

An overview of the national system of doctoral training and qualification - India

Higher education system of India is one of the largest such systems in the world. The system has undergone massive expansion in post-independence establishment of several Universities, Technical Institutes, Research Institutions and Professional / Non-professional Colleges all over the country to generate and disseminate knowledge. Along with this expansion, it was necessary to have strong quality control measures to assure performance above an acceptable benchmark for all institutions. A regulatory system to ensure compliance to the set bench marking provides a uniform educational system which is essential in a socio-economically and culturally diverse country like India. Thus to overcome such challenges and bring equity in quality of education across the length and breadth of the country, a number of regulations have been framed which guide the selection, evaluation and examination of students who wish to enrol in doctoral programs in any institute of the country.

The data from the Ministry of Education All India Survey on Higher Education (AISHE) highlight the status of students opting for research degree. In India,

- the total admissions to PhD doubled from 77798 in 2010-11 to 161412 in 2017-18 i.e an increase of 10% per annum
- the number of women enrolling for PhD increased at a higher rate compared to men
- the highest number of students are enrolled in Science, Engineering and Technology stream followed by Social Science/Humanities

In India, the doctoral training and qualification is controlled and implemented by the University Grants Commission (UGC), a body under the Ministry of Education. PhD is the doctoral research degree granted in India by authorized universities/institutes, with usual course duration between 3-6 years. Currently, the eligibility criteria for admission, duration and subsequent evaluation in the doctoral program is mandated by the “University Grants Commission (Minimum Standards and Procedures for Award of M.Phil./Ph.D. Degrees) Regulations, 2019”. According to this regulation, the “Ph.D. programme shall be for a minimum duration of three years, including course work and a maximum of six years.” and the eligibility of students enrolling for the Ph.D. programme is as follows:

- I. “Candidates for admission to the Ph.D. programme shall have a Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7- point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.”

- II. “The candidates who have completed undergraduate courses of minimum four-years duration in Engineering, Science, Law, Architecture, Social Sciences, Humanities and others approved by the appropriate bodies.”
- III. “For students coming out of existing four-year undergraduate institutions, a minimum credit threshold is prescribed (preferably equivalent to a conventional first class. For example, CGPA of (3.0/4.0) or (7.5/10.0)).”
- IV. “Candidates who have cleared the M.Phil. course work with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) and successfully completing the M.Phil. Degree shall be eligible to proceed to do research work leading to the Ph.D. Degree in the same Institution in an integrated programme.”
- V. “They should come through a national/state/university level entrance test that measures research aptitude, analytical skills, writing skills, comprehension and reasoning beyond the subject competency with the appropriate thresholds being met. Institutions may conduct the interviews to select the candidates from the eligible applicant”.
- VI. “A person whose M.Phil. dissertation has been evaluated and recommended for award of the degree, before the viva voce, may be admitted to the Ph.D. programme in any Institution.”
- VII. “Candidates possessing a Degree considered equivalent to M.Phil. Degree of an Indian Institution, from a Foreign Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, shall be eligible for admission to the Ph.D. programme.”

The students are admitted to the doctoral programmes of the Higher Educational Institutions (HEIs) through a two-stage process through National Level Entrance Tests or Equivalent Tests conducted by Universities/Institutions:

- I. “Qualifying marks in the entrance test will be 50%. The syllabus of the Entrance Test shall consist of 50% of questions which tests research aptitude, while 50% shall be subject specific.”
- II. “An interview/viva-voce to be organized by the University/Institute wherein the candidates are required to discuss their research interest/area through a presentation before a duly constituted Departmental Research Committee. For the selection of the candidates, a weightage of 50% to the entrance test and 50% to the performance in the interview/viva-voce shall be given.”



The interview/viva voce shall also consider the following aspects, viz. whether: “(i) the candidate possesses the competence for the proposed research; (ii) the research work can be suitably undertaken at the Institution/College; (iii) the proposed area of research can contribute to new/additional knowledge.”

All the students admitted to the doctoral program would be stipulated to undergo compulsory course work, which determines their continuous evaluation, with the following conditions:

- I. “Minimum number of credit requirement for Ph.D. programme should be at least 12 credits up to a maximum of 16 credits”.
- II. “The course work shall be treated as prerequisite for Ph.D. preparation. A minimum of four credits shall be assigned to one or more courses on Research Methodology which could cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, field work, etc. Other courses shall be advanced level courses preparing the students for Ph.D. degree.”
- III. “All candidates admitted to the Ph.D. programmes shall be required to complete the course work prescribed by the Department during the initial one or two semesters.”
- IV. “A Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the dissertation/thesis”.
- V. “After completion of the course work and before the end of two years from the date of admission, a comprehensive and rigorous qualifying examination shall be conducted by a committee recommended by the Research Advisory Committee. It should test the comprehensive knowledge and research methodology in the broad discipline. The minimum score/grade that the student should obtain in the qualifying examination may be set by the institutions/universities”.

For the award of the degree, after the course work, the following conditions should be met:

- I. “Upon satisfactory completion of course work and obtaining the marks/grade the Ph.D. scholar shall be required to undertake research work and produce a draft dissertation/thesis within a reasonable time, as stipulated by the Institution concerned.”
- II. “Prior to the submission of the dissertation/thesis, the scholar shall make a presentation in the Department before the Research Advisory Committee of the Institution concerned which shall also be open to all faculty members and other research scholars. The feedback and comments obtained from them may be

suitably incorporated into the draft dissertation/thesis in consultation with the Research Advisory Committee”.

- III. “It is desirable that Ph.D. research work is published in standard, refereed journals/books and the institutions may take steps to encourage research publications. Quality assessment of Ph.D. degrees should be the responsibility of the institutions/universities.”
- IV. “The Academic Council (or its equivalent body) of the Institution shall evolve a mechanism using well developed software and gadgets to detect plagiarism and other forms of academic dishonesty. While submitting for evaluation, the dissertation/thesis shall have an undertaking from the research scholar and a certificate from the Research Supervisor attesting to the originality of the work, vouching that there is no plagiarism and that the work has not been submitted for the award of any other degree/diploma of the same Institution where the work was carried out, or to any other Institution.”
- V. “The Ph.D. thesis submitted by a research scholar shall be evaluated by his/her Research Supervisor and at least two external examiners, who are expert in the field and not in employment of the Institution/College. Examiner(s) should be academics with good record of scholarly publications in the field. The viva-voce examination, based among other things, on the critiques given in the evaluation report, shall be conducted by the Research Supervisor and at least one of the two external examiners, and shall be open to be attended by Members of the Research Advisory Committee, all faculty members of the Department, other research scholars and other interested experts/researchers.”
- VI. “The public viva-voce of the research scholar to defend the dissertation/thesis shall be conducted only if the evaluation report(s) of the external examiner(s) on the dissertation/thesis recommends acceptance. If one of the evaluation reports of the external examiner in case of Ph.D. thesis, recommends rejection, the Institution shall send the dissertation/ thesis to another external examiner out of the approved panel of examiners and the viva-voce examination shall be held only if the report of the latest examiner is satisfactory. If the report of the latest examiner is also unsatisfactory, the dissertation/ thesis shall be rejected, and the research scholar shall be declared ineligible for the award of the degree.”

More details about the higher education system and various guiding frameworks/proposed improvements can be found by accessing the following documents:

- [Data on educational structure of India](#)
- [Guidelines for Multiple Entry and Exit in Academic Programmes offered in Higher Education Institutions](#)
- [Good Academic Research Practices](#)
- [Quality Mandate for Higher Education Institutions in India](#)