

# PhD Handbook

## (Rules and Regulations)



**National University**  
**of Computer & Emerging Sciences**  
**Islamabad**

June 2025

## VISION

To produce world- class professionals, who are responsible citizens and good human beings.

## MISSION

To identify and attract the most promising students from diverse communities, to shape them into visionary leaders and world- class professionals.

To impart quality education to students, irrespective of their financial background ethnicity, gender or religion to create an inclusive society.

To promote research and scholarly activities to generate knowledge.

### Disclaimer

The contents of PhD Handbook supersede all policies, rules, regulations, procedures, requirements and conditions notified earlier. The University reserves the right to change any part or whole of this Handbook without notice or obligation.

In case of any ambiguity of non-existence of rules and regulations, the final authority for their interpretation and provision shall rest with the University whose decision shall be final and binding for all parties concerned.

## Document Control

Document Name	PhD Handbook
Category	Rules and Regulations
Approved By	41 <sup>st</sup> BASR meeting dated 24-Dec-2021
Revision-I	March 2022
Revision-II	June 2025
Quantity	300 copies

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## Nomenclature

<b>BASR:</b>	<b>Board of Advanced Studies and Research</b>
<b>BOG:</b>	<b>Board of Governors</b>
<b>CGPA:</b>	<b>Cumulative Grade Point Average</b>
<b>GPA:</b>	<b>Grade Point Average</b>
<b>GSC:</b>	<b>Graduate Studies Committee</b>
<b>HEC:</b>	<b>Higher Education Commission</b>
<b>NTS:</b>	<b>National Testing Service</b>
<b>SOP:</b>	<b>Standard Operating Procedure</b>



# 1. Launching PhD Program

As per rules laid down by the HEC, any department wishing to launch a PhD program should have at least 3 relevant full time PhD faculty members in the department. Before launching the new PhD program, HEC NOC is essential. The request for initiating new PhD program should reach FAST-NUCES (HQ).

## 1 Graduate Studies Committee (GSC)

Board of Advanced Studies and Research (BASR) shall constitute GSC for each campus on the recommendation of the Campus Director, which shall consist of three or more faculty members, with at least one member from each department offering doctoral program.

- (a) All members of the GSC shall be PhD approved Supervisors. If required, one or two external experts may be co-opted. These experts must also be PhD approved Supervisors.
- (b) MS Coordinators from each department offering MS program shall be members of the campus GSC as per the discretion of the Campus Director.
- (c) From the GSC members, a GSC Coordinator will be appointed on the recommendation of Campus Director by the Rector to liaise with the Head Office.
- (d) The GSC committee may include representative staff of IQAE and Academics Office as observers.

### 1.2 Responsibilities

1.2.1. For each PhD student, GSC shall recommend to the BASR the following:

- (a) Confirmation of admission.

- (b) Title and area of research.
  - (c) Name of Supervisor.
  - (d) Synopsis document.
  - (e) Panel of experts (Foreign and Local) for evaluating thesis and conducting defense.
  - (f) Closure of admission.
  - (g) Award and suspension of FAST PhD Fellowship cases.
- 1.2.2. The GSC shall periodically review the progress of each student. This review shall be done at least once every semester. Progress on each student shall be sent to the BASR.
- 1.2.3. Recommendations on graduate programs related policies.
- 1.2.4. Any other relevant matter with the permission of the chair.

### 3 Roadmap for PhD Program

PhD program comprises of course work and research work. Student needs to complete 18 credit hours of course work followed by 24 credit hours of research work (total 42 credits hours).

Roadmap for timely completion of PhD is mentioned in the following table. In the table, “Prescribed Time” is for completing PhD in minimum time. “Maximum Time” column is the maximum time allowed for each activity. All the activities are semester based and summer semester is not included in the plan.

Activity	Prescribed Time (semesters)	Lapsed Time (years)	Maximum Time (semesters)	Lapsed Time (years)
Coursework	2	1	4	2
Comprehensive Exam	-	1	-	2
Synopsis Defense	1	1.5	2	3
Research Work	2	2.5	4	5
Thesis Submission	1	3	2	6

Note: Although maximum time allowed by HEC to complete PhD requirements is 8 years, FAST-NUCES encourages its students to complete the requirements in maximum 6 years. The cases of extension should be discussed in a Two (2) member Committee composed of HOD and Supervisor/Senior faculty member. The request for extension in PhD duration should reach the Office of the Controller of Examinations along with i) Applicant request, ii) Minutes of the Committee, and iii) Documents in support of student request for extension. The record shall be maintained by the academics department of each campus. Extension may be granted for genuine reasons.

Student will be issued warning by GSC if he/she is unable to complete an activity in the maximum time allowed.

In case of warning, the performance of student will be thoroughly discussed in GSC meeting and next plan of action will be devised for the student.

## 4. Admission in PhD Program

### 4.1 Eligibility Criteria

- 4.1.1. Must have completed 18 years of education, MS/MPhil/MBA, from an HEC recognized University.
- 4.1.2. Minimum CGPA of 3.00 (out of 4.00 in the Semester System) or First Division (in the Annual System) in MS/MPhil/Equivalent Degree in a relevant field is required.

- 4.1.3. Minimum score of 60% in GRE/GAT, in the specialization area chosen at the PhD level, is required. The result should be valid at the time of admission.
- 4.1.4. FAST-NUCES admission test minimum score is 60% (equivalent to NTS-GAT Subject Test).

#### 4.2 Admission of PhD students in inter-disciplinary areas

- 4.2.1. Students who have scored minimum 50% marks in FAST-NUCES or GAT-Subject in the discipline of admission are provisionally admitted into PhD degree provided they successfully complete a Zero Semester.
- 4.2.2. Zero Semester shall be a regular semester offered in the University in which the students shall study 9 CH of deficiency courses of level 7. The deficiency courses shall be approved by the Graduate Studies Committee (GSC).
- 4.2.3. The GSC shall recommend admission to PhD if it is satisfied that the student's knowledge of primary area (level 7) has sufficiently prepared him/her to undertake the course of studies of the doctoral program.

#### 4.3 Admission of PhD students having a CGPA < 3.0 (out of 4.0 in the semester system) or < 60% (in the annual system) in the MS/MPhil/Equivalent degree

- 4.3.1. Students having a minimum CGPA of 2.90 (out of 4.00 in semester system) or 58% (in the annual system) are provisionally admitted into PhD degree provided they successfully complete a Zero Semester.
- 4.3.2. Zero Semester shall be a regular semester offered in the University in which the students shall study additional courses of 9 CH of level 7 and score minimum 3.00 out of 4.00 GPA. The additional courses shall be approved by the Graduate Studies Committee (GSC).

- 4.3.3. The GSC shall recommend admission to PhD if it is satisfied that the student's knowledge of primary area (level 7) has sufficiently prepared him/her to undertake the course of studies of the doctoral program.

#### 4.4 Admission Test

- 4.4.1. The applicant can either apply on the basis of FAST-NUCES admission test or on the basis of NTS GAT admission test.
- 4.4.2. The applicant must obtain a minimum of 60% marks in the test after which the merit will be determined based on the 60% admission test marks and 40% panel evaluation.
- 4.4.3. Panel evaluation will include a presentation on a research topic and the student's ability to respond to questions. The student will also be asked to write an essay on a given topic.

#### 4.5 FAST-NUCES Admission Test

- 4.5.1. The test will be based on the subject test.
- 4.5.2. The duration of the test would be between 1-2 hours.
- 4.5.3. FAST-NUCES admission test shall be valid for One year.

#### 4.6 Procedure

- 4.6.1. Applications for admission are entertained throughout the year. However, the admission shall be offered only twice a year at the start of Spring and Fall semesters. The applicant shall be asked to complete the admission formalities within a specified period, failing which the offer shall stand cancelled.
- 4.6.2. Admission shall be given subject to the availability of a Supervisor in the area of research. Formal consent from the Supervisor must be taken before the admission.

- 4.6.3. Provisional admission shall be given on the recommendation of Campus GSC.
- 4.6.4. Cases of new admissions shall be sent to FAST-NUCES-HQ. Based on Supervisory workload and availability of PhD Approved Supervisors, the HO (Office of the Registrar) will issue Provisional PhD Admission Letter(s).
- 4.6.5. A freezing request of PhD admission to those who are doing job and unable to commence the classes in Fall/Spring semester, due to official protocol/delay in the approving process (leave, etc.) by the employer may be facilitated by FAST-NUCES. They can take classes in the next semester (Spring/Fall). The campuses may send such request(s) along with the details to the Rector for approval.
- 4.6.6. The period for PhD studies shall be counted from the date of admission to the program.

#### 4.7 Constitution of Advisory Committee

If deemed necessary, GSC shall constitute an advisory committee for a student after the comprehensive exam, with consultation of the Supervisor. Functions of the committee are as follows:

- (a) Advisory committee is responsible for monitoring the progress of the student and helping the student to improve his/her research work.
- (b) The committee would comprise of the members who have expertise in the area of research.
- (c) Size of the committee should be 2 or 3, ideally. In exceptional cases this number can be revised by the campus GSC.

### 5 Registration Process

- 5.1.1 During coursework, each student will register courses in consultation with the Supervisor.
- 5.1.2 Minimum normal workload is 6 credit hours.
- 5.1.3 During research phase, student shall register in Thesis

(I-IV). Along with the request for registration, complete study plan for the semester must be submitted to the Supervisor.

- 5.1.4 Students away from campus for an extended period (e.g., for field research etc.) must register in absentia for the semester.
- 5.1.5 Supervisor to decide whether to upload the Thesis on Turnitin repository or not.
- 5.1.6 Student shall register in Thesis-IV subject to the Thesis is ready to be forwarded to the Foreign Reviewer.

## 6 PhD Coursework

On admission, each student should immediately start his/her coursework:

- 6.1.1 A student shall complete 18 credit hours of course work without any exemption.
- 6.1.2 During course work, students will get credit for PhD level courses only.
- 6.1.3 Minimum passing grade in each course is B-.
- 6.1.4 Normal course load is three courses per semester. This load can be reduced upon consultation with the Supervisor.
- 6.1.5 Attendance is mandatory for each course. A student with attendance less than 75% is debarred from the final exam and awarded FA grade.
- 6.1.6 A course not offered by the University may be taken at another University/degree awarding institute recognized by the Higher Education Commission of Pakistan. Such courses can only be taken on the advice of the Supervisor and after approval from the GSC. Maximum of two such courses shall be allowed. GPA obtained in these courses will not be counted while computing CGPA of the student. Only Satisfactory (if

passed) or Unsatisfactory (if failed) will be mentioned on the transcript.

- 6.1.7 CGPA throughout the coursework stage should be minimum 3.00. CGPA below 3.00 will result in an academic warning. After three consecutive warnings admission of the student will be closed. Securing CGPA greater than or equal to 3.00 will remove the warning and reset the warning count.

## 7 Comprehensive Examination

Each student shall take comprehensive examination after completing PhD coursework.

- 7.1.1 Scope of the examination shall be limited to the PhD courses studied by the student.
- 7.1.2 GSC Coordinator will be responsible for conducting this exam.
- 7.1.3 GSC Coordinator is required to seek Rector's approval for conducting Comprehensive Exam by presenting information of the eligible students, question papers and examination schedule.
- 7.1.4 Comprehensive Examination will be arranged before the start of Spring and Fall semesters.
- 7.1.5 The instructors of the courses will be responsible for setting up and checking the question papers. If the concerned instructor is not available, then GSC will find a suitable person for this task.
- 7.1.6 Comprehensive Examination is one and monolithic, even though question papers will be made by instructors of six different courses.
- 7.1.7 A student must pass the Comprehensive Examination in a maximum of two attempts. The second attempt must be within six months of the first.
- 7.1.8 The pass percentage of Comprehensive Examination



shall be 60% in aggregate.

7.1.9 The result shall be compiled by the GSC Coordinator, and it will be shared with the student, Supervisor, HOD, and the Head Office.

7.1.10 BASR will give the final approval of the result.

## 8 Research Phase

8.1.1 A student shall start his/her research only after passing the Comprehensive Exam. The student shall spend a minimum of 20 hours per week at the campus during the research phase (Thesis-I, II, III and IV)

8.1.2 A student must spend at least 4 semesters (Thesis I-IV) in his/her research phase after clearing the Comprehensive Exam.

8.1.3 Research period can be extended till the expiry of the maximum time allowed for completing PhD.

8.1.4 During the research phase, student shall register in Theses I-IV in the next four semesters.

8.1.5 A student shall advance to the next thesis only after getting an S (Satisfactory) grade in the enrolled thesis.

8.1.6 A student will repeat the same thesis in the following semester if he/she gets a U (Unsatisfactory)/CN grade. Maximum one CN grade can be given for each thesis.

8.1.7 Publications ensuing from the research shall be submitted to journals, conferences, etc., only after obtaining consent of the Supervisor. Submission without consent shall be constituted as a breach of discipline and may justify punitive action against the student.

8.1.8 A student may carry out a portion of his/her research work in a reputable institute located in a developed country. No such attachments shall not exceed an accumulative total of 12 months. These attachments

shall be recommended by the department with the consent of the Supervisor to the GSC. The GSC shall consider them and forward its recommendation to the Head Office for final approval.

## 8.9 Plan for Research Phase

Following study plan is given here as a guideline for students.

- 8.9.1. Synopsis Defense A student is expected to finalize his/her topic of research and defend synopsis by the end of Thesis I.
- 8.9.2. Implementation & Compilation of Results during Theses II & III, a student is expected to conduct research and publish the work in different venues including some reputed journals/conferences.
- 8.9.3. Writing of Thesis A student should write, submit, and defend the thesis in Thesis IV.
- 8.9.4. Sciences and Engineering One research article in W category.
- 8.9.5. Management Sciences, Mathematics & Physics One research article in W category OR Two research articles in X category.
- 8.9.6. English, Pakistan Studies and Islamiyat One research article in X category OR Two research articles in Y category.

## 9 Thesis Submission

- 9.1.1 After completing research work and publication of at least one research paper based on PhD research as per the following criteria.
- 9.1.2 The PhD thesis shall be evaluated by at least Two Foreign Reviewers. The name of these Reviewers shall be recommended by the department and GSC and approved by the BASR. In case a meeting of BASR cannot be conveyed earlier and it is essential to

forward the thesis to Foreign Reviewers, then the Rector is authorized to approve the names of Foreign Reviewers. A thesis defense shall only be arranged if favorable evaluation reports are received from both the Foreign Experts.

9.1.3 Student must be enrolled in Thesis IV at the time of submission of thesis.

9.1.4 Submitted thesis must comply with the following requirements:

- (a) Must be original contribution to the area of research.
- (b) Thesis must not include research work for which a degree has been conferred on him or any other person, in this or any other University.
- (c) The student shall state in the preface or bibliography, the sources from which his/her information is derived, the extent to which he has availed of the work of others; and the portion of thesis that he claims his own.
- (d) Student shall also certify that the work presented in the thesis has not been submitted elsewhere for any other degree.
- (e) The thesis shall be written in English. The quotations, however, may be in other languages.
- (f) Similarity Index must be less than 19% with not more than 5% match with any single source.
- (g) The thesis should not contain any plagiarized material. The Supervisor must ensure that the thesis is purely based on the student's original work.

9.1.5 The PhD thesis should comply with the Generative AI policy of the HEC and the University. No part of the

thesis should be generated using the Generative AI tools.

- 9.1.6 Final PhD thesis along with other required documents will be submitted by the Supervisor to GSC. Supervisor will ensure that the thesis formatting conforms to the guidelines provided by the University and is free of grammatical mistakes. Appendix D enumerates the list of the documents required for the submission of thesis.
- 9.1.7 The PhD thesis will be considered as officially submitted only after it is submitted to campus GSC. Submission to Supervisor will not be considered as thesis submission.

## 10 Evaluation Process

### 10.1 Bi-Annual Progress Reports

- 10.1.1. Supervisor will submit detailed progress report of his/her PhD student to GSC at the end of each semester.
- 10.1.2. The cases with adverse reports must be discussed in the GSC meeting.
- 10.1.3. GSC shall submit these reports to BASR for information and action, if any.

### 10.2 Theses I-III

- 10.2.1 For Theses I-III, Supervisor shall evaluate the student according to the study plan suggested at the time of thesis registration.
- 10.2.2 Outcome of the evaluation will be translated into either S (Satisfactory)/U (Unsatisfactory)/CN (Continue Research) grade.
- 10.2.3 A student shall promote to the next thesis only after securing the S grade.

### 10.3 Synopsis Defense

- 10.3.1. During research phase, as a first step, student is required to defend his/her research proposal in front of GSC members.
- 10.3.2. A student shall submit research proposal to GSC through his/her Supervisor. Please refer to Appendix E for the guidelines of writing synopsis document.
- 10.3.3. GSC shall forward the synopsis to BASR for approval.
- 10.3.4. A student will be assigned 'S' grade after successful defense of Synopsis.

### 10.4 Thesis Evaluation by Foreign Reviewers

- 10.4.1. PhD thesis shall be evaluated by at least Two Foreign Reviewers.
- 10.4.2. Supervisor shall suggest the names of Foreign Reviewers for consideration of GSC.
- 10.4.3. GSC will recommend names of at least Three Foreign Reviewers to Head Office for Rector's approval. The Rector then shall approve two, out of three.
- 10.4.4. Final thesis defense shall be arranged only after receiving favorable evaluation reports from Foreign Reviewers.
- 10.4.5. If a Foreign Reviewer does not give a favorable report, the student will revise the thesis in the given time and resubmit to the same to Foreign Reviewer.

### Criteria for the appointment of Foreign Reviewers

- (a) Reviewer must be a PhD in the relevant field and an eminent and active researcher in the respective field.
- (b) Reviewer must have no significant personal, professional, or contractual relationship with PhD candidate.
- (c) A Reviewer will be sent at most two theses at a time;

and not more than four theses in a calendar year.

## 10.5 Final Thesis Defense

- 10.5.1. Examination committee of eminent experts in the relevant field shall be appointed by BASR on the recommendation of GSC for conducting final thesis defense. Examination committee shall have three members, including the Supervisor and two members from outside the University.
- 10.5.2. The public defense of thesis shall be announced in well-known public forums.
- 10.5.3. A student shall publicly defend his/her thesis in the presence of the examination committee.
- 10.5.4. Examination committee shall base its decision about the admissibility of the thesis based on thesis report, public presentation, and evaluation reports by foreign experts, oral examination of the student, and quality of publications ensuing from the research work.
- 10.5.5. The result of thesis defense shall be one of the following:
  - (a) Recommended for the award of PhD degree with no change in the PhD Thesis...
  - (b) Recommended for the award of PhD degree with minor changes in the PhD Thesis. The scholar can make the changes in one month's time. Each examiner should indicate whether they wish to review the revised thesis and compliance report after the PhD scholar has addressed the suggested changes: The compliance of the revisions as proposed by the examiners shall be the responsibility of the Supervisor.
- 10.5.6. The examination committee shall strive to reach unanimous decision. In case of difference of opinion between the members, the approval of thesis shall

require a majority vote. In case of a tie, the BASR will take the final decision.

10.5.7. The examination committee shall sign a joint certificate of the result of its deliberations.

10.5.8. After incorporating the changes suggested by the examination committee, the student will submit the final Thesis to GSC through his/her Supervisor.

## 11 Modification/change of research topic

11.1.1 Student may request for change in the topic of research by applying to GSC. This request must be duly supported by the Supervisor.

11.1.2 Change request will be honored if the student has adequate time to complete research work after the topic change.

11.1.3 GSC shall consider such cases and forward them to the BASR with its recommendations. The final decision shall be made by BASR.

11.1.4 No request for Modification/change of research topic/thesis title is admissible/permitted, once the thesis is approved by Two Foreign Reviewers.

## 12 Rules for supervision & responsibilities of Supervisor

As per HEC guidelines, a Supervisor can supervise at any time a maximum of Twelve (12) graduate students, of which not more than Five (5) may be PhD students (at any time). In compliance to HEC Graduate Education Policy (GEP-2023), a Fresh PhD faculty member is eligible to supervise MS/MPhil student(s) and Co-Supervise PhD student(s) immediately after obtaining his/her degree. However, he/she can only start supervising PhD student(s) independently after two years of obtaining the PhD degree. The supervision load increases gradually, with One (1) PhD student in the 3rd year, Two (2) in the 4th year and up to Five (5) PhD students from the 5th year onward.

For the responsibilities of a Supervisor, please refer to Appendix B.

### **13 Responsibilities of Student**

- (a) PhD students are responsible for working towards completion of his/her degree programs in a timely manner.
- (b) PhD students are expected to expand their knowledge of their chosen disciplinary field by discovering and pursuing a unique topic of scholarly research, resulting in the PhD dissertation.
- (c) It is the student's responsibility to ensure continued progress of his/her academic program and thesis research.
- (d) PhD students have a responsibility for the following aspects of his/her program.

#### **13.1 Research, Teaching and Training**

- 13.1.1. Time frames: A PhD student should work effectively towards completion of the degree in a timely manner.
- 13.1.2. Academics: The student should learn the existing theories, practices, and research methods of the discipline and to apply these in his/her research and teaching.
- 13.1.3. Thesis: The student should discover and pursue a unique topic of research to construct new knowledge and to apply this knowledge to existing problems and issues.
- 13.1.4. Communication: The student should communicate regularly with the Supervisor providing him/her with updates on his/her progress in research activities.
- 13.1.5. Integrity and ethics: The student should assume the highest integrity and maintain ethical standards in all aspects of his/her work, especially in the tasks of



collecting, analyzing, and presenting research data. Special care should be taken to follow guidelines established by BASR.

- 13.1.6. Professionalization: The student should contribute, wherever possible, to the scholarly discourse of the discipline through presentations and publications. He/she should attend and participate in appropriate meetings, colloquia, seminars, and group discussions that are part of the educational program, and the student should submit all relevant research results that are ready for publication in a timely manner.
- 13.1.7. Work environment: The student should maintain a clean and safe work environment, including, but not limited to, office space, laboratory spaces and common spaces.
- 13.1.8. Mentors: The student should seek out a range of faculty, professional and peer mentors who can help him/her prepare for a variety of professional and career roles and responsibilities, and to serve as a mentor to others when appropriate.

## 13.2 Community and Administrative

- 13.2.1. Familiarity with policies: The student should be knowledgeable of and comply with regulations and policies and complete all required paperwork and other degree obligations in a timely fashion (meet important deadlines). Note that individual programs may have additional policies, and it is the student's responsibility to understand and comply with these policies as well.
- 13.2.2. Effort: Full time students are expected to be on campus and working towards completion of degree requirements during the academic semester. Students must check with the GSC Coordinators for program specific limits on vacation time and must receive

approval for all vacation time from their Supervisor. Students away from campus for an extended period during any academic semester (e.g., for field research) must register in absentia for the semester.

- 13.2.3. Employment: The student should not be employed full-time while maintaining full-time student status, unless it is an internship related to the student's academic program and supported by the student's Supervisor, GSC and the Director of Campus. However, faculty members are exempted from this condition. Self-financed students may work with the approval of their PhD Supervisors provided it does not hinder their satisfactory progress.

## 14 Issuance of Degree

- 14.1.1 PhD degree shall be awarded by BOG on the recommendation of BASR. The BOG also approved that in case meeting of the BOG cannot be convened early and a candidate has fulfilled all the requirements for the award of PhD degree, the Rector is authorized by the BOG to approve the recommendations of BASR for award of PhD degree to the candidates in anticipation of approval of the BOG.
- 14.1.2 Students who have completed their PhD degree requirements will submit following documents to GSC Office.
- (a) Soft and hard copy of PhD Thesis (the soft copy should be searchable), presentation and publications information.
  - (b) Plagiarism report.
  - (c) Soft copy of PhD Completion Form as per HEC format.
  - (d) Hard copy of clearance certificate from the

campus.

- (e) Seven hard copies of PhD thesis. Out of Seven, Five for Head Office, One for Supervisor and One for student.

## **15 Academic Rules**

### **15.1 Duration of Program**

- 15.1.1. Maximum time allowed to complete PhD is 6 years. Extension may be allowed for genuine reasons, but duration cannot exceed 8 years, the maximum allowed by HEC.
- 15.1.2. This time is counted from the date of admission.
- 15.1.3. Regular semesters (Fall and Spring) shall be counted while calculating the time period spent in the PhD program.

### **15.2 Closure of Admission**

- 15.2.1. The University reserves the right to cancel/close the admission at any time during the period of studies. Valid reasons of such an action include, but not limited to, discovery of forgery or falsification of documents during the admission process, disciplinary action due to violation of campus code of conduct, nonpayment of dues, and expiry of maximum allowed time. Any such action shall be recommended by GSC and approved by BASR.
- 15.2.2. Failure to find an internal/external Supervisor during the research stage.
- 15.2.3. In case of two consecutive adverse reports from the Supervisor, the GSC may recommend cancellation of admission of the student. The student shall have the right to appeal to the Rector against the decision. Any final decision shall be taken on the recommendation of BASR.

- 15.2.4. Absence without semester freeze for two consecutive semesters shall result in closure of admission.
- 15.2.5. On transfer of admission from FAST-NUCES to some other University.
- 15.2.6. On students own request.
- 15.3 Freezing of Semester
  - 15.3.1. A student may apply for deferment (or freezing) of a semester and such cases shall be recommended by GSC and approved by BASR.
  - 15.3.2. Freezing time will be counted in the calculation of the time spent by a student in the degree.
  - 15.3.3. At most two semesters can be frozen during PhD studies. These may be consecutive semesters.
- 15.4 Extension in PhD Admission
  - 15.4.1. Students may apply in writing about the extension and submit the request through his/her supervisor to the GSC.
  - 15.4.2. The GSC shall discuss the extension request in their meeting and the meeting minutes should be shared with Head Office.
  - 15.4.3. In exceptional cases, BASR may allow extension for successful completion of PhD degree beyond 6 years. Such request must be reviewed and recommended by the GSC and the HOD of the department.
  - 15.4.4. At one time, BASR will allow three months extension in PhD duration.
  - 15.4.5. Extension requests for HEC scholars will be forwarded to the HEC after recommendation from BASR. HEC shall give the final decision.
- 15.5 Transfer of PhD from FAST-NUCES to another University
 

The GSC shall recommend transfer requests on case to case

basis. Minimum criteria by HEC for transfer must be considered while making such decisions. Properly filled clearance must be submitted with the request for transfer. GSC shall forward this case after deliberation to BASR for formal approval. Closure of admission process shall be initiated automatically for the approved cases.

**15.6 Transfer of PhD to FAST-NUCES from another University.**

The GSC shall recommend transfer requests on case to case basis. Minimum criteria by HEC for transfer must be considered while making such decisions. Core PhD requirement laid down by HEC should not be violated while making these requests. BASR shall give the formal approval for the recommended cases.

**15.7 Change of Supervisor**

15.7.1. Intra University change will be handled by the University.

15.7.2. Inter University change will be handled as per the SOP defined by HEC.

15.7.3. GSC will forward all such requests to BASR for final approval.

15.7.4. The relevant department may also recommend change of Supervisor in case it becomes necessary due to any justifiable reason.

15.7.5. No relaxation in the total permissible time span of the PhD shall be given in such cases.

15.7.6. Head Office will inform HEC of such change in case of HEC scholar.

**15.8 Intra University**

15.8.1. Duly filled change of Supervisor form will be submitted by the student.

15.8.2. GSC will discuss the request and will recommend it to BASR for formal approval.

## 15.9 Inter University

15.9.1 Student will submit a written request to GSC for the change of Supervisor. Following documents must be attached with the application.

- (a) NOC from old (Existing) Supervisor
- (b) Consent of new Supervisor along with the profile of the new Supervisor.

## 15.10 Withdrawal of Supervision

Supervisor reserves the right of withdrawal of supervision in extreme situations. Supervisor shall adopt following course of action for the aforementioned.

15.10.1. Supervisor will warn the student in writing on two different occasions. A copy of the warning letter will be sent to the HOD of the concerned department and GSC Coordinator for filing.

15.10.2. After two consecutive warnings Supervisor can forward the case to GSC for further action.

15.10.3. GSC will forward the request after deliberation to BASR for formal approval.

15.10.4. GSC will consider the biannual progress report of the student during its deliberations

## 15.11 Plagiarism

Plagiarizing or copying of research idea or document is a serious offence. University has zero tolerance towards such incidents. If reported, such cases will be forwarded to campus plagiarism committee for recommendations. All the recommendations will be forwarded by GSC to BASR for formal approval/action. A plagiarism check of thesis is performed before thesis defense and after any major revision. The student should also comply with the Generative AI policy of HEC and the University. No part of the thesis should be generated using Generative AI tools.

**16. Letter Grades**

Grade	Points	Interpretation
A+	4.00	Outstanding
A	4.00	Excellent
A-	3.67	Very Good
B+	3.33	Good
B	3.00	Average
B-	2.67	Pass
F	0	Fail
S	NA	Satisfactory
U	NA	Unsatisfactory
CN	NA	Continue Research

**17. Payment of Fee**

17.1.1 At the time of admission, PhD students shall pay full tuition fee and admission fee. Admission fee will not be realized in case of FAST-NU graduates.

17.1.2 Please refer to University prospectus for details of the fee structure.

**18. Professional Ethics**

18.1.1 Honorary and gift authorship: Authorship should be decided purely on merit and must include people with significant contribution. No author can be added for monetary or other gains.

18.1.2 Duplicate publication: Republishing one's own work is self-plagiarism and is punishable under the University rules.

18.1.3 Acknowledging the Deserving: Students are required to give due credit to other researchers, funding bodies and research material. Proper references to the cited work and help should be mentioned while publishing.

**18.1.4 Fabrication and Falsification of Results:** Fabrication is making up data or results and recording or reporting them, while Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. Both fabrication and falsification are punishable under the University rules.

## 19. Fellowship Program

FAST-NUCES has launched a fellowship program to establish a strong PhD program that attracts bright students from all over Pakistan. Salient features of the program are as follows:

### 19.1 Scholarship

- (a) Scholar should secure Admission at FAST-NUCES, and deposit Admission fee plus security. The deadline of Tuition fee shall be extended until the final decision. The scholar should be informed by GSC Coordinator (in writing) that in case of rejection, the scholar shall be required to pay the tuition fee.
- (b) GSC shall consider application of newly admitted PhD students and recommend fellowship for qualifying and deserving students.
- (c) GSC Coordinator shall forward recommendation of GSC for award of fellowship to Head Office after the interview and recommendation by the panel of five faculty members.
- (d) One PhD Fellowship is available in an academic year for every PhD program at each campus.
- (e) Start of the Fellowship will be subject to declaration by the student that he/she is not a full/part-time employee of any organization. Students doing job must submit acceptance of resignation/leave by the employer.
- (f) Upon approval of Fellowship by BASR, fellowship will commence from the start of the ongoing semester or from the date of acceptance of his/her



resignation/leave, whichever is later.

- (g) The selected scholars shall receive an amount of Rs. 60,000 per month in addition to full tuition fee waiver. The duration of scholarship shall be three years. After first year of fellowship, a PhD fellow shall teach one course in each semester, to a section of undergraduate students.

## 19.2 Eligibility

To be eligible for this scholarship an applicant must fulfill all the following conditions:

- (a) Minimum CGPA of 3.00 in Bachelor's degree (earned after at least 16 years of education)
- (b) Minimum CGPA of 3.30 in MS or an equivalent degree
- (c) Passed Subject test of Local GAT or International GRE (minimum 70 percentile)/FAST-NUCES admission test passing marks of 60.

## 19.3 Selection

Applicant shall be interviewed by a panel of at least five faculty members. All of them should be PhD approved PhD Supervisors. At least two members of the selection panel must be from other campuses.

## 19.4 Restrictions

The scholar must be a full-time student and should not indulge in any activity, paid or unpaid other than teaching load prescribed for this scholarship.

## 19.5 Progress milestones

The scholar shall be expected to meet or exceed the below mentioned milestones to continue receiving the scholarship.

Course work: Eighteen (18) credit hours of PhD Coursework must be completed within one year, with a minimum CGPA of 3.3  
 Comprehensive Exam: Must pass the PhD Comprehensive Exam within six months of completing the PhD course work

**Synopsis:** Within six months of passing PhD Comprehensive Exam

**Publication:** At least one research paper based on the PhD research in an HEC approved “W” or “X” category journal within one year after submission of synopsis.

**Thesis Submission:** Must be submitted after the required publication, but within two years of passing the PhD Comprehensive Exam

#### 19.6 Suspension of Scholarship

If due to illness or any other family circumstances, the scholar must suspend his/her studies, scholarship will be suspended, and this period shall not be counted towards measuring his/her performance against the above stated milestones. The fellowship will be withdrawn if the suspension exceeds twelve months.

### 20. Readmission in PhD

FAST-NUCES discourages readmission in PhD program. However, in exceptional cases such request can be made by the student to campus GSC. GSC shall recommend the case to BASR for formal approval. GSC shall decide each case by considering the circumstances and must recommend for each case the exemptions and complete plan for the completion of PhD. No core PhD requirement should be violated while making these requests. BASR shall give the formal approval for the recommended cases. Readmission is subject to clearance of PhD Admission Test.

## Appendix A: Guidelines on Thesis Format for PhD Degree

All PhD and MS theses should comply with the following guidelines.

### 1. Preparation of Manuscript and Copies

- (a) The thesis needs to be prepared using a standard text processing software and must be printed in black text (color for images, if necessary) using a laser printer. The standard font shall be Times New Roman 12 pts with line spacing 1.
- (b) The thesis must be printed or photocopied on both sides of a white paper to meet our Green Environment obligations. All copies of thesis pages must be clear, sharp, and even, with uniform size and uniformly spaced characters, lines, and margins on every page.
- (c) Thesis should be free from typographical errors.
- (d) Ten copies on good quality paper (minimum 70 gm) must be submitted.

### 2. The front cover shall contain the following details.

- (a) Name of the University in 18 pt font size properly centered located at the top of the page.
- (b) Name of the Department in 17 pt font size properly centered.
- (c) A replica of the University Monogram.
- (d) Full title of thesis in 24 pt font size properly centered.
- (e) Full name of the candidate in 21 pt font size properly centered.

- (f) Name of maximum degree obtained in 21 pt font size properly centered.
- (g) Year of submission in 21 pt font size properly centered.
- 3. Certificate of Approval: A specimen of certificate to be signed by the scholar, external and local reviewers, Director, and Dean of concerned Board of Faculty is enclosed at Appendix-I.
- 4. Authors Declaration: Declaration by the student to indicate that this is his/her own work, and he/she has not presented it for any other degree in any part of the world.
- 5. Plagiarism Undertaking: Undertaking by the student to indicate that this is his/her own work, and he/she has not plagiarized it.
- 6. SDG Mapping Table: The dissertation should include SDG Mapping Table as specified in Appendix F of this handbook.
- 7. Ethical Research Statement: The dissertation should include Ethical Research Statement as specified in Appendix G of this handbook.
- 8. Abstract: An abstract of 500 words (maximum) shall highlight the important features of the thesis. It is to be a brief description of a scholars work and should be organized in the following order (without the explicit use of these headings):
  - (a) Statement of the Problem
  - (b) Procedure and/or Methods
  - (c) Results
  - (d) Conclusions
- 9. Acknowledgments [Optional]: The acknowledgments should not be more than one page.

**10. Contents**

- (a) The contents shall follow the Abstract or Dedication or Acknowledgment whichever is the last one. It shall enlist the titles of the chapters, section and sub-section using decimal notation, as in the text, with corresponding page number against them, placed to the right.
- (b) After the Contents, List of Publications (if applicable) should start at a separate page.
- (c) After the Publications, List of Figures (if applicable) should start at a separate page.
- (d) After the list of Figures, List of Tables (if applicable) should start at a separate page.
- (e) After the list of Tables, List of Algorithms (if applicable) should start at a separate page.

**9. Abbreviation Notation and Nomenclature**

A complete list of all abbreviations, notations and nomenclature including Greek alphabets with subscripts and superscripts shall be provided after the list of algorithms. (As far as possible, generally accepted symbols and notation should be used.)

**10. Size of Paper and Margins**

- (a) A4 size white paper of 70 gm or more (height 297 mm, width 210 mm) be used, no restriction is placed on drawings and maps.
- (b) The top and bottom margins should be 25 mm, whereas the left margin should be 35 mm for odd page numbers and 25 mm for even page numbers; similarly, right margin should be 35 mm for even page numbers and 25 mm for

odd page numbers (Additional margin of 10 mm is to cater for gutter margin that may be utilized for binding.) for both textual and non-textual (e.g., figures, tables) pages. Content should not extend beyond the bottom margin except for completing a footnote, last line of chapter/subdivision, or figure/table caption.

- (c) A sub-head at the bottom of the page should have at least two full lines of content below it. If the sub-head is too short to allow this, it should begin on the next page.
- (d) All tables and figures should conform to the same requirements as text. Color may be used for figures. If tables and figures are large, they may be reduced to the standard size (provided the reduced area is not less than 50% of the original) and/or folded just once to flush with the thesis margin (if the page size does not exceed 250x360 mm).

#### 11. Pagination

- (a) Beginning with the first page of the text in the thesis (Chapter 1), all pages should be numbered consecutively and consistently in Arabic numerals through the appendices. The subsequent chapters shall begin on a fresh page and page numbers, at the first page, shall be printed at the bottom center.
- (b) Page numbers prior to Chapter 1 should be in lower case Roman numerals. The page numbers should be displayed from table of contents onwards. All the pages prior to starting page of table of contents must be counted in numbering; however, the page number should not be displayed on them. The title page should not be included in counting of pages.

- (c) All page numbers should be placed without punctuation at the bottom center. Page numbers should also use Times New Roman 12 pts.
- (d) All pages except the first page of the chapter may have the section headings on the top right of the odd page and chapter title on the top left corner of the even page as a header. The header should be underlined. The text in the heading should be in Times New Roman 10 pts. These features are optional and may be omitted.

## 12. Chapter Format

Each chapter shall begin on a fresh page with an additional top margin of about 65 mm. Chapter number and title shall be left justified with 25 pt font size for chapter title and 17 pt for chapter number in title face by making the first letter capital of every word other than prepositions. A vertical gap of about 1 line (at 25 pt font size) shall be left between the chapter and chapter title lines and 2 lines between chapter title line and the first paragraph. The chapter should start with an Introduction Section except the first chapter (Introduction) and end with a Summary Section that should summarize the contributions of the chapter.

## 13. Tables, Figures, Equations and Quotations

- (a) A table generally refers to numerical data or textual information presented in a column format.
- (b) All graphs, charts, line drawings, maps, photographs, or other graphical representations are considered as figures.
- (c) All tables (tabulated data) and figures (charts, graphs, maps, images, diagrams, etc.) should be prepared,

wherever possible, on the same paper used to type the text and conform to the specifications. They should be inserted as close to the textual reference as possible and should appear after the textual dereference.

- (d) Tables, figures and equations should be numbered sequentially either throughout the thesis or chapter-wise using Arabic numerals. They are referred to in the body of the text capitalizing the first letter of the word and number, as for instance, Table 17, Figure 24, Equation (33), or Table 5.3, Figure 3.11, Equation (4.16), etc.
- (e) All titles of figures and tables should be on the same page as the figure or table and should be labeled appropriately. The legend should be placed beneath the figure and above the table.
- (f) Tables should be inserted in the appropriate place in the text; however, if a group of tables relating to one topic is more than 4 consecutive pages then the table group should appear as an Appendix.
- (g) Diagrams, maps, table's etc. exceeding A4 size (8.5 inches' x 11 inches or 21.5 cm x 28 cm) should be folded to read as a right-hand page when opened.
- (h) Images, Photographs, etc. must be scanned in resolution exceeding 200dpi with 256 gray scales for the monochrome images and 24 bit per pixel for the color images.
- (i) Any quotations presenting primary data (e.g., based on interviews and focus group discussions) should be typed in Times New Roman 12 pts italic. All such quotations should start on a separate line and be indented 0.5 inch on each side, so that they appear distinct from the text.



No quotation marks should be used. However, a quotation which is less than 10 words long may be included within a paragraph, in which case quotation marks should be used; the font size to be used should remain Times New Roman 12 pts italic.

- (j) A figure or table may be included with the text, or if it is larger than 4 inches long it may appear on a separate page with no text. If a table or figure will not fit on the page of first mention move it to the top of the next page and fill in the text page that will normally come after the figure or table?
- (k) Leave 2 double line spaces between the text and the figure table. If a caption is longer than a line, it should be single spaced.
- (l) Special requirement for tables: Left align table title above the table. Table captions or descriptions should be left aligned under the table.
- (m) The standard font of Times New Roman 12 pts should be used in tables, where possible. However, in case a thesis has many large tables, the font size may be reduced to Times New Roman 8 or 10 pts depending on the size of the table.

#### 14. Font Size

Title of Chapter	25
Level 1/Level 2/Level 3 headings	17/14/12
Text	12
Footnotes	10

**15. Footnotes**

There are two types of footnotes: “reference” and “content.” Reference footnotes refer to the source from which the information has been taken; content footnotes make incidental comments, amplify, or make acknowledgements. You must place content footnotes at the bottom of the page they refer to, regardless of whether the regular or scientific format is used.

**16. Length of Thesis**

It is recommended that work presented for the degree of PhD should normally be between 70-250 pages (counting from the first page of Introduction up to the last page of conclusion). In case of an MS thesis, the allowed size is in between 40-150 pages (counting from the first page of Introduction up to the last page of conclusion).

**17. Layout of the Thesis**

- (a) Title Page
- (b) Author Declaration
- (c) Plagiarism Undertaking
- (d) Abstract / Summary
- (e) Dedication
- (f) Acknowledgements
- (g) Contents
- (h) List of Figures (where applicable)
- (i) List of Tables (where applicable)
- (j) List of Algorithms (where applicable)

- (k) Abbreviations, Symbols and Nomenclature
- (l) Introduction Chapter (Set the scene and problem statement). This chapter should clearly define the problem statement and its motivation. Afterwards, it should also outline a summary of the novel contributions of the thesis and their impact on the field.
- (m) Review of the literature/related work and critical assessment, relation to own work. This must be a separate chapter irrespective of its length.
- (n) Methodology (Materials and methods), Results and discussion (analysis, design, implementation, and interpretation of results
- (o) Conclusions (short summary and detailed contribution)
- (p) Recommendations for future work
- (q) Bibliography (references)
- r) Appendices (where applicable).

## 18. Bibliography and References

References should be placed at the end of the last chapter and written on a separate sheet. IEEE (Institute of Electrical and Electronics Engineers) referencing style for Computer Science and Engineering, APA (American Psychological Association) for Management Sciences, Social Sciences & Linguistics, and AMS (American Mathematical Society) for Mathematics have been approved by the Rector for standard citation and referencing.

## 19. Appendices (if applicable)

- (a) Published work from the thesis might be included as Appendix (Reprints/ proof/ preprint) or any other

information specific to the respective discipline. All appendices should have the Appendix heading on top of the page as a header. This text should be right justified and in Times New Roman 12 pts bold.

- (b) There should be a reference to each Appendix in the main body of the thesis.

## 20. Binding

- (a) The final thesis and published work presented for higher degrees must be bound at the expense of the scholar in a permanent form or in a temporary (hard binding will be provided after defense of the thesis) where printed pamphlets or off-prints are submitted in support of a thesis, they must be bound in with the thesis or bound in such manner as Binderies may advise. To meet our obligations regarding Green Environment, the thesis pages should be printed (or photocopied) on both sides of a paper.
- (b) The front cover should be exactly similar as outlined in Item 2. The color of binding for different degrees in the Science subjects and Social Sciences is as follows:

PhD                      Dark Maroon

MS                        Black

- (c) Spine of the thesis should be a simple imprint of front cover mentioned in Item 2.

### A.1 Guidelines on bibliography/referencing and citation

Citations for books should include the following information in this order whenever possible: p. 693- 694 1. Full name of author(s) or editor as author or corporate/institutional author

2. Publication year 3. Title and subtitle 4. Editor, compiler, or translator in addition to author 5. Edition (only if not the first edition) 6. Volume information: total number of volumes of an entire multivolume work cited, individual volume of a multivolume work, title of individual volume if different from set 7. Series title and number (if applicable) 8. Facts of publication: city and publisher 9. Page information (if applicable) 10. For electronic books: URL or DOI [digital object identifier], or type of medium (Kindle, etc.)

## Appendix B: Responsibilities of a Supervisor

1. The expectations of students to their Supervisors, among others include, early direction of research project formulation and plan, exposure to research training, advice on research project, positive feedback, frequent meetings as asked for, guidance for meeting professional research standards and support and encouragement during the period of research. Foremost of all, it is important that a Supervisor should have expertise in the field of the candidate's research area and should not undertake to supervise if he has no expertise or interest.
2. By accepting a research student means a commitment to supervise the student until the completion of the project. The Supervisor should ensure that his/her students are aware of rules and regulations of the University on PhD and should see that all the desired facilities equipment and other material are made available to the students.
3. The primary duties of a Supervisor as mentor, guide and teacher are:
  - (a) Guiding students regarding all aspects of the project.
  - (b) Helping students to carry out an analysis of training and learning needs, to develop skills for scientific research and to train them to carry out research independently to professional standards.
  - (c) Establishing systematic and clear supervision arrangements and maintain contact through regular meetings from the start and should be accessible to the

student at other appropriate times when advice may be needed.

- (d) Undertaking training and other development events to help undertake the role of the Supervisor effectively and advising the candidate on the form and structure of the thesis, promptly reading, criticizing, and annotating draft chapters and ensuring that the candidate is (or becomes) familiar with internationally recognized guides to scholarly thesis, documentation of sources and plagiarism.
  - (e) Making sure that students are familiar with the professional standards of published work by getting them to read good PhD dissertations, review of literature and sources and participate in departmental seminars. The students should be encouraged to participate in seminars and conferences for their professional training and hone presentational skills. He/she should ensure that students have a professional attitude to research. Effective communication skills must be developed in the students and
  - (f) Preparing students for their viva, and advising on any subsequent corrections they may have to undertake.
4. The Supervisor and students must meet frequently to ensure that progress is not slowed down for want of constructive advice and criticism.
  5. The Supervisor must insist on seeing drafts of major chapters of the thesis and must respond as quickly as possible to the written submissions of the students.
  6. If the candidate is assessed having deficiency in an area, he should make necessary arrangements with the department for

removal of deficiencies of the student.

7. If at any time the candidate is dissatisfied with the supervision provided or the resources available or with any other matter affecting his/her progress, the candidate should report the matter to the Head of Department.

#### B.1 Guidelines for PhD Supervision

1. Prospective Supervisors should have a sufficient range of theoretical and methodical expertise to offer the student proper supervision. Except in rare circumstances, staff new to PhD supervision may not be principal Supervisors.
2. At the beginning of the student's research the Supervisor will give details of the facilities available in the Department and will guide students on the relevant use of library facilities, including approaching original literature and sources with a critical attitude and will give guidance on avoiding plagiarism.
3. The Supervisor should discuss with the students at the commencement of PhD study, the aims, scope and presentation of the thesis, and any orientation, required course work or supplementary training necessary for the research project. He will give appropriate guidance about the nature of research and the standard expected from the student. He is expected to provide continuing guidance to PhD students in the selection and planning of a meaningful and appropriate research topic and on the research being undertaken that can be successfully completed within the normal time limit for the degree program. Students have the right at the time of Supervisor and therefore must be given time to students for proper supervision.
4. The Supervisor should forewarn the students to commonly encountered tasks, processes and standards expected of



doctoral program in the field. This is a useful framework for helping the student to develop and refine a topic which can be researched and written up within the required timeframe.

5. The Supervisor needs to be well acquainted with the candidate's academic background so that if the proposed project needs additional skills and knowledge, the candidate can be informed how these might be acquired. Supervisors will also ensure that English language proficiency must be of acceptable standard. Where students are experiencing difficulty with their English, Supervisors will require them to attend English classes. He should ensure that students understand the relevant theories, knowledge, and background literature, and the methodological and technical skills necessary for the research.
6. Supervisors will give guidance on the systematic recording of data or theoretical calculations and the importance of keeping and maintaining a tidy, clear record of research that has been undertaken.
7. Once the topic is refined to the satisfaction of the Supervisor and the student, the Supervisor should assist the student to formulate a framework for the research and time estimates for the completion of various phases. The framework should reflect a realistic timetable for completion of the project. It should include several milestones to measure progress along the course of the PhD. These milestones may be modified as the research proceeds.
8. Supervisors will maintain regular contact with their students through tutorials or individual meetings. From the outset, Supervisors and students should ensure regular meetings schedule at regular intervals. In this context, it is helpful for the

students to minute these meetings for record and communications between the student and the Supervisor and serve as useful aide memoire. In addition to informal meetings, it is important that major reviews take place at least six monthly in order that the student's achieved work can be assessed within the overall scope of the study and the timeframe for completion.

9. Early in the student's candidature, the Supervisor must assess a student's written work. The Supervisor should be open, honest, and fair with the students when academic performance is not meeting expectations. In case of inadequate academic performance, it is in no one's best interests to prolong a program of study when success is unlikely. If the Supervisor considers that further work is required, the Supervisor should provide advice and assistance as to how an appropriate standard can be achieved. The Supervisor should continue to monitor the student's progress to resolve any ongoing difficulties.
10. In accordance with procedures, Supervisors will ensure that twice- yearly reports are made on all students during their period of registration with the campus and will also prepare any additional reports required by funding bodies. By submitting six monthly progress reports, the Supervisor must report to the GSC on the progress of each student and make clear recommendations on the nature of progress and should comment on whether progress is satisfactory or not. If satisfactory progress has not been made or the student is not PhD material, Supervisors will ensure that students are made aware frankly when progress is inadequate or when standard of work fall below those generally expected. The case should be submitted to GSC for a decision on closure of admission or

making any changes to the Supervisory regime considered necessary. The student has a right to appeal against such decision.

11. The Supervisor is expected to read any written work thoroughly, in advance of meetings, and provide regular feedback on the student's work. It is vital that criticism is given in a constructive and supportive way. Hard criticism may be avoided.
12. The Supervisor has a responsibility to ensure that candidates are included in the academic life of the department. The Supervisor should provide adequate opportunity and a positive environment for discussion and constructive criticism of ideas, research plans, research results, and thesis drafts as the research progresses. He should ensure that the research environment is safe, equitable, and free from harassment and discrimination. He should avoid personal or business relationships that may constitute a conflict of interest. Candidates should be required to present work-in-progress papers to their peers and academic staff. Candidates should be strongly encouraged to take part in departmental and/or interdepartmental seminars, conferences, informal functions, and the like. Reports from conferences should be conveyed to departments and research students. A supportive environment and a sense of collegiality are important influences in timely completion of research projects.
13. The students should not be left without supervision and in case of leave by the Supervisor; he should make alternate arrangements with another relevant Supervisor. In case of field work of student for extended period, he should remain in touch with the student through internet and provide necessary guidance.

14. In case the Supervisor joins another University and if the student is in advanced thesis writing stage and the change of Supervisor is not feasible, growth of information technology has made it possible to carry supervision in the distance learning mode through Skype and internet. But this mode cannot be allowed for long period and is not an alternative to face-to-face supervision.
15. The Supervisor should provide sufficient and appropriate guidance and commentary on progress to help ensure successful completion of the program. This should include:
  - (a) Establishing regular meeting times for discussion and review of progress.
  - (b) Planning to ensure continuity of supervision during leaves or extended periods of absence.
  - (c) Being aware of, and ensuring the student is aware of and abides by, all relevant policies and requirements for both the academic program and the research.
  - (d) Assisting and encouraging the wider professional development of the student by means such as: participation in seminars and colloquia.
  - (e) Attendance and presentation of work at local, national, or international conferences.
  - (f) Publication of work in appropriate journals and encouraging students to take advantage of the numerous offerings provided by the University for Professional Development.
  - (g) Helping the student in the transition from degree program to employment by providing advice on career options.

16. There are some instances when Supervisory relationship breaks down. In such cases, the Supervisor should see to it through the Head of Department to make arrangements which are to the satisfaction of the student.
17. Where appropriate Supervisors will encourage students to produce written work, which may often provide a basis for the preparation of the final thesis; they should return such work with constructive criticism and in reasonable time. The Supervisor will impress upon students the need to complete and submit work by agreed deadlines.
18. Postgraduates should be encouraged to publish their work, jointly with Supervisors when appropriate. Normally, Supervisors will encourage their students to publish, singly or jointly, the results of research as they emerge and are suitable for publication.
19. The Supervisor must make sure that the final draft of PhD thesis submitted by the students is read by him before submission.
20. Supervisor should impress upon the student that original research contributions come through hard work, diligent review, concentration, and analysis.
21. Supervisor may decide whether to upload the thesis on Turnitin repository or not.

## Appendix C: Appointment of Co-Supervisor

Under the following conditions, a co-Supervisor may be appointed for MS or PhD student for guidance and supervision of research work:

### C.1 Appointment of Co-Supervisor

1. The topic of Research is cross-disciplinary and supervision from another discipline, either within or outside the University is essential.
2. The current Supervisor resigns or proceeds on long leave *but* agrees to continue to provide guidance.
3. The current Supervisor, in consultation with the department, decides to involve another faculty member (from FAST-NUCES or other University) to safeguard interest of the student in any adverse situation.

### C.2 Assignment of Co-Supervisor

1. At the MS level, Co-Supervisor is to be assigned by the Graduate Studies Committee (GSC), on the recommendations of the Supervisor and the Head of Department (HOD).
2. At the PhD level, Co-Supervisor is to be assigned by the Board of Advanced Studies and Research (BASR), on the recommendations of the Supervisor, HOD and GSC.
3. In both the above cases, a Consent Form duly signed by the current Supervisor, the proposed Co-Supervisor and the student is to be submitted to the HOD.

### C.3 Remuneration for Co-Supervisor

Co-Supervisors will be entitled to receive a share out of the

total remuneration approved for the Supervisor which will be decided by the GSC in consultation with the main Supervisor of the student.

#### C.4 Other Conditions

Following additional conditions are to be incorporated while assigning co-Supervisors:

1. In case the Supervisor leaves, the Co-Supervisor (if internal) becomes the Supervisor.
2. An External Supervisor would always be designated as a co-Supervisor.
3. All documents of GSC and BASR should mention the names of the Supervisor as well as Co-Supervisor.

## Appendix D: Documents Required at Thesis Submission

Final thesis along with the following documents should be submitted to GSC by the Supervisor.

1. Copy of NTS-GAT/International GRE Subject Test score or FAST-NUCES Admission Test.
2. Copy of letter issued by the University confirming the PhD admission of the student.
3. Transcript of the student confirming that the student has
  - (a) Completed the required PhD coursework, and
  - (b) That the student had registered for PhD Theses (I, II, III and IV) in four different regular semesters and had obtained S (Satisfactory) grade in Thesis I-III.
4. Copy of the Result of Comprehensive Exam, confirming that the student passed the exam by obtaining the required score.
5. Plagiarism check report of the PhD thesis using turnitin.com by ensuring that the similarity index is less than 19% excluding the similarity with the student's own publication(s).
6. Copy of the Journal paper on the basis of which the journal requirement is claimed to have met. The student must be the first author in this paper.
7. Copy of the complete correspondence between the author and the Journal office. This includes all review reports, all response documents, and intermediate changes made to the paper.



8. Final acceptance letter of the journal paper.
9. Names of two foreign reviewers and their consent to review the thesis. The evaluators should have published in the same field as that of the thesis.

## Appendix E: Guidelines for Writing PhD Synopsis

Following are the guidelines for writing a PhD synopsis document. Typical length of the document ranges from 4-6 pages. Each document must have a cover page which has the following information:

1. First line should be “PhD Research Proposal.”
2. Second line should be title of the proposal.
3. Followed by logo of FAST-NUCES.
4. The next line should be name of the student, followed by his/her roll no and the name of the Supervisor and co-Supervisor (if any)
5. Last line should be name of the University.

The document must contain following sections/information.

1. Introduction: Theme of research should be introduced with background information indicating its importance and relevance with overall objectivity and area of research.
2. Review of literature: Review of literature should be comprehensive covering various aspects of the proposed work, but it must be precise with recent information. Detailed review at this stage is not required.
3. Methodology: Techniques in brief should be given in respect of specific experiments/observations only. Methods of routine nature need not be described.
4. Proposed plan of work: This part of the synopsis is very important. Different aspects of the proposed plan of work should be given into separate components/chapters/sub-

projects. Each component/sub-project should have detailed titles of various experiments proposed to be performed. Wherever possible, area of research be mentioned indicating whether studies would be performed in the laboratory or in some specific field conditions.

5. Expected Conclusions: Researcher may indicate the conclusions, which are expected to be drawn from the proposed studies.
6. References: References should be listed alphabetically author wise. In the text, the reference should be quoted as Sen-Sarma (1980) or Sen-Sarma and Thakur, (1981) or Sen-Sarma et al. (1982) for single, two and more than two authors, respectively. Papers by the same author in the same year should be distinguished by letters, a, b, c, etc.

# Appendix F: Sustainable Development Goals (SDG) Mapping Table

This table is recommended to be included in the PhD dissertation. The table will be filled out by the student and validated by the Supervisor.

SDG	Description	Direct Mapping	Indirect Mapping
1	No poverty	<input type="checkbox"/>	<input type="checkbox"/>
2	Zero hunger	<input type="checkbox"/>	<input type="checkbox"/>
3	Good health and well-being	<input type="checkbox"/>	<input type="checkbox"/>
4	Quality Education	<input type="checkbox"/>	<input type="checkbox"/>
5	Gender equality	<input type="checkbox"/>	<input type="checkbox"/>
6	Clean water and sanitation	<input type="checkbox"/>	<input type="checkbox"/>
7	Affordable and clean energy	<input type="checkbox"/>	<input type="checkbox"/>
8	Decent work and economic growth	<input type="checkbox"/>	<input type="checkbox"/>
9	Industry, innovation and infrastructure	<input type="checkbox"/>	<input type="checkbox"/>
10	Reduced inequalities	<input type="checkbox"/>	<input type="checkbox"/>
11	Sustainable cities and economies	<input type="checkbox"/>	<input type="checkbox"/>
12	Responsible consumption and production	<input type="checkbox"/>	<input type="checkbox"/>
13	Climate action	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SDG	Description	Direct Mapping	Indirect Mapping
14	Life below water	<input type="checkbox"/>	<input type="checkbox"/>
15	Life on land	<input type="checkbox"/>	<input type="checkbox"/>
16	Peace, justice and strong institutions	<input type="checkbox"/>	<input type="checkbox"/>
17	Partnership for the goals	<input type="checkbox"/>	<input type="checkbox"/>

Student Signature

Supervisor Signature

## Appendix G: Ethical Research Statement

The Ethical Research Statement is to be included in the final dissertation. It should be signed by the student as well as by the Supervisor. The proper mechanism of validating ethical compliance of the PhD. work as per the University specific criteria should be followed.

*It is acknowledged and confirmed that the research work in this thesis complies with the Ethical Research Guidelines of the University and the HEC.*

*Signature of the Student*

*Signature of the Supervisor*

## Appendix H: Declaration of Authorship for Thesis

*'I hereby declare that the Thesis submitted is my own, original work, completed independently without any unauthorized assistance. Only the sources and resources explicitly cited have been utilized. All excerpts, whether quoted directly or paraphrased, have been properly acknowledged.'*

*If generative AI tools were used, I have clearly indicated the product name, manufacturer, software version, and the specific purpose (e.g., language enhancement, systematic research). I take full responsibility for the selection, application, and interpretation of any AI-generated content incorporated into this work. List of prompts along with corresponding page number where they are used is listed in the appendix“.*

