



National University
of Computer & Emerging Sciences

PhD HAND BOOK

(Rules and Regulations)

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Nomenclature

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

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.

2 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 HEC-approved PhD supervisors. If required, one or two external experts may be co-opted. These experts must also be HEC approved PhD 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 by the Rector to liaise with the Head Office.
- (d) The GSC committee may include representative staff of QEC and Academics office as observers.

2.2 Responsibilities

2.2.1. 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 for evaluating thesis and conducting defense;
- (f) Closure of admission;
- (g) Award and suspension of fellowship cases

2.2.2. 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 BASR.

2.2.3. Recommendations on graduate programs related policies.

2.2.4. Any other relevant matter.

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 8years, NUCES encourages its students to complete the requirements in maximum 6years. Extension may be granted for genuine reasons.

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

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

4 Admission in PhD Program

4.1 EligibilityCriteria

- 4.1.1. Must have completed 18 years of education, MS/MPhil/MBA, from an HEC recognized university.
- 4.1.2. Minimum CGPA of 3.0 (out of 4.0 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 area specialization chosen at the PhD level, is required. The result should be valid at the time of admission.
- 4.1.4. If NUCES conducts its own admission test, then minimum. required score is 70% (Valid for one semester only).

4.2 Procedure

- 4.2.1. Applications for admission are entertained through out 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.
- 4.2.2. Admission shall be given subject to availability of supervisor in the area of research. Formal consent from the supervisor must be taken before the admission.
- 4.2.3. Provisional admission shall be given on the recommendation of campus GSC.
- 4.2.4. Cases of new admissions shall be sent to NUCES-HQ. Based on supervisory workload and availability of HEC Approved Supervisors, the HO will issue Provisional PhD Admission Letter(s)
- 4.2.5. The period for PhD studies shall be counted from the date of admission to the program.

4.3 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 areas follows:

- Advisory committee is responsible for monitoring the progress of the student and helping the student to improve his/her research work.
- The committee would comprise of the members having expertise in the area of research.
- 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. During course work, each student will register courses in consultation with the supervisor.
- 5.2. Minimum normal work load is 6 credit hours.
- 5.3. 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.
- 5.4. Students away from campus for an extended period (e.g., for field research) must register in absentia for the semester.
- 5.5. Supervisor to decide whether to upload the Thesis is turn it in repository or not.
- 5.6. Students shall register in Thesis-IV subject to the Thesis is ready to be forwarded to the Foreign Reviewer.

6 PhD Course work

On admission, each student should immediately start his coursework:

- 6.1. A student shall complete 18 credit hours of course work without any exemption.
- 6.2. During course work, students will get credit for PhD level courses only.
- 6.3. Minimum passing grade in each course is B-.
- 6.4. Normal course load is three courses per semester. This load can be reduced upon consultation with the supervisor.
- 6.5. Attendance is mandatory for each course. A student with attendance less than 75% is debarred from the final exam and awarded FA grade.

- 6.6. A course not offered by the University may be taken at another University/Degree awarding institute recognized by the Higher Education Commission (HEC) of Pakistan. Such courses can only be taken on the advice of the supervisor and after approval from the Campus GSC. Maximum of two 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.
- 6.7. CGPA through out the course work stage should be minimum 3.0. CGPA below 3.0. will result in an academic warning. After three consecutive warnings admission of the student will be closed. Securing CGPA greater than or equal to 3.0. will remain the warning, and reset the warning count.

7 Comprehensive Examination

Each student shall take comprehensive examination after completing PhD course work.

- 7.1. Scope of the examination shall be limited to the PhD courses studied by the student.
- 7.2. GSC Coordinator will be responsible for conducting this exam.
- 7.3. GSC Coordinator is required to seek approval of Rector for conducting Comprehensive Exam by presenting information of the eligible student, question papers and examination schedule.
- 7.4. Comprehensive Examination will be arranged before the start of Spring and Fall semesters.
- 7.5. 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.
- 7.6. Comprehensive Examination is one and monolithic, even though question papers will be made by instructors of six different courses.
- 7.7. A student must pass the Comprehensive Examination in a

- maximum of two attempts. These second attempt must be within six months of the first.
- 7.8. The pass percentage of Comprehensive Examination shall be 60% in aggregate.
 - 7.9. The result shall be compiled by the GSC Coordinator and it will be shared with the student, student's supervisor, HoD and Head Office.
 - 7.10. BASR will give the final approval of the result.

8 Research Phase

- 8.1. A student shall start his/her research only after passing the Comprehensive Examination. The student shall spend a minimum of 20 hours per week at the campus during the research phase (Thesis I, II, III and IV)
- 8.2. Student must spend at least 4 semesters (Thesis I - IV) in his/her research phase after clearing the Comprehensive Exam.
- 8.3. Research period can be extended till the expiry of the maximum time allowed for completing PhD.
- 8.4. During the research phase, student shall register in Theses I-IV in the next four semesters.
- 8.5. Student shall advance to the next thesis only after getting a Satisfactory grade in the enrolled thesis.
- 8.6. 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.
- 8.7. 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.
- 8.8. The student may carry out a portion of his/her research work in a reputable institute located in a developed country. Any 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 the 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 his/her synopsis by the end of Thesis I.
- 8.9.2. Implementation & Compilation of results during Theses II & III, student is expected to conduct research and publish the work in different venues including some reputed journals conferences.
- 8.9.3. Writing of Thesis Student should write, submit and defend the thesis in Thesis IV.

9 Thesis Submission

- 9.1. After completing research work and publication of at least one research paper based on PhD research in an HEC approved “W” or “X” category journal.
- 9.2. The PhD thesis shall be evaluated by at least two foreign experts from technologically / academically advanced countries. The name of these experts shall be recommended by the department and GSC and approved by the BASR. A thesis defense shall only be arranged if favorable evaluation reports are received from both the foreign experts.
- 9.3. Student must be enrolled in Thesis IV at the time of submission of thesis.
- 9.4. 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/her 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/she has availed of the work of others ; and the portion of thesis that he/she claims his/her 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 or equal to 19% with not more than 5% match with any single source.
- 9.5. Final PhD thesis along with other required documents will be submitted by the supervisor to GSC. Supervisor will ensure that the thesis formatting conforms with 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.
- 9.6. A PhD thesis will be considered as officially submitted only after it, 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 student to GSC at the end of each semester.
- 10.1.2. The cases with adverse reports must be discussed in the upcoming 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 (Continued Research) grade
- 10.2.3. Student shall promote to the next thesis only after securing 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. 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.

10.4 Thesis Evaluation by Foreign Experts

- 10.4.1. PhD thesis shall be evaluated by at least two experts from technologically/academically advanced foreign countries.
- 10.4.2. The supervisor shall propose Three to Five Foreign Examiners to GCS. These names shall be considered by GSC, and it shall decide their order to preferences. The supervisor shall contact the approved Foreign
- 10.4.3. GSC will recommend foreign evaluators to Head Office for the final approval by BASR.
- 10.4.4. Final thesis defense shall be arranged only after receiving favorable evaluation reports from at least two foreign experts.
- 10.4.5. If a foreign evaluator does not give a favorable report, the student will revise the thesis in the given time, and re submit to the same foreign evaluators.

10.4.1 Criteria for the appointment of foreign expert

- 10.4.11. Expert must be a PhD in the relevant field and an eminent and active researcher in the respective field.
- 10.4.1.2. Expert must have at least one HEC-approved journal

publication and two conference publications (or equivalent) in the last five years.

- 10.4.1.3. Expert must have no significant personal, professional or contractual relationship with PhD candidate.
- 10.4.1.4. Expert 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 for of GCS conducting final thesis defense. Examination committee shall have at least three members, including the supervisor. At least one member shall be from out side the University.
- 10.5.2. The public defense of thesis shall be announced in well-known public forums.
- 10.5.3. 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 on the basis of thesis report, public presentation, evaluation reports by foreign experts, oral examination of the student, and quality of publications ensuing from there search work.
- 10.5.5. The result of thesis defense shall be one of the following:
 - (a) Thesis is accepted.
 - (b) Thesis is accepted with amendments, which shall be implemented with in one month from the date of the thesis defense. A certificate of compliance issued by the supervisor shall be required.
 - (c) Thesis is judged as adequate but the student fails to satisfy the Examination committee in oral examination. The student may be permitted to redefend the thesis and appear for another oral examination by the same examination committee with in the time specified by them . Re-defense

can take place only once.

- (d) Thesis is adjudged as inadequate. The Examination committee may either reject the work or recommended that the student may be permitted to submit a revised thesis within six months. The re-submitted thesis will be again evaluated by the same examination committee, if possible. Re-defense can take place only once.

10.5.6. The Examination committee shall strive to reach unanimous decision. In case of different 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. Student may request for change in the topic of research by applying to GSC. This request must be duly supported by the supervisor.

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

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

12 Rules for supervision & responsibilities of supervisor

Maximum number of PhD students under the supervision of a HEC approved full time faculty member shall be five.

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

13 Responsibilities of Student

- PhD students are responsible for working towards completion

of their degree programs in a timely manner.

- PhD students are expected to expand the knowledge of their chosen disciplinary field by discovering and pursuing a unique topic of scholarly research, resulting in the PhD dissertation.
- It is the student's responsibility to ensure continued progress of his or her academic program and thesis research.
- Students has a responsibility for the following aspects of their 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: He/she 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: He/she should discover and pursue a unique topic of research in order to construct new knowledge and to apply this knowledge to existing problems and issues.
- 13.1.4. Communication: He/she should communicate regularly with the supervisor providing him with updates on the his/her progress in research activities.
- 13.1.5. Integrity and ethics: He/she should assume the highest integrity and maintain ethical standards in all aspects of the 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: He/she should contribute wherever possible to the scholarly discourse of the discipline through presentation presentations and publication. He/she should attend and participate in appropriate meetings, colloquia, seminars 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: He/she should maintain a clean and safe work environment, including, but not limited to, offices spaces, laboratory spaces and common space.
- 13.1.8. Mentors: He/she 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 a mentor to others when appropriate.

13.2 Community and Administrative

- 13.2.1. Familiarity with policies: He/she 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 addition 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 Coordinator for program specific limits on vacation time and must receive approval for all vacation time from their advisor. Students away from campus for an extended period during any academic semester (e.g. for field research) must register in absence for the semester.
- 13.2.3. Employment: He/she should not to 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 advisor, GSC and the Director of Campus. However faculty members are exempted from this condition. Self finance students may work with the approval of their PhD supervisors provided it does not hinder their satisfactory progress.

14 Issuance of Degree

- The PhD degree under the seal of the University shall be awarded to the successful student after approval of the BOG, provided the students has completed all requirements for the award of Phd degree and has been recommended by the BASR. In case meeting of the BOG cannot be convened early and a candidate has fulfill all the requirements for the 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 the BOG.
- Students who have completed their PhD degree requirements submit following documents to GSC office.

To get the PhD degree, properly filled PhD completion form. along with the following items/documents must be submitted to GSC.

- 14.1. Three CD containing PhD Thesis, presentation and publications information.
- 14.2. Similarity report;
- 14.3. Hard copies of publications;
- 14.4. Copy of GRE score;
- 14.5. GSC minutes in reference to recommendation of case of PhD admissions, approval of international and external/local viewers, PhD graduates of NUCES who did their degrees five years ago can be allowed to review the PhD Thesis of NU scholars.
- 14.6. Hard and soft copies of International and Local Reviewers reports
- 14.7. BASR references in respect of PhD admission, approval of International and local reviewers;
- 14.8. Soft and Hard copies of PhD Country Directory and PhD Completion Form as per HEC format.
- 14.9. Hard copy of scholar clearance certificate from the campus.

and

14.10. Five hard copies of PhD thesis.

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 reason 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, non payment of due, expiry of maximum allowed time. Any such action shall be recommended by GCS and approved by BASR.

15.2.2. Failure to find an internal/external supervision 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 NUCES to some other University.

15.2.6. On student's 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 the BASR.
- 15.3.2. Freezing time will be included in the calculation of time spent by a student in a degree.
- 15.3.3. At most two semesters can be frozen during PhD studies. These may be consecutive.

15.4 Extension in PhD Admission

- 15.4.1. In exceptional cases BASR may allow extension for successful completion of PhD degree beyond 6 years.
- 15.4.2. Such request must be vetted and recommended by supervisor, GCS and HoD of the department.
- 15.4.3. Extension requests for HEC scholars will be forwarded to HEC after recommendation from BASR. HEC shall give the final decision.

15.5 Transfer of PhD from NUCES to another University

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 NUCES from another University

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

- (a) Intra-University change will be handled by the University.
- (b) Inter-University change will be handled as per the SOP defined by HEC.
- (c) GSC will forward all such requests to BASR for final approval.
- (d) The relevant department may also recommend change of supervisor in case it becomes necessary due to any justiable reason.
- (e) No relaxation in the total permissible time span of the PhD shall be given in such cases.
- (f) Head Office will inform HEC of such change in case of HEC scholar.

15.7.1 Intra University

- (a) Duly filled change of supervisor form will be submitted by the student.
- (b) GSC will discuss the request and will recommend it to BASR for formal approval.

15.7.2 Inter University

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 Supervision along with the profile of the new supervisor.

15.8 Withdrawal of Supervision

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

- 15.8.1. Supervisor will warn the student in writing on two different occasions. A copy of the warning letter will be sent to HoD of the concerned department and GSC Coordinator as well as NUECS-HQ for filing.
- 15.8.2. After two consecutive warnings supervisor can forward the case to GSC for further action.
- 15.8.3. GSC will forward the request after deliberation to BASR for formal approval.
- 15.8.4. GSC will consider the biannual progress report of the student during its deliberations (see section 10.1 (Page 10) for details).

15.9 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.

15.10 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

16 Payment of Fee

- 16.1. At the time of admission, PhD student shall pay full tuition fee and admission fee. Admission fee will not be realized in case of FAST-NU graduates. Fee for PhD studies will be paid for a minimum period of three years on semester basis.
- 16.2. Students who go beyond the minimum duration of 3 years, no tuition fee may be charged if the supervisor issues a certificate stating that substantial research work has been completed and that the candidate is not using campus facilities any more. In case University facilities are used, student will be liable to pay fee for the period of his/her extended period of studies at the University.

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

17 Professional Ethics

- 17.1. 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.
- 17.2. Duplicate publication : Republishing one's own work is self-plagiarism and is punishable under University rules.
- 17.3. 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.
- 17.4. 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 University rules.

18 Fellowship Program

FAST NU 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:

18.1 Scholarship

- (a) Scholar should secure Admission at 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.
- (b) GSC shall consider application of newly admitted PhD students and recommended 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 registration/leave by the employer.
- (f) Upon approval of Fellowship by BASR, Fellowship with commence from the start of the ongoing semester or from the date of acceptance of his/her resignation/leave, whichever is later.

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 and may be extended for a maximum of one year by the BASR. After first year of Fellowship, a PhD Fellow shall teach one course in each semester to a section of undergraduate students. The department shall receive an amount of Rs100,000 per annum for purchase of equipment, books or to cover research publications expenses.

18.2 Eligibility

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

- Minimum CGPA of 3.00 in Bachelor degree (earned after at least 16 years of education)
- Minimum CGPA of 3.30 in MS or an equivalent degree
- Passed Subject test of Local GAT or International GRE (minimum 70 percentile)

18.3 Selection

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

18.4 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.

18.5 Progress milestones

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

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

18.6 Suspension of Scholarship

If due to illness or any other family circumstances, the scholar has to break 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 with drawl if discontinuation exceeds twelve months.

19 Readmission in PhD

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 may 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.

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 12pts 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) Seven 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 18pt font size properly centered located at the top of the page.
- (b) Name of the Department in 17pt font size properly centered.
- (c) A replica of the University Monogram.
- (d) Full title of thesis in 24pt font size properly centered.
- (e) Full name of the candidate in 21pt font size properly centered.
- (f) Name of maximum degree obtained in 21pt font size properly centered.
- (g) Year of submission in 21pt font size properly centered.

3. Certificate of Approval : A specimen of certificate to be signed by 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. **Abstract:** An abstract of 500 words (maximum) shall highlight the important features of the thesis. It is to be a brief description of a scholar's 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
7. **Acknowledgments [Optional]:** The acknowledgments should not be more than one page.
8. **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 70gm or more (height 297mm, width 210 mm) be used, no restriction is placed on drawings and maps.
- (b) The top and bottom margins should be 25mm, whereas the left margin should be 35mm for odd page numbers and 25 mm for even page numbers; similarly, right margin should be 35 mm for even page numbers and 25mm for odd page numbers (Additional margin of 10mm 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 foot note, last line of chapter/subdivision, or figure/table caption.
- (c) A sub-head at the bottom of the page should have atleast 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 once to flush once to flush with the thesis margin (if the page size does not exceed 250x360mm).

11. **Pagination**

- (a) Beginning with the first page of the text in the thesis (Chapter1), 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 have to be counted in numbering, however, the page number should not be displayed on them. The title page should not to 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 pages as header. The header should be underlined. The text in the heading should be in Times New Roman. 10pts. 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 65mm. Chapter number and title shall be left justified with 25 pt font size for chapter title and 17pts for chapter number in title face by making the first letter capital of every word other than prepositions. A vertical gap of about 1line (at 25pt 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 references as possible, and should appear after the textual de reference.
- (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, tables etc. exceeding A4size (8.5inches'x11 inches or 21.5cmx28cm) should be folded so as 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 the reviews and focus group discussions) should be typed in Times New Roman 12pts 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 with in a paragraph, in which case quotation marks should be used, the font size to be used should remain Times New Roman 12pts 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 12pts should be used in tables, where possible. However, incase 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
Level1/Level2/Level3 headings	17/14/ 12
Text	12
Foot notes	10

15. **Footnotes:** There are two types of foot notes, “references” and “content”. Reference footnotes refer to the source from which the information has been taken; content footnotes make incidental comments, amplify, or make acknowledgments. 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 upto 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 thesis and the 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 12pts 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 the same outlined in Item 2 (Page 21). 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 (Page21).

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 multi volume 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 application)
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/she 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 students 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 literatures and sources and participate in departmental seminars. The students should be encouraged to participate in seminars and conferences for their professional training and one presentational skills. He/she should ensure that students have a professional attitude to research. Effective communication skills must be developed in the students.
 - (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/she 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 HoD.

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 students 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 to the time of supervisor and therefore must be given time to students for proper supervision.
4. The supervisor should foreword the students to commonly encountered tasks, processes and standards expected of doctoral program in the particular 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 time-frame.
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 have an understanding of 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. Having such a framework and realistic time table for completion of the project preferably including a number of milestones to measure progress along the way which may be modified as the research proceeds will give a sense of focus and will be useful for writing the thesis.
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 minuted these meetings for record and communication between the students 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 time-frame for completion.
9. Early in the student's candidature, the supervisor must make an assessment of 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 in order to resolve any on going 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 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 department and/or interdepartmental seminars, conferences, informal functions and the like. Reports from conference 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/she should make alternate arrangements with another relevant supervisor. In case of field work of student for extended period, he/she 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) Making arrangements 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 HoD 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 dead lines.
 18. Postgraduates should be encouraged to publish their work, jointly with supervisors when appropriate. Normally, supervisor will encourage their students to publish, singly or jointly, the results of research as they emerge and a resuitable for publication.
 19. The supervisor must make sure that the final draft of PhD thesis submitted by the students is read by him/her 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 to safe guard 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 GSC on the recommendations of the Supervisor and the HoD.
2. At the PhD level, Co-Supervisor is to be assigned by the HoD on their 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 or International GRE Subject Test Score.
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 course work, and
 - (b) That the student had registered for PhD Thesis (I,II,II 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 by ensuring that the similarity index is less than 20% 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 include shall 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 evaluators 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 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 in dictating its importance and relevance with over all 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. Whenever possible area of research be mentioned in dictating 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. (1982) (1982) for single, two and more than two authors, respectively. Papers by the same author in the same year should distinguished by letters, a, b, c,etc.



National University

of Computer & Emerging Sciences



Islamabad

A.K. Brohi Road, H-11/4

Tel: (051) 111 128 128



Chiniot - Faisalabad

Loonaywala Stop

9km from Motorway Interchange

Faisalabad-Chiniot Road

Tel: (041) 111 128 128



Karachi

Shah Latif Town (on National Highway)

Tel: (021) 111 128 128



Lahore

Block-B, Faisal Town

Tel: (042) 111 128 128



Peshawar

160 Industrial Estate, Hayatabad

Tel: (091) 111 128 128



For Further Query, please contact:

registrar@nu.edu.pk