate in the Common Admission Test conducted by the University annually.

- In making selection for admission, the pattern of reservation prescribed by the University shallbe followed.

Fee structure
- A student shall pay the fees prescribed by the University from time to time.

Curriculum:
- The B.B.A LL.B. (Hons.) curriculum shall consist of 18 compulsory courses in Business Management, 2courses in English, 26 compulsory courses in Law including 4 clinical courses and 14 elective courses in Law. Six of the elective courses shall be chosen and offered by the Law School from among the General Elective Courses. The other eight elective courses shall be chosen either wholly from a particular group or from various groups such as Special Elective Groups viz., Constitutional Law, Business Law, Law and Agriculture, Intellectual Property Law and such other groups introduced by the University/Bar Council from time to time depending upon the availability of infrastructural facilities.

Subjects:

A. Compulsory Courses in Law:

1. Administrative Law

2. Civil Procedure Code and Limitation Act

3. Company Law

4. Constitutional Law – 1

5. Constitutional Law – II

6. Consumer Protection Law

7. Environmental Law

8. Family Law – I

9. Family Law – II

10. General Principles of Contract (Law of Contract - I)

11. Jurisprudence (Legal Method, Indian Legal System and Basie Theory of Law)

12. Labour Law -I (Trade Unions and industrial Disputes)

13. Labour Law - II (Social Securities Law)

14. Law of Crimes- I

15. Law of Crimes-II

16. Law of Criminal Procedure

17. Law of Evidence

18. Law of Torts and Motor Vehicles Accidents

19. Principles of Taxation Law

20. Property Law

21. Public international Law

22. Special Contracts (Law of Contract - II)

B. Compulsory Clinical Courses in Law

1. Drafting, Pleading and Conveyancing

2. Professional Ethics and Professional Accounting System

3. Mediation, Conciliation and Arbitration

4. Moot Court Exercise and Internship

C. Compulsory Courses in Management:

1. Business Organization and Management

2. Managerial Economics

3. Business Statistics

4. Business Environment

5. Business Communication

6. Financial Accounting

7. Cost Accounting

8. Advertising and Publicity Management

9. Modern Banking

10. Financial Management

11. Marketing Management

12. Human Resource Management

13. Business Ethics

14. Information Technology for Managers

15. Research Methodology

16. Management Project

17. Operations Management

18. Organizational Dynamics

19. General English – I

20. General English - II

D. General Elective Courses in Law;
1. Air and Space Law

2. Animal Protection Law

3. Criminology, Penology and Victimology

4. Disability Law

5. Disaster Management Law

6. Forensic Science and Medical Jurisprudence

7. Healthcare Law

8. Human Rights Law

9. Intellectual Property Laws

10. International Humanitarian and Refugee Law

11. International Trade Law

12. Interpretation of Statutes

13. Land Utilization law

14. Law and Medicine

15. Law Governing Scientific Research

16. Law of Cooperative Societies

17. Law of Local Self Government

18. Law of the Sea

19. Law on Building and Engineering Contracts

20. Law Relating to Child

21. Law Relating to Ships

22. Law, Poverty and Development

23. Laws Relating to Agriculture

24. Laws Relating to Armed Forces

25. Marine Safety Law

26. Private International Law

27. Science, Technology and Law

28. Securities Laws

29. Women and Criminal Law

E. **Special Elective Courses in Business Law**
1. Banking Law

2. Bankruptcy and Insolvency Law

3. Competition Law

4. Foreign Trade Law

5. Information Technology Law

6. Insurance Law

7. Law of Carriages

8. Law of Corporate Governance

9. Law of Merger and Acquisition

10. Law on Corporate Finance

Teaching Scheme:

- Every teacher shall prepare a teaching plan at the commencement of the course. The teaching plan shall contain the details of lectures, seminars, discussions, treatises and other materials relied upon by him or her for handling the classes which shall be participatory. Discussion methods of teaching will be adopted.

Examination:

- There shall be a University examination at the end of each semester. Candidates having attendance not less than 70% in each paper and 75 % in aggregate shall alone be admitted to the end semester examination. Marks for attendance will be awarded for attendance above 80% on pro rata basis. Criteria for condonation of shortage of attendance will be decided by CUSAT through its orders from time to time.

- For each written paper carrying 100 marks, 50% shall be set apart for internal assessment and 50% marks for the end semester examinations. Internal assessment shall be made on the basis of overall performance during the semester such as regularity of attendance, preparation and presentation of assignments, test paper scoring and class room participation etc. The scheme for internal evaluation may be decided by the Department Council based on University rules.

- The performance in practical training papers shall be assessed internally.

- A candidate who is registered and or is entitled to be presented for the examination in a semester shall be entitled to pursue the studies for the next semester of the course.

- Each registered student shall have completed an Internship of minimum of 20 weeks during the entire period of legal studies under NGO, Trial and Appellate Advocates, Judiciary, Legal Regulatory authorities. Legislatures and Parliament, Other Legal Functionaries. Market Institutions, Law Firms, Companies, Local Self Government and other such bodies as the University shall stipulate. Provided that internship in any year cannot be for a continuous period of more than Four Weeks. Every student need to maintain an authorized internship diary for the entire period of study reporting the internship work done.2Credit will be given for Internship.

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- Internal improvement Re- admission and validity of registration to complete the programme will be as per University rules.

Pass minimum and classification;

- A candidate who secures not less than forty percentage (40%) in the internal as well as external examinations and also secure an aggregate of fifty percent (50%) of the total marks for individual papers in the semester examination shall be declared to have passed the examination in that paper.

- The minimum credit to qualify the degree is 300 credits.

- A candidate who passes in all the papers and secures 50% or more of the aggregate marks for all the ten semesters but less than 60% shall be declared to have passed whole examination in second class.

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-

Grading;

Grades shall be awarded to the students in each course based on the total marks obtained incontinuous assessment and at the end semester examination.

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The academic performance of a student in a semester is indicated by the Grade Point Average (GPA)

$$GPA = \frac{G1C1 + G2C2 + G3C3 + ...GnCn}{C1 + C2 + C3 + ...Cn}$$

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Grade Card:
The Grade Card issued at the end of the semester to each student by the Controller of Examinations, will contain the following;

      a) The code, title, number of credits of each course registered in the semester,

      b) The letter grade obtained,

      c) The total number of credits earned by the student upto the end of that semester and

      d) GPA & CGPA

Classification:
    On successful completion of the programme, CGPA will be calculated as follows:

$$CGPA = \frac{C1 GP1 + C2 GP2 + C3 GP3 + ...CnGPn}{C1 + C2 + C3 + ...Cn}$$

Where 'GP' refers to the grade point average (GPA) and 'C' refers to the total number ofcredits obtained by a student in a particular semester.

The classification based on CGPA is as follows:

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Conversion of GPA/CGPA to Percentage marks

    The following formula shall be used to convert the SGPA/CGPA obtained by a student topercentage marks

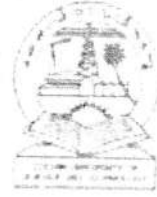   **Percentage marks = (GPA or CGPA - 0.5) 10**

    In the final mark list along with the Grade point average percentage of marks obtained by thecandidate may be noted in bracket

Revision of Regulations and Curriculum:

    The University may from time to time revise, amend or change the Regulations, scheme of Examinations and the syllabus. In the case of students already undergoing the course the changes will take effect from the beginning of the following academic year after the changes are introduced, and shall cover the part of the course that remains to be completed.

        ❖ **This Regulation will be effective from 2021 admission onwards.**

COCHIN UNIVERSITY P.O.
COCHIN - 682022
KERALA, S. INDIA

No. Conf. II/2941/2/2018 (3)

Date: 28.01.2019

NOTIFICATION

In exercise of the powers conferred by Section 24 (ii) read with Section 42 (1) of the CUSAT Act 1986, the Academic Council at its meeting held on 03.08.2018 resolved to approve the following:

1. The revised Regulation and Course Structure M.Voc. in Technology and Management Consulting under Faculty of Social Sciences offered by Deen Dayal Upadyaya Kaushal Kendra (DDUKK) with effect from 2018 admissions as in **Appendix I.**

2. The Regulation and Course Structure for one year Executive Post Graduate Diploma in Management Consulting under Faculty of Social Sciences, to be offered at Deen Dayal Upadyaya Kaushal Kendra (DDUKK) with effect from 03.08.2018, the date of meeting of the Academic Council as in **Appendix II.**

3. The Regulation and Course Structure for B.Voc in Business Process and Data Analytics under Faculty of Social Sciences with effect from 2018 admissions as in **Appendix III.**

4. The change in the first Para of Clause iv of the Regulation [Eligibility Criteria] for B. Voc in Business Process and Data Analytics under Faculty of Social Sciences with effect from 2019-2020 Academic Year onwards as give below:

   "Students with a total of 65% mark or equivalent CGPA in Plus Two or any equivalent examination conducted by recognized Boards with Mathematics/Statistics as one of the Subjects. Relaxation in percentage of marks shall be given to the candidates belonging to reservation communities as per rules in force from time to time".

The Syndicate at its Meeting held on 27.12.2018 and 05.01.2019 vide item 657.11 considered and approved the above resolution of the Academic Council.

REGISTRAR

To:
1. Dr. Sunil K. Narayanankutty, Dean, Faculty of Technology and Controller of Examinations.
2. The Director, Deen Dayal Upadyaya Kaushal Kendra (DDUKK), CUSAT, Kochi - 22.
3. The Controller of Examinations/Joint Registrar (Academic)/Assistant Registrar (Academic).
4. Academic 'A'/Exam. 'D'/'E'/'Y'/Exam. Confidential Sections.
5. Day file/Stock file/File copy.

Regulations for M.Voc in Technology and Management Consulting Programme offered under the Faculty of Social Sciences- (from 2018 admission onwards)

....

The **Master of Vocation (M.Voc)** programme has been launched by the UGC to promote vocational education at higher levels to produce industry ready, employable graduates under the National Skill Qualification Framework (NSQF) with multiple entry/exit options during the programme. The contents of the vocational courses are to be designed by providing a judicious mix of skill component relating to a profession (60%) and appropriate content of General education (40%) to ensure that the students are getting equipped in terms of knowledge and skills to be employable at each exit point of the programme.

M.Voc in Technology and Management is a Masters level vocational programme designed to be offered under the DDU KAUSHAL Kendra, CUSAT and designed according to the UGC guide lines based on NSQF with multiple entry/exit options, leading to various job roles at each level of exit. Course contents shall be aligned with the norms of the concerned Sector Skill Councils for enabling the students to obtain skill certifications from SSC concerned at various exit points.

I.   Duration and Nature of the Course

M.Voc in Technology and Management Consulting is a Masters level vocational programme which spans over a period of four semesters (two years) with multiple entry and exit options. Multiple entry and exit options imply that students who successfully complete the first two semesters will be eligible for Post-graduate Diploma in Technology and Management Consulting if they wish to discontinue the programme after the first year of this programme.   Suchstudents with P.G. Diploma will be eligible for lateral entry to the third semester of M.Voc Programme later if they wish to do so. In such cases the students must surrender their PG Diploma for obtaining the M.Voc Degree certificate and such lateral entry shall be permitted only within five years of their original admission to the M.Voc course. Students who successfully completeall four semesters will be eligible for Master of Vocation (M.Voc.) Degree in Technology and Management Consulting.

II.   Centre and Faculty

M.Voc in Technology and Management Consulting shall be offered at DDU KAUSHAL KENDRA and the degree shall be awarded under the Faculty of Social Sciences

III.   Eligibility for Admission

3.1 Eligibility for academic year 2018-19 Admission

Graduates with 60% marks (or equivalent CGPA) in Engineering or Graduates with 60% marks (or equivalent CGPA) in Business Management/Business Administration/Commerce/Economics or B.Voc graduates with 60% marks (or equivalent CGPA)in Technology/ Management related disciplines with Mathematics/Statistics/Accountancy as one of the subjects.

3.2 Eligibility for academic year 2019-20 onwards

Graduates with 50% marks (or equivalent CGPA) in Engineering or Graduates with 60% marks (or equivalent CGPA) in Business Management/Business Administration/Commerce/Economics or B.Voc graduates with 60% marks (or equivalent CGPA)in Technology/ Management related disciplines with Mathematics/Statistics/Accountancy as one of the subjects.

IV.   Selection and Intake of the Programme

4.1 Selection for academic year **2018-19** admission will be based on the candidates' score in CUSAT CAT Exam and interview. Weightage for test and interview shall be in the ratio of 80:20. Seats are reserved for SC/ST and Other Backward Communities as per Government of Kerala rules in this regard.

4.2 Selection for academic year **2019-20** onwards will be exclusively based on the candidates score in CUSAT CAT exam. Seats are reserved for SC/ST and Other Backward Communities as per Government of Kerala rules in this regard.

4.3 Intake of the programme shall be as per the decision of the university from time to time, taking into consideration the facilities available in the centre offering the programme.

V.   Programme structure

5.1 The number of credits (total) in I, II, III and IV semesters shall be 24, 36, 24 and 24 respectively. The total number of credits required for a pass in the programme shall be 108, in which minimum credit required for the core courses and electives shall be 96 and 12 respectively.

5.2 Since the Programme is vocational in character, the curriculum is designed in such a way that 60 per cent of the subjects are in the vocational domains (Technology and Management Consulting)

and 40 per cent in the general domains such as communication skills, professional skills, and IT skills, entrepreneurship and functional management

5.3 Students shall have the freedom to opt for four electives during semester III of which at least one shall be an Interdisciplinary Elective (IE) course from other Departments/Schools.

5.4 Students will have to undergo an internship training of minimum 40 working days at the end of semester II. Semester IV is fully devoted to a Major Project work of not less than 90 working days and the same will be on Technology or Management Consulting in a consulting organisation or any other business firm (where the student is required to work on a specific consulting assignment). Each student shall be assigned to a faculty guide for the internship and Major Project.A written report must be submitted at the end of the internship/Major Project in a format prescribed by the Centre.

VI. Method of Teaching and Training

The teaching and training for the M.Voc programme shall focus on developing skills and enhancing employability of the students so as to make them industry-ready graduates. Hence the teaching and training pedagogy of the programme will be mostly through "Activity oriented Class Room (AOC)", and the same will comprise of case studies, games, simulation techniques, presentations, Industry internships, training labs,both individual and group projects, interaction with industry experts, etc. Live consulting projects and internship training in organisations shall also form part of the training for the programme.

VII. Mode of Evaluation and Eligibility for Pass

7.1 Mode of Evaluation will be 100 per cent internal for all papers out of which 50 % marks are for continuous assessment throughout the semester and 50 % marks are for End-semester examination. In the case of following subjects namely Professional Skills Development (Semester I) and Case Development Skills for Consultants (Semester II) the entire 100 marks will be awarded through continuous assessment by the teachers through case analysis, group discussion, team building tasks, leadership role, problem solving exercises, personal improvement, report writing, presentations etc. Evaluation for Business Analytics in Semester II will be in practical mode.

7.2 For the Internship in semester II, 50% marks are for continuous assessment as well as the written report and remaining 50% marks will be awarded through a viva voce examination conducted by internal examiners. For the Main Project in Semester IV, the maximum marks shall be 300, of

which 100 marks each will be allotted on the basis of (i) continuous evaluation of the project work (ii) the project report submitted (iii) Viva–voce examination carried out by a board of examiners.

7.3 Marks obtained by the students in the continuous assessment shall be displayed on the Centre notice board and grievances if any may be addressed to the Head of the Centre/Department. The Centre/Department council shall finalise the marks of the continuous assessment of each course after addressing such grievances.

7.4 A minimum of 75% attendance is compulsory for each student to appear for End-Semester examination and also to progress to the subsequent semester. But the Vice-Chancellor shall have the power to condone the shortage of attendance up to 10% on medical grounds on the recommendations of the HOD. However, such condonation for shortage of attendance shall be given to a particular student only once during the entire programme of study.

7.5 Internal marks will be awarded on the basis of class tests, assignments, viva-voce, practical assignments, term-papers, mini-projects etc. as decided by the teacher concerned, considering the relevance of each component with respect to the paper he/she handles. However, the student shall be evaluated continuously throughout the semester and marks shall be awarded as per the following guidelines:

   a) A minimum of 50 per cent weightage shall be given for internal tests/lab exams/practical assignments

   b) A maximum of 20 per cent weightage shall be given for written assignments

   c) A maximum of 20 per cent weightage shall be given for class room presentations, Viva – voce and mini projects

   d) A maximum of 20 per cent weightage shall be given for other items such as attendance or activities that the teacher of the concerned course believes as relevant for the course and assigned to the students.

   The total Internal Marks awarded will be 50.

However, Department/Centre Council can change the guidelines for the distribution of internal marks given above, as and when required.

7.6 The question paper for the End-Semester examination shall be set by the concerned teacher in advance which shall be scrutinized by the respective Centre/Department Council or by a committee consisting of the HOD and faculty members offering courses in that semester to ensure that questions are within the scope of the syllabus and that the entire syllabus of the course is fairly covered in the question papers. Modifications can be suggested by the council if necessary and such suggestions shall be incorporated in the final version of the question paper.

There shall be only a single evaluation for the End-Semesterexamination.Immediately after the examination is over, the Head of the Department/Centre shall make arrangements to complete the evaluation and finalise the results within 10 working days after the last examination. In case of Semester II and Semester IV where internship/Major Projectis included, the results shall be finalised within five working days after the Viva-Voce examination. The marks and grade in all courses obtained by the students will be displayed in the notice board and the answer scripts can be shown to the students for scrutiny on written request by the student addressed to the Director of the Centre. (Viva-voce marks are exempted from this clause as it is awarded by a board of examiners).

7.7 For each course there shall be a separate passing minimum of 45% marks for the End-Semester examination and the student has to secure an aggregate of 50% when End-Semester examination and Internal Marks are taken together for every course in all the semesters for passing the programme. In case of the course Professional Skills Development in Semester II, students should acquire a minimum of 50% marks in Continuous Assessment.

Students have to acquire a minimum of 50% marks for the Viva Voce examination of the Internship in Semester II and 50% marks in each oneof the three components of Main Project in Semester IV (The three components will be (i) continuous evaluation of the project work (ii) the project report submitted and (iii) Viva–voce examination.)

7.8 The department shall publish the marks obtained by the students, in the continuous assessment and End-Semester examination. If the student has any grievance, he/she can approach the concerned teacher and submit his/her grievance with supporting documents/arguments. The teacher and the HOD will examine the case and decide on his/her grievance. If the student is not convinced with the decision, he/she can approach the appellate authority, which is the department council, in writing and the council shall examine the same and take a final decision which has to be intimated to the student in writing. The decision of the appellate authority shall be final.

7.9 The final marks and grades obtained by the students shall be published in the notice board. Those who could not obtain at least Grade D in total for a course will be declared as failed in that course. Those who fail in any core or elective course shall submit an application to the HOD within five working days if necessary for a re-examination of the End-Semester examination. Within ten days of the display of the results in the notice board, the department shall conduct an additional End-Semester examination for these candidates. This reexamination is only to provide the student a chance to complete the course successfully. If he/she completes the course successfully making use of this additional chance, he/she will be awarded only Grade D irrespective of the marks scored. If he/she cannot secure the minimum, he/she may repeat the End-Semester examination of that course in the next available chance/s. In this case, he/she will be awarded whatever grade he/she has secured.

7.10 For Semester IV, the results of the examinations will be finalized and published within 30 days from the last date of examinations by the centre/department council, which will act as the passing board and the minutes shall be sent to the Controller of Examinations of the university for the issue of grade cards. In case of Semester II and Semester IV where internship/major Projectis included, the results shall be finalized and published within 15 working days after the Viva-Voce examination.

7.11 A student shall complete his/her M.Voc programme within four years from the date of admission by acquiring the total credit requirements as specified for the award of the degree. In case of candidates who take lateral entry toSemester III of the course shall complete his/her M.Voc programme within three years from the date of admission to Semester III.

7.12 For PG Diploma in Technology and Management Consulting, a student shall complete the passing requirements within three years of securing admission to the course.

VIII. Grading and Classification

The following grading system is adopted for all the courses. The following grades will be awarded based on the overall performance in each course.

Range of marks	Grades	Weightage
90% and above	S-Outstanding	10
(80-89)	A-Excellent	9
(70-79)	B-Very Good	8
(60-69)	C-Good	7
(50-59)	D-Satisfactory	6
Below 50%	F-Failed	0

Decimal percentages shall be rounded to the next higher number if it is greater than or equal to 0.5.

Overall performance at the end of the semester will be indicated by Grade Point average (GPA) calculated as follows:

$$GPA = (G1C1+G2C2+G3C3+.....+GnCn) / (C1+C2+C3+ ….+Cn)$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student.

At the end of the final semester, Cumulative Grade Point Average (CGPA) will be calculated based on the above formula.

Classification for the Degree diploma will be as follows:

Classification for the Degree diploma will be as follows:

Classification	CGPA
First class with Distinction	8 and above
First class	6.5 and above
Second class	6 and above

IX. Revision of Regulations and Curriculum

The University may from time to time, revise, amend or change the Regulations, Schemes of Examinations and Syllabus. The date of effect of such changes will be as decided by the university.

X. Structure of the Question Paper of End-Semester Examinations

The End-Semester question paper shall have three parts (except for practical examinations), namely Part-A, Part-B and Part C. The maximum marks for End-Semester Examinations will be 50.

In Part A, there will be 10 compulsory questions which will be of the type *'Fill in the blanks/one-word answer'*. Each question in Part A carries one mark.

Part-B will consist of six questions out of which students must answer four questions. Each question will carry five marks in this part.

In Part-C, student will answer two questions of 10 marks each from a group of three questions. One case study would be preferred among the three questions in this section.

In case of practical exams, this pattern need not be followed. The number of questions can be varied according to the nature of the subject and the same will be decided by the examiners concerned based on the norms set by the Centre/Department council.

Revised Regulations for M.Voc in Mobile Phone Application Development Course offered under the Faculty of Technology- (from 2018 admission onwards)

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The **Master of Vocation (M.Voc)** programme has been launched by the UGC to promote vocational education at higher levels to produce industry ready, employable graduates under the National Skill Qualification Framework (NSQF) with multiple entry/exit options during the programme. The contents of the vocational courses are to be designed by providing a judicious mix of skill component relating to a profession (60%) and appropriate content of General education (40%) to ensure that the students are getting equipped in terms of knowledge and skills to be employable at each exit point of the programme.

M.Voc in Mobile Phone Application Development is a Masters level vocational programme designed to be offered under the DDU KAUSHAL Kendra, CUSAT and designed according to the UGC guide lines based on NSQF with multiple entry/exit options, leading to various job roles at each level of exit. Course contents shall be aligned with the norms of the concerned Sector Skill Councils for enabling the students to obtain skill certifications from SSC concerned at various exit points.

XI.   Duration and Nature of the Course

M.Voc in Mobile Phone Application Development Course is a Masters level vocational course and will span over a period of four semesters (two years) with multiple entry and exit options. That is, the course is designed in such a way that students who successfully complete the first two semesters can discontinue the programme if they wish and can get a Post-graduate Diploma in Mobile Phone Application Development. Those who continue the course further and finish four semesters successfully will be eligible for M.Voc. Degree (Master of Vocation). Students who discontinue after second semester with P.G. Diploma can come back and opt for lateral entry to the third semester later if they wish to do so and can finish their M.Voc Degree. In such cases they have to surrender their PG Diploma for obtaining the M.Voc Degree certificate and such lateral entry shall be permitted only within five years of their original admission to M.Voc course.

XII. Centre and Faculty

M.Voc in Mobile Phone Application Development shall be offered under DDU KAUSHAL KENDRA and the degree shall be awarded under the Faculty of Technology

XIII. Eligibility for Admission

3.1 Eligibility for academic year 2018-19 Admission

Engineering graduates with 60% marks (or equivalent CGPA) in the branches of Information Technology/Computer Science/Electronics & Communication or Graduates with 60% marks (or

equivalent CGPA) in Computer Science/ Computer Applications/ Information Technology/Electronics/Software Development or Graduates with B.Voc degree in relevant disciplines with 60% marks (or equivalent CGPA).

3.2 Eligibility for academic year 2019-20 onwards

Engineering graduates with 50% marks (or equivalent CGPA) in the branches of Information Technology/Computer Science/Electronics & Communication or Graduates with 60% marks (or equivalent CGPA) in Computer Science/ Computer Applications/ Information Technology/Electronics/Software Development or Graduates with B.Voc degree in relevant disciplines with 60% marks (or equivalent CGPA).

XIV. Selection and Intake of the course

14.1 Selection for academic year 2018-19 admission will be based on the candidates score in CUSAT CAT exam and interview. 80% weightage for Test score and 20% weightage for interview shall be given for selection. Ranking will be based on the aggregate score of Test and Interview. Seats are reserved for SC/ST and other backward communities as per Kerala Government rules.

14.2 Selection for academic year 2019-20 admission onwards will be exclusively based on the candidates score in CUSAT CAT exam. Seats are reserved for SC/ST and other backward communities as per Kerala Government rules.

14.3 Intake of the course shall be as per the decision of the university from time to time taking into consideration the facilities available in the centre offering the programme.

XV. Course structure

15.1 The number of credits (total) in I, II, III and IV semesters shall be 24, 36, 24 and 24 respectively. The total number of credits required for a pass in the course shall be 108, in which minimum credit required for the core courses and electives shall be 96 and 12 respectively.

15.2 Since the Course is vocational in character, the curriculum is designed in such a way that 60 per cent of the subjects are in the vocational domain (Mobile Phone application Development) and 40 per cent in the General domain such as Communication skills, Professional Skills, Management and Entrepreneurship.

15.3 Students shall have the freedom to opt for two electives during II and IV semester of which at least one should be Interdisciplinary Elective (IE) course from other Departments/Schools.

15.4 Students will have to undergo for an internship training of minimum 40 working days at the end of second semester. Semester IV is fully devoted to a Major project work of not less than 90 working days and the same will be on mobile phone application development in an IT firm. Each student shall be assigned to a guide for the same and a report has to be submitted in a format prescribed by the Centre.

XVI. Method of Teaching and Training

The teaching and training of the M.Voc course should focus on developing skills and enhancing employability of the students to make them industry ready graduates. Hence the teaching and training pedagogy of the course will be mostly through "Activity oriented Class room (AOC)", on the job training through live projects and the same will comprise of Case studies, games, simulation techniques, presentations, Industry internships, training labs, both individual and group projects, interaction with industry experts, etc.

XVII. Mode of Evaluation and Eligibility for pass

17.1 Mode of Evaluation will be 100 per cent internal for all papers out of which 50 % marks are for continuous assessment throughout the semester and 50 % marks are for End-semester examination. In case of the paper Professional Skills Development in second semester the entire 100 marks will be awarded through continuous assessment by the teachers through case analysis, Group discussion, Team Task, Leadership role, Problem solving exercises, Personal Improvement, etc. All practical examinations will also be internally evaluated with both continuous assessment and End-semester examinations as mentioned above.

17.2 For the Internship in second semester, 50% marks are for continuous assessment and the report submitted and remaining 50% marks will be awarded through a viva voce examination conducted by internal examiners. For the Main Project in fourth semester, the maximum marks shall be 300, of which 100 marks each will be allotted to (i) the continuous evaluation of the project work carried out by the student, (ii) the project report submitted (iii) Viva–voce examination carried out by a board of examiners.

17.3 Marks obtained by the students in the continuous assessment shall be displayed on the notice board and grievances if any may be addressed to the Head of the Centre/department. The department council shall finalise the marks of the continuous assessment of each course after addressing such grievances.

17.4 A minimum of 75% attendance is compulsory for each student to appear for End-semester examination and also to progress to the next subsequent semester. But the Vice-Chancellor shall have the power to condone the shortage of attendance up to 10% on medical grounds on the recommendations of the HOD. However such condonation for shortage of attendance shall be given only once during the entire programme of study.

17.5 Sessional marks will be awarded on the basis of class tests, assignments, viva-voce, practical assignments, term-paper, mini-project etc. as decided by the teacher concerned according to the relevance of the same with respect to the paper he/she handles. However, the student shall be evaluated continuously throughout the semester and marks shall be awarded as detailed below:

  e) A minimum of 50 per cent weightage shall be given for internal tests/lab exams/practical assignments
  f) A maximum of 20 per cent weightage shall be given for written assignments
  g) A maximum of 20 per cent weightage shall be given for class room presentations, Viva –voce and mini projects
  h) A maximum of 20 per cent weightage shall be given for other items such as attendance or activities that the teacher of the concerned subject believes as relevant for the course and assigned to the students.

  Department/Centre Council can change the criteria proposed above for the distribution of internal marks, as and when it required.

17.6 The question paper for the End-semester examination shall set by the concerned teacher in advance, which shall be scrutinized by the respective department council or by a committee consisting of the HOD and faculty members offering courses in that semester to ensure that questions are within the scope of the syllabus and that the entire syllabus of the course is fairly covered in the question paper. Modifications can be suggested by the council if necessary and such suggestions shall be incorporated in the final version of the question paper.

There shall be only a single evaluation for the semester end examination. Immediately after the examination is over, the Head of the Department/Centre shall make arrangements to complete the evaluation and finalise the results within 10 working days after the last examination. In case of second semester and fourth semester where internships are there, the results shall be finalized within five working days after the Viva-Voce examination. The marks and grade in all the courses obtained by the students have to be displayed in the notice board and the answer scripts can be shown to the students for scrutiny (Viva-voce marks are exempted from this clause as it is awarded by a board of examiners) if requested.

17.7 For each course there shall be a separate minimum of 45% marks for the End-semester examination and the student has to secure aggregate 50% marks for every paper in all the semesters for passing the programme. In case of the paper Professional Skills

Development in second semester, students should acquire a minimum of 45% marks in Continuous Assessment.

Students have to acquire a minimum of 50% marks for the Viva Voce examination of the Internship in second semester and 50% marks each for all the three components of the main project in fourth semester (three components: (i) the continuous evaluation of the project work (ii) the project report submitted (iii) Viva–voce examination.)

17.8 The department shall publish the marks obtained by the students, in the continuous assessment and End-semester examination. If the student has any grievance, he/she can approach the concerned teacher and submit his/her grievance with supporting documents/arguments. The teacher and the HOD will examine the case and decide on his/her grievance. If the student is not convinced with the decision, he/she can approach the appellate authority, which is the department council, in writing and the council shall examine the same and take a final decision which has to be intimated to the student in writing. The decision of the appellate authority shall be final.

17.9 The final marks and grades obtained by the students shall be published in the notice board. Those who could not obtain at least Grade D in total for a course will be declared as failed in that course. Those who fail in any core or elective course shall submit an application to the HOD within five working days if necessary for a re-examination of the semester end examination. Within ten days of the display of the results in the notice board, the department shall conduct an additional semester end examination for these candidates. This reexamination is only to provide the student a chance to complete the course successfully. If he/she completes the course successfully making use of this additional chance, he/she will be awarded only a D grade enabling the candidate to be declared successful in that course. If he/she cannot make it up, he/she may repeat the semester end examination of that course in the next available chance/s. In this case, he/she may be awarded whatever grade he/she has secured.

17.10 The result of the examinations will be finalized and published within 30 days from the last date of examinations by the department council, which will act as the passing board and the minutes shall be sent to the controller of examinations for the issues of grade card. In case of second semester and fourth semester where internships are there, the results shall be finalized and published within 15 working days after the Viva-Voce examination.

17.11 A student shall complete his/her M.Voc program within four years from the date of admission by acquiring the total credit requirements as specified for the award of the degree. In case of candidates who take lateral entry during the third semester of the course shall complete his/her M.Voc program within three years from the date of admission to the third semester.

XVIII.   Grading and Classification

The following grading system is adopted for all the courses. The following grades will be awarded based on the overall performance in each subject.

Range of marks	Grades	Weightage
90% and above	S-Outstanding	10
(80-89)	A-Excellent	9
(70-79)	B-Very Good	8
(60-69)	C-Good	7
(50-59)	D-Satisfactory	6
Below 50%	F-Failed	0

Decimal percentages shall be rounded to the next higher number if it is greater than or equal to 0.5.

Overall performance at the end of the semester will be indicated by Grade Point average (GPA) calculated as follows:

$$GPA = \frac{G_1C_1+G_2C_2+G_3C_3+\ldots\ldots\ldots+G_nC_n}{C_1+C_2+C_3+\ldots\ldots\ldots+C_n}$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student.

At the end of the final semester, Cumulative Grade Point Average (CGPA) will be calculated based on the above formula.

Classification for the Degree diploma will be as follows:

Classification	CGPA
First class with Distinction	8 and above
First class	6.5 and above
Second class	6 and above

XIX. Revision of Regulations and Curriculum

The University may from time to time, revise, amend or change the Regulations, Schemes of Examinations and Syllabus. The date of effect of such changes will be as decided by the university.

XX.   Structure of the Question Paper

The End-Semester question paper shall have three parts (except for computer lab/practical exams), namely Part-A, Part-B and Part C.

In Part A, there will be 10 compulsory questions which will be of the type *'Fill in the blanks/one-word answer/multiple choice'*. Each question in Part A carries one mark.

Part-B will consist of six questions out of which students must answer four questions. Each question will carry five marks in this part.

In Part-C, student will answer two questions of 10 marks each from a group of three questions. One case study would be preferred among the three questions in this section.

In case of Software Lab/ Practical oriented papers, this pattern need not be followed. The number of questions or programmes be varied according to the nature of lab/practical and the same will be decided by the examiners concerned based on the norms set by the department council.

Regulations for B Voc in Business Process and Data Analytics Programme offered in DDU KAUSHAL Kendra under the Faculty of Social Sciences from the Academic year 2018-19

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XXI. Introduction

The **Bachelor of Vocation (B.Voc)** programme has been launched by the UGC to promote vocational education at higher education institutions to produce industry ready, employable graduates under the National Skill Qualification Framework (NSQF) with multiple entry/exit options during the programme. The contents of the vocational courses are to be designed by providing a judicious mix of skill component relating to a profession (60%) and appropriate content of General education (40%) to ensure that the students are getting equipped in terms of knowledge and skills to be employable at each exit point of the programme.

B.Voc in Business Process and Data Analytics is a vocational graduate programme designed to be offered under the DDU KAUSHAL Kendra, CUSAT and designed according to the UGC guide lines based on NSQF with multiple entry/exit options, leading to various job roles at each level of exit. Course contents shall be aligned with the norms of the concerned Sector Skill Councils (SSC) for enabling the students to obtain skill certifications from SSC concerned at various exit points.

XXII. Duration and Nature of the Course

B Voc in Business Process and Data Analytics is a Bachelor level vocational programme which spans over a period of six semesters (three years) with multiple entry and exit options. Multiple entry and exit options imply that the students have exit options at the end of each year of the course and are eligible for varying certifications as shown below and such candidates who exit the course can rejoin to the course on a later stage and can complete the course.

1. Students who successfully complete the first two semesters and take exit option will be eligible for **Diploma in Business Process and Data Analytics**
2. Students those who successfully complete the first four semesters and take exit option will be eligible for **Advanced Diploma in Business Process and Data Analytics** and
3. Students who successfully complete all six semesters will be eligible for Bachelor of Vocation (B.Voc.) **Degree in Business Process and Data Analytics.**

Such students with Diploma/Advanced Diploma will be eligible for lateral entry to the third/fifth semester of B Voc Programme later if they wish to do so. Students with Diploma in Business Process and Data Analytics will be eligible for lateral entry to third semester and those with Advanced Diploma in Business Process and Data Analytics will be eligible for lateral entry to the fifth semester of this course. In such cases the students must surrender their Diploma/Advanced Diploma for obtaining the Advance Diploma/B Voc Degree certificate as they are not eligible for multiple certifications and such lateral entry shall be permitted only within five years of their original admission to the B Voc programme.

XXIII.   Centre and Faculty

B Voc in Business Process and Data Analytics shall be offered at DDU KAUSHAL KENDRA and the degree shall be awarded under the Faculty of Social Sciences.

XXIV.   Eligibility for Admission

For 2018 Admission
"Students with a total of 75% marks (or equivalent CGPA) in Plus Two or any equivalent examination conducted by recognised boards with Mathematics/Statistics as one of the subjects. Relaxation in percentage of marks shall be given to the candidates belonging to reservation communities as per rules".

For 2019 admission onwards

"Students with a total of 65% marks (or equivalent CGPA) in Plus Two or any equivalent examination conducted by recognised boards with Mathematics/Statistics as one of the subjects. Relaxation in percentage of marks shall be given to the candidates belonging to reservation communities as per rules".
While calculating the percentage of mark for plus two, the marks of mathematics/statistics shall necessarily be included in case the student has studied additional subjects.

XXV. Selection and Intake of the Programme

25.1   Selection of candidates will be based on the following criteria:

For 2018 Admission

The eligible students shall be admitted to the course from a rank list prepared by the university based on the marks secured by candidate in an Aptitude Test (CAT) conducted by the university and the marks scored for the qualifying examination. 50% weightage shall be given for the marks scored in CAT and 50% weightage shall be given to the aggregate marks scored by the candidate

for the qualifying examination plus the marks scored for the Mathematics or Statistics (If both subjects are studied, only marks for the mathematics will be considered).

For 2019 admission onwards

The eligible students shall be admitted to the course from a rank list prepared by the university based on the marks secured by candidate in an Aptitude Test (CAT) conducted by the university.

25.2   Intake of the programme shall be as per the decision of the university from time to time, taking into consideration the facilities available in the centre offering the programme. Seats are reserved for SC/ST and Other Backward Communities as per Government of Kerala rules in this regard.

XXVI.   Programme structure

26.1   Since the Programme is vocational in character, the curriculum is designed in such a way that 60 per cent of the subjects are in the vocational domains (Business Process and Data Analytics) and 40 per cent in the general domains such as English language, communication skills, professional skills, IT skills, entrepreneurship and Functional Management. The curriculum has been designed to meet the requirements laid out in the UGC Guidelines for curriculum design for B Voc programmes under the National Skill Qualification Framework (NSQF). The total credit requirements for the course is 180 out of which skill components will carry 108 and general education components will carry 72 credits. The credit distribution will be in the following pattern:

	NSQF Level	Skill Component Credits	General Education Credits
Year I Diploma	5	36	24
Year II Advanced Diploma	6	36	24
Year III B Voc	7	36	24
Total		108	72

26.2   The number of credits (total) in I, II, III, IV, V and VI semesters shall be 30, 30, 30, 30, 34 and 26 respectively. The total number of credits required for a pass in the programme shall be 180, in which minimum credit required for the core courses and electives shall be 172 and 8 respectively.

26.3   Students shall have the freedom to opt for one elective each in semester IV and semester V of the programme.

26.4   Students will have to undertake an Organisational study of minimum 15 working days as part of their Project-I at the end of semester II. Project II at the end of Semester IV will be of 15 working days on Business Process Mapping. Semester VI is fully devoted for Project III – (Main Project) of not less than 80 working days and the same will be on a data analytics project in any organisation. Each student shall be assigned to a faculty guide for all the projects. A written report must be submitted at the end of the Project-I, II and III in a format prescribed by the Centre.

26.5   Students are required to attend single/multiple Training Programme/s with the total duration of which shall amount to 5 days each in Semester I and Semester III and 10 days in Semester VI. These training programmes shall be in the general domain to improve the personal effectiveness, professional skills and career planning of the students. The ten days workshop programme proposed in fourth semester will help students to build personal branding and to prepare career planning along with building awareness about current trends and developments in Industry and Economy. Students shall be encouraged to participate in training programmes organized by state/national level institutes/Centres or Departments of Universities including DDUKK/Professional bodies such as AIMA or ISTD, etc. to satisfy the requirements for acquiring credits for the aforementioned training programmes in various semesters.

In order to attend such training programmes, students have to obtain prior permission from the Centre by submitting the details of the institution offering the training programme and the proposed course. The credits for the participation in such training programme shall be awarded only based on the evaluation of the report submitted by the students along with the participation Certificates.

XXVII.   Method of Teaching and Training

The teaching and training for the B Voc programme shall focus on developing skills and enhancing employability of the students so as to make them industry-ready graduates. Hence the teaching and training pedagogy of the programme will be mostly through "Activity oriented Class Room (AOC)",

and the same will comprise of case studies, games, simulation techniques, presentations, Industry internships, training labs, both individual and group projects, interaction with industry experts, etc. Live analytics projects and internship training in organisations shall also form part of the training for the programme.

XXVIII.   Mode of Evaluation and Eligibility for Pass

28.1   Mode of Evaluation will be 100 per cent internal for all papers out of which 50 % marks are for continuous assessment throughout the semester and 50 % marks are for End-semester examination. In the case of the following subject namely Managerial Skills Development and Design Thinking (Semester III), the entire 100 marks will be awarded through continuous assessment by the teachers through case analysis, group discussion, team building tasks, leadership role, problem solving exercises, personal improvement, report writing, presentations etc.

For Project I and Project II, 50 % marks will be awarded through continuous assessment and 50% marks will be awarded based on the evaluation of the report submitted by the student. In case of the Project III (Main Project) 100 marks each will be awarded for Continuous Assessment, Project Report and Viva Voce. Viva-Voce examination at the end of the sixth semester shall be carried out by a board with at least three examiners.

Evaluation for programming-based subjects in various semesters shall be in practical mode.

28.2   A minimum of 75% attendance is compulsory for each student to appear for End-Semester examination and also to progress to the subsequent semester. But the Vice-Chancellor shall have the power to condone the shortage of attendance up to 10% on medical grounds on the recommendations of the HOD. However, such condonation for shortage of attendance shall be given to a particular student only once during the entire programme of study.

28.3   Internal marks will be awarded on the basis of class tests, assignments, viva-voce, practical assignments, term-papers, mini-projects etc. as decided by the teacher concerned, considering the relevance of each component with respect to the paper he/she handles. However, the student shall be evaluated continuously throughout the semester and marks shall be awarded as per the following guidelines:

    i)   A minimum of 50 per cent weightage shall be given for internal tests/lab exams/practical assignments

j) A maximum of 20 per cent weightage shall be given for written assignments

k) A maximum of 20 per cent weightage shall be given for class room presentations, Viva – voce and mini projects

l) A maximum of 20 per cent weightage shall be given for other items such as attendance or activities that the teacher of the concerned course believes as relevant for the course and assigned to the students.

The total Internal Marks awarded will be 50.

However, Department/Centre Council can change the guidelines for the distribution of internal marks given above, as and when required.

28.4 The question paper for the End-Semester examination shall be set by the concerned teacher in advance which shall be scrutinized by the respective Centre/Department Council or by a committee consisting of the HOD and faculty members offering courses in that semester to ensure that questions are within the scope of the syllabus and that the entire syllabus of the course is fairly covered in the question papers. Modifications can be suggested by the council if necessary and such suggestions shall be incorporated in the final version of the question paper.

There shall be only a single evaluation for the End-Semester examination. Immediately after the examination is over, the Head of the Department/Centre shall make arrangements to complete the evaluation and finalise the results within 10 working days after the last examination. In case of Semester II, Semester IV and Semester VI where Projects are included, the results shall be finalised within seven working days after the submission of the report/ conduct of Viva-Voce examination, which ever applicable as the case may be. The marks and grade in all courses obtained by the students will be displayed in the notice board and the answer scripts can be shown to the students for scrutiny on written request by the student addressed to the Director of the Centre. (Viva-voce marks are exempted from this clause as it is awarded by a board of examiners).

28.5 For each course there shall be a separate passing minimum of 45% marks for the End-Semester examination and the student has to secure an aggregate of 50% when End-Semester examination and Internal Marks are taken together for every course in all the semesters for passing the programme. In case of the course Managerial Skills Development and Design Thinking in Semester III, students should acquire a minimum of 50% marks in Continuous Assessment. In case

of Projects, candidate has to acquire aggregate 50% marks in each projects- Project I, II and III, for the successful completion.

28.6 The department shall publish the marks obtained by the students, in the continuous assessment and End-Semester examination. If the student has any grievance, he/she can approach the concerned teacher and submit his/her grievance with supporting documents/arguments. The teacher and the HOD will examine the case and decide on his/her grievance. If the student is not convinced with the decision, he/she can approach the appellate authority, which is the department council, in writing and the council shall examine the same and take a final decision which has to be intimated to the student. The decision of the appellate authority shall be final.

28.7 The final marks and grades obtained by the students shall be published in the notice board. Those who could not obtain at least Grade D in total for a course will be declared as failed in that course.

28.8 For Semester I, III, and V, the results of the examinations shall be finalized and published within 30 working days from the date of last end semester by the centre/department council, which will act as the passing board and the minutes shall be sent to the Controller of Examinations of the university for the issue of grade cards. In case of Semester II, Semester IV and Semester VI where Project I, II and III are included respectively, the results shall be finalized and published within ten working days after the submission of the report/ conduct of Viva-Voce examination, which ever applicable as the case may be.

28.9 A student shall complete his/her B Voc programme within six years from the date of admission by acquiring the total credit requirements as specified for the award of the degree. In case of candidates who take lateral entry to Semester III or V of the course shall complete his/her B Voc programme within five years or four years respectively from the date of admission.

28.10 For Diploma in Business Process and Data Analytics, a student shall complete the passing requirements within three years of securing admission to the course. And the same will be four years in the case of Advanced Diploma.

28.11 For Advanced Diploma in Business Process and Data Analytics, a student shall complete the passing requirements within five years of securing admission to the course

XXIX. Grading and Classification

The following grading system is adopted for all the courses. The following grades will be awarded based on the overall performance in each course.

Range of marks	Grades	Weightage
90% and above	S-Outstanding	10
(80-89)	A-Excellent	9
(70-79)	B-Very Good	8
(60-69)	C-Good	7
(50-59)	D-Satisfactory	6
Below 50%	F-Failed	0

Decimal percentages shall be rounded to the next higher number if it is greater than or equal to 0.5.

Overall performance at the end of the semester will be indicated by Grade Point average (GPA) calculated as follows:

$$GPA = (G_1C_1+G_2C_2+G_3C_3+.....+G_nC_n) / (C_1+C_2+C_3+ ....+C_n)$$

Where 'G' refers to the grade weightage and 'C' refers to the credit value of corresponding course undergone by the student.

At the end of the final semester, Cumulative Grade Point Average (CGPA) will be calculated based on the above formula.

Classification for the Degree diploma will be as follows:

Classification	CGPA
First class with Distinction	8 and above
First class	6.5 and above
Second class	6 and above

XXX. Revision of Regulations and Curriculum

The University may from time to time, revise, amend or change the Regulations, Schemes of Examinations and Syllabus. The date of effect of such changes will be as decided by the university.

XXXI. Structure of the Question Paper of End-Semester Examinations

The End-Semester question paper shall have three parts (except for practical examinations), namely Part-A, Part-B and Part C. The maximum marks for End-Semester Examinations will be 50.

In Part A, there will be 10 compulsory questions which will be of the type *'Fill in the blanks/one-word answer'*. Each question in Part A carries one mark.

Part-B will consist of six questions out of which students must answer four questions. Each question will carry five marks in this part.

In Part-C, student will answer two questions of 10 marks each from a group of three questions. One case study would be preferred among the three questions in this section.

In case of practical exams, this pattern need not be followed. The number of questions can be varied according to the nature of the subject and the same will be decided by the examiners concerned based on the norms set by the Centre/Department council.