

Ordinance of Graduate Program (OGP)
For the Session 2023-2024 and onward
Shahjalal University of Science and Technology, Sylhet

Upon the approval of this ordinance, the preceding one, inclusive of all amendments, shall be deemed null and void. However, this action shall not impact ordinances or resolutions pertaining to matters not addressed herein.

I. Formation of GSC and its function

The formation of a Graduate Studies Committee (GSC) is a prerequisite for initiating a Graduate Program in any Discipline or Institute. The GSC shall consist of all Professors and/or Associate Professors within the Discipline, with a minimum of three (3) Professors or Associate Professors and shall be chaired by the Head/Director of the Discipline/Institute. In cases where an adequate number of Professors and/or Associate Professors are not available within a Discipline, the Dean of the School, in consultation with the Head of the Discipline, shall propose a sufficient number of Professors or Associate Professors from other Disciplines/Institutes and will take necessary steps for getting approval by the executive committee of the School. The Dean will then send the formed GSC committee to the Board of Advanced Studies (BAS) for subsequent approval by the Academic Council (AC).

The GSC will undertake administrative duties and play a significant role in organizing the ceremonial aspects of the graduate program. The Head of the Discipline (HoD) will appoint a faculty member from the GSC as the Graduate Program Coordinator (GPC), who will assist the GSC in program management. The HoD may appoint an officer to manage the relevant files of the offered programs to assist GPC. The GPC, under the guidance of the GSC Chair, will maintain a centralized file for each cohort of Master's students. Separate files will be opened for individual students enrolled in Master's by Research and PhD programs.

II. Nature of Graduate Program and the nomenclature of the Degree

II.1 SUST graduate program offers three distinct pathways to a Master's degree: Master's by Coursework, Master's by Mixed Mode (with options for a dissertation), and Master's by Research. A Master's by Research program is primarily centered around the development of a dissertation or dissertation, with the possibility of including some taught components. However, it is important to note that any taught components within this program are non-credit bearing, and the students' evaluation is solely based on their dissertation or dissertation work. In contrast, a Master's by Mixed Mode program comprises a minimum of 18 credit hours of instructional coursework, complemented by a research component that demands the completion of a dissertation or dissertation. In this mode, a student's overall assessment is contingent on their performance in both the instructional courses and the research component. Finally, a Master's by Coursework program involves a curriculum primarily comprised of taught courses, with a minimum requirement of 40 credits.

The doctoral program offered at SUST is Doctoral by Research. At the Doctoral by Research, there is no minimum credit requirements for coursework. It is important to note that across the doctoral-level qualification, the culminating requirement is the completion of a substantial dissertation.

Specific credit requirements and duration limits of each program have been depicted in the table below:

Table: Credit requirements and duration of each of the postgraduate programs

Program Type	Credit Requirement				Program Duration			
	Coursework (Min.)	Dissertation (Min.)	Dissertation (Max.)	Total (Min.)	Semester (Min.)	Year (Min.)	Semester (Max.)	Year (Max.)
Master's by Coursework	40	-	-	40	2.0	1.0	4.0	2.0
Master's by Mixed Mode	18	12	16	40	3.0	1.5	6.0	3.0
Master's by Research	Non-credit (if offered)	48	-	48	4.0	2.0	6.0	3.0
Doctoral by Research	Non-credit (if offered)	72	-	72	6.0	3.0	12	6.0

II.2 Notification for the admission process in post graduate programs will be published once a year.

II.3 Each student enrolled in Master's (by Mixed Mode & by Research) and in PhD Program will be assigned a dedicated Supervisor from the teachers of their Discipline to provide guidance throughout their academic program.

II.4 Any Discipline or Institute may offer a Master's program, provided it can ensure that its teaching personnel, whether from the same Discipline or others, hold qualifications equivalent to an Assistant Professor with a Ph.D. or higher. However, for offering Master's by Research and PhD. programs, the Discipline must ensure the availability of qualified individuals, either from its own faculty or from related Disciplines, who hold the rank of Associate Professor or higher to supervise graduate research work.

II.5 The name of the degree of a program should be related to the offering Discipline. However, allied subject/title can be offered upon prior approval of the School.

For instances:

- i. Students who will successfully complete the Master's program within the Disciplines of the School of Social Sciences (excluding Language Discipline) will be conferred the degree as Master of Social Science in Sociology (Coursework), Master of Social Science in Sociology (Mixed Mode).

For Language Disciplines: Students completing the Master's by Coursework or by Mixed Mode (with options for a dissertation) program within a language Discipline (such as Bangla or English) will be awarded the degree: Master of Arts in Bangla (Mixed Mode), Master of Arts in English (Coursework), and so forth.

- ii. The students who will complete the Master's program within the Discipline of the School of Physical Sciences, Life Sciences, and Agriculture and Mineral Sciences will be awarded the degree as Master of Science in Physics (Coursework), Master of Science in Physics (Mixed Mode), Master of Science in Forestry and Environmental Science (Coursework), Master of Science in Forestry and Environmental Science (Mixed Mode), Master of Science in Genetic Engineering and Bio Technology (Coursework), Master of Science in Genetic Engineering and Bio Technology (Mixed Mode) and so on.
- iii. The student who will complete the Master's program within a Discipline under the School of Applied Sciences and Technology will be awarded the degree as Master of Engineering in Chemical Engineering and Polymer Science (Coursework), Master of Engineering in Chemical Engineering and Polymer Science (Mixed Mode), Master of Engineering in Computer Science and Engineering (Coursework), Master of Engineering in Computer Science and Engineering (Mixed Mode) and so on.

II.6 A graduate program could be offered by a discipline in a specific field through collaboration with reputed foreign Institutes or universities, subject to the conditions outlined by the Academic Council, tailored to each individual case.

II.7 Graduates of the Master's by Research program will receive a degree, the title of which will vary depending on the School, Discipline, and specific module attended by the student.

For instances:

- i) Students who have successfully completed the Master's by Research program within Disciplines other than those under the School of Applied Sciences and Technology will be conferred degrees such as: Master of Philosophy in Sociology, Master of Philosophy in Social Work and Master of Philosophy in Physics, Master of Philosophy in Biotechnology, Master of Philosophy in Bangla and so on.
- ii) Students who have completed the Master's by Research program within a Discipline under the School of Applied Sciences and Technology will receive degrees such as: Master of Science in Chemical Engineering and Polymer Science, Master of Science in Chemical Engineering, Master of Science in Disaster Management, Master of Science in Industrial Engineering, Master of Science in Software Engineering and so on.

II.8 A student completing a Doctoral by Research program will be awarded the degree as Doctor of Philosophy in [name of the broader area the dissertation work belongs to], such as Doctor of Philosophy in Social Sciences, Doctor of Philosophy in Physical Sciences, Doctor of Philosophy in Biological Sciences, Doctor of Philosophy in Engineering Sciences, Doctor of Philosophy in Literature, Doctor of Philosophy in Industrial Engineering, and so forth.

In the PhD certificate, the name of the degree will be associated with the program offering entity in the following format: Doctor of Philosophy in Social Science, Department of Social Science, Doctor of Philosophy in Information Technology, Institute of Information and Communication Technology, Doctor of Philosophy in Literature, Department of Bangla, and so forth.

III. Course Identification System for Graduate Program

III.1 Formation of Curriculum Committee

Curriculum committee for the postgraduate programs will be comprised of the GSC members, one expert member from the industry/employers, one expert member from alumni, and two external members from other universities nominated by the Dean.

III.2 Course Development

III.2.1 Core, Elective and General Education Courses: The curriculum committee of the Discipline, duly formed by the respective Dean, will develop all the courses of the curriculum for every session. These courses include the Core, General Education, and Elective courses needed for the program of the Discipline. The General Education courses will be developed with close consultation with the respective Discipline concerned, considering the nature and demand of the program. If, for any of the Disciplines, the needed General Education courses are not running/operating in the University then the curriculum committee of that Discipline will develop all the necessary/relevant courses for the program. Finally, the curriculum has to be approved by the respective School, the Board of Advanced Studies, and the Academic Council.

III.2.2 Curriculum: The curriculum committee will be responsible for the selection and approval of courses, including both Core and Elective courses within the Discipline, as well as General Education courses offered within and by other Disciplines, to form the comprehensive curriculum. A student must successfully complete all core courses and general education courses to be eligible for graduation, even if they have accrued the necessary degree credits. Additionally, the Committee may assign prerequisite requirements to certain courses if deemed necessary.

III.2.3 Course Instruction: At the beginning of every semester, the course instructor has to prepare a detailed course outline and submit it to the Head of the Discipline and make it available for the students. The course plan should have information about the suggested textbooks, topics per week and corresponding course learning outcomes (COs) covered, teaching and learning strategies, assessment strategies, number and approximate dates of term-test examinations, quizzes, presentations, and mandatory office hours reserved for the students of the course offered, etc. If not otherwise mentioned, the medium of instruction is always English.

III.3 Course Identity:

Each course is specified/designated by a three-letter symbol for Discipline/School abbreviation (if not otherwise mentioned) followed by a four-digit International Standard Classification of Education (ISCED) code and a four-digit number to characterize that course. To avoid confusion, any new or modified courses should never be specified/designated by reusing a discontinued course number.

III.3.1 Discipline Identification

The three-letter symbol will identify a Discipline/Institute/School offering the course as follows. If the same course is offered to more than one Discipline/Institute, if necessary, an extra letter shown in the list may be used after the four digits to specify the Department receiving the General Education course.

SL No.	Identifier	School of Applied Sciences and Technology:	Extra Letter
1.	ARC	Architecture	A
2.	CEP	Chemical Engineering and Polymer Science	B
3.	CEE	Civil and Environmental Engineering	C
4.	CSE	Computer Science and Engineering	D
5.	EEE	Electrical and Electronic Engineering	E

6.	FET	Food Engineering and Tea Technology	F
7.	IPE	Industrial and Production Engineering	G
8.	MEE	Mechanical Engineering	Q
9.	PME	Petroleum and Mining Engineering	H
		School of Life Sciences:	
10.	BMB	Biochemistry and Molecular Biology	I
11.	GEB	Genetic Engineering and Biotechnology	J
		School of Physical Sciences:	
12.	CHE	Chemistry	K
13.	GEE	Geography and Environment	L
14.	MAT	Mathematics	M
15.	PHY	Physics	N
16.	STA	Statistics	O
17.	OCG	Oceanography	S
		School of Social Sciences:	
18.	ANP	Anthropology	a
19.	BNG	Bangla	b
20.	ECO	Economics	c
21.	ENG	English	d
22.	PSS	Political Studies	e
23.	PAD	Public Administration	f
24.	SCW	Social Work	g
25.	SOC	Sociology	h
		School of Agriculture and Mineral Science:	
26.	FES	Forestry and Environmental Science	P
		School of Management and Business Administration:	
27.	BUS	Business Administration	i
		Institute of Information and Communication Technology:	
28.	SWE	Software Engineering	W

III.3.2 Course Number

- (a) Following the BNQF (Bangladesh National Qualifications Framework) guidelines, an ISCED Code will be assigned to each course (offered by the Discipline/Institute/School) immediately after the three-letter Discipline code of the specified course.
- (b) **First Digit:** The first digit of the four-digit number, after the ISCED Code, will correspond to the year intended for the course recipient.
- (c) **Second Digit:** The second digit of the four-digit number, after the ISCED Code, will correspond to the semester intended for the course recipient.
- (d) **Third Digit:** A Discipline should use the numbers 0 and 1 for the third digit to identify allied General Education courses. The digits 2-9 are reserved for Core and Elective courses to identify the different areas within a Discipline/Institute.
- (e) **Fourth Digit:** The fourth digit of the four-digit numbers, after the ISCED Code, will identify a course within a particular Discipline/Institute/School. This digit may be sequential to indicate the follow-up courses. If possible, fourth digit may be even for identifying the laboratory/sessional courses of the Discipline/Institute/School.

III.3.3 Course Title and Credit: Every course will have a short representative course title and a number indicating the total credit as well as reference to prerequisite courses, if any.

III.4 Assignment of Credits:

III.4.1 Theoretical: One lecture of 1 (One) hour duration per week or 14 (Fourteen) lectures in total per semester will be considered as one credit.

III.5 Classification of the Courses: The Master's (Coursework and Mixed Mode degree programs) courses will be classified into several groups, and the curriculum committee will finalize the curriculum by selecting courses from the groups shown below.

III.5.1 Core and Elective Courses: Every student has to take the courses specified as core courses of the program offered by the Discipline/Institute. The percentage of the core and elective courses shall be at most 90% of the total credits so designed by the respective Discipline/Institute.

III.5.2 General Education Courses: Every student is required to take General Education courses developed by the Curriculum Committee of the Discipline/Institute. The General Education courses shall be at least 10% of the total credits offered by the respective Discipline/Institute. If any General Education course is declared as a mandatory course in the curriculum, a student is required to take that course to complete his/her degree.

III.5.3 Non-credit Courses: The credit of these courses will not be added to the total credits if passed and will have no effect on the CGPA as there will be no grades for these courses.

IV. Ethical Issues:

IV.1 Ethical Issues involved in Dissertation Supervision and Evaluation:

- a) A faculty member or a designated person cannot supervise a PhD candidate or a candidate for Master's Program either by Mixed Mode or by Research as a Supervisor/Co-Supervisor if s/he is a close relative (Husband/Wife, Father/Mother, Brother/Sister, Son/Daughter, Nephew/Niece, First Cousin, In-laws) to the candidate.
- b) Any panel examiner (Internal/External) of dissertation of any postgraduate program should not be the close relative (mentioned in (a)) of the Supervisor. The Supervisor and the GSC should carefully propose the panel of examiners to avoid conflict of interest.
- c) Neither the Supervisor nor the candidate may communicate with the examiner regarding the examination at any stage of the process.
- d) If either the HoD or Dean is a Supervisor of the candidate, an alternative must be nominated and appointed as the Chair of the oral examination committee.
- e) If a Chairman of GSC is a candidate for PhD, he/she cannot conduct the GSC meeting and cannot act his/her role as GSC Chair or Present in a BAS meeting (if member) wherever there is an agenda regarding his/her PhD either for supervision, committee formulation, examination and other relevant aspects mentioned in the ordinance. Alternative must be set by the respective Dean of the School from the Members of relevant GSC. The same provision is to be applied in case of a Member of GSC.
- f) A student may never be asked any question that may hurt her/his religious or ethnic background/identity throughout his/her program conduction.

IV.2 Ethical Issues involved in Course/Lab/Sessional Examination

IV.2.1 Everyone involved in the process of the examination shall guard the confidentiality of the question papers, examination grades, and results. The examinee, under any circumstance, cannot try to tamper with the examiners. Such attempts of the examinees shall be brought to the attention of the Controller of Examinations.

IV.2.2 If someone involved in offering a course or in the examination process having the following relatives as examinees, s/he shall inform the Head of the Discipline and the Controller of Examinations or the controlling authority immediately (a) Husband/Wife (b) Son/Daughter (c) Brother in law/Sister in law (d) Son in law/Daughter in law (e) Nephew/Niece (f) Uncle/Aunt (g) First cousins (h) brother/sister.

IV.2.3 Compliance: A student (clearing graduate) may appeal to the Controller of Examinations to (re)examine his/her answer scripts for a maximum of 2 (two) theory courses within 2 (two) weeks after the publication of the result. In this case s/he must pay a fee determined by the Academic Council filling the prescribed form supplied by the office of the Controller of Examinations. Then, based on the appeal, two examiners (except the previous examiners) will be appointed soon by the Grievance Cell, and the Controller of Examinations will take the approval from the Vice- Chancellor. In case of the single examiner system (SES), two examiners will evaluate two answer scripts A and B (of the appealed course) separately, and their given Marks will be added together for obtaining the total mark. Whereas for the double examiner system (DES), two examiners will evaluate the single answer script (of the appealed course) separately, and then the two Marks will be averaged. If the present total/average mark is at least 10% less or higher than the previous total/average mark, only then, the Grievance Cell will ask the concerned Examination Committee and the Controller of Examinations to revise the grade of the applicant. Otherwise, her/his previous grade shall stand.

V. Dispute Resolution about Course Examination and Evaluation of Dissertation:

During the program, a student may have dispute about the outcome of the relevant assessment. To resolve

such issue, there will be a Grievance Cell for graduate program to address the issue and make recommendation for mitigating and/or resolving the dispute to the BAS.

V.1 Grievance Cell

In each Discipline for exam-oriented compliance, a four/five members' committee as in the following will be formed:

Dean of the School	: Convener
Head of the Discipline (if not examiner or candidate)	: Member
Two senior faculties (not examiners) nominated by the GSC	: Member
The Controller of Examinations	: Member Secretary

V.1.1 If a candidate of postgraduate program believes that he/she has been significantly disadvantaged by examination process, or by any part of the examination process, then a written appeal may be made to the

Chairman of GSC stating the relevant ground providing the supportive documents. GSC will send the matter

with the materials submitted in appeal to the Grievance Cell to deal with.

V.1.2 After making a recommendation, the Convener of the Cell will send the summary as a report to BAS for

approval.

A. Master's by Coursework

A1 Eligibility

A1.1 Graduates with a Bachelor's degree in a relevant Discipline from SUST are eligible to apply for the Master's by Coursework program.

A2 Admission

A2.1 The candidate for this program must submit the following documents: (i) application in the prescribed form, (ii) academic transcript, and (iii) consent letter from the employer, if applicable.

A2.2 After selecting the candidate for this program, the Graduate Study Committee (GSC) will then send all the documents mentioned in Clause A2.1 to the Board of Advanced Studies (BAS) through the Dean of the School for subsequent approval by the Academic Council (AC).

A3 Registration

A3.1 A student enrolled in this program must register for a minimum of 10 (ten) credits and a maximum of 20 (twenty) credits per semester.

A3.2. A SUST faculty member may be admitted to this program with prior approval from the University Authority.

A3.3 The registration for this program will remain valid for a maximum of 4 (four) semesters.

A3.4 The period of candidature for this program will remain valid for a maximum of 2 (two) academic years.

A4 Academic Calendar

A4.1 Number of Semester

There will be two semesters in an academic year. The first semester of the year will start on 1st January and end on 30th June, the Second semester will begin on 1st July and end on 31st December. The roster of the final examination dates and other academic deadlines will be announced at the beginning of each semester.

A4.2 Duration of Semesters:

The duration of each semester will be as follows:

Classes	14 weeks
Recess before final Examination	2 weeks
Final Examination	4 weeks (Max.)
<u>Semester Break for the Result Processing and Publication</u>	<u>2 weeks</u>
Total	22 weeks

These 22 (Twenty-two) weeks may not be continuous in order to accommodate various holidays and the recess before the final examination.

A5 Course Pattern

Master's by Coursework program has been structured around a series of theoretical courses. At the beginning of every academic session, a short description of courses will be published by the curriculum committee of each Discipline.

A6 Academic Regulations: The Master's by Coursework program is exclusively structured around theoretical courses. In this mode, a student's overall assessment is dependent on his/her performance in these instructional courses. The minimum duration and total credits required for the degree will remain consistent across all Schools, as outlined below.

Table: Credit requirements and duration of Master's by Coursework program

Program Type	Credit Requirement				Program Duration			
	Coursework (Min.)	Dissertation (Min.)	Dissertation (Max.)	Total (Min.)	Semester (Min.)	Year (Min.)	Semester (Max.)	Year (Max.)
Master's by Coursework	40	-	-	40	2.0	1.0	04	2.0

The course structure for this program will be designed by the GSC and approved by the relevant school.

A6.1 Duration: Minimum duration for this degree is 2 (two) semesters.

A6.2 Credit Requirement: To attain the Master's by Coursework degree, students are required to fulfill a minimum of 40 credits through coursework instruction.

A6.3 Course Requirement: Students enrolled in the Master's by Coursework program must complete a minimum of 40 credit hours of instructional coursework. The GSC may recommend required courses, but not more than 12 (twelve) credits, from the graduate and/or undergraduate levels from other Disciplines.

A6.3.1 Lab Course: While initially optional, once integrated into the program structure, this component will become mandatory for students. Instruction will be conducted collectively with all students of the batch or in multiple groups. Each course of this nature will carry 1 to 2 credits.

A6.4 Incomplete Courses: If a student has any incomplete course(s), s/he has to register that incomplete course(s) from preceding semesters before registering courses from current or successive semesters. If an incomplete course is not available or offered in the running semesters, the student shall take such course(s) when it is available or offered.

A6.5 Course Withdrawal: A student can withdraw from a course by a written application to the Controller of Examinations through the Head/Director of the Discipline/Institute two weeks before the examination start. The Controller of Examinations will send the revised registration list(s) to the Disciplines before the commencement of semester final examination. There will be no record in transcript if the course is withdrawn.

A6.6 Course Repetition: If a student has to repeat a failed or incomplete course and that course is not available/offered any more, the Discipline may allow him/her to take an equivalent course from the current curriculum. For clearing graduates, if any incomplete course is not available/offered in the running semester, the Discipline may suggest a suitable/equivalent course to complete the credit required for the degree.

A6.7 Special Semester: Students with any retake or re-retake course(s) may apply for a special semester to complete the total required courses, with a maximum limit of twelve (12) credits during that semester. A special semester will be offered for final semester students who have retake or re-retake courses. The examination will commence four (4) weeks after the publication of the result and will continue for a maximum of two (2) weeks. The marks for both attendance and continuous assessments will be carried over from the previous record.

A7 Examination

Under this program, students will undergo continuous evaluation. In theoretical classes, assessment methods include class participation, assignments, quizzes, mid-semester examinations, topic-based report writing/presentation, and a final examination at the end of the semester. Laboratory/sessional work will be evaluated through observation, viva-voce sessions, lab quizzes, written reports, and examination grades determined by the course instructor and examination committee.

A7.1 Examination Committee

A7.1.1 The Graduate Studies Committee (GSC) of the Discipline or Institute will form a 06(Six) members examination committee for Master's by Coursework and Master's by Mixed Mode which is as follows:

Chairman: A teacher not below the rank of Professor of the GSC, in absence of Professor of the Discipline, an Associate Professor/Head of the Discipline. Head of the GSC will be the Chairman of the terminal semesters.

Internal Members: 04 (four) teachers from the members of the GSC.

External Members: One teacher/expert (not below the rank of Professor or equivalent) of the Major field and one teacher from each of the Disciplines offering the general education courses.

The respective Deans will ratify the list of the examinations committees and send to the Registrar for approval from the Academic council (AC).

A7.1.2 The examination committee proposes the examination schedule, finalizes question papers, assists the Discipline in conducting the examinations, preparing results, and addressing any issues that may arise regarding the examination procedure.

A7.2 Examination Dates and Routines

A7.2.1 The respective Disciplines will prepare the examination schedules, and the Heads of the Disciplines will notify them and distribute copies to other relevant Disciplines, as well as to the Office of the Controller of Examinations.

A7.3 Theory Courses

A7.3.1 Distribution of Marks: The marks of a given course will be as follows.

1.	Class Attendance	10%
2.	Class performance (Quizzes/MCQ/fill in the gap/report writing/ presentation/Assignments)	10%
3.	Mid-Semester Examinations	20%
4.	Final Examination Note: A student must obtain at least 25% of Marks allocated to final examination to pass the course	60%

A7.3.2 Class attendance: The marks for class attendance will be as follows:

Attendance (Percentage)	≥ 95	90 – < 95	85 – < 90	80 – < 85	75 – < 80	70 – < 75	65 – < 70	60 – < 65	50 – < 60
Marks	10	9	8	7	6	5	4	3	0

A student will not be allowed to appear the final examination of a course if his or her class attendance in that course is less than 50%.

A7.4 Mid-Semester Examination: There should be at least two Mid-Semester examinations for every theory course. The course teacher may decide the marks distribution of the Mid-Semester examinations. The answer scripts must be shown to the students as it is essential to their learning process.

A7.5 Question Setting and Moderation

A7.5.1 The Examination Committee will propose two question setters for each course to the Dean for appointment, at least four weeks prior to the examination commencement date, and subsequently inform the Controller of Examinations. The Controller of Examinations will then provide the necessary documents to the appointed question setters and examiners. In the event that a question setter or examiner declines the responsibility, they are required to return all documents, upon which the Examination Committee will propose an alternative question setter or examiner.

A7.5.2 The Chairman of the examination committee shall receive all the manuscripts of question papers. Should no manuscript be received within the stipulated timeframe, the committee will proceed to recommend an alternative question setter.

A7.5.3 After receiving all question paper manuscripts, the examination committee will proceed to moderate them. The committee is tasked with editing and printing the final question papers.

A7.6 Question Structure: Each Discipline must follow one unique question structure for final examinations. For 3.00 (three) or 4.00 (four) credits theory courses: (a) the written (final) examinations will be conducted for 60 marks, (b) there will be six questions for Double Examiner System (three questions in each part of the question paper for Single Examiner System), and the examinees will be asked to answer all of them, and (c) the examination time/duration will be 3 (three) hours. However, for 2.00 (two) credits theory courses: (a) the written (final) examination will be conducted for 60 marks, (b) there will be four questions for Double Examination System (two questions in each part of the question paper for Single Examination System), and the examinees will be asked to answer all of them, and (c) the examination time/duration will be 2 (two) hours. However, in the case of a Double Examiner System, two questions with alternative questions will be given. In the case of a Single Examiner System, only one question with an alternative question will be provided in each part (Part A and Part B) of the question paper. The serial number, question number, assigned marks, related course learning outcome (CO), and Bloom's level of the questions must match in both the main question and the corresponding alternative question (in cases where a question consists of multiple sub-questions). For instance:

Question Number	Question(s)	Consider these ARBITRARY		
		Assigned Marks	Related CO	Bloom's Level (BL)
X(a)	n ₁	CO m ₁	BL _{x1}
X(b)	n ₂	CO m ₁	BL _{x2}
X(c)	n ₃	CO m ₃	BL _{x5}
-				
-				
OR				
X(a)	n ₁	CO m ₁	BL _{x1}
X(b)	n ₂	CO m ₁	BL _{x2}
X(c)	n ₃	CO m ₃	BL _{x5}
-				
-				

OR

Question Number	Question(s)	Consider these ARBITRARY		
		Assigned Marks	Related CO	Bloom's Level (BL)
X(a)	n ₁	CO m ₁	BL _{x1}
OR				
	n ₁	CO m ₁	BL _{x1}
X(b)	n ₂	CO m ₁	BL _{x2}
OR				
	n ₂	CO m ₁	BL _{x2}
X(c)	n ₃	CO m ₃	BL _{x5}
OR				
	n ₃	CO m ₃	BL _{x5}
-				
-				

The GPA calculation will follow clause A7.3.1 during the result processing. Question setters are liable to set questions covering the entire curriculum of the course, and the examination committee shall have the liberty to investigate it and to do other necessary corrections during moderation. Moderated question paper must be printed and supplied to the examinees.

A7.7 Final Examination: After the 16th week since the beginning of the semester, the final examination will be conducted as per the Postgraduate Examination Ordinance.

A7.7.1 Duration of the Final Examination: There will be a 3-hour final examination for every course of 3-4 (three-four) credits, and the courses less than 3 (three) credits will have a final examination for 2 (two) hours duration.

A7.7.2 Evaluation of answer scripts of final examination: The School of Disciplines may follow any one of the following answer script evaluation system.

- (1) **Single Examiner system, SES:** The students will have two answer scripts to answer a separate set of questions during the final examination. Two examiners will grade the two answer scripts separately, and their given marks will be added together (examinee wise) for determining the Final Mark.
- (2) **Double Examiner system, DES:** The students will have a single answer script to answer questions during the final examination. The answer scripts will be evaluated by two examiners separately. For determining the Final Mark: (1) If the difference of two marks of the examiners is less than 20%, then these two marks will be averaged, and (2) If the difference of two marks of the examiners is 20% or more, the corresponding/concerned answer scripts will be examined by a third examiner and then the closer (by smaller difference) otherwise higher two marks of the three examiners will be averaged. Furthermore, if the total marks of two examiners differ by 15% or more in the case of 50% or more answer scripts of a course, then the whole set of answer scripts will be examined by a third examiner. The examination committee will propose the name for appointing the third examiner(s) (not any member of the examination committee) to the respective Dean. The Dean will authenticate/approve the name and send it to the Controller of Examinations for book-keeping and to take the approval of the Vice-Chancellor.

The system of answer script evaluation of the School has to be approved by the Academic Council.

A8 Grading System

A8.1 Letter Grade and Grade Point: Letter Grade and corresponding Grade-Point for a course will be awarded from the roundup marks of individual courses as follows:

Numerical Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	C-	2.00
Less than 40%	F	0.00

A8.2 Calculation of Grades

A8.2.1 GPA: Grade Point Average (GPA) is the weighted average of the grade points obtained in all the courses completed by a student in a semester.

A8.2.2 CGPA: Cumulative Grade Point Average (CGPA) of major degree will be calculated by the weighted average of all courses of the previous semesters along with that of the current/present semester. For the calculation of the final CGPA of clearing graduates, if the third digit after the decimal point is nonzero then its previous, that is, the second digit will be incremented by one.

A8.2.3 F Grades: A student will be given an “F” grade if s/he fails or remains absent in the final examination of a registered course. If a student obtains an “F” grade, her/his grade will not be counted for GPA and s/he will have to repeat the course. An “F” grade will be in her/his record, and s/he will not be eligible for distinction, award, and scholarship of the university.

A9. Distinction

Candidates for this program will be awarded the degree with Distinction if her/his overall CGPA is 3.75 or above. However, a candidate/student will not be considered for Distinction and any kind of Awards if s/he has any one of the following:

- (a) s/he is not a regular student,
- (b) s/he has semester drop or incomplete courses in any semester,
- (c) s/he has an “F” grade in any course,
- (d) s/he has upgraded her/his GPA through improvement,
- (e) s/he is addicted to drugs,
- (f) disciplinary action(s) is taken against her/him.

A10. Examination Ethics:

All involved in the examination process must follow the provisions of ethical issues stated in Clause IV in the OGP.

A.11General Instruction

A11.1 Disable (only handicapped) and slow learning students will be allowed 5 (five) minutes extra per hour during the examination.

A11.2 Disable (blind/without hand only) students will be allowed to take support in writing during the examination. But the writer should be junior and unfamiliar with the course for which the examinee is hiring her/him.

A11.3 Application for result correction may be accepted if it is submitted/lodged within the next 3 (three) months since the publication of the result. Chairman of the concerned examination committee/ Head of the discipline and the Controller of Examinations will do the corrections as per rules.

A11.4 The result/ tabulation sheet for course improvement will be signed by the examination committee of the present semester of the examinee.

A12 Exam Hall structure:

A12.1 For final examination of theory courses the number of invigilators will be as in the following.
For each exam hall:

- For 1 – 25 examinees, 2 (two) invigilators will be assigned.
- For 26 – 40 examinees, 3 (three) invigilators will be assigned.
- After 40 examinees, 1 (one) invigilator will be increased for each 20 examinees.
- For each course, one chief invigilator will be assigned to conduct the examination.

A12.2 For Term Test of a theory course, the number of invigilators will be two(02) including the course teacher.

A13 For continuous assessment, course teacher will do the needful and no other invigilators are required.

A14. Academic Fee: To be decided by the Academic Council and the Syndicate.

B. Master's by Mixed Mode

B1 Eligibility

- B1.1** Graduates with a Bachelor's degree in a relevant Discipline from SUST or any other university or equivalent foreign university, with a minimum CGPA of 3.00, are eligible to apply for the Master's by Mixed Mode program.
- B1.2** A candidate holding a Master's by Coursework degree in a relevant Discipline from SUST is eligible for admission to the Master's by Mixed Mode program, provided s/he has achieved a minimum CGPA of 3.25 in his/her Master's by Coursework program.
- B1.3** A candidate currently enrolled in a Master's by Coursework program at SUST, who has already completed 18 credits of coursework with a CGPA of 3.25 or higher, is eligible to apply for the conversion from his/her current program to this program. In such cases, the candidate will be granted a waiver for theory courses completed in the Master's by Coursework program.
- B1.4** A candidate who has graduated under the course system and has achieved at least a second division/class in all previous examinations is eligible for admission to this program. In such cases, the candidate must provide evidence that this degree will enhance his/her professional career.
- B1.5** A candidate with a Bachelor's degree in engineering from a university or institution other than SUST, who has completed 160 credits as his/her degree requirements with a minimum CGPA of 3.00, is eligible to apply for the Master's by Mixed Mode program.

B2 Admission:

- B2.1** The candidate applied for this program must submit the following documents: (i) application in the prescribed form, (ii) academic transcript, (iii) a research proposal, (iv) one reference letter, (v) consent letter from a potential Supervisor, and (vi) consent letter from the employer, wherever applicable.
- B2.2** Candidates will be selected for admission based on the performance in a written and/or viva voce examination conducted by the Graduate Studies Committee (GSC). However, full-time university teachers will be exempted from the written examination.
- B2.3** The GSC will assign a Supervisor and, if applicable, a Co-Supervisor for the dissertation work among the teachers in the same Discipline at SUST. However, the Co-Supervisor can be selected from other Disciplines of SUST or from home and abroad. Both the Supervisor and Co-Supervisor must meet the required qualification criteria outlined in clause B2.3.1
- B2.3.1 Qualification of the Supervisor/Co-Supervisor**
The Supervisor or Co-Supervisor must possess one of the following qualifications: a permanent faculty member at SUST with the rank of (i) a Professor (ii) an Associate Professor holding at least a Master's by Research degree; (iii) an Assistant Professor with a PhD and a minimum three years of teaching experience. If necessary, a permanent employee with a PhD degree from a university other than SUST or an accredited research institution, working in a position equivalent to that of an Associate Professor and above, can be assigned as a Co-Supervisor.
- B2.4** After selecting the candidates for the program, the GSC will make a recommendation for admission along with a summary sheet and the following supportive documents: (i) tentative title of the dissertation; (ii) proposed supervisor and co-supervisor (if any); (iii) research proposal; (iv) academic records with CGPA; (v) an evaluation sheet for the qualification of the candidate; and (vi) statements regarding the qualification and consent of the supervisor and co-supervisor. The GSC will forward this recommendation to the Board of Advanced Studies (BAS) through the Dean of the School for subsequent approval by the Academic Council (AC).
- B2.5** A SUST faculty member may be admitted to this program with prior approval from the University Authority.

B3 Registration

B3.1 Every admitted candidate must register with the registrar’s office and pay the required fees for the program.

B3.2 A student enrolled in this program must register for a minimum of 8 (eight) credits and a maximum of 16 (sixteen) credits per semester.

B3.3 The candidature of the registered candidate will remain valid for a maximum of 6 (six) semesters.

B4 Academic Calendar

B4.1 Number of Semester

There will be two semesters in an academic year. The first semester of the year will start on 1st January and end on 30th June, the Second semester will begin on 1st July and end on 31st December. The roster of the final examination dates and other academic deadlines will be announced at the beginning of each semester.

B4.2 Duration of Semesters:

The duration of each semester will be as follows:

Classes	14 weeks
Recess before final Examination	2 weeks
Final Examination	4 weeks (Max.)
<u>Semester Break for the Result Processing and Publication</u>	<u>2 weeks</u>
Total	22 weeks

These 22 (Twenty-two) weeks may not be continuous in order to accommodate various holidays and the recess before the final examination.

B5 Course Pattern

The entire Master’s by Mixed Mode program has covered through a set of theory courses and dissertation work. At the beginning of every academic session, a short description of courses will be published by the curriculum committee of each Discipline.

B6 Academic Regulations

The Master’s Mixed Mode program is a combination of theory courses and dissertation work. In this mode, a student's overall assessment is dependent on his/her performance in both the instructional courses and the research component. The minimum duration and total credits for the degree will be the same for all Schools, as outlined below.

Table: Credit requirements and duration of Master’s by Mixed Mode program

Program Type	Credit Requirement				Program Duration			
	Coursework (Min.)	Dissertation (Min.)	Dissertation (Max.)	Total (Min.)	Semester (Min.)	Year (Min.)	Semester (Max.)	Year (Max.)
Master’s by Mixed Mode	18	12	16	40	3.0	1.5	6.0	3.0

The course structure for this program will be designed by the GSC and approved by the relevant School.

B6.1 Duration: Minimum duration for the degree is 3 (three) semesters.

B6.2 Credit Requirement: To obtain the Master’s degree by Mixed Mode, a student must complete a minimum of 40 (forty) credits through a combination of taught coursework and a dissertation.

B6.3 Course Requirement: Students enrolled in this program must complete a minimum of 18 credit hours of instructional coursework, complemented by a research component of 12–16 credits. The GSC may recommend required courses, but not more than 12 (twelve) credits, from the graduate and/or undergraduate levels from other Disciplines.

B6.4 Dissertation Requirement: To obtain the degree, a student must complete a dissertation of 12–18 credits, as assigned by the GSC as a mandatory degree requirement. Upon completing the entire research work, the student will prepare a dissertation as a comprehensive piece of work. It should be evaluated for

its theoretical, scientific and methodological soundness using a prescribed rubric as outlined in Clause B6.4.1.

B6.4.1 Dissertation Evaluation

The use of a prescribed rubric is obligatory for ensuring consistent and unbiased assessment of Master's dissertation, thereby promoting the uniform appraisal of research excellence and academic rigor. The rubric comprises three parts: Part A and B for quantitative and qualitative assessment of the dissertation, and Part C for evaluating the quality of the presentation and responses during the oral examination. The overall evaluation of the dissertation shall encompass the combined scores derived from the quantitative assessment and the performance exhibited during the oral presentation and examination. Part B, the qualitative component, will serve as feedback from the examiners, which the student should address to enhance the overall quality of the dissertation. Finally, the Supervisor will ensure that the examiners' revisions are appropriately incorporated into the final version of the dissertation.

B6.5 Incomplete Courses: If a student has any incomplete course(s), s/he has to register that incomplete course(s) from preceding semesters before registering courses from current or successive semesters. If an incomplete course is not available or offered in the running semesters, the student shall take such course(s) when it is available or offered.

B6.6 Course Withdrawal: A student can withdraw from a course by a written application to the Controller of Examinations through the Head/Director of the Discipline/Institute two weeks before the examination start. The Controller of Examinations will send the revised registration list(s) to the Disciplines before the commencement of semester final examination. There will be no record in transcript if the course is withdrawn.

B6.7 Course Repetition: If a student has to repeat a failed or incomplete course and that course is not available/offered any more, the Discipline may allow him/her to take an equivalent course from the current curriculum. For clearing graduates, if any incomplete course is not available/offered in the running semester, the Discipline may suggest a suitable/equivalent course to complete the credit required for the degree.

B6.8 Special Semester: Students with any retake or re-retake course(s) may apply for a special semester to complete the total required courses, with a maximum limit of twelve (12) credits during that semester. A special semester will be offered for final semester students who have retake or re-retake courses. The examination will commence four (4) weeks after the publication of the result and will continue for a maximum of two (2) weeks. The marks for both attendance and continuous assessments will be carried over from the previous record.

B7 Examination

Under the semester-course system, students will undergo continuous evaluation. In theoretical classes, assessment methods include class participation, assignments, quizzes, mid-semester examinations, topic-based report writing/presentation, and a final examination at the end of the semester. Laboratory/sessional work will be evaluated through observation, viva-voce sessions, lab quizzes, written reports, and examination grades determined by the course instructor and examination committee.

B7.1 Examination Committee

B7.1.1 The Graduate Studies Committee (GSC) of the Discipline or Institute will form the examination committee as follows:

Chairman: A teacher not below the rank of Professor of the GSC, in absence of Professor of the Discipline, an Associate Professor/Head of the Discipline. Head of the GSC will be the Chairman of the terminal semesters.

Internal Members: 04 (four) teachers from the members of the GSC.

External Members: One teacher/expert (not below the rank of Professor or equivalent).

The respective Deans will ratify the list of the examinations committees and send it to the registrar for approval from the Academic Council (AC).

B7.1.2 The examination committee proposes the examination schedule, finalizes question papers, assists the Discipline in conducting the examination, preparing results, and addressing any issues that may arise regarding the examination procedure.

B7.2. Examination Dates and Routines

B7.2.1 The respective Disciplines will prepare the examination schedules, and the Heads of the Disciplines will notify them and distribute copies to other relevant Disciplines, as well as to the Office of the Controller of Examinations.

B7.3 Theory Courses

B7.3.1 Distribution of Marks: The marks of a given course will be as follows.

1.	Class Attendance	10%
2.	Class performance (Quizzes/MCQ/fill in the gap/report writing/presentation/Assignments)	10%
3.	Mid-Semester Examinations	20%
4.	Final Examination (25% is the pass mark for the final examination)	60%

B7.3.2 Class attendance: The marks for class attendance will be as follows:

Attendance (Percentage)	≥ 95	90 – < 95	85 – < 90	80 – < 85	75 – < 80	70 – < 75	65 – < 70	60 – < 65	50 – < 60
Marks	10	9	8	7	6	5	4	3	0

A student will not be allowed to appear the final examination of a course if his or her class attendance in that course is less than 50%.

B7.4 Mid-Semester Examination: There should be at least two Mid-Semester examinations for every theory course. The course teacher may decide the marks distribution of the Mid-Semester examinations. The answer scripts must be shown to the students as it is essential to their learning process.

B7.5 Question Setting and Moderation

B7.5.1 The Examination Committee will propose two question setters for each course to the Dean for appointment, at least four weeks prior to the examination commencement date, and subsequently inform the Controller of Examinations. The Controller of Examinations will then provide the necessary documents to the appointed question setters and examiners. In the event that a question setter or examiner declines the responsibility, they are required to return all documents, upon which the Examination Committee will propose an alternative question setter or examiner.

A7.5.2 The Chairman of the examination committee shall receive all the manuscripts of question papers. Should no manuscript be received within the stipulated timeframe, the committee will proceed to recommend an alternative question setter.

B7.5.3 After receiving all question paper manuscripts, the examination committee will proceed to moderate them. The committee is tasked with editing and printing the final question papers.

B7.6 Question Structure: Each Discipline must follow one unique question structure for final examinations. For 3.00 (three) or 4.00 (four) credits theory courses: (a) the written (final) examinations will be conducted for 60 marks, (b) there will be six questions for Double Examiner System (three questions in each part of the question paper for Single Examiner System), and the examinees will be asked to answer all of them, and (c) the examination time/duration will be 3 (three) hours. However, for 2.00 (two) credits theory courses: (a) the written (final) examination will be conducted for 60 marks, (b) there will be four questions for Double Examination System (two questions in each part of the question paper for Single Examination System), and the examinees will be asked to answer all of them, and (c) the examination time/duration will be 2 (two) hours. However, in the case of a Double Examiner System, a maximum of two questions with alternative questions will be given. In the case of a Single Examiner System, only one question with an alternative question will be provided in each part (Part A and Part B) of the question paper. The serial number, question number, assigned marks, related course learning outcome (CO), and Bloom’s level of the questions must match in both the main question and the corresponding alternative question (in cases where a question consists of multiple sub-questions).

For instance:

Question Number	Question(s)	Consider these ARBITRARY		
		Assigned Marks	Related CO	Bloom's Level (BL)
X(a)	n ₁	CO m ₁	BL _{x1}
X(b)	n ₂	CO m ₁	BL _{x2}
X(c)	n ₃	CO m ₃	BL _{x5}
-				
-				
OR				
X(a)	n ₁	CO m ₁	BL _{x1}
X(b)	n ₂	CO m ₁	BL _{x2}
X(c)	n ₃	CO m ₃	BL _{x5}
-				
-				
OR				
Question Number	Question(s)	Consider these ARBITRARY		
		Assigned Marks	Related CO	Bloom's Level (BL)
X(a)	n ₁	CO m ₁	BL _{x1}
OR				
	n ₁	CO m ₁	BL _{x1}
X(b)	n ₂	CO m ₁	BL _{x2}
OR				
	n ₂	CO m ₁	BL _{x2}
X(c)	n ₃	CO m ₃	BL _{x5}
OR				
	n ₃	CO m ₃	BL _{x5}
-				
-				

The GPA calculation will follow clause B7.3.1 during the result processing. Question setters are liable to set questions covering the entire curriculum of the course, and the examination committee shall have the liberty to investigate it and to do other necessary corrections during moderation. Moderated question paper must be printed and supplied to the examinees

B7.7 Final Examination

After the 16th week since the beginning of the semester, the final examination will be conducted as per the Postgraduate Examination Ordinance.

B7.7.1 Duration of the Final Examination

There will be a 3-hour final examination for every course of 3-4 (three-four) credits, and the courses less than 3 (three) credits will have a final examination for 2 (two) hours duration.

B7.7.1 Evaluation of answer scripts of final examination: The School of Disciplines may follow any one of the following answer script evaluation system.

- (1) **Single Examiner system, SES:** The students will have two answer scripts to answer a separate set of questions during the final examination. Two examiners will grade the two answer scripts separately, and their given marks will be added together (examinee wise) for determining the Final Mark.
- (2) **Double Examiner system, DES:** The students will have a single answer script to answer questions during the final examination. The answer scripts will be evaluated by two examiners separately. For determining the Final Mark: (1) If the difference of two marks of the examiners is less than 20%, then these two marks will be averaged, and (2) If the difference of two marks of the examiners is 20% or more, the corresponding/concerned answer scripts will be examined by a third examiner and then the closer (by smaller difference) otherwise higher two marks of the three examiners will be averaged. Furthermore, if the total marks of two examiners differ by 15% or more in the case of 50% or more answer scripts of a course, then the whole set of answer scripts will be examined by a third examiner.

The examination committee will propose the name for appointing the third examiner(s) (not any member of the examination committee) to the respective Dean. The Dean will authenticate/approve

the name and send it to the Controller of Examinations for book-keeping and to take the approval of the Vice-Chancellor. The system of answer script evaluation of the School has to be approved by the Academic Council.

B7.8 Dissertation Submission and evaluation

B7.8.1 Dissertation title: The dissertation title for the Master's degree by Mixed Mode has to be approved by the BAS based on the recommendation of the GSC. However, changes to the initially approved dissertation title can be made within the first year of his/her enrollment.

B7.8.2 The proposal for any change in the initially approved dissertation title must be formally declared during the public seminar talk, as mentioned in Clause C6.4. Subsequently, the changed dissertation title should be submitted to the BAS for approval through the GSC and the respective Dean.

B7.8.2. The GSC, in consultation with the Supervisor, will propose both the final dissertation title and the dissertation evaluators' panel, including alternative panel members, to the BAS through the Dean, either simultaneously or separately.

B7.8.3 Each student is mandated to submit three printed copies of his/her dissertation, adhering to the approved dissertation format, to the Chairman of the GSC.

B7.8.4 The student is obligated to assert that the conducted research work is his/her original contribution and has not been previously submitted elsewhere, except for publication purposes.

B7.8.5 The dissertation should manifest substantiated evidence of the student's proficient knowledge in the field of the undertaken research.

B8 Submission and Examination of Master's by Mixed Mode Work-Documents

B8.1 Master's by Mixed Mode work-documents package: The documentation attesting to the fulfillment of this program comprises of the subsequent components: (i) evidence of one participation in an international conference substantiated by relevant documents (conference proceedings, abstract books) if published; (ii) a comprehensive resume derived from seminar talks, encapsulating details such as total completed credits, aggregate seminar talks, conference presentations and the number of published or accepted journal article(s) if any; (iii) grade sheet(s) corresponding to completed coursework; and (iv) the dissertation paper itself, validated as a work characterized by theoretical, scientific, and methodological soundness.

B8.2 Supervisor's declaration: The Supervisor shall formally communicate in writing to the GSC that the student has fulfilled all prerequisites for the degree and has compiled the requisite Master's by Mixed Mode work-document package for assessment. Subsequently, the GSC will recommend to the Academic Council (AC) through the respective Dean and the Board of Advanced Studies (BAS) to initiate the formal procedure for the evaluation of the Master by Mixed Mode work.

B8.3 Dissertation Evaluation

Dissertation of Master's by Mixed Mode program must be evaluated using a prescribed rubric as outlined in Clause B6.4.1. Two examination committees, namely the dissertation evaluation committee and the oral examination committee, will assess the dissertation work. The distribution of marks for both the dissertation evaluation and oral examination is as follows:

- i) Supervisor : 30%
- ii) Two (2) Examiners (Dissertation evaluators): 40% (20% + 20%)
- iii) Oral Examination Committee Members : 30%

B8.4 Formation of Dissertation Evaluation Committee

B8.4.1 The GSC, in collaboration with the Supervisor, will recommend to the Academic Council (AC) through the Dean and the Board of Advanced Studies (BAS), the constitution of a Dissertation Evaluation Committee (DEC) tasked with assessing the dissertation work requisite for the completion of the Master's degree by Mixed Mode.

B8.4.2 The Academic Council (AC), upon the recommendation of the GSC, will appoint a DEC for each dissertation, with the Supervisor as the Chairman. The committee shall be comprised of two members,

with at least one member being external to SUST, referred to as the external member. The proposal must include alternative candidates for both committee members. External member invited to serve on the Dissertation Evaluation Committee (DEC) must hold the rank of an Associate Professor or above with a PhD, and have a minimum of two (2) publications in Web of Science or Scopus-indexed journals.

B8.4.3 Documents to be provided to the DEC members: The Controller of Examinations, in collaboration with the Supervisor, will provide the dissertation evaluators with (i) the comprehensive work-documents package detailed in Clause B8.1; (ii) Parts A and B of the prescribed rubric for quantitative and qualitative evaluation of the dissertation, as specified in Clause B6.4.1; and (iii) the appointment letter indicating the decision of the Academic Council.

B8.5 Formation of Oral Examination Committee

B8.5.1 The Academic Council, in line with the recommendations of the GSC, will appoint an Oral Examination Committee (OEC) composed of the following members: (i) the Chairman of the GSC as the Chair; (ii) Supervisor or Co-Supervisor (in the absence of the Supervisor); (iii) an external member of the DEC; and (iv) a member of the GSC nominated by the Dean in consultation with the Supervisor. All members nominated by the Dean must meet the qualification criteria outlined in (i) and (ii) of Clause B2.3.1.

B8.5.2 If a member of the OEC is unable to participate in the oral examination, the Vice-Chancellor will assign a replacement from the members of the GSC of the Discipline.

B8.5.3 Documents to be provided to the OEC members: The Controller of Examinations, in collaboration with the Supervisor, will provide the dissertation evaluators with (i) the dissertation paper (printed/soft copy) mentioned in (iv) of Clause B8.1; (ii) Part C of the prescribed rubric for evaluating the quality of the presentation and responses during the oral examination, as specified in Clause B6.4.1; and (iii) the appointment letter indicating the decision of the Academic Council (AC).

B8.6 Evaluation report of the Dissertation Evaluation Committee (DEC) members

B8.6.1 Each member of the DEC is obliged to assess the Master's by Mixed Mode program dissertation both quantitatively and qualitatively, utilizing the prescribed rubric as mentioned in Clause B6.4.1. Subsequently, each member is required to prepare an individual and distinct report, encompassing (i) quantitative and qualitative evaluations of the dissertation (using the supplied rubric) and (ii) marks obtained, reflecting the overall assessment.

B8.6.2 In the dissertation evaluation report, each member of the DEC is mandated to explicitly state whether they recommend or do not recommend the conferral of the Master's degree by Mixed Mode. These recommendations should fall into one of the following categories: (i) recommended with no correction or minor correction; (ii) recommended with major correction and resubmission; and (iii) rejected.

B8.6.3 Every member of DEC shall dispatch two copies of the report, securely sealed in two separate envelopes to the Controller of Examinations. Concurrently, a hard copy or soft copy (in PDF) of the report must be sent to the Chairman of the DEC.

B8.6.4 The Supervisor's evaluation report must include (i) the student's expertise development in the field, covering theoretical and experimental/practical aspects, the student's contribution to the development of apparatus/method, manuscript and the dissertation paper preparation, etc.; and (ii) marks obtained, reflecting the overall assessment. The Supervisor will send two copies of his or her evaluation report, securely sealed in two separate envelopes to the Controller of Examinations.

B8.7 Disclosure of the report: Upon the Supervisor's request, the Chairman of the GSC will collect copies of the three evaluation reports from the Office of the Controller of the Examinations. The GSC Chairman will unveil the reports during a specifically convened GSC meeting in presence of the Supervisor (or Co-Supervisor in the Supervisor's absence). All members must receive prior notification of this event. However, the disclosure of the reports requires the presence of at least more than half of the active GSC members present in Bangladesh.

B8.8 GSC's Response to the Recommendations of Evaluation Reports: Subsequent to the disclosure of the evaluation reports, the GSC will undertake one of the actions outlined in Clauses B8.8.1 – B.8.83, provided the recommendations are explicit, unequivocal, and unanimous.

B8.8.1 In cases where recommendations entail no correction or minor correction, the GSC will propose an oral examination committee following Clause B8.5.1, forwarding it to the Academic Council through the respective Dean and the BAS for approval.

B8.8.2 In cases where major corrections and resubmission are recommended, the GSC will instruct the student, through the Supervisor, to address the required corrections and resubmit the dissertation within a six-month period. Subsequent to the revision, the updated dissertation is to be submitted to the Controller of the Examinations through the GSC and made available to the initial members of the DEC for subsequent evaluation following Clause B8.4.3.

B8.8.3 In instances where the recommendations result in rejection, the Chair of the GSC will formally communicate the decision of rejection to the student, and recommend the Academic Council, through the Dean and the BAS, to annul the student's registration.

B8.8.4 In cases where unanimity is lacking in the recommendations, a committee comprising (i) the Chairman of the GSC as the Chair; (ii) a Professor from the respective School nominated by the Dean; and (iii) the Supervisor, will thoroughly examine the reports from the dissertation evaluators. Subsequently, the committee will submit a report, incorporating one of the recommendations, as outlined in Clauses B8.8.1–C.8.8.3, to the BAS through the GSC and the respective Dean for formal approval.

B9 Public Defense and Oral Examination

B9.1 Venue and date: Upon receiving unanimous positive opinions from the dissertation evaluators, the Chairman of the GSC, acting as the Chair of the OEC, will, in consultation with the Supervisor and OEC members, schedule a date and venue for the public defense and oral examination. The Chairman of the GSC is mandated to notify OEC members about the event.

B9.2 Publicity of the defense ceremony the collective responsibility of publicizing the defense rests with the GSC, the student, and the Supervisor/Co-Supervisors to garner maximum public attention.

Mandatory components include:

- (i) invitation extended to the Dean and the BAS members.
- (ii) display of posters on the facades of all academic buildings and the central library, posting on the notice board of relevant Disciplines, and invitations through the SUST Website/email in collaboration with the relevant authority (SUST Computer and Information Center).

Optional components encompass:

The Master's by Mixed Mode work will be made available to interested parties for a week preceding the final defense. Posters will indicate the location and time of the materials' accessibility. The Supervisor or Co-Supervisor, subject to approval from the Chairman of the GSC, will oversee the organization of this event.

B9.3 The Public Defense Ceremony: The GSC will organize the event. The Chairman of the GSC, as the Chair of the OEC, will preside over the ceremony. The Supervisor will briefly introduce the candidate (biography, works, quality, moral). Subsequently, the candidate will present his or her complete dissertation work. Following the presentation, an opportunity will be provided for questions and answers. At a designated moment, the Chairman of the OEC will officially declare the 'Closure of the Discussion'.

B9.4 Protocol of the Public defense: The Chairman of the GSC, in collaboration with the Supervisor or Co-Supervisor and the relevant Master's by Mixed Mode student(s), will formulate a protocol encompassing details about the participants (committee members, audience), questions and answers, and modifications made in accordance with the dissertation evaluators' reports. The protocol, along with the attendance sheet, must be signed by the Chairman of the OEC.

B9.5 Oral Examinations: After the culmination of the public defense ceremony, the OEC will proceed to conduct a closed-door oral examination of the candidate and subsequently determine the eligibility for conferring the degree.

B9.5.1 In the event of a favorable decision, members of the OEC will compile a comprehensive report, incorporating (i) a precise declaration in favor of conferring the Master's degree by Mixed Mode; and

(ii) the average marks attained, indicating the overall assessment. Additionally, they will affix their signatures on designated pages of the dissertation under the heading 'Oral Examination Committee', along with their respective names, designations, and affiliations.

B9.5.2 The Chairman of the OEC will forward the compiled report, securely sealed in an official envelope, to the Academic Council through the BAS for the degree to be awarded.

B9.5.3 Archiving of the dissertation work: A hard copy of the final version of the dissertation, as forwarded by the Chairman of the OEC, will be archived in the university central library, while the corresponding digital version will be stored in the institutional repository. The archived copy will bear an official stamp delineating: Master's degree by Mixed Mode Conferred on, pursuant to Decision No.of theth Syndicate, ratified on

B9.5.4 If the decision of the OEC is disapproving, the candidate may have the option to appear at another oral examination after a six-month interval, or the process may be stopped by the termination of the student's enrollment. It is imperative to note that no candidate is permitted to present the same dissertation at the oral examination more than twice.

B10. Grading System

B10.1 Letter Grade and Grade Point: Letter Grade and corresponding Grade-Point for a course will be awarded from the roundup marks of individual courses as follows:

Numerical Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	C-	2.00
Less than 40%	F	0.00

B10.2 Calculation of Grades

B10.2.1 GPA: Grade Point Average (GPA) is the weighted average of the grade points obtained in all the courses completed by a student in a semester.

B10.2.2 CGPA: Cumulative Grade Point Average (CGPA) of major degree will be calculated by the weighted average of all courses of the previous semesters along with that of the current/present semester. For the calculation of the final CGPA of clearing graduates, if the third digit after the decimal point is nonzero then its previous, that is, the second digit will be incremented by one.

B10.2.3 F Grades: A student will be given an "F" grade if s/he fails or remains absent in the final examination of a registered course. If a student obtains an "F" grade, her/his grade will not be counted for GPA and s/he will have to repeat the course. An "F" grade will be in her/his record, and s/he will not be eligible for distinction, award, and scholarship of the university.

B11. Distinction Candidates for this program will be awarded the degree with Distinction if her/his overall CGPA is 3.75 or above. However, a candidate/student will not be considered for Distinction and any kind of Awards if s/he has any one of the following:

- (g) s/he is not a regular student,
- (h) s/he has semester drop or incomplete courses in any semester,
- (i) s/he has an "F" grade in any course,
- (j) s/he has upgraded her/his GPA through improvement,
- (k) s/he is addicted to drugs,
- (l) disciplinary action(s) is taken against her/him.

B12. Certificate of Practical Skill: For extraordinary and remarkable contribution in establishing lab(s)/new lab set ups, instrument making, developing software/algorithm/apps/device/

technology/technique, designing research tools, etc., student (involved) will be awarded a certificate of excellence in practical skill based on the decisions of the Discipline by the respective dean.

B13. Examination Ethics

All involved in the examination process must follow the provisions of ethical issues stated in the Clause IV in the OGP.

B14. General Instruction

B14.1 Disable (only handicapped) and slow learning students will be allowed 5 (five) minutes extra per hour during the examination.

B14.2 Disable (blind/without hand only) students will be allowed to take support in writing during the examination. But the writer should be junior and unfamiliar with the course for which the examinee is hiring her/him.

B14.3 Application for result correction may be accepted if it is submitted/lodged within the next 3 (three) months since the publication of the result. Chairman of the concerned examination committee/ Head of the Discipline and the Controller of Examinations will do the corrections as per rules.

B14.4 The result/ tabulation sheet for course improvement will be signed by the examination committee of the present semester of the examinee.

B15. Exam Hall structure:

B15.1 For final examination of theory courses the number of invigilators will be as in the following.
For each exam hall:

- For 1 – 25 examinees, 2 (two) invigilators will be assigned.
- For 26 – 40 examinees, 3 (three) invigilators will be assigned.
- After 40 examinees, 1 (one) invigilator will be increased for each 20 examinees.
- For each course, one chief invigilator will be assigned to conduct the examination.

B15.2 For Term Test of a theory course, the number of invigilators will be two(02) including the course teacher.

B16 for continuous assessment, course teacher will do the needful and no other invigilators are required.

B17 Academic Fee: To be decided by the Academic Council and the Syndicate.

C. Master's by Research

C1 Eligibility

- C1.1** Graduates with a Bachelor's degree in a relevant Discipline from SUST or any other university or equivalent foreign university, with a minimum CGPA of 3.00, are eligible to apply for the Master's by Research program.
- C1.2** A candidate holding a Master's by Coursework (General) degree in a relevant Discipline from SUST is eligible for admission to the Master's by Research program, provided s/he has achieved a minimum CGPA of 3.25 in his or her Master's by Coursework program.
- C1.3** A candidate currently enrolled in a Master's by Coursework program at SUST, who has already completed 18 credits of coursework with a CGPA of 3.25 or higher, is eligible to apply for the conversion from his/her current program to this program.
- C1.4** A candidate who has graduated under the course system and has achieved at least a second division/class in all previous examinations is eligible for admission to this program. In such cases, the candidate must provide evidence that this degree will enhance his/her professional career.
- C1.5** A candidate with a Bachelor's degree in engineering from a university or institution other than SUST, who has completed 160 credits as his/her degree requirements with a minimum CGPA of 3.00, is eligible to apply for the Master's by Research program.

C2 Admission:

- C2.1** The candidate applied for this program must submit the following documents: (i) application in the prescribed form, (ii) academic transcript, (iii) a research proposal, (iv) one reference letter, (v) consent letter from a potential Supervisor, and (vi) consent letter from the employer, wherever applicable.
- C2.2** Candidates will be selected for admission based on the performance in a written and/or viva voce examination conducted by the Graduate Studies Committee (GSC). However, full-time university teachers will be exempted from the written examination.
- C2.3** The GSC will assign a Supervisor and, if applicable, a Co-Supervisor for the dissertation work among the teachers in the same Discipline at SUST. However, the Co-Supervisor can be selected from other Disciplines of SUST or from home and abroad. Both the Supervisor and Co-Supervisor must meet the required qualification criteria outlined in clause C2.3.1

C2.3.1 Qualification of the Supervisor/Co-Supervisor

The Supervisor or Co-Supervisor must possess one of the following qualifications: a permanent faculty member at SUST with the rank of (i) a Professor (ii) an Associate Professor holding at least a Master's by Research degree; (iii) an Assistant Professor with a PhD and a minimum three years of teaching experience. If necessary, a permanent employee with a PhD degree from a university other than SUST or an accredited research institution, working in a position equivalent to that of an Associate Professor or Professor, can be assigned as a Co-Supervisor.

- C2.4** After selecting the candidates for the program, the GSC will make a recommendation for admission along with a summary sheet and the following supportive documents: (i) tentative title of the dissertation; (ii) proposed supervisor and co-supervisor (if any); (iii) research proposal; (iv) academic records with CGPA; (v) an evaluation sheet for the qualification of the candidate; and (vi) statements regarding the qualification and consent of the supervisor and co-supervisor. The GSC will forward this recommendation to the Board of Advanced Studies (BAS) through the Dean of the School for subsequent approval by the Academic Council (AC).
- C2.5** If necessary, the Graduate Studies Committee (GSC) may recommend non-credit courses at the bachelor's or master's levels to enhance the candidate's academic foundations for specific research.

C2.6 A change in the Supervisory team, either for the primary Supervisor or Co-Supervisor, may be initiated through a proposal put forth by the current Supervisor. The nominated replacement for either role must adhere to the specified qualification criteria detailed in clause C2.3.1. If the GSC considers the proposed change justified, the matter will be forwarded to the Academic Council (AC) through the respective Dean and the Board of Advanced Studies (BAS) for required approval.

C3 Registration

C3.1 Every admitted candidate must register with the registrar’s office and pay the required fees for the program.

C3.2 Date of registration and duration of the Candidature: Registration takes effect on the date approved by BAS and successively endorsed by AC. The duration of the registered Master’s by research program will be counted from the date of registration.

C3.3 A student enrolled in this program must register for a minimum of 8 (eight) credits and a maximum of 16 (sixteen) credits per semester.

C3.4 The candidature of the registered candidate will remain valid for a maximum of 6 (six) semesters.

C4 Academic Calendar

C4.1 Number of Semester

There will be two semesters in an academic year. The first semester of the year will start on 1st January and end on 30th June, the Second semester will begin on 1st July and end on 31st December.

C5 Course Pattern

A Master's by Research program is primarily centered around the development of a dissertation, with the possibility of including some taught components.

C5.1 Non-credit course requirements

C5.1.1 Any taught components within the Master’s by Research program are non-credit-bearing, meaning that the credits of these courses will not be added to the total credits if passed.

C5.1.2 If necessary, the GSC may recommend courses at the Bachelor's or Master’s levels to enhance the candidate's academic foundations for specific research.

C5.1.3 Once courses are recommended by the GSC of the Discipline, the completion of those courses becomes mandatory to obtain the degree.

C6 Academic Regulations

The Master’s by Research program is fundamentally research-based, and as such, coursework is not mandatory. The evaluation of the student is solely based on his/her dissertation work. The minimum duration and total credits for the degree will be the same for all Schools, as outlined below.

Table: Credit requirements and duration of Master’s by Research program

Program Type	Credit Requirement				Program Duration			
	Coursework (Min.)	Dissertation (Min.)	Dissertation (Max.)	Total (Min.)	Semester (Min.)	Year (Min.)	Semester (Max.)	Year (Max.)
Master’s by Research	Non-credit (if offered)	48	-	48	4.0	2.0	6.0	3.0

The course structure for this program will be designed by the GSC and approved by the relevant School.

C6.1 Duration: Minimum duration for the degree is four (4) semesters.

C6.2 Credit Requirement: To obtain the Master’s degree by Research, a student must complete a minimum of forty-eight (48) credit hours through research. One credit hour for research corresponds to at least two contact hours.

C6.3 Course Requirement: The GSC may recommend required courses, not exceeding twelve (12) credits, at the graduate and/or undergraduate levels from the same or other Disciplines.

C6.4 Seminar-talk on research progress: This constitutes an obligatory element of this program. At the end of the first year, the registered student is mandated to deliver a public seminar talk, organized by the Graduate Studies Committee (GSC), at the respective discipline or institute. The topic of talk must be aligned to the field of research. A protocol for the seminar must be meticulously maintained, encompassing essential details, such as: (i) the total number of GSC members within the Discipline and the percentage in attendance; (ii) the overall number of participants and their categorization (Professors, Associate Professors, Assistant Professors, Lecturers, PhD/Master students, undergraduate students, experts, and guests); (iii) the presentation's topic; date, time, and duration; as well as noteworthy questions and suggestions raised during the event. The seminar presentation should be accessible to all.

C6.5 Paper-presentation in conferences: The dissemination of the research work within the scholarly community and relevant stakeholders is an imperative facet of this program. The student is required to present his/her research work at a minimum of two international conferences. The evidence of participation and presentation, including conference proceedings and / or abstract books, must be submitted to the GSC and be incorporated into the respective semester progress report.

C6.6 Dissertation Requirement: To obtain the Master's degree by Research, a candidate must complete a dissertation of 48–60 credits, as assigned by the GSC as a degree requirement. Upon completing the entire research work, the candidate will prepare a dissertation as a comprehensive piece of work. It should be evaluated for its scientific and methodological soundness using a prescribed rubric as outlined in Clause C6.6.1.

C6.6.1 Dissertation Evaluation

The use of a prescribed rubric is obligatory for ensuring consistent and unbiased assessment of Master's dissertation, thereby promoting the uniform appraisal of research excellence and academic rigor. The rubric comprises three parts: Part A and B for quantitative and qualitative assessment of the dissertation, and Part C for evaluating the quality of the presentation and responses during the oral examination. The overall evaluation of the dissertation shall encompass the combined scores derived from the quantitative assessment and the performance exhibited during the oral presentation and examination. Part B, the qualitative component, will serve as feedback from the examiners, which the student should address to enhance the overall quality of the dissertation. Finally, the Supervisor will ensure that the examiners' revisions are appropriately incorporated into the final version of the dissertation.

C6.7 Semester Report: Every candidate is required to submit a progress report to the Graduate Studies Committee (GSC) through the Supervisor at the end of each semester. This report should encompass a succinct overview of the undertaken work during the semester, along with performances measured by: (i) total non-credit hours completed for coursework; (ii) completed credit hours for research; (iii) details of seminar talks delivered, including date and topic; (iv) paper(s) presented in conferences (conference name, date, venue, presentation type: oral or poster, title, copy of the abstract/proceeding) if available; (v) Journal article(s) if available; and (vi) progress report. Concurrently, the student will submit a cumulative semester progress report, consolidating integrated performance metrics represented by numerical values (total credits completed, total number of seminar talks, conference presentations and published articles, if any).

C6.8 Working place: The research work is supposed to be conducted at SUST. However, it can be carried out outside SUST, subject to consultation with the Supervisor and approved by the Graduate Studies Committee (GSC).

C7 Examinations:

C7.1 Course Examination: Students enrolled in this program are required to participate in the examination of recommended theory courses, where applicable, in accordance with the examination ordinance specific to the program level to which the courses are affiliated. The chairman of the corresponding examination committee will make a separate tabulation sheet for them and send it to the chairman of the GSC. However, the results of the assigned courses will be categorized as either pass or fail for this program as mentioned in Clause C5.1.

C7.2 Dissertation Submission and evaluation

C7.2.1 Dissertation title: The Dissertation title for the Master's degree by Research has to be approved by the BAS based on the recommendation of the GSC. However, changes to the initially approved dissertation title can be made within the first year of his/her enrollment.

C7.2.2 The proposal for any change in the initially approved dissertation title must be formally declared during the public seminar talk, as mentioned in Clause C6.4. Subsequently, the changed dissertation title should be sent to the BAS for approval through the GSC and the respective Dean.

C7.2.3. The GSC, in consultation with the Supervisor, will propose both the final dissertation title and the dissertation evaluation panel, including alternative panel members, to the BAS through the respective Dean, either simultaneously or separately.

C7.2.4 Each student is mandated to submit 3 (Three) printed copies of his/her dissertation, adhering to the approved dissertation format, to the Chairman of the GSC.

C7.2.5 The student is obligated to assert that the conducted research work is his/her original contribution and has not been previously submitted elsewhere, except for publication purposes.

C7.2.6 The dissertation should manifest substantiated evidence of the student's proficient knowledge in the field of the undertaken research.

C8 Master's by Research work-documents submission and Examination

C8.1 Master's by Research work-documents package: The documentation attesting to the fulfillment of the Master by Research program comprises of the subsequent components: (i) evidence of participation in an international conference substantiated by relevant documents (conference proceedings/abstract books); (ii) a comprehensive resume derived from seminar talks, encapsulating details such as total completed credits, aggregate seminar talks, cumulative conference presentations, and the number of published journal papers, if any; (iii) grade sheet(s) corresponding to completed coursework (if applicable); and (iv) three copies of dissertation paper itself, validated as a work characterized by theoretical, scientific, and methodological soundness.

C8.2 Supervisor's declaration: The Supervisor should submit the statement regarding the context and outcomes of the research in writing to the GSC that the student has fulfilled all prerequisites for the degree and has compiled the requisite program related work-document package for assessment. Subsequently, the Graduate Studies Committee (GSC) will recommend to the Academic Council (AC) through the respective Dean and the Board of Advanced Studies (BAS) to initiate the formal procedure for the evaluation of the Master's by Research work.

C8.3 Dissertation Evaluation

Dissertation of Master's by Research must be evaluated using a prescribed rubric as outlined in Clause B6.6.1. Two examination committees, namely the dissertation evaluation committee and the oral examination committee, will assess the dissertation work. The distribution of marks for both the dissertation evaluation and oral examination is as follows:

- iv) Supervisor : 30%
- v) Two (2) Examiners (Dissertation evaluators): 40% (20% + 20%)
- vi) Oral Examination Committee Members : 30%

C8.4 Formation of Dissertation Evaluation Committee

C8.4.1 The GSC, in collaboration with the Supervisor, will recommend to the Academic Council (AC) through the respective Dean and the BAS, the constitution of a Dissertation Evaluation Committee (DEC) tasked with assessing the dissertation work required for the completion of the Master's degree by Research.

C8.4.2 The Academic Council (AC), upon the recommendation of the GSC, will appoint a DEC for each dissertation, with the Supervisor as the chairman. The committee shall be comprised of two members, with at least one member being external to SUST, referred to as the external member. The proposal must include alternative candidates for both committee members. External member invited to serve on the DEC must hold the rank of an Associate Professor or above with a PhD, and have a minimum of two (2) publications in Web of Science or Scopus-indexed journals.

C.8.4.3 Documents to be provided to the DEC members: The Controller of Examinations, in collaboration with the Supervisor, will provide the dissertation evaluators with (i) the comprehensive work-documents package detailed in Clause C8.1; (ii) Parts A and B of the prescribed rubric for quantitative and qualitative evaluation of the dissertation, as specified in Clause C6.6.1; and (iii) the appointment letter indicating the decision of the Academic Council.

C8.5 Formation of Oral Examination Committee

C8.5.1 The Academic Council, in line with the recommendations of the GSC, will appoint an Oral Examination Committee (OEC) composed of the following members: (i) the chairman of the GSC as the chair; (ii) Supervisor or Co-Supervisor (in the absence of the Supervisor); (iii) an external member of the DEC; and (iv) a member of the GSC nominated by the Dean in consultation with the Supervisor. All members nominated by the Dean must meet the qualification criteria outlined in (i) and (ii) of Clause C2.3.1.

C8.5.2 If a member of the OEC is unable to participate in the oral examination, the Vice-Chancellor will assign a replacement from the members of the GSC of the Discipline.

C8.5.3 Documents to be provided to the OEC members: The Controller of Examinations, in collaboration with the Supervisor, will provide the dissertation evaluators with (i) the dissertation paper (printed/soft copy) mentioned in (iv) of Clause C8.1; (ii) Parts C of the prescribed rubric for evaluating the quality of the presentation and responses during the oral examination, as specified in Clause C6.6.1; and (iii) the appointment letter indicating the decision of the Academic Council (AC).

C8.6 Evaluation report of the DEC members

C8.6.1 Each member of the DEC is obliged to assess the Master's by Research program dissertation both quantitatively and qualitatively, utilizing the prescribed rubric as mentioned in Clause C6.6.1. Subsequently, each member is required to prepare an individual and distinct report, encompassing (i) quantitative and qualitative evaluations of the dissertation (using the supplied rubric) and (ii) marks obtained, reflecting the overall assessment.

C8.6.2 In the dissertation evaluation report, each member of the Dissertation Evaluation Committee (DEC) is mandated to explicitly state whether they recommend or do not recommend the conferral of the Master's degree by Research. These recommendations should fall into one of the following categories: (i) recommended with no correction or minor correction; (ii) recommended with major correction and resubmission; and (iii) rejected.

C8.6.3 Every member of DEC shall dispatch two copies of the report, securely sealed in two separate envelopes to the Controller of Examinations. Concurrently, a hard copy or soft copy (in PDF) of the report must be sent to the Chairman of the DEC.

C8.6.4 The Supervisor's evaluation report must include (i) the student's expertise development in the field, covering theoretical and experimental/practical aspects, the student's contribution to the development of apparatus/method, manuscript and the dissertation paper preparation, etc.; and (ii) marks obtained, reflecting the overall assessment. The Supervisor will send two copies of his or her evaluation report, securely sealed in two separate envelopes to the Controller of Examinations.

C8.7 Disclosure of the report: Upon the Supervisor's request, the chairman of the Graduate Studies Committee (GSC) will collect copies of the three evaluation reports from the Office of the Controller of the Examination. The GSC Chairman will unveil the reports during a specifically convened GSC meeting in presence of the Supervisor (or Co-Supervisor in the Supervisor's absence). All members must receive prior notification of this event. However, the disclosure of the reports requires the presence of at least more than half of the active GSC members present in Bangladesh.

C8.8 GSC's Response to the Recommendations of Evaluation Reports: Subsequent to the disclosure of the evaluation reports, the Graduate Studies Committee (GSC) will undertake one of the actions outlined in Clauses C8.8.1 – C.8.8.3, provided the recommendations are explicit, unequivocal, and unanimous.

C8.8.1 In cases where recommendations entail no correction or minor correction, the GSC will propose an oral examination committee following Clause C8.5.1, forwarding it to the Academic Council through the respective Dean and the BAS for approval.

C8.8.2 In cases where major corrections and resubmission are recommended, the Graduate Studies Committee (GSC) will instruct the student, through the Supervisor, to address the required corrections and resubmit the dissertation within a six-month period. Subsequent to the revision, the updated dissertation must be submitted to the Controller of the Examinations through the Graduate Studies Committee (GSC) and made available to the initial members of the Dissertation Evaluation Committee (DEC) for subsequent evaluation following Clause C8.4.3.

C8.8.3 In instances where the recommendations result in rejection, the chair of the Graduate Studies Committee (GSC) will formally communicate the decision of rejection to the student, and recommend the Academic Council (AC), through the Dean and the Board of Advanced Studies (BAS), to annul the student's registration.

C8.8.4 In cases where unanimity is lacking in the recommendations, a committee comprising (i) the Chairman of the Graduate Studies Committee (GSC) as a chair; (ii) a professor from the respective school nominated by the Dean; and (iii) the Supervisor, will thoroughly examine the reports from the dissertation evaluators. Subsequently, the committee will submit a report, incorporating one of the recommendations outlined in Clauses C8.8.1–C.8.8.3, to the BAS through the GSC and the respective Dean for formal approval.

C9 Public Defense and Oral Examination

C9.1 Venue and date: Upon receiving unanimous positive opinions from the dissertation evaluators, the Chairman of the GSC, acting as the chair of the OEC, will, in consultation with the Supervisor and OEC members, schedule a date and venue for the public defense and oral examination. The Chairman of the GSC is mandated to notify OEC members about the event.

C9.2 Publicity of the defense ceremony: The collective responsibility of publicizing the defense rests with the GSC, the student, and the Supervisor/Co-Supervisors to garner maximum public attention.

Mandatory components include:

- (i) invitation extended to the Dean and the BAS members.
- (ii) display of posters on the facades of all academic buildings and the central library, posting on the notice board of relevant disciplines, and invitations through the SUST Website/email in collaboration with the relevant authority (SUST Computer and Information Center).

Optional components encompass:

The Master's by Research work will be made available to interested parties for a week preceding the final defense. Posters will indicate the location and time of the materials' accessibility. The Supervisor or Co Supervisor, subject to approval from the Chairman of the GSC, will oversee the organization of this event.

C9.3 The Public Defense Ceremony: The GSC will organize the event. The chairman of the GSC, as the chair of the OEC, will preside over the ceremony. The Supervisor will briefly introduce the candidate of the Master's by Research program (biography, works, quality, moral). Subsequently, the candidate will present his or her complete dissertation work. Following the presentation, an opportunity will be provided for questions and answers. At a designated moment, the chairman of the OEC will officially declare the 'Closure of the Discussion'.

C9.4 Protocol of the Public defense

The chairman of the GSC, in collaboration with the Supervisor or Co-Supervisor and the relevant Master's by Research student(s), will formulate a protocol encompassing details about the participants (committee members, audience), questions and answers, and modifications made in accordance with the dissertation evaluators' reports. The protocol, along with the attendance sheet, must be signed by the chairman of the OEC.

C9.5 Oral Examinations: After the culmination of the public defense ceremony, the OEC will proceed to conduct a closed-door oral examination of the student and subsequently determine the eligibility for conferring the degree.

C9.5.1 In the event of a favorable decision, members of the OEC will compile a comprehensive report, incorporating (i) a precise declaration in favor of conferring the Master's degree by Research; and (ii)

the average marks attained, indicating the overall assessment. Additionally, they will affix their signatures on designated pages of the dissertation under the heading 'Oral Examination Committee', along with their respective names, designations, and affiliations.

C9.5.2 The chairman of the OEC will forward the compiled report, securely sealed in an official envelope, to the Academic Council through the BAS for the degree to be awarded.

B9.5.3 Archiving of the dissertation work: A hard copy of the final version of the dissertation, as forwarded by the chairman of the OEC, will be archived in the university central library, while the corresponding digital version will be stored in the institutional repository. The archived copy will bear an official stamp delineating: Master’s degree by Research Conferred on, pursuant to Decision No.of theth Syndicate, ratified on

C9.5.4 If the decision of the OEC is disapproving, the candidate may have the option to appear at another oral examination after a six-month interval, or the process may be stopped by the termination of the student’s enrollment. It is imperative to note that no candidate is permitted to present the same dissertation at the oral examination more than twice.

C10 Award of the degree and archiving

C10.1 Recommendation for degree

At the convening of the Board of Advanced Studies (BAS) meeting, the designated representative of the Oral Examination Committee (OEC) will be called upon to respond to queries seeking clarification. If, during the proceedings, the Board of Advanced Studies (BAS) finds that the work aligns with the stipulated requirements and that procedural protocols have been duly maintained, it will propose the award of the degree for deliberation by the Academic Council (AC) and subsequent endorsement by the Syndicate.

C10.2 Archiving of the Dissertation Work

A hard copy of the final version of the dissertation, as forwarded by the chairman of the Oral Examination Committee (OEC), will be archived in the central university library, while the corresponding digital version will be stored in the institutional repository. The archived copy will bear an official stamp delineating: Master’s by Research degree Conferred on, pursuant to Decision No.of theth Syndicate, ratified on

C11. Grading System

C11.1 Letter Grade and Grade Point: Letter Grade and corresponding Grade-Point for a course will be awarded from the roundup marks of individual courses as follows:

Numerical Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	C-	2.00
Less than 40%	F	0.00

C11.2 Calculation of Grade

C11.2.1 If both the Dissertation Evaluation Committee (DEC) and Oral Examination Committee (OEC) provide favorable decisions, the grade point will be computed utilizing the marks assigned by the Supervisor and the assessments given by the members of the two examination committees—the Dissertation Evaluation Committee and the Oral Examination Committee—in accordance with the distribution of marks outlined in Clause 8.3.

C12. Distinction

Candidates for this program will be awarded the degree with Distinction if her/his overall CGPA is 3.75 or above. However, a candidate/student will not be considered for Distinction and any kind of Awards if s/he has any one of the following:

- (m) s/he is not a regular student,
- (n) s/he has semester drop or incomplete courses in any semester,
- (o) s/he has an “F” grade in any course,
- (p) s/he has upgraded her/his GPA through improvement,
- (q) s/he is addicted to drugs,
- (r) disciplinary action(s) is taken against her/him.

C13. Certificate of Practical Skill: For extraordinary and remarkable contribution in establishing lab(s)/new lab set ups, instrument making, developing software/algorithm/apps/device/technology/technique, designing research tools, etc., student (involved) will be awarded a certificate of excellence in practical skill based on the decisions of the discipline by the respective Dean.

C14. Academic Fee: To be decided by the Academic Council and the Syndicate.

C15. Ethical Issues and Dispute resolution:

All involved in the examination process must follow the provisions of ethical issues stated in the Clause IV and V in the OGP.

D. Doctoral by Research Program

The Doctoral program available at Shahjalal University of Science and Technology is designated as the Doctor of Philosophy (PhD). The demands of PhD research require a significant commitment by candidates in terms of time and resources. The candidates are expected to be working full-time on their doctoral research. Part time candidature may also be permitted in some stages under some conditions.

D1. Eligibility:

D1.1 As a candidate with a Master's degree by Mixed Mode with CGPA 3.25 or with a Master's by Research degree is eligible to apply for a PhD program as a regular student.

D1.2 A candidate currently enrolled in a Master's by Research program at SUST is eligible to apply for the conversion from a Master's by Research to a PhD program, subject to the fulfillment of the following conditions: (i) the candidate must have authored at least two published articles in peer-reviewed journal(s) derived from his/her research work within the first two semesters, provided that s/he appears as the first or corresponding author, (ii) the supervisor must certify that the candidate possesses the potential to successfully complete the PhD program, and (iii) the Graduate Studies Committee (GSC) confirms that the progress achieved is solely attributable to the candidate. The proposal for this conversion requires approval from the Board of Advanced Studies (BAS) and subsequently from the Academic Council (AC). From the date of conversion at AC, the PhD candidature will be started. The title of the PhD dissertation along with a research proposal must be submitted to GSC.

D1.3 A candidate who has graduated in Masters (by research) under the course system (other than semester system) and is seeking admission to the PhD program must hold a minimum of a second division or class in all previous examinations. Additionally, the candidate is required to attain a score of at least 50% in his/her Master's (Research) examination.

D1.4 Candidates eligible for direct admission to the PhD program as regular students should fulfill any of the following criteria: (i) university or college teachers possessing a Master's by Mixed Mode or Master's by Research; (ii) university teachers with a minimum of three (3) years of teaching experience at the university level; (iii) college teachers (teaching in graduate programs) with a minimum of five (5) years of teaching experience at the college level; and (iv) researchers affiliated with recognized research organizations, provided they have a minimum of six (6) years of research experience being appointed as a research scholar or associate. It is pertinent to note that candidates falling under categories (ii) through (iv) are required to have at least two research articles published in a Web of Science or SCOPUS-indexed journal where they appear as the first or corresponding author.

D2 Admission

D2.1 A candidate possessing all required qualifications for admission to the PhD program is needed to submit an application to the Head of the Discipline or the Director of the Institute. The application must be accompanied by the following documents: (i) a completed application form; (ii) academic transcripts; (iii) a comprehensive research proposal; (iv) a reference letter; (v) a letter of consent from a potential Supervisor (as per the provision stated in clause D4.1); and (vi) a letter of consent from the employer, if applicable. In cases where the candidate does not propose a specific Supervisor, the Graduate Studies Committee (GSC) retains the authority to assign a Supervisor among the faculty members within the same Discipline or any other Discipline at SUST, relevant to the proposed topic.

D2.2 Candidates aspiring to enroll in the PhD program, possessing the qualifications outlined in Clauses D1.1–D1.3, shall undergo a selection process facilitated by the GSC. This process may involve written and/or viva voce examinations, wherein the GSC will assess and select the suitable candidates for admission. GSC may arrange a presentation for the candidate to clarify his/her research proposal.

D2.3 Following the selection of the candidate for the PhD program, the GSC will provide a recommendation supported by a summary sheet including documents (i) a provisional title for the dissertation; (ii) proposed Supervisor and Co-Supervisor, (if applicable) (iii) a research proposal

endorsed by the GSC; (iv) academic records of the candidate; (v) an assessment sheet detailing the candidate's qualifications; (vi) statements confirming the qualifications and consent of the Supervisor and Co-Supervisor (if any) and (vii) evidence of accommodating the student in the Institution of the Co-Supervisor (external to SUST), where applicable.

D2.4 The Chairman of the GSC will then send all the documents mentioned in Clause D2.3 to the Board of Advanced Studies (BAS) through the respective Dean for subsequent approval by the Academic Council (AC).

D2.5 If deemed necessary, the GSC has the prerogative to suggest non-credit courses at the Bachelor's or Master's levels, aiming to fortify the candidate's academic foundations pertinent to his/her specific research endeavors.

D3 Registration

D3.1 Every candidate must register for the degree of Doctor of Philosophy (PhD) as a full-time student for the first year. By the end of the year the student needs to confirm his/her candidature defending his/her research work with satisfactory progress assessed by the GSC. After successful confirmation of the candidature, the candidate can continue his/her study with full time status or may apply for a part time status.

D3.1.1 After the confirmation of candidature, a PhD student i) who is in a full-time employment in a research supportive environment and expected to continue in the employment situation, and ii) who could not attend the university and participate in a full-time basis due to assignable causes may apply to register as a part-time student. The GSC will confirm the part-time studentship status with the approval of BAS and AC.

D3.1.2 Date of registration and duration of the Candidature: Registration takes effect on the date approved by BAS and successively endorsed by AC. The duration of the registered PhD program will be counted from the date of registration.

D3.2 A candidate enroll in the PhD program must register for a minimum of 8 (eight) credits and a maximum of 16 (sixteen) credits per semester.

D3.3 The registration for the PhD program will remain valid for a maximum of 12 (twelve) semesters.

D3.4 The period of candidature for this program will remain valid for a maximum of 6 (six) academic years.

D3.5 Review of registration:

D3.5.1 After confirmation of candidature in the first year or within the stipulated time-frame, a PhD student must submit the progress report endorsed by the main Supervisor to the GSC. Based on the progress evaluation, the GSC will make one of the following recommendations to BAS:

- (i) that the candidate's registration be confirmed
- (ii) that the candidate's registration be continued subject to specific conditions
- (iii) that the candidate's candidature be terminated.

D3.5.2 After receiving the recommendation from the GSC about the candidature of a PhD student, the BAS will take decision for approval. However, no decision to terminate the registration be made by the BAS unless the candidate has been notified in writing and given reasonable opportunity to response.

D4 Supervision:

As stated in D2.3, the BAS being proposed by GSC will appoint a qualified Supervisor and Co-supervisor (if required) for each candidate for supervising his/her work throughout the program.

D4.1. Qualification of Supervisor

The *Supervisor* must actively involve in research in the candidate's general field and hold one of the following qualifications: (i) a permanent faculty member at SUST with the rank of Professor with PhD degree or be appropriately qualified and experienced (ii) an Associate Professor with PhD and having a minimum of two (2) publications in Web of Science or Scopus indexed journals;

and (iii) a Supernumerary, Emeritus, or Distinguished Professor with PhD degree within the relevant Discipline, contingent upon a clear declaration from the pertinent Graduate Studies Committee (GSC) affirming the Professor's acknowledged expertise in the chosen field of study for which the student seeks enrollment.

D4.2 Qualification of Co-supervisor:

The *Co-Supervisor* must possess one of the following qualifications: (i) a permanent faculty member at SUST with the rank of Professor with PhD degree or be appropriately qualified and experienced (ii) an Associate Professor holding a PhD and having a minimum of two (2) publications in Web of Science or Scopus indexed journals; (iii) an Assistant Professor with a PhD and a minimum of three years of teaching experience, along with a minimum of two (2) publications in Web of Science or Scopus indexed journals; and (iv) if necessary, a permanent employee with a PhD degree from a university other than SUST or an accredited research institution, engaged in a position equivalent to that of an Associate Professor or above, possessing a laboratory/institutional unit, or obtaining permission to use the laboratory/institutional unit from higher authority, and having the capability to accommodate the SUST PhD student in that laboratory/institutional unit for research. Documentation confirming this capacity must be presented to the Graduate Studies Committee (GSC).

D5 Changes to the Conditions of Registration

During the progress of the PhD it may become necessary to change Supervisor/Co-supervisor or the Topic/Title. Generally, the changes require the approval of BAS after receiving a recommendation of the GSC made in consultation with the Supervisor.

D5.1 Changes/replacement of the Supervisor/ Co-supervisor(s):

A change in the supervisory team, either for the Supervisor or Co-Supervisor, may be initiated through a proposal put forth by the current Supervisor. The nominated replacement for either role must adhere to the specified qualification criteria detailed in clauses D4.1 and D4.2. If the Graduate Studies Committee (GSC) considers the proposed change justified, the matter will be forwarded to the Academic Council (AC) through the respective Dean and the BAS for approval. It is noted that the recommendation should always be accompanied by detailed reasons in support of any change.

D5.2 Changes of the Topic/Title of Dissertation:

If there is a necessity to change the topic of PhD research previously approved by the AC for a candidate, the required change must be recommended by the GSC through Dean and be approved by the BAS and the AC and this need to be done by the first year or by the confirmation of candidature within stipulated time-frame. In case of changing Title or correcting the Title, the changes must be done by following the earlier stated procedure.

D6 Academic Calendar: Number of Semester

There will be two semesters in an academic year. Generally, the first semester of the year will start on 1st January and end on 30th June, the Second semester will begin on 1st July and end on 31st December. The PhD candidate who needs to carry non-credit courses assigned by GSC should follow the academic calendar prescribed for the Master's by Research program.

D7 Course requirement and accomplishment

A PhD program is primarily centered around the development of a dissertation, with the possibility of including some taught courses assigned by the GSC. The course structure for this program will be designed by the Graduate Studies Committee (GSC) of a Discipline and approved by the relevant School.

D7.1 Non-credit course requirements

D7.1.1 Any taught components within the PhD program are non-credit-bearing, meaning that the credits of these courses will not be added to the total credits, if passed.

D7.1.2 If necessary, the Graduate Studies Committee (GSC) may recommend courses at the Bachelor's or Master's levels to enhance the candidate's academic foundations pertinent to their specific research endeavors.

D7.1.3 Once courses are recommended by the Graduate Studies Committee (GSC) of the Discipline, the completion of those courses becomes mandatory to obtain the degree.

D8 Academic Regulations

The PhD program is fundamentally research-based, and as such, coursework is not mandatory. The evaluation of the student is solely based on their dissertation work. The minimum duration and total credits for the degree will be the same for all Schools, as outlined below.

Table: Credit requirements and duration of Doctoral Program

Program Type	Credit Requirement				Program Duration			
	Coursework (Min.)	Dissertation (Min.)	Dissertation (Max.)	Total (Min.)	Semester (Min.)	Year (Min.)	Semester (Max.)	Year (Max.)
PhD	Non-credit (if offered)	72	-	72	6.0	3.0	12	6.0

D8.1 Credit Requirement: To obtain the PhD degree, a student must complete a minimum of seventy-two (72) credit hours through research. One credit hour for research corresponds to at least two contact hours per week.

D8.2 Course Requirement: The Graduate Studies Committee (GSC) may recommend required courses, not exceeding twelve (12) credits equivalent, at the graduate and/or undergraduate levels from the same or other Disciplines. As stated earlier, these credits cannot be added to the minimum requirement for the degree.

D8.3 Seminar-talk on research progress: This constitutes an obligatory element of this program. At the end of the first year, the registered student is mandated to deliver a public seminar talk, organized by the Graduate Studies Committee (GSC), at the respective Discipline or Institute. The topic of talk must be aligned to the field of research. A protocol for the seminar must be meticulously maintained, encompassing essential details such as: (i) the total number of GSC members within the Discipline and the percentage in attendance; (ii) the overall number of participants and their categorization (Professors, Associate Professors, Assistant Professors, Lecturers, PhD/Master students, undergraduate students, experts, and guests); (iii) the presentation's topic; date, time, and duration; as well as noteworthy questions and suggestions raised during the event. The seminar presentation should be accessible to all.

D8.4 Paper-presentation in conferences: The dissemination of the research work within the scholarly community and relevant stakeholders is an imperative facet of the PhD program. The PhD student is required to present his/her research work at a minimum of two international conferences. The evidence of participation and presentation, including conference proceedings and / or abstract books, must be submitted to the GSC and be incorporated into the respective semester progress report.

D8.5Research article Requirement: The student is required to have a minimum of two (2) articles published or accepted in peer-reviewed journals deriving from his/her PhD research, with the stipulation that at least one of these publications should be indexed in the Web of Science or Scopus. The candidate’s authorship must be either as the first author or second to the Supervisor exclusively. Furthermore, a patent linked to the dissertation work, wherein the student holds a minimum ownership stake of 15%, will be considered equivalent to one article.

D8.6Dissertation Requirement: To obtain the PhD degree, a student must complete a dissertation of 72–84 credits, as assigned by the Graduate Studies Committee (GSC) as a mandatory degree requirement. Upon completing the entire research work, the student should prepare a dissertation as a comprehensive piece of work. It should be evaluated for its scientific and methodological soundness using a prescribed guideline in the Clauses D8.6.1.

D8.6.1 Dissertation Evaluation

The use of a set guidelines is obligatory for ensuring consistent and unbiased assessment of PhD dissertation, thereby promoting the uniform appraisal of research excellence and academic rigor. Examiners are required to make their judgment on the basis of (i) originality (newness and novelty) of the work (ii) contribution of the research to the existing literature of relevant field (iii) well formulated structure of dissertation (including problem statement, research objectives, materials and methods, scientific analysis, format) and (iv) volume of the works and its scientific accomplishment aligned to a PhD work. Structured assessment form approved by AC will be sent to the examiners for benchmarking for evaluation.

D8.7 Semester Report: Every candidate is required to submit a progress report to the Graduate Studies Committee (GSC) through the Supervisor at the end of each semester. This report should encompass a succinct overview of the undertaken work during the semester, along with performances measured by: (i) total non-credit hours completed for coursework; (ii) completed credit hours for research; (iii) details of seminar talks delivered, including date and topic; (iv) paper(s) presented in conferences (conference name, date, venue, presentation type: oral or poster, title, copy of the abstract/proceeding) if available; (v) Journal article(s) if available; and (vi) progress report. Concurrently, the student will submit a cumulative semester progress report, consolidating integrated performance metrics represented by numerical values (total credits completed, total number of seminar talks, conference presentations and published articles, if any).

D8.8 Semester report analysis: The GSC will systematically assess the semester report during a convened meeting and evaluates the progress of research work and send the summarized report to BAS through Dean for further approval. In the event that two (2) successive research reports are adjudged unsatisfactory, the candidate may be called upon to furnish an explanation. Concurrently, the GSC, in collaboration with the Supervisor, may suggest improvement measures and await the submission of the subsequent two (2) consecutive reports. However, should there be four (4) consecutive reports assessed as unsatisfactory, the GSC may recommend to the Academic Council, through the respective Dean and the BAS, the termination of student's registration for PhD program.

D9 Working place: The research work is supposed to be carried out at SUST. However, it can be carried out outside SUST, subject to consultation with the Supervisor and approved by the Graduate Studies Committee (GSC).

D10 Examinations

D10.1 Course Examination: Students enrolled in the PhD program are required to participate in the examination of recommended theory courses, where applicable, in accordance with the examination ordinance specific to the program level to which the courses are affiliated. The Chairman of the corresponding examination committee will make a separate tabulation sheet for them and send it to the Chairman of the Graduate Studies Committee (GSC). However, the results of the assigned courses will be categorized as either pass or fail for this program as mentioned in Clause D5.1.

D10.2 Dissertation Submission

Each candidate is mandated to submit three printed copies of his/her dissertation to the GSC for evaluation. The Chairman of GSC will send the copies through Dean to the Controller of Examination Office for taking further measures for evaluation. It is noted that the plagiarism check of the submitted dissertation must be done by the relevant committee composed by the Dean (as Chair), Head of the Discipline and the Supervisor. The consolidated report duly signed by the committee member need to be attached with the dissertation copies to be evaluated.

D10.2.1 Dissertation Title: The dissertation title for the PhD degree has to be approved by the Board of Advanced Studies (BAS) based on the recommendation of the Graduate Studies Committee (GSC). Followed by the provision stated in clause D5.2, the title can be changed. Without formally approved Title, a dissertation will not be forwarded for evaluation.

D10.2.2 The GSC, in consultation with the Supervisor, will propose the dissertation evaluation panel, including alternative panel members, to the BAS through the respective Dean, either simultaneously or separately.

D10.2.3 The student is obligated to assert that the conducted research work is his/her original contribution and has not been previously submitted elsewhere, except for publication purposes.

D10.2.4 The dissertation should manifest substantiated evidence of the student's proficient knowledge in the field of the undertaken research.

D10.2.5 One month prior to the expected date of submission, candidate should notify the GSC in writing of his/her intention to submit.

D11 PhD Work-document submission with dissertation

D11.1 PhD Work-document package: The documentation attesting to the fulfillment of the PhD program comprises of the subsequent components: (i) three (3) copies of dissertation paper itself, validated as a work characterized by theoretical, scientific, and methodological soundness (ii) two published or accepted articles, as outlined in the Clause D6.6; (iii) evidence of participation in two international conferences substantiated by relevant documents (iv) a comprehensive resume derived from seminar talks, encapsulating details such as total completed credits, aggregate seminar talks, cumulative conference presentations, and the number of published journal papers; (v) grade sheet(s) corresponding to completed coursework, if applicable; and (v) plagiarism check report set by the guidelines of the AC.

D11.2 Supervisor's declaration: The Supervisor should submit the statement regarding the context and outcomes of the research in writing to the GSC that the student has fulfilled all prerequisites for the degree and has compiled the requisite PhD work-document package for assessment. Subsequently, the Graduate Studies Committee (GSC) will recommend to the Academic Council (AC) through the respective Dean and the Board of Advanced Studies (BAS) to initiate the formal procedure for the evaluation of the PhD work.

D12 Dissertation Evaluation

Dissertation of PhD must be evaluated using a set guideline. Two examination committees, namely the Dissertation Evaluation Committee (DEC) and the Oral Examination Committee (OEC), will assess the dissertation work successively.

D12.1 Dissertation Evaluation Committee (DEC)

The DEC will be composed of three members: Supervisor as the Chairman and two External Members (External to SUST; referred as External Examiners hereafter), with a stipulation that at least one member is affiliated with a reputed university or institution outside the country.

D12.1.1 Appointment of External Examiners: The GSC, in collaboration with the Supervisor, will recommend the names of members to the Academic Council (AC) through the respective Dean and the Board of Advanced Studies (BAS). The proposal for the committee must include alternative candidates for all external members. The Academic Council (AC), upon the recommendation of the Graduate Studies Committee (GSC), will appoint a DEC for each PhD dissertation approved by BAS.

D12.1.2 External member invited to serve on DEC must hold the rank of Professor with a PhD, and have a minimum of five (5) publications in Web of Science or Scopus-indexed journals, with at least three (3) of them as the first or corresponding author.

D12.1.3 Documents to be provided to the DEC members: The Controller of Examinations, in collaboration with the Supervisor, will furnish the dissertation evaluators with (i) the comprehensive work-documents package detailed in Clause D11.1; (ii) Set Evaluation Form specified in D8.6.1; and (iii) the appointment letter indicating the decision of the Academic Council (AC).

D12.1.4 Every member of the Dissertation Evaluation Committee (DEC) shall dispatch two copies of the report, securely sealed in two separate envelopes to the Controller of Examinations. Concurrently, a hard copy or soft copy (in PDF) of the report must be sent to the Chairman of the Dissertation Evaluation Committee (DEC). DEC will submit all the evaluation reports to the Chairman of GSC for further step.

D12.1.5 If a report has not been received within two months, the Controller of Examination will send a reminder to the examiner and advise him/her that unless the report is received within the next (third) month, the appointment as examiner will be lapsed. If the report is not received within the stipulated time-frame, the BAS may appoint replacement examiner following the procedure stated in the clause D12.1.1.

D12.2 Oral Examination Committee (OEC)

D12.2.1 The Academic Council (AC), in line with the recommendations of the Graduate Studies Committee (GSC), will appoint an Oral Examination Committee (OEC) composed of the following members: (i) the Chairman of the Graduate Studies Committee (GSC) as the Chair; (ii) Supervisor or Co-Supervisor (in the absence of the Supervisor); (iii) any one of the external members of the

Dissertation Evaluation Committee (DEC); (iv) a member of the Graduate Studies Committee (GSC) nominated by the respective Dean in consultation with the Supervisor. The member nominated by the Dean must meet the qualification criteria outlined in (i) and (ii) of Clause D4.1. If the Chairman of GSC himself/herself is a candidate for PhD The Chair of OEC will be the Dean of respective School.

D12.2.2 If a member of the Oral Examination Committee is unable to participate in the oral examination, the Vice-Chancellor will assign a replacement from the members of the Graduate Studies Committee (GSC).

D12.2.3 Documents to be provided to the OEC members: The Controller of Examinations, in collaboration with the Supervisor, will furnish the dissertation evaluators with (i) the comprehensive work-documents package detailed in Clause D11.1; (ii) Set Evaluation Form specified in Clause D8.6.1; and (iii) the appointment letter indicating the decision of the Academic Council (AC).

D12.3. Evaluation report of the DEC members

D12.3.1 Each member of the Dissertation Evaluation Committee (DEC) is obliged to assess the PhD dissertation utilizing the prescribed format as mentioned in Clause D8.6.1. Subsequently, each member is required to prepare an individual and distinct report, encompassing evaluations of the dissertation (using the supplied guidelines in individual parameters) and reflecting the overall assessment.

D12.3.2 In the dissertation evaluation report, each member of the Dissertation Evaluation Committee (DEC) is mandated to explicitly state whether they recommend or do not recommend the conferral of the PhD degree. These recommendations should fall into one of the following categories: (i) recommended with no correction and suggested to proceed for oral examination for awarding the degree subject to satisfactory performance at that oral examination; (ii) recommended with minor correction and suggested to proceed for oral examination for awarding the degree subject to satisfactory performance at that oral examination and completion of corrections suggested; (iii) recommended for major revisions and resubmission and suggested not to proceed for oral examination without the evaluation of revised and resubmitted dissertation within stipulated time-frame; and (iv) rejection.

D12.3.3 The Supervisor's evaluation report must include (i) the student's expertise development in the field, covering theoretical and experimental/practical aspects, the student's contribution to the development of apparatus/method, manuscript and the dissertation paper preparation, etc.; and (ii) marks obtained, reflecting the overall assessment. The Supervisor will send two copies of his or her evaluation report, securely sealed in two separate envelopes provided, to the controller of examinations and one copy to the GSC.

D12.4 GSC's Response to the Recommendations of Evaluation Reports:

D12.4.1 Disclosure of the report: The GSC Chairman will unveil the reports during a specifically convened GSC meeting in presence of the Supervisor (or Co-Supervisor in the Supervisor's absence). All members must receive prior notification of this event. However, the disclosure of the reports requires the presence of at least more than half of the active GSC members present in Bangladesh.

D12.4.2 Measures of GSC after disclosure of reports: Subsequent to the disclosure of the evaluation reports, the Graduate Studies Committee (GSC) will undertake one of the actions outlined in Clauses D12.4.2.1 – D12.4.2.4, provided the recommendations are explicit, unequivocal, and unanimous.

D12.4.2.1 In cases where recommendations entail no correction or minor correction, the Graduate Studies Committee (GSC) will propose an oral examination committee in adherence to Clause D12.2.1, forwarding it to the Academic Council (AC) through the respective Dean and the Board of Advanced Studies (BAS) for approval.

D12.4.2.2 In cases where major corrections and resubmission are recommended, the Graduate Studies Committee (GSC) will instruct the student, through the Supervisor, to address the required corrections and resubmit the dissertation within a six-month period. Subsequent to the revision, the updated dissertation must be submitted to the Controller of the Examinations through the Graduate Studies Committee (GSC) and made available to the initial members of the Dissertation Evaluation Committee (DEC) for subsequent evaluation. In case of the unavailability of the previously constituted examiners, newly formatted DEC will accomplish the Dissertation evaluation in place of earlier committee.

D12.4.2.3 In instances where the recommendations result in rejection, the chair of the Graduate Studies Committee (GSC) will formally communicate the decision of rejection to the student through the Supervisor, and recommend the Academic Council (AC), through the Dean and the Board of Advanced Studies (BAS), to annul the student's registration.

D12.4.2.4 In cases where unanimity lacks in the recommendations, a committee comprising (i) the Chairman of the Graduate Studies Committee (GSC) as a chair; (ii) a Professor from the respective School nominated by the Dean; and (iii) the Supervisor, will thoroughly examine the reports from the dissertation examiners. Subsequently, the committee will submit a report, incorporating one of the recommendations outlined in Clauses D8.8.2 and D.8.8.3, to the Board of Advanced Studies (BAS) through the Graduate Studies Committee (GSC) and the respective Dean for formal approval.

D12.5 Public Defense and Oral Examination

D12.5.1 Venue and Date: Upon receiving unanimous positive opinions from the dissertation evaluators, the Chairman of the Graduate Studies Committee (GSC), acting as the Chair of the Oral Examination Committee (OEC), will, in consultation with the Supervisor and OEC members, schedule a date and venue for the public defense and oral examination. The Chairman of the Graduate Studies Committee (GSC) is mandated to notify the OEC members about the event.

D12.5.2 Publicity of the Defense Ceremony: The collective responsibility of publicizing the defense rests with the Graduate Studies Committee (GSC), the PhD student, and the Supervisor or Co-Supervisor to garner maximum public attention.

Mandatory components include:

- (i) invitation extended to the respective Dean and the BAS members.
- (ii) display of posters on the facades of all academic buildings and the central library, posting on the notice board of relevant disciplines, and invitations through the SUST Website/email in collaboration with the relevant authority (SUST Computer and Information Center).

Optional components encompass:

Invitations extended to distinguished individuals in the research field pertinent to the dissertation, members of relevant professional societies, and Associated non-governmental organizations (NGOs). The Supervisor or Co-Supervisor, subject to approval from the Chairman of the GSC, will oversee the organization of this event.

D12.5.3 The Public Defense Ceremony: The Graduate Studies Committee (GSC) will organize the event. The Chair of the Oral Examination Committee (OEC), will preside over the ceremony. The Supervisor will briefly introduce the candidate of the PhD program (biography, works, quality, moral). Subsequently, the candidate will present his or her complete dissertation work. Following the presentation, an opportunity will be provided for questions and answers. At a designated moment, the Chairman of the Oral Examination Committee (OEC) will officially declare the 'Closure of the Discussion'.

D12.5.4 Protocol of the Public defense

The Chairman of the Oral Examination Committee (OEC), in collaboration with the Supervisor or Co-Supervisor and the relevant PhD student(s), will formulate a protocol encompassing details about the participants (committee members, audience), questions and answers, and modifications made in accordance with the dissertation evaluators' reports. The protocol, along with the attendance sheet, must be signed by the Chairman of the Oral Examination Committee (OEC).

D12.5.5 Oral Examinations: After the culmination of the public defense ceremony, the Oral Examination Committee (OEC) will proceed to conduct a closed-door oral examination of the candidate and subsequently determine the eligibility for conferring the degree.

D12.5.5.1 In the event of a favorable decision, members of the Oral Examination Committee (OEC) will compile a comprehensive report, incorporating (i) a precise declaration in favor of conferring the PhD degree; and (ii) the average marks attained, indicating the overall assessment. Additionally, they will affix their signatures on designated pages of the dissertation under the heading 'Oral Examination Committee', along with their respective names, designations, and affiliations.

D12.5.5.2 If the decision of the Oral Examination Committee (OEC) is unfavorable to awarding degree, the candidate may have the option to appear at another oral examination after a six-month interval, or the process may be stopped by the termination of the student's enrollment. It is imperative to note that no candidate is permitted to present the same dissertation at the oral examination more than twice.

D13 Award of the degree and archiving

D13.1 Recommendation for degree:

The final report of OEC will be presented at the convening of the Board of Advanced Studies (BAS) meeting. The Board of Advanced Studies (BAS) finds that the work aligns with the stipulated requirements and that procedural protocols have been duly maintained, it will propose the award of the degree for deliberation by the Academic Council (AC) and subsequent endorsement by the Syndicate.

D13.2 Archiving of the Dissertation Work

A hard copy of the final version of the dissertation, as forwarded by the Chairman of the Oral Examination Committee (OEC), will be archived in the university central library, while the corresponding digital version will be stored in the institutional repository. The archived copy will bear an official stamp delineating: PhD degree Conferred on, pursuant to Decision No.of theth Syndicate, ratified on

D14 Academic Fee: To be decided by the Academic Council and the Syndicate.

D15 Ethical Issues and Dispute Resolution

All involved in supervision and examination of PhD program must follow the provisions stated in the Clause IV and V of OGP.

The End