

Minimum Criteria for MS/M.Phil and Ph.D. Programs

This is for the information of all concerned that the degrees awarded by the Universities/Degree Awarding Institutions must meet the following minimum criteria for recognition by the HEC.

MS/M.Phil Programme:

1. Sixteen years of schooling or 4 year education (130 credit hours) after HSSC/F.A. /F.Sc/Grade 12 equivalent will be required for admission in the M.Phil/MS.
2. The GAT-General (www.nts.org.pk/gat/gat.asp) conducted by the National Testing Service with a minimum 50% cumulative score will be required at the time of admission to M.Phil/M.S. The GAT-General test is valid for a period of two years.
3. For award of M.Phil/M.S/Equivalent degree, candidates will either need to complete 30 credit hours of course work or complete 24 credit hours of course work along with a minimum of 6 credit hours for research work/thesis.

(*a. 6 credit hours of research is mandatory for M.Phil. However, exemption may be allowed only for MS in those disciplines where research is not possible. (This exemption from research can only be for non-science subjects/disciplines)

(*b. The Head of Department may allow the student to do course work of 6 credit hours in lieu of 6 credit hours of research. This exemption can only be allowed if the student wants to terminate his/her course at MS and do not want to do PhD.

PhD Programme:

Admission requirement:

1. For admission into the PhD minimum CGPA 3.0 (out of 4.0 in the Semester System) or First Division (in the Annual System) in M.Phil/M.S/Equivalent is required.

Subject Test:

2. A subject test conducted by the National Testing Service (NTS) or ETS, USA in the area of specialization chosen at the PhD level must be cleared prior to admission for the PhD Program.
 - a. In the case of GAT Subject test (<http://www.nts.org.pk/GAT/GATSubject.asp>) a minimum of 60% marks is required to pass the test.
 - b. In the case GRE subject test, the minimum score will be acceptable as follows:
 - i. 45% Percentile Score: Valid for Admissions until December 31, 2010
 - ii. 50% Percentile Score: Valid for Admissions until December 31, 2011.
 - iii. 60% Percentile Score: Valid for Admissions thereafter.
 - c. If the Test is not available in NTS subject list, then a University Committee consisting of at least 3 PhD faculty members in the subject area and approved by the HEC will conduct the Test at par with GRE Subject Test and qualifying score for this will be 70% score.
 - d. Students admitted in PhD Programs after August 25, 2010 have to submit the requisite GAT Subject or GRE Subject within period of one year that is by October 31, 2011.

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Course Work:

3. Course work of 18 credit hours preferably in the first year is required to be completed and followed by a comprehensive examination for granting candidacy as PhD researcher.

Foreign Expert Evaluation:

4. The Ph.D. Dissertation must be evaluated by at least two Ph.D. experts from technologically/academically advanced foreign countries in addition to local Committee members.

Open defense:

5. An open defense of Dissertation is essential part of PhD Program after positive evaluation.

Research Paper:

6. Acceptance/publication of at least one research paper in an HEC approved "X" category journal is a requirement for the award of Ph.D. degree ("Y" in case of Social Sciences only).

Plagiarism Test:

7. The Plagiarism Test must be conducted on the Dissertation before its submission to the two foreign experts, as described below.

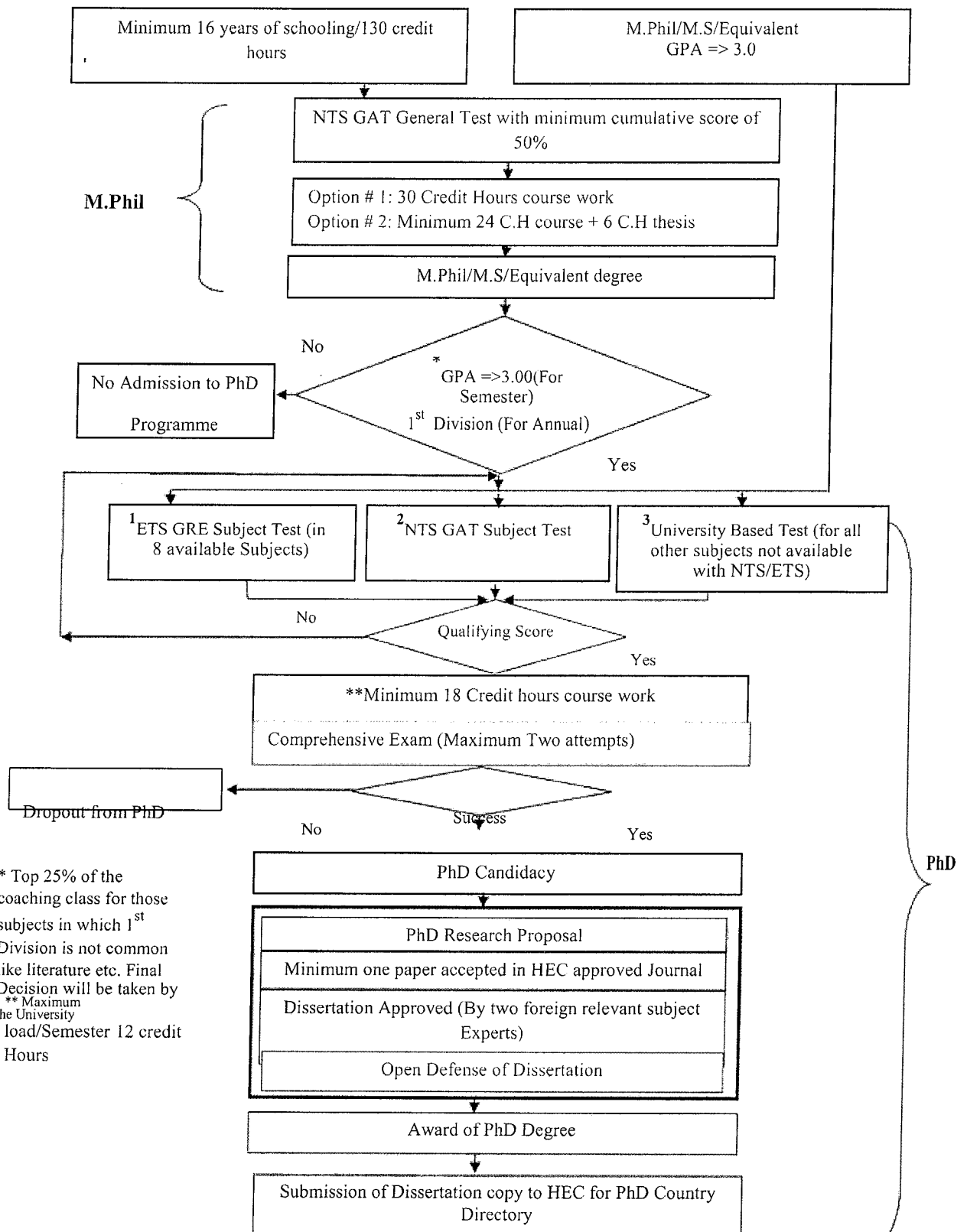
Copy of PhD Dissertation to HEC:

8. A copy of Ph.D. Dissertation (both hard and soft) must be submitted to HEC for record in Ph.D. Country Directory and for attestation of the PhD degree by the HEC in future.

Conduct of PhD Program:

9. There should be **at least 3 relevant full time Ph.D. Faculty members** in a department to launch the Ph.D. program.
10. The maximum number of Ph.D. students under the supervision of a full time faculty member is **five** which may be increased to **eight** under special circumstances in certain teaching departments subject to prior approval of the Higher Education Commission (HEC).

Flow Diagram for Minimum Quality Criteria for M.Phil/MS & PhD



Note: These are minimum HEC requirements and universities may make them more stringent.

1. ETS GRE-Subjects:

- 1) Biochemistry, Cell and Molecular Biology
- 2) Biology
- 3) Chemistry
- 4) Computer Science
- 5) Literature in English
- 6) Mathematics
- 7) Physics
- 8) Psychology

Minimum Qualifying Score: The minimum acceptable scores are as follows:

- i. 45% Percentile Score: Valid for Admissions until December 31, 2010
- ii. 50% Percentile Score: Valid for Admissions until December 31, 2011.
- iii. 60% Percentile Score: Valid for Admissions thereafter.

2. NTS GAT Subjects:

Presently the NTS has arrangements for the following Subjects and the Minimum Qualifying Score is 60 % Cumulative Score.

- | | |
|---------------------------|---------------------------------|
| 1 Agriculture Sciences | 18 Management Sciences |
| 2 Architecture | 19 Mathematics |
| Biochemistry, Cell and | 20 Mechanical Engineering |
| 3 Molecular Biology | 21 Physics |
| 4 Chemistry | 22 Psychology |
| 5 Civil Engineering | 23 Statistics |
| 6 Computer Engineering | 24 Telecom Engineering |
| 7 Computer Science | 25 Urdu |
| 8 Economics | 26 Veterinary (Animal Sciences) |
| 9 Education | Veterinary (Bio-Medical |
| 10 Electrical Engineering | 27 Sciences) |
| 11 Electronics | Veterinary (Clinical Sciences) |
| 12 Environmental Sciences | 28 |
| 13 Geography | Veterinary (Patho-Biological |
| 14 History | 29 Sciences) |
| 15 Islamic Studies | |
| 16 Library Sciences | |
| 17 Literature in English | |

3. University Based Tests:

Every effort should be made to identify a GAT Subject test that the PhD applicant must take. In case this is really not possible. It is the responsibility of the respective universities to arrange for the Subject test at par with the GRE-Subject Test in all other subjects currently not available in the ETS and the NTS List. A University Committee consisting of at least 3 Ph.D. faculty members in the subject area with prior approval of the HEC will conduct the Test at par with GRE Subject Test.

Minimum Qualifying Score: 70% Cumulative Score

FAQs for M.Phil/M.S and PhD Programme

Q. I have sixteen years of education with second class/division. Am I eligible for admission into the M.Phil/MS programme?

A. Provision of admission in M.Phil/M.S programme based on first/second/third class/division is prerogative of University/Institution. Institutions are required to follow minimum requirements of the HEC and they may stringent these criteria at their own.

Q. I have qualified GAT General with 50% and have sixteen years of education but University is denying admission on the pretext that qualifying score should be 60%?

A. The HEC requires that scholars should pass NTS GAT test with minimum 50% score but Universities can ask for more score as per their policies.

Q. Is it necessary that GAT test should be qualified with minimum of 50% cumulative score before admission into the M.Phil/M.S programme?

A. Yes, GAT test conducted by the National Testing Service is required to be qualified with a minimum 50% score at the time of admission to M.Phil/M.S.

Q. I have acquired admission in the PhD programme during 2006, what should be International GRE (Subject) qualifying score for me?

A. All students enrolled after May 31, 2005 and before July 31, 2008/ Fall 2008 are required to qualify International Subject (GRE) with 50% (percentage) passing score. After Fall 2008 following minimum score will be required:

- i. 40% percentile Score: Valid for admissions until December 31, 2009
- ii. 45% percentile Score: Valid for admissions until December 31, 2010
- iii. 50% percentile Score: Valid for admissions until December 31, 2011
- iv. 60% percentile Score: Valid for admissions thereafter

Q. I am going to appear for International GRE (Subject) in February 2010. I was enrolled in 2007. How much qualifying score is required in my case?

A. As you were enrolled during 2007 (prior to implementation of percentile score i.e. July 31, 2008/Fall 2008). Therefore, 50% (percentage) score will be required for qualifying International GRE (Subject).

Q. For M. Phil/M.S degree total 30 Credit hours are required out of which 24 credit hours are for course work. Can I complete 30 credit hours by course work?

A. HEC requires minimum 24 credit hours course work and has recommended thesis of minimum 6 credit hours. However, degree with 30 credit hours course work is also acceptable.

Q. I have acquired 3.0 CGPA in M.S and submitted PhD application with University, which is denying admission and is asking for 3.5 CGPA in M.S for admission in the PhD programme.

A. One of the minimum requirements of the HEC for admission into PhD programme is 3.0 CGPA in M.Phil/M.S degree. However, Universities can raise this as per their policy.

Q. I am currently registered in Ph.D. Could you please update me regarding the condition of International GRE Subject Test. Is the condition abolished?

A. No the condition is there but the HEC has approved to also accept the GAT Subject Test (NTS) for PhD admissions in those eight subjects where the International GRE Subject is offered.

Q. I have already cleared the International GRE Subject Test with the requisite percentile score. Should I also appear for NTS GAT Subject Test?

A. Students who have already cleared the International GRE Subject Test and achieved the requisite percentile score are not required to clear the NTS GAT Subject Test.

Q. Will the relaxation of NTS GAT Subject score for the period of one year be applicable to already enrolled PhD Scholars?

A. This decision is not applicable to PhD scholars, who are enrolled before 25th August, 2010. Already enrolled students will submit the requisite GAT Subject score before submission of thesis as per previous policy.

Q. Can i take provisional admission into PhD in the Fall semester 2010 without having cleared the International GRE/NTS GAT Subject Test.

A. The Universities may provide provisional admissions to PhD students who have not cleared the International GRE/NTS GAT Subject Test. However the students must compulsorily clear the International GRE/NTS GAT Subject Test within a period of one year i.e. by October 31, 2011.

Q. I am planning to enroll myself in PhD program in the Fall 2011. What policy will be applicable to me?

A. From the Academic year 2011-12 beginning from the Fall 2011, all prospective PhD students have to qualify the appropriate Subject Test (conducted either by the NTS or GRE by ETS or HEC approved University Committee based Test) in the area of specialization as determined by the admitting University prior to admission in the PhD Program.

Q. What does mean by Comprehensive Exam?

A. Comprehensive Exam is requirement for all doctoral programs, and precedes defense of the PhD research proposal. The student must pass both the written and oral components after the completion of 18 credit Hours Course Work. Successful completion of the both the comprehensive exam and the PhD research proposal must be completed before a student can be granted Doctoral Candidacy status.

Q. I have completed course work for PhD. Is it necessary to appear in comprehensive examination? What score should be acquired for qualifying that exam?

A. Yes, comprehensive examination is mandatory and it should be qualified. Qualifying score should be in accordance with rules of the Institution.

Q. What does a Public Defense mean?

A. The defense is done in a public presentation in which teachers, students, and the general public can participate. The Scholar presents his/her Research Work and answers the questions of the audience. Public thesis defense is mandatory, in the presence of a board of senior researchers, consisting of members from an outside organization or a university. The University concerned will notify in advance the date, Time and venue of the event via its website, News Papers and

electronic media.

Q. Previously 'Y' Category Journal in Sciences was accepted for publication of paper for PhD degree, now, it is 'X' Category.

A. The condition of Publication in "X" category is applicable with effect from January 11, 2010.

A. My PhD thesis is evaluated with favorable comments by two foreign experts. University is not processing my case for final seminar, because they are asking for the third evaluation.

A. The evaluation of thesis by two foreign experts with positive comments/recommendations is minimum requirement of the HEC. Universities can evaluate theses from more than two experts.

Q. How many PhD scholars one professor/supervisor can supervise?

A. One supervisor can supervise five PhD Scholars that can be increased to eight under special circumstances in certain teaching departments subject to prior approval of the Higher Education Commission (HEC).

Q. Which countries are academically/technically advanced?

A. Following countries are developed countries:

**List of Industrially/Academically advance countries for evaluation of PhD thesis
(For all subjects unless noted)**

- | | |
|----------------------|-------------------|
| 1 Australia | 19 Ireland |
| 2 Austria | 20 Italy |
| 3 Belgium | 21 Japan |
| 4 Bulgaria | 22 Luxemburg |
| 5 Canada | 23 Netherland |
| 6 China ⁺ | 24 New Zealand |
| 7 Czech Republic | 25 Norway |
| 8 Denmark | 26 Poland |
| 9 Egypt* | 27 Portugal |
| 10 Finland | 28 Romania |
| 11 France | 29 Singapore |
| 12 Germany | 30 South Korea |
| 13 Greece | 31 Spain |
| 14 Hong Kong | 32 Sweden |
| 15 Hungry | 33 Switzerland |
| 16 Iceland | 34 Turkey |
| 17 India* | 35 United Kingdom |
| 18 Iran* | 36 United States |

* For Oriental Languages (Arabic etc.) Islamiat, Islamic Studies

Q. Is there any financial assistance for GRE Test?

A. Universities/DAI's will refund GRE fee to those students who will qualify GRE test with the required score.

Q. How many students a supervisor can supervise?

A. a) The maximum number of PhD students under the supervision of a full time faculty member will normally be 5 which may be increased to 8 under special circumstances in teaching departments subject to prior approval of the Higher Education Commission.

b) Eminent faculty/scientists such as HEC distinguished professors, Fellow of Royal Societies (FRS) and those who have cumulative impact factor of 100 or more can supervise as many PhD students as they wish.

Q. Can Adjunct faculty members (of the University) supervise PhD Students?

A. Yes, Adjunct faculty members (of the University), can supervise the PhD students.

Q. How to calculate 50% percentage score from the ETS score card?

A. 50% (percentage) score is calculated from total scaled score in each subject which is available in GRE Guide book at page number 14. For example, for Mathematics, total scaled score is 900 and its 50% percent is 450.

Q. Will HEC notifies clarifications mentioned in FAQs, as Universities are insisting for the HEC notification?

A. Clarifications made in FAQs are approved by the authorities and need no further notification.