



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर
INDIAN INSTITUTE OF TECHNOLOGY BHUBANESWAR
Argul, Khordha-752050

Admission into Ph.D. Programme (Spring Session 2024-25)

Indian Institute of Technology Bhubaneswar invites **ONLINE** applications for admission to **Ph.D. Programme** from eligible candidates for the year **2024-25 (Spring Semester)** in the following categories:

| | |
|--------------------|---|
| Category -1 | Institute Ph.D. Scholar |
| Category -2 | Sponsored Ph.D. Scholar: a) Sponsored by External Organization b) Sponsored GoI Fellowship c) Sponsored Research project under IIT Bhubaneswar |
| Category -3 | Joint M.Sc.-Ph.D. Students of IIT Bhubaneswar (For Autumn session admission only) |
| Category -4 | Institute Staff Category (IIT Bhubaneswar) |
| Category -5 | Students of IITs / IISc. |

Opening date for online application : 16th October, 2024

Last date for submission of online application : 17th November, 2024 11:00 PM

To explore the available Research Areas please click on the below URLs:

| Sl. No. | School/ Center | URL |
|---------|---|---|
| 1. | School of Electrical & Computer Sciences | https://secs.iitbbs.ac.in/index.php/broad-research-areas-ph-d-and-ms-r-admission/ |
| 2. | School of Infrastructure (Civil Engineering) | https://old.iitbbs.ac.in/infrastructure-area-of-research.php?code=if |
| 3. | School of Mechanical Sciences | https://old.iitbbs.ac.in/mechanical-msphdareas.php?code=ms |
| 4. | School of Minerals, Metallurgical and Materials Engineering | https://old.iitbbs.ac.in/minerals-metallurgical-and-materails-msphd.php?code=mm |
| 5. | School of Humanities, Social Sciences and Management: | https://old.iitbbs.ac.in/humanities-research-msphd.php?code=hs |
| 6. | School of Basic Sciences | https://old.iitbbs.ac.in/basic-sciences-research-msphd.php?code=bs |
| 7. | School of Earth, Ocean & Climate Sciences | https://old.iitbbs.ac.in/earth-ocean-research-msphd.php?code=oc |
| 8. | Artificial Intelligence and High Performance Computing Research Center (AHRC) | https://www.iitbbs.ac.in/index.php/ahrc/ |

I. Minimum Eligibility Criteria - Category wise

Category 1 - Institute Ph.D. Scholar

Institute Ph.D. Scholar refers to the Ph.D. scholar who receives **Institute Research Assistantship** sanctioned by the Ministry of Education (MoE) and offered through the institute. Eligibility criteria for different schools are as follows:

School wise Eligibility Criteria for Category 1:

| School | Eligibility Criteria |
|---|---|
| All Engineering Schools <ul style="list-style-type: none">◆ School of Electrical & Computer Sciences(SECS)◆ School of Infrastructure (SIF)◆ School of Mechanical Sciences (SMS)◆ School of Minerals, Metallurgical and Materials Engineering (SMM&ME) | <ol style="list-style-type: none">1. M. Tech./ME or equivalent degree in appropriate disciplines, with minimum 60% marks or 6.5 CGPA (in a 10-point scale). OR B Tech/BE or equivalent degree in appropriate disciplines with minimum 70% marks or 7.5 CGPA (in a 10-point scale). The candidate must be GATE qualified in an appropriate discipline.2. Minimum 60% marks or 6.5 CGPA (in a 10-point scale) required in all other examinations from Class 10 onwards. A single relaxation up to 5% marks in secondary/higher secondary/equivalent is permitted. |
| School of Humanities, Social Sciences and Management (SHSS&M) | <ol style="list-style-type: none">1. Minimum of 55% marks or 6.0 CGPA (in a 10-point scale) in Master's degree in appropriate Humanities and Social Sciences disciplines.2. Minimum 55% marks or 6.0 CGPA (in a 10-point scale) required in all other examinations from Class 10 onwards. A single relaxation up to 5% marks in secondary/higher secondary/bachelor's degree/equivalent is permitted.3. The candidate must be GATE or CSIR-UGC NET (LS) qualified in an appropriate discipline. |
| School of Basic Sciences (SBS) | <ol style="list-style-type: none">1. Minimum 60% marks or 6.5 CGPA (in a 10-point scale) in Master's or equivalent degree in appropriate disciplines.2. Minimum 60% marks or 6.5 CGPA (in a 10-point scale) required in all other examinations from Class 10 onwards. A single relaxation up to 5% marks in secondary/higher-secondary/bachelor's degree/equivalent is permitted.3. The candidate must be GATE or CSIR-UGC NET (LS) or JAM or JEST qualified in an appropriate discipline. |

| | |
|---|--|
| <p>School of Earth, Ocean and Climate Sciences (SEOCS)</p> | <ol style="list-style-type: none"> 1. Minimum 60% marks or 6.5 CGPA (in a 10-point scale) in Master's or equivalent degree in appropriate disciplines. OR B Tech/BE or equivalent degree in appropriate disciplines with minimum 70% marks or 7.5 CGPA (in a 10-point scale). 2. Minimum 60% marks or 6.5 CGPA (in a 10-point scale) required in all other examinations from Class 10 onwards. A single relaxation up to 5% marks in secondary/higher-secondary/bachelor's degree/equivalent is permitted. 3. The candidate with B.Tech/B.E./M.Sc. degree must be GATE or CSIR-UGC NET (LS) or JAM or JEST qualified in an appropriate discipline. |
| <p>Artificial Intelligence and High Performance Computing Research Center(AHRC)</p> <p>Specialization: Applied Artificial Intelligence (AI)</p> | <p>1(a): M. Tech./ME or equivalent degree in Artificial Intelligence/ Data Science/ Computer Science/Electronics and Communication Engineering with minimum 60% marks or 6.5 CGPA (in a 10-point scale).</p> <p>OR</p> <p>1(b): M. Tech./ME or equivalent degree in any Engineering discipline (other than mentioned above in 1(a)) with minimum 60% marks or 6.5 CGPA (in a 10-point scale). The candidate must be GATE qualified in either Data Science and Artificial intelligence (DA) or Computer Science and Information Technology (CS), or Electronics and Communications Engineering (ECE).</p> <p>OR</p> <p>1(c): B Tech/BE or equivalent degree in Artificial Intelligence/ Data Science/Computer Science/ Electrical/ Electronics/ Communication / Mechanical/ Civil/ Biomedical/ Genetics/ Agricultural/ Environmental Engineering, with minimum 70% marks or 7.5 CGPA (in a 10-point scale). The candidate must be GATE qualified in either Data Science and Artificial Intelligence (DA) or Computer Science and Information Technology (CS) or Electronics and Communications Engineering (ECE).</p> <p>OR</p> <p>1(d): Master of Science or equivalent degree in Mathematics/ Biology/ Genetics/ Psychology: with minimum 60% marks or 6.5 CGPA (in a 10-point scale). The candidate must be GATE qualified in either Data Science and Artificial Intelligence (DA) or Computer Science and Information Technology (CS) or Electronics and Communications Engineering (ECE).</p> <p>2: Minimum 60% marks or 6.5 CGPA (in a 10-point scale) required in all other examinations from Class 10 onwards. A single relaxation up to 5% marks in secondary/higher secondary/equivalent is permitted.</p> |

Category 2 - Sponsored Ph.D. Scholar

| Sl. No. | Type of Sponsored Ph.D. Scholar | Eligibility |
|---------|---|--|
| 1. | Sponsored by External Organization | <ul style="list-style-type: none"> ◆ They must be in continuous service for at least three (3) years in any one of the following categories of organizations where appropriate R&D facilities exist: <ul style="list-style-type: none"> a) Departments and Ministries of the GoI or any other government organizations. b) Established industrial research and developmental organizations c) Recognized autonomous bodies and public undertakings d) Recognized universities/colleges. e) Established industries ◆ Candidates under this category need not be GATE or CSIR-UGC NET (LS) qualified. ◆ All other academic qualifications specified under Category 1 is applicable to these candidates. ◆ Candidates must submit Sponsorship Certificates as per the prescribed format at the time of application; otherwise their applications will not be considered. ◆ Ph.D. scholars joining under this category do not receive any financial support from the Institute. |
| 2. | Sponsored GoI Doctoral Fellowship (CSIR—UGC, DST-INSPIRE, DBT, ICMR etc.) | <ul style="list-style-type: none"> ◆ Candidates having CSIR-UGC NET (JRF) or any other doctoral fellowship offered by GoI are eligible to apply under this category. ◆ Ph.D. scholars joining under this category receive financial support from respective GoI doctoral fellowships. ◆ They must meet the same minimum academic qualification applicable for Institute Ph.D. Scholar as under Category 1. ◆ These candidates need not be GATE qualified. |
| 3. | Sponsored Research Project under IIT Bhubaneswar | <ul style="list-style-type: none"> ◆ Persons who possess the minimum prescribed qualifications as mentioned in Category 1 and are already working in a sponsored project of the Institute as JRF/SRF/equivalent availing minimum fellowship as that of Institute Ph.D. scholar shall be eligible for applying to the Ph.D. program under this category. ◆ For this category of candidates, the followings also apply: <ul style="list-style-type: none"> a) They receive assistantship from the fund available in the project under the personnel/manpower budget head (to be referred as Project Fund now onwards) and the fellowship amount is at least equal to that of Institute Ph.D. scholar. b) The remaining period of the project fund (in a single project) as well as the remaining tenure of the same project should be at least 2 years (duration of the project can be relaxed upto 6 months upon recommendation of the PI & Head) from the date of enrolment in the Ph.D. program in the Autumn/Spring Semester as per the academic calendar (if selected). |

Category 3 - Joint M.Sc.-Ph.D. Students of IIT Bhubaneswar

(Only for Autumn semester admission)

(Refer to M.Sc. regulation – Modalities for Enrolment in Ph.D. Programme for more detail)

- ◆ This programme is applicable for bright and motivated students pursuing M.Sc. programmes at IIT Bhubaneswar. Applicants must have completed third semester. Students securing CGPA ≥ 8.5 after their third semester are automatically shortlisted for appearing the selection test for joining the Ph.D. programme in the following **Spring** semester. They are required to submit a declaration towards joining the Ph.D. program within two weeks of declaration of the third semester result. Students who have not submitted the said declaration in time will not be considered for selection test.
- ◆ Their selection test will be conducted along with the **Spring** semester Ph.D. admission of the institute. There will be a discipline wise cap of 10% of the sanctioned strength (rounded upward) on the number of students who can avail this option. They will be enrolled for the Ph.D. programme in the **Spring** semester, if selected after the selection tests.

Category 4 – Institute Staff Category (IIT Bhubaneswar)

(Refer to Ph.D regulation for more detail)

- ◆ Members of **Non-Teaching Staff** (working in **permanent** capacity, including technical and non- technical) may be permitted to join the Ph.D. programme of the Institute provided, that prior permission i.e, No Objection Certificate (NOC) has been obtained from the Competent Authority before admission to the program.
- ◆ For admission to the program, a member of staff must fulfil the prescribed norms and in the qualifying examination, he/she must have obtained at least the percentage of marks/grade/CGPA as prescribed under category-1. The prescribed minimum qualification for admission to the Ph.D. program and other details are given under category-1.
- ◆ The candidate **need not** be a **GATE/UGC-NET/CSIR-NET (LC)** qualified.

Category 5 – Students of IITs /IISc.

- ◆ In addition to the above categories, the following categories of candidates will be **automatically shortlisted**
 - a) B.Tech. and Dual Degree /Equivalent students of IIT Bhubaneswar and other IITs having **CGPA ≥ 8.0**
 - b) M.Tech/M.Sc. degree holders of Indian Institute of Sciences (IISc.) with **CGPA ≥ 8.5**
- ◆ The candidate **need not** be GATE/CSIR-UGC NET (LS) qualified to appear for the written test.

Details of GATE / NET Disciplines required for Ph.D. admission are given below:

| School Name | GATE Discipline | UGC-CSIR-NET (LS) / (RS) Discipline |
|-------------|---|--|
| SECS | Electrical Engineering: <ul style="list-style-type: none"> Electrical Engineering (EE) Instrumentation (IN) | - |
| | Computer Science and Engineering: <ul style="list-style-type: none"> Computer Science and Information Technology (CS) Data Science and Artificial Intelligence (DA) | Computer Science and Applications (Code-87) |
| | Electronics & Communication Engineering: <ul style="list-style-type: none"> Electronics and Communication Engineering (EC) Instrumentation Engineering (IN) Electrical Engineering (EE) | Electronic Science (Code-88) |
| SIF | Civil Engineering (CE) | - |
| SMS | <ul style="list-style-type: none"> Mechanical Engineering (ME) Production Engineering (PI) Aerospace Engineering (AE) Chemical Engineering (CH) Biotechnology (BT) Biomedical Engineering (BM) | - |
| SMMME | <ul style="list-style-type: none"> Metallurgical Engineering (MT) Mechanical Engineering (ME) Engineering Sciences (XE) Production and Industrial Engineering (PI) | - |
| SHSS&M | <ul style="list-style-type: none"> Economics English Philosophy Psychology | <ul style="list-style-type: none"> Economics English Philosophy Psychology |
| SBS | <ul style="list-style-type: none"> Physics (PH) Chemistry (CY) Mathematics <ol style="list-style-type: none"> Mathematics (MA) Statistics (ST) Computer Science and Engineering (CS) Bio-sciences <ol style="list-style-type: none"> Biotechnology (BT) Life Sciences (XL) | <ul style="list-style-type: none"> Physics Chemistry Mathematics <ol style="list-style-type: none"> Mathematics Statistics Computer Science and Engineering Bio-sciences <ol style="list-style-type: none"> Biotechnology Life Sciences |
| SEOCS | <ul style="list-style-type: none"> Geology (GG) | Earth, Atmospheric, Ocean and Planetary Sciences |
| | <ul style="list-style-type: none"> Atmosphere and Ocean Science (AS, CE, CS, GG, IN, ME, XE, PH, MA) | <ul style="list-style-type: none"> Earth, Atmospheric, Ocean and Planetary Sciences Physical Sciences Mathematical Sciences |
| AHRC | <ul style="list-style-type: none"> Data Science and Artificial Intelligence (DA) Computer Science and Information Technology (CS) Electronics and Communications Engineering (ECE) | - |

II. General Instructions

- a) An interested candidate meeting the above listed category-wise minimum eligibility criteria may apply for the Ph.D. programme through ONLINE process on or before the closing date mentioned above. The online application should be supported by uploading the scanned copies of all ORIGINAL educational and experience certificates or else the application will not be considered. No hardcopy of the Online Application Form is to be sent to the Institute.
- b) The shortlisting of application will be purely based on the information submitted in the online application. Hence, the candidates are advised to fill the online application with utmost care. The Institute will not be responsible for rejection of candidature due to submission of any wrong and/or incomplete data in the online application portal.
- c) The minimum eligibility criteria do not guarantee either shortlisting or selection, for the admission. Applications not meeting minimum eligibility criteria will be rejected without any intimation.
- d) The minimum eligibility criteria refer to the minimum academic qualification to be met by the applicant at the time of applying for the admission. Relaxation up to 5% marks in all academic examinations is permitted only for SC/ST/PwD candidate categories, over General/OBC(NCL) categories, as per Govt. of India (GoI) guidelines. This is applicable to applicants under both Institute and Sponsored Ph.D. Scholar categories.
- e) Candidates possessing the minimum eligibility criteria are eligible to receive **Institute Research Assistantship** or **UGC/CSIR-NET Junior Research Fellowship (JRF)** or **any other doctoral fellowship offered by Govt. of India (GoI)**, as applicable, on joining the Ph.D. programme. Scholars admitted under Institute Staff category / Sponsored by external organization are not entitled for Assistantship.
- f) **Shortlisting Criteria:** The candidate must fulfil the minimum eligibility criterion as specified in **Section-I**. School(s) may fix additional criterion in terms of marks / score. Moreover, school(s) may put additional criterion in terms of discipline/branch of the candidate at undergraduate and postgraduate level.
- g) **Selection Procedure:** All shortlisted Ph.D applicants including sponsored and Institute staff category (IIT Bhubaneswar) candidates will have to appear **the written test and interview**. The Ph.D. selection to be based on 40% weightage in a written test and 60% weightage in an interview. The School(s) can fix cut-offs for written test and interview based upon the requirements. The final selection will be based on combined performances in the written test and interview.
- h) **Application Fee:** The applicants are required to pay a **non-refundable** application fee as indicated below:

| | |
|---|---|
| For General, General (EWS) and OBC Candidates | ₹ 500/- (Rupees Five Hundred Only) |
| For SC/ST/PwD Candidates | ₹ 250/- (Rupees Two Hundred Fifty Only) |
| For Foreign Nationals | USD 50 |
| For Female candidates | Fee is exempted. |

N.B.: Application fee once paid shall not be refunded under any circumstances.

- i) Any difficulties relating to submission of online application may be sent to the Email ID provided below. *Helpline Numbers are answerable during 10:00 AM to 5:00 PM of Working days only:*

| | |
|---|--|
| Query relating to admission | Academic Section Email ID: academic.phd@iitbbs.ac.in Contact No. 0674 - 7134466 |
| Query relating to Technical issues with Online Application Process (Submission of Application Form) | ERP Team Email ID: erp.admin@iitbbs.ac.in Contact No. 0674 - 7138615 |
| Query relating to payment Application Fee (online) | Accounts Section Email ID: fa.section@iitbbs.ac.in Contact No – 0674-7134563 |