

PhD Rules and Regulations

1. Eligibility and Admission Criteria

- a. For eligibility in PhD program at PIEAS, a candidate shall be required to have MS / MPhil (minimum 18 years of education) in the relevant subject with minimum CGPA 3.0 out of 4.0 for semester system or minimum 65% marks for the annual system. For lower degrees/certificates, the academic career required is 60% marks for annual systems or minimum CGPA 2.5 at the scale of 4.0 for semester systems. However, in BSc (two years), HSSC and SSC (or equivalent) one degree / certificate with minimum 50% marks may be allowed.
- b. The eligible candidate must qualify HEC criterion for admission to a PhD program.
- c. For the admission, the candidate must pass PIEAS written test / GRE (Subject) / GAT (Subject) or any other examination approved by PIEAS CGSR.
- d. Affiliated institutes may conduct their own written tests. The outline of the tests shall be got approved from CGSR.

2. Admission Procedure

- a. A candidate desirous of seeking admission to PhD program shall apply on the prescribed form to the Registrar. All applications shall be forwarded to the concerned departments by the Registrar. The department will scrutinize the applicant for the eligibility.
- b. To interview the candidates, the HoD will propose a committee to the Dean Research for approval. The eligible candidates shall be evaluated by the committee based on an interview of the candidate. However, the committee may also make written test / presentation a part of the evaluation. The committee shall forward its recommendation to the HoD.
- c. After acceptance from a supervisor, the HoD will send the recommendation to the Dean Research for the approval. Dean (Research) will approve the admission of the suitable candidates.
- d. The Registrar will give an offer of admission valid for ninety days.
- e. An extension in the admission validity may be approved to a realistic time by Dean (Research) on the request of the applicant duly recommended by the supervisor / HoD. Dean (Research) will communicate the approval to Registrar for notification.
- f. To join PhD studies at PIEAS, the procedure will be:
 - i) The student will report to the concerned HoD for initiation of the joining process, who will forward the joining request to the Registrar.
 - ii) The Registrar office will notify the joining after all the required documents have been submitted by the student to the office.
 - iii) The date of joining shall be the date when all the necessary documents have been received by the Registrar Office.
 - iv) A copy of the notification will be sent to all concerned including supervisor, Controller of Examinations, Head of Department, funding agency, security, accounts etc., and will send the record to Dean (Research) for future communications.
- g. Affiliated institutes shall make their own arrangements for the admission in line with the PIEAS procedures. The institutes shall include in their admission test / interviewing committees one

representative from PIEAS to be nominated by the Dean Research. The affiliated institutes shall forward the joining reports of the students to Registrar PIEAS for further processing.

3. Program of Studies

- a. The study period of PhD program shall be counted from the date of joining PhD / transfer to PhD studies till the submission of copies of the final thesis to Dean (Research) office for evaluation.
- b. The minimum period for the completion of PhD studies shall be three years whereas the maximum period shall be six years.
- c. In special circumstances, upon recommendation of supervisor / co-supervisor and HoD, Dean (Research) may extend the maximum period by one year. In extraordinary situation, further extension shall be granted by the Council (CGSR) with appropriate justification and after due recommendation of the BoS.
- d. Student's plan of study recommended by the BoS / Departmental Committee shall be submitted to the Dean (Research) within three months after the joining. The plan of study shall include area of research and courses to be studied.
- e. Dean (Research) will include plans of study in the agenda of the CGSR meeting, and Head of the Department / affiliated institute shall present the plan of study.
- f. The Dean (Research) will take appropriate measures to ensure the implementation of the plan of study.
- g. Student shall submit the synopsis during the second year of her / his PhD studies. After due recommendation from the BoS, it shall be presented to the CGSR for approval.
- h. A student can take leave of one or more semesters within her / his study period provided that she / he is expected to complete PhD during the stipulated time.
- i. The course work comprising graduate level courses with minimum of 18 credit hours with minimum CGPA of 3.0 shall be required. In addition to this, a student shall also be required to pass a course on Communication Skills if she / he has not studied this course earlier.
- j. All PhD students shall be required to register in each regular semester at PIEAS for a minimum of 9 credit hrs. By the end of fourth week of each semester, the Department Heads shall forward the list of their PhD students along with the courses / research registration details to the Controller of Examinations and Dean Research, PIEAS. Failure to register in any semester may result in cancellation of PhD registration.
- k. In case a student is registered in Research, one page progress report of the student, at the end of each semester, shall be evaluated by the supervisors with a Grade Satisfactory / Unsatisfactory and shall be communicated to Dean Research and a copy to Controller of Examinations.
- l. For PhD students who have not studied core courses relevant to academic program shall pass the prescribed core courses in addition to 18 credit hours PhD level courses. These courses shall be mentioned in the plan of study as core courses. All the departments shall declare at least four core courses through respective Board of Studies for such cases.
- m. Each PhD student is required to take her / his course work and qualifying examinations during the first two years of her / his PhD study period. In extraordinary cases, Dean Research may extend the period up to one year. Such requests shall be recommended by the concerned supervisor and forwarded through HOD.

- n. Rules & Regulations for PhD courses / thesis research registrations will be the same as for PIEAS MS / MPhil Programs.
- o. A PhD student may be allowed course credit hours transfers, to be decided by a committee comprising the HoD, supervisor and two senior departmental faculty members. Credit hour transfer shall be allowed for the courses passed with A or B grades only at the PhD level after completing 18 years of education from an HEC recognized university.
- p. Failure in Course Work
- i) A PhD student registered in a regular course shall be declared fail in that if she / he obtains a GP (grade point) of less than 2.
 - ii) A PhD student shall be required to maintain a minimum CGPA (cumulative grade point average) of 3.0 at the scale of 4.
 - iii) If a student fails to maintain the minimum required CGPA in course work then she / he should either improve it to meet the requirement or opt for MS / MPhil.
 - iv) A student failing to qualify any of the courses of departmental or subject requirement in three attempts will cease to be a PhD student of PIEAS.
 - v) A PhD student registered for a minimum of 9 credit hours of course work in a semester and does not obtain a minimum semester GPA of 1.0 shall be declared Fail and her / his registration shall be cancelled.
- q. Qualifying Examinations
- A PhD student shall be required to pass Comprehensive Qualifying Examination (CQE) and Subject Qualifying Examination (SQE). The details are as follows:
- The Comprehensive qualifying examination shall be based on the PhD courses (18 credit-hour) approved in the plan of study. The exam shall be conducted within six months of the completion of PhD courses. The mode of examination shall be comprehensive written test and the grading shall be either pass or fail. If the student does not pass this examination in first attempt, then she / he may be given one more chance. The registration of a PhD student shall be deemed as cancelled if she / he fails to pass this examination in two attempts. The paper for the Comprehensive qualifying examination will be prepared and checked by the concerned department. The HoD will appoint a committee within the department for this purpose and the qualifying examination shall be submitted by the Department. Results for each student will be conveyed to Dean (Research) in pass / fail form. For the Comprehensive Qualifying Examination (CQE), a minimum of 60% marks would be required to qualify the examination. The details (date-sheet, question paper and the answer sheet) for this examination will be submitted to the office of Dean Research by the concerned departments.
- After passing the Comprehensive Qualifying Examination the student shall appear in Subject Qualifying Examination (SQE) which is meant to assess the approach of tackling research problems. The mode of examination is presentation of proposed PhD research before a committee appointed by the HoD comprising three examiners including the supervisor. The grading shall be either pass or fail. If the student does not pass this examination in first attempt, she / he may be given one more chance. The registration of a PhD student shall be deemed as cancelled if she / he does not pass this examination in two attempts. Results for each student will be submitted to Dean (Research) in pass / fail form.
- Office of Dean Research shall notify CQE and SQE results submitted by HoDs.
- r. Failure / Probation in Research Work

- i) PhD student registered in research / dissertation course shall be required to maintain SATISFACTORY Grade throughout her / his PhD.
 - ii) A PhD Student obtaining an UNSATISFACTORY result at the end of any semester in research / dissertation course (XXX699) will be placed on probation.
 - iii) A PhD Student obtaining two consecutive UNSATISFACTORY results or three total UNSATISFACTORY in research / dissertation course (XXX699) will cease to be a PhD student.
- s. After passing the qualifying examination, the student is required to give at least two seminars on his thesis topic of research, preferably one during third year and second just before submission of the thesis. Notifications of these seminars need to be circulated to all interested and copies be sent to all Deans, Pro-Rector and Rector.
 - t. Students of PIEAS and affiliated institutes shall mention Pakistan Institute of Engineering and Applied Sciences (PIEAS), Islamabad as an address in their research papers.
 - u. Before submission of a thesis for external evaluation, all PhD students shall be required to have accepted for publication or published at least one technical / research paper in an Institute for Scientific Information (ISI) Indexed Journal as first author. The paper published as second author may also be accepted provided that the first author is her / his PhD supervisor.

4. Option of MS / MPhil

When a student registered for PhD is unable or not willing to continue after two years then she / he may opt for MS / MPhil from PIEAS. Concerned Department will submit the case to CGSR for consideration and approval. The CGSR will make its decision after considering the student's performance and degree requirements, and its decision will be the final.

5. Disqualification as PhD Student at PIEAS

A PhD student cannot continue as a registered PhD student in either of the following cases:

- a. She / he is unable to obtain a minimum CGPA 3.0 out of 4 in the course work after availing the chances of marks improvement.
- b. She / he fails twice in either CQE or SQE.
- c. Without any valid reason, she / he does not appear in the qualifying examination within 24 months from the date of joining / transfer to PhD Program.
- d. She / he obtains two consecutive UNSATISFACTORY results in research / dissertation course (XXX699)
- e. She / he obtained three in total UNSATISFACTORY results in research / dissertation course (XXX699).

6. Thesis Submission, Evaluation, Defence and the Award of PhD Degree

- a. Thesis Submission

The thesis submitted by a candidate for the PhD degree must comply with the following conditions:

- i) It must form a distinct contribution to knowledge and afford evidence of originality either by the discovery of new facts or by the exercise of independent critical judgment duly certified by the concerned supervisor. It must not include research work for which a degree has been already conferred.

- ii) It must be written in English language and the writing quality of the dissertation must be at par with the standards of publications in a peer-reviewed ISI indexed journal in the field of research.
 - iii) For any part of the thesis, which has been published before the submission of the thesis, a list of published work should be appended at the end of the thesis.
 - iv) The thesis must meet the similarity index requirements as per HEC policy.
 - v) The thesis must be formatted and bound in accordance with the specifications mentioned in the most recent version of Thesis Guidelines (available on-line at PIEAS data server in CGSR folder).
 - vi) Upon completion of all PhD study / research requirements, the candidate shall submit to Dean (Research), through the HoD, four soft-bound copies and one soft copy (pdf format) of the thesis on a CD along with an application form duly approved by her / his PhD Supervisor / co-supervisor for the evaluation of his / her thesis.
- b. Thesis Evaluation
- i) The Rector shall appoint a panel of external reviewers on the recommendations of the Head of Department and supervisor from the comprehensive list of reviewers approved by CGSR. This panel will include three external reviewers, preferably from technologically / academically advanced countries.
 - ii) Controller of Examinations will send the thesis to the approved reviewers with the request of thesis evaluation within a period of six weeks after sending the thesis to the reviewers. A copy of the letter shall also be forwarded to Dean Research, relevant Department Head / Director of the affiliated institute.
 - iii) Controller of Examinations will receive the evaluation reports and forward it to Dean Research for further processing. A copy of the evaluation reports shall also be sent to the relevant Department Heads / Director of the institute.
 - iv) The relevant Department Head / Director of the institute shall also keep track of the report received. In case of a delay of more than six weeks, the Department Head / Director of the institute, under intimation to Dean Research, shall initiate a request to the Controller of Examinations (PIEAS) for a reminder of the evaluations.
 - v) After a thesis has been sent to a reviewer, any query / request with the reviewers regarding the thesis evaluations shall be communicated through the Controller of Examinations (PIEAS) only.
 - vi) In case, an external reviewer does not respond within 3 months, and two satisfactory reports have been received, the student will be allowed to defend her / his thesis in front of the panel of thesis examiners.
 - vii) In case two or more evaluation reports are not received within a period of three months, the procedure from claus 6-b(i) will be repeated for appointing new reviewer(s).
 - viii) Each reviewer in the panel will assign one of the three categories to the thesis given below. The reviewer will also be required to provide a detailed evaluation and critique of the thesis on the prescribed pro forma.

Satisfactory (S): The thesis meets the degree requirements in scope, contribution to knowledge and research methodology. Some minor improvements in one or more of the following may also be suggested: presentation and analysis of results, layout and quality of writing.

Major Revision required (M): The research problem considered in the thesis satisfies the requirements of a PhD degree but the thesis requires major changes in one or more of the following: scope, contribution to knowledge and research methodology. A re-evaluation of the thesis would be required in this case.

Unsatisfactory (U): The thesis does not satisfy the expectations and requirements for a PhD degree.

ix) The following table describes the action in response to thesis evaluation reports:

	Evaluation	Action
Only two reports have been received	SS	Schedule the PhD Defence if the third report is not received within three months, otherwise proceed to get the third report as per defined procedure.
	UU	Failure in obtaining the PhD degree.
	SM, SU, MM, MU	Proceed to get the third report as per defined procedure.
Three reports have been received	SSS	Schedule the PhD Defence.
	SSM, SSU	Revise the thesis. Thesis review by a Re-evaluation Committee (see subclaus xi).
	SMM, SMU, MMU, MMM	Revise the thesis. Re-evaluation of the thesis by the external reviewers. Two or more Satisfactory reports of the re-evaluations are required in order to continue the PhD studies, otherwise failure in obtaining the PhD degree.
	SUU, MUU, UUU	Failure in obtaining the PhD degree

- x) In case of thesis major revision, the candidate will be required to resubmit a revised thesis within one year. In case of thesis re-evaluation by the external reviewers, the student has to pay the thesis evaluation fee again.
- xi) A three-member thesis Re-evaluation Committee to review a thesis, if required, shall be constituted by Dean Research in consultation with the relevant HoD.
- xii) Any minor modifications / revisions shall be incorporated without referring again to the external reviewers, and supervisor shall make sure that appropriate changes have been done in the thesis by the student before scheduling the final defence. The student will prepare and submit a point by point summary of the changes incorporated in the thesis.
- xiii) In case, an external reviewer does not respond within 3 months, and two satisfactory reports have been received, the student will be allowed to defend her / his work in front of the panel of thesis examiners for final open defence.
- xiv) In case two or more evaluation reports are not received within a period of three months, the procedure from step '6-b(i)' will be repeated for appointing new reviewer(s).

c. Thesis Defence

- i) After the receipt of required evaluation reports from the external reviewers, Rector PIEAS will appoint a panel of thesis examiners which will include the supervisor, co-supervisor (if any), Head of the Department, Dean (Research) and at least two PhD experts from the comprehensive list of examiners approved by CGSR.
- ii) The evaluation reports by the external examiners along with the changes incorporated in the thesis by the student in response to the reports will be forwarded to the internal examiners.
- iii) The student shall give a presentation in front of the approved panel of examiners in an open gathering. The thesis defence shall be before the panel members only. The decision of the panel shall be by majority.
- iv) If the candidate fails to satisfy the examiners in the thesis defence examination, then the panel of thesis examiners may require the candidate to defend the thesis for second and the last time within a period of six months.
- v) The student shall make all the changes suggested by the examiners and shall submit to Dean Research through the supervisor and Head of the Department a point by point summary of the changes incorporated in the thesis along with four hardbound copies of the thesis. Two CDs/DVDs containing soft copies of the thesis and abstract in pdf format shall also be provided to the office of Dean Research, PIEAS. The date when final PhD thesis is received in the office of Dean Research shall be considered as the PhD completion date.
- vi) The notification of the award of PhD degree shall be issued after all the administrative formalities / requirements have been completed for the degree. The Dean (Research) shall initiate the case through Rector, PIEAS for the final notification.

7. Transfer of a PhD Student from another University / Institute

- a. All PIEAS PhD rules and procedures shall be applicable on such admissions except Claus 1-c.
- b. Transfer of a PhD student from an HEC recognized university / institute to PIEAS can take place subject to satisfying eligibility and admission criteria, and approval of Dean (Research), PIEAS.
- c. Student's course work shall be certified through registration and examination office of the university she / he is leaving. For the credit transfer, procedure defined in Claus 3-o shall be followed.
- d. The candidate shall pass the Comprehensive and Subject Qualifying examinations at PIEAS.
- e. The candidate shall publish a research paper out of her / his PhD work as per PIEAS requirements.
- f. CGSR, on the recommendations of departmental BoS, may relax the requirement of minimum duration for the completion of PhD studies.

8. Miscellaneous Issues

- a. *Comprehensive list of approved external reviewers and internal examiners:* Upon the recommendation of HoD and Departmental Board of Studies, CGSR will approve external reviewers and internal examiners for the institute. The external reviewers will evaluate the thesis and thesis examiners will conduct the final thesis defence examination. An updated comprehensive list of the approved external reviewers and internal examiners shall be maintained by Dean (Research), PIEAS.

- b. Dean Research is authorized to approve minor changes in PhD Title and / or Synopsis on the recommendations of concerned HoD.
- c. *Revision of the plan of study:* The recommending committee can revise the plan of study at any stage of the PhD studies. CGSR will approve any such changes.
- d. *Change of supervisor / co-supervisor:* Student can apply for change of her / his supervisor / co-supervisor. Concerned Dean shall constitute a fact finding committee to give its recommendations within a period of one month. The concerned Dean, after considering the findings of the committee, progress in PhD studies, total PhD supervision period etc., may approve, in special circumstances, the change of supervisor / co-supervisor and forward the case to the office of Dean Research for the necessary notification and communication to funding agency (if any).
- e. *Change of Department:* Registrar PIEAS will allow the change of the department provided that both the Heads of the Departments and concerned Dean(s) agree on the change. The candidate shall be registered afresh in the new department.
- f. *Departmental committee:* In unusual cases when a meeting of BoS cannot be convened in the due course of time, a departmental committee comprising at least three senior faculty members of the department may recommend a case to CGSR.
- g. *Research in absentia:* If a researcher of an established laboratory is registered in PhD at PIEAS, then after completing the course and qualifying requirements, the student may do research in her / his own establishment under the supervision of an adjunct faculty member. *The student shall be required to comply with Claus 3 (j, k). The panel of internal examiners for such students (research in absentia) shall comprise minimum of five internal examiners besides her / his supervisor, co-supervisor, HoD and Dean (Research).*
- h. *Co-Supervisor:* In case when supervisor is not a regular faculty member of PIEAS then HoD shall recommend a co-supervisor from the PIEAS faculty. A co-supervisor may also be recommended by the supervisor. A co-supervisor shall make sure that PIEAS PhD rules and regulations are being observed.

9. Any other matter

Any matter not covered by the rules shall be referred to the CGSR and its decision will be final.