

BHABHA ATOMIC RESEARCH CENTRE
Ph.D. Programme
IF YOU ARE
LOOKING FOR AN OPPORTUNITY TO PURSUE Ph.D.
IN FRONTLINE AREAS IN ENGINEERING AND BASIC SCIENCES
IN STATE-OF-THE-ART LABORATORIES
THEN BARC IS THE PLACE FOR YOU!

Bhabha Atomic Research Centre (BARC) is a premier Institution for Research & Development (R&D) in Nuclear Science & Technology, in particular, and in Biological, Chemical, Engineering and Physical Sciences in general. The Centre has not only been the backbone of the Indian Nuclear Energy Programme, but also has been in the forefront of research in other branches of engineering as well as in basic sciences. Several of its state-of-the-art laboratories and research facilities are unique to it.

BARC conducts Ph.D. programme in various Engineering disciplines, and in basic Sciences such as Physical, Chemical and Life Sciences. Its Ph.D. programme is under the aegis of Homi Bhabha National Institute (HBNI), a Deemed to be University. As per the Rules of HBNI, the Ph.D. programme at BARC consists of course work of one academic year duration followed by research work leading to Ph.D. thesis.

BARC invites applications for its Ph.D. programme commencing in September 2010 under the aegis of HBNI

A limited number of Junior Research Fellowships (JRFs), awarded by the Department of Atomic Energy (DAE), will be offered to those selected for the Ph.D. programme. DAE fellowship is tenable for four years. The fellowship amount is Rs 12000/- per month for first and second year and Rs.14000/- per month for subsequent years besides house rent and medical benefits as per rules. The candidates selected through the BARC Training School selection process can also pursue the Ph.D. programme with fellowship from other sources like UGC-CSIR, DBT, ICAR, ICMR and other national agencies. A few meritorious candidates will be offered DAE Graduate Fellowship Scheme-Ph.D. (DGFS-Ph.D.) Fellowship. It carries fellowship of Rs. 15,000/- p.m. in the first year and Rs.18,000/- p.m. in succeeding years.

Selection Process

Selection for the Ph.D. programme is a two-step process: **screening** to short-list candidates followed by **interview** of short-listed candidates.

Screening for Engineering Sciences shall be through (i) Written Test – 2010 or (ii) on the basis of valid GATE-2009/ GATE-2010 score.

Candidates who do not opt for GATE or who do not qualify on the basis of GATE Score may take the Written Test.

Screening for Chemical and Life Sciences shall be on the basis of one of the following: (i) GATE-2009/GATE-2010 score or (ii) Written Test-2010 score of the BARC Training School.

Screening for Physical Sciences shall be on the basis of one of the following:

(i) GATE-2009/GATE-2010 score or (ii) Score in Joint Entrance Screening Tests-2010 (JEST-2010) or (iii) Written Test-2010 score of the BARC Training School.

To access various modes of screening

1. **JEST:** Visit the website <http://jest2010.aries.res.in> for details.

2. **BARC Training School Written Test:** It is conducted for short-listing in Science and Engineering disciplines candidates for admission to BARC Training Schools. Those who have applied for admission to BARC Training Schools and have opted for its written test have only to state their BARC Training Schools application number on the accompanying application form. Those applicants who do not want to apply for BARC Training School but would like to appear for its Written Test for the purpose of admission to the Ph.D. programme of BARC, can do so by expressing their option through the accompanying application form. For details about BARC Training School programme, visit www.hrdbarc.gov.in or www.npcil.co.in/hrdbarc/oces.htm

BARC Training School Test in Science disciplines will be held on Sunday February 28, 2010 at the centres listed in Table-1.

BARC Training School Test in Engineering will be held on Sunday May 23, 2010 at the centres listed in Table-1.

Short-listed candidates shall be called for **interview** to be conducted in June-July, 2010 at the BARC Training School, Anushaktinagar, Mumbai-400 094. Outstation applicants called for interview will be paid to and fro sleeper class train fare by shortest route, or actual fare, whichever is less.

Eligibility

a. Qualifying Degree and other academic qualifications

Those having M.Sc. in Physics/ Chemistry/ Biology or related science subjects with minimum 60%* marks in MSc as well as BSc or B.E./B.Tech. or equivalent with minimum 60%* marks in one of the following Engineering disciplines: Chemical, Computer, Electrical, Electronics, Mechanical, Metallurgy, Instrumentation are eligible to apply.

Applicants for **Physics discipline** should have Physics and Mathematics up to BSc or at subsidiary and/or ancillary level in case of five years integrated MSc.

Applicants for **Chemistry discipline** should have Mathematics up to XII std and Physics up to BSc or at subsidiary and/or ancillary level in case of five years integrated MSc.

For **Biology and related disciplines** MSc in Agriculture, Biochemistry, Microbiology, Molecular Biology, Biotechnology, Genetics, Botany, Zoology, Plant Science, Plant Breeding, Plant Pathology, Entomology, Food Technology, Animal Science, Life Sciences and Biosciences; or BE/BTech/BSc (Tech) only in Food Technology with minimum of 60%* marks. MSc applicants should have Physics or Chemistry or Biochemistry or Agriculture Chemistry up to BSc or at subsidiary and/or ancillary level in case of five year integrated MSc with minimum of 60%* aggregate marks in MSc as well as in BSc. Applicants opting to be considered on the basis of GATE Score should have valid GATE Score in Life Sciences. Those having MSc with specialization in subjects like Fisheries, Horticulture, Forestry, Agronomy, Animal Husbandry, Marine Biology and Home Science etc and BE/BTech/MTech in Biotechnology/Genetic Engineering are **not eligible**.

*A minimum of 60% marks means that 60% minimum marks in the qualifying degree/ P.G. degree as per the ordinance of the respective university in the respective disciplines OR equivalent CGPA (converted to % marks by multiplying with 100/x if CGPA is on x points scale)

Those whose final results of qualifying degree are awaited can also apply. In the event of selection, mark sheet of final result should be submitted by November 30, 2010.

b. Age limit: The candidates desirous of availing DAE Fellowship should have been born on or after September 1, 1984. Age limit is relaxable by three years for OBC and by five years for SC/ST applicants.

c. Nationality: Applicant should be an Indian citizen.

How to Apply

Make two copies of the accompanying application form, affix a passport size photo on each and, along with copies of documents mentioned in the application, mail to

BARC-Ph.D. Programme
DEO, Recruitment-IV
Training School
Anushaktinagar, Mumbai-400 094.

The application enables you to register for the Written Test of BARC Training School. In case you opt for it, a letter of admission to the Written Test Centre of your choice from Table-1 will be mailed to you. However, even if you do not receive admission letter, you can proceed to your chosen test center with a copy of the application and proof of mailing it.

Alternately a candidate may apply online by visiting the website www.hrdbarc.gov.in or www.npcil.co.in/hrdbarc/oces.htm

Table-1: Written Test Centre Code for BARC Training School Written Test

Centre	Code	Centre	Code	Centre	Code	Centre	Code
Ahmedabad	01	Coimbatore	06	Jaipur	11	Roorkee	16
Bengaluru	02	Delhi	07	Kolkata	12	Thiruvananthapuram	17
Bhubaneswar	03	Guwahati	08	Lucknow	13	Varanasi	18
Chandigarh	04	Hyderabad	09	Mumbai	14	Jamshedpur#	19
Chennai	05	Indore	10	Nagpur	15	Raipur#	20
						Shillong#	21

These additional centres are only available for Written Test in Engineering Disciplines.

Last Date of receipt of Application: (i) January 15, 2010 for those who wish to register for BARC Written Test in Science Disciplines.
(ii) April 15, 2010 for those who wish to register for BARC Written Test in Engineering Disciplines
(iii) April 15, 2010 for those who wish to apply on the basis of GATE or JEST.

Those who wish to apply only on the basis of GATE-2010/ JEST-2010 should do so only after declaration of GATE-2010/ JEST-2010 (as applicable) result.

BHABHA ATOMIC RESEARCH CENTRE
Application for BARC-Ph.D.- 2010

Application Number
(to be allotted by office)

Affix recent
passport
Size photograph
And sign across it

1. Name:

2. Address for correspondence:

3. Mobile or Landline Number (with STD Code):

4. Email Address:

5. Date of Birth:

6. Category: General , SC/ST , OBC

7. Qualifying degree: M.Sc. , Integrated M.Sc. , BE/ BTech and equivalent

8. Discipline of the qualifying degree: Chemical Engg , Computer Engg , Electrical Engg , Electronics Engg , Mechanical Engg ,
Metallurgy , Instrumentation , Physics , Chemistry , Biology

9. Whether result of qualifying degree available: Yes/No.

(a) If answer to 9 is yes: (i) year of passing: (ii) % marks (in case of CPI, multiply CPI by 10 to convert it in to %):

(b) If answer to 9 is No, % marks up to the last semester/ term for which result is available:

10. If qualifying degree is M.Sc., % marks in B.Sc.:

11a. Wish to be considered on the basis of i. GATE-2009 , ii. GATE-2010 , iii. JEST-2010 , iv. BARC Training School Written Test-2010

11b. GATE-2009/2010 Score: Registration number:

11c. JEST-2010 Score: Application number:

12. If opting for BARC Training School Written Test-2010:

(a) Are you applying for BARC Training School: Yes/No

(b) If answer to 12(a) is Yes, BARC Training School Application No.

(c) If answer to 12(a) is No, select the center code from the list of centers:

Date:

Signature of Applicant

Enclosures [Photocopies of] 1. Date of Birth Certificate, 2. Mark-lists and Certificates of all available Semesters/Part (as applicable) of BSc/ BE/ BTech/ MSc;
3. GATE Score Certificate 4. Age Relaxation Certificate.