

भारतीय सूचना प्रौद्योगिकी संस्थान भागलपुर INDIAN INSTITUTE OF INFORMATION TECHNOLOGY BHAGALPUR (An Institute of National Importance under Act of Parliament)



Advt. No.: IIITBH/Advt/2023/MTech&PhD/03 DATE: 05-05-2023

PhD and M.Tech Admission Brochure

1. About the Institute

Indian Institute of Information Technology Bhagalpur (IIIT Bhagalpur) is one of the IIITs set up by MHRD, Govt. of India in Public-Private-Partnership (PPP) mode and it is an institute of national importance. It started functioning in the academic year 2017 in the city of Bhagalpur which is of historical importance on the southern banks of the river Ganges in the state of Bihar. The region has witnessed great educational history by having ancient universities such as Vikramshila University and Nalanda University. Indian Institute of Information Technology Bhagalpur is a joint venture of Govt. of India (50%), Govt. of Bihar (35%), and BELTRON (15%). The institute currently offering B.Tech courses in three branches, namely Computer Science and Engineering, Electronics and Communication Engineering, and Mechatronics and Automation Engineering. From 2023-24 academic year a new Branch of B.Tech, Mathematics and Computing will be offered. To excel in the field of research in the respective areas the institute is running M.Tech and PhD programs in the respective areas from 2021. The 1st UG batch passed out in year 2021 and achieved 100% placement. The 1st batch of PG courses will be passing out in July 2023 and till date approximately 75 % students are placed. PhD students are getting opportunity to work on real time problems in collaboration with industry and academia. The 1st batch of PhD student has also got opportunity to work in collaboration with foreign University. The institute has well-equipped state-of-the-art laboratories to provide real-time experiment-based hands-on experience to students. IIIT Bhagalpur has also well-qualified and experienced faculty from IITs/NITs etc., and dedicated supporting staff.

2. Departments and Specializations.

Online applications are invited for admission to the Doctor of Philosophy (PhD) Program and Master of Technology (M.Tech) program beginning in July 2023 (Tentatively). The disciplines and research areas in which these Programs to be offered are given below.

2.1. Name of the Departments offering the Ph.D. Program and Research

Sl. No.	Name of the Department	Research Areas	
1	Computer Science and Engineering (CSE)	a) Computer Architectureb) Data Science and AIc) Bioinformaticsd) Cloud Computinge) Mobile Computing	 f) Fault tolerance systems g) Computer Networks and Wireless communications h) IoT and Sensors

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2	Electronics and Communication Engineering (ECE)	a) Communication Systems b) Signal and Image Processing c) Biomedical Engineering d) VLSI & Microelectronics g) Artificial Intelligence h) Soft Computing	
3	Mechatronics and Automation Engineering (MAE)	a) Machine Designb) Electric Vehicle Technologyc) Manufacturing Engineering	
4	Basic Science and Humanities (BSH) "Mathematics"	 a) Word Combinatorics, String Algorithms, Graph algorithms b) Mathematical Modelling of ecological/ epidemiological/ biological systems 	

2.2. Name of the Departments offering the M.Tech Programs and Specializations

SI. No	Specialization**	Number of Seats*	Department
1	Artificial Intelligence and Data Science	20 (5 CCMT +15 Direct Admission)	Computer Science and Engineering (CSE)
2	Electrical Vehicle Technology	20 (5 CCMT +15 Direct Admission)	Mechatronics and Automation Engineering (MAE)
3	Signal Processing and Machine Learning	20 (5 CCMT +15 Direct Admission)	
4	VLSI and Embedded Systems	20 (5 CCMT +15 Direct Admission)	Electronics and Communication Engineering (ECE)
5	Microwave and Communication Systems	20 (5 CCMT +15 Direct Admission)	

^{*}Reservation for SC/ST/OBC (Non-Creamy Layer)/EWS/PWD candidates will be as per Government of India rules.

3. Categories of PhD Program

3.1. Full Time Research Scholars (Regular):

3.1.1.Institute Fellowship

A student in this category works full time towards PhD degree. **Institute scholarship of Rs. 15,000/- per month, will be provided to the scholars for three years** and they will be assigned Teaching Assistantship duties. The student needs to be GATE qualified in respective areas.

3.1.2. External Funding

A student in this category has CSIR-JRF, UGC-JRF, Google PhD Fellowship, NBHM, INSPIRE, Microsoft Research Fellows Program etc. as external funding for PhD program already approved by the concerned authority/organization. The Institute does not provide any assistantship/fellowship in this category.

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^{**}For Executive M.Tech degree programs (online), the specializations are the same.

^{***}Further details about fee structure, ordinances, and faculty profile, departmental profile, notifications, etc., can be found on institute webpage.

3.1.3.Sponsored

- i) A student in this category is sponsored by a recognized industrial, R&D organization, academic institution (universities/colleges), government organization (defence or other ministries of the Government of India or any other government organizations including PSUs and autonomous bodies) or reputed industries (as may be recognized by this Institute) for doing research in the Institute.
- ii) The Institute does not provide any assistantship/fellowship in this category.
- iii) Candidate in this category must be an employee of the sponsoring organization (of repute) with a minimum of two-year job experience in the respective field. A student in this category is therefore a professionally employed person, who pursues the program while continuing her/his services.
- **iv**) Foreign students shall be sponsored by their Government or awarded scholarship by Govt. of India, Indian Council for Culture Relations (ICCR) or other such agencies/organizations.

3.1.4.Self-Financed

- i) An Indian student in this category may work full-time towards the Program. The Institute does not provide any assistantship/fellowship to such a student.
- ii) An NRI student in this category may work full-time towards the Program. The Institute does not provide any assistantship/fellowship to such a student. However, student needs to do the following:
 - a) On approval/selection of student by concerned department/centre, the student will be required to send a signed statement certifying that he/she will bear all the charges including the tuition fees, accommodation, food charges and all other incidental charges during the course of their stay at IIIT Bhagalpur. He/she will also bear travel cost from his/her home country to India (Bhagalpur).
 - b) Student should attach either a bank statement showing that they have enough finances in their own bank account or a letter from their parents or sponsors certifying that they will support all the expenses incurred by the student as mentioned above.

3.1.5.Project Staff

This category refers to a student who is working on a sponsored project in the Institute and willing to be admitted to the Program to work on a full-time basis. The duration of the project should be at least one year. If the project gets completed before the student completes his/her Program, his/her category will be converted to that of Self-Financed.

3.2. Part-Time

Students need to physically attend classes at IIIT Bhagalpur for course work.

3.2.1.Employed

A student in this category is an employed person (including the staff of IIIT Bhagalpur), who wants to pursue the Program, while continuing the duties of her/his service. The Institute does not provide any assistantship/ fellowship to such a student.

3.2.2.Project Staff

This category refers to a student who is working on a sponsored project and willing to be admitted to the Program to work part-time basis. The duration of the project should be at least one year.

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4. Categories of M.Tech Program

- **4.1. Full Time** (Regular, 2year Program- 1 year Course Work, 1 Year Thesis)
 - **4.1.1.Institute Fellowship:** Only for those students who will be admitted through CCMT.
 - **4.1.2.Sponsored:** Same as 3.1.3.
 - **4.1.3.Self-Financed:** Same as 3.1.4.
 - **4.1.4.Project Staff:** Same as 3.1.5.
- **4.2. Part-Time** (3 year program- 1 year Course Work, 2 Year Thesis)

Students need to physically attend classes at IIIT Bhagalpur for first two semesters with regular M.Tech students.

- **4.2.1.Employed:** Same as 3.2.1. **4.2.2.Project Staff:** Same as 3.2.2.
- **4.3. Executive** (3 year program- 2 year Course Work, 1 Year Thesis)

The students will do coursework in "Online Mode" and do their thesis work remotely while being employed in industry. The duration of program will be of 3 years in which first 2 years will be course work, and next one year will be for dissertation work. The Institute does not provide any assistantship/fellowship to such a student.

5. Eligibility Criteria and Required Qualification

5.1. Ph.D (For all categories mentioned in 3)

5.1.1. Engineering

Master's degree in Engineering/Technology in a relevant area with a minimum Cumulative Grade Point Average (CGPA) of 6.5 or 60% of marks or first class or equivalent.

OR

Bachelor's degree in Engineering/Technology/Medical Sciences in a relevant area with a minimum CGPA of 8.0 and/or 75% of marks or equivalent with qualified GATE score.

OR

Bachelor's degree from IITs/NITs/IIITs or any Institute of repute in a relevant area with a minimum CGPA of 7.0 and/or 70% of marks or equivalent.

OR

In exceptional cases an NRI applicant with B. Tech degree or equivalent in respective discipline with excellent academic record (with a minimum CGPA of 7.5 and/or 70% marks or equivalent) may be considered eligible for admission.

5.1.2.Mathematics

Master's degree in Mathematics or equivalent with a minimum CGPA of 6.5 and/or 60% of marks or first class or equivalent.

5.2. M.Tech (For all categories mentioned in 4)

Minimum CGPA of 6.5 or 60% of marks or First Class or equivalent in the qualifying degree (Preference will be given to the GATE qualified candidates)

OR

Bachelor's degree from IITs/IIITs/NITs/IISc or any Institute of repute with a minimum CGPA of 7.5 and/or 70% of marks or equivalent.

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- **5.2.1.CSE:** B.Tech or Equivalent in CSE/IT/ECE/EEE, M.Sc in CSE/IT, MCA
- **5.2.2.ECE:** B.Tech or Equivalent in ECE/EEE/E&I or equivalent, M.Sc in Electronics.
- **5.2.3.MAE:** B.Tech or Equivalent in ME/Mechatronics/EE/ECE/E&I or equivalent.

6. Selection Procedure (Combined for M.Tech and PhD)

The selection procedure for admission to PhD and M.Tech (other than CCMT) Program is based on consistently good academic record, written test and interview conducted by the Institute. The admission procedures are as follows:

- **6.1.** Application for admission is to be done through online portal which will remain available on the IIIT Bhagalpur website www.iiitbh.ac.in from May 08, 2023.
- **6.2.** Candidates can also apply for more than one Program by paying application fee for each program separately.
- **6.3.** Non-refundable application fee of PhD Program in different department/program for candidates is Rs. 1,000/- each for all the categories. Payment need to be done through SBI Collect portal only.
- **6.4.** Non-refundable application fee of M.Tech Program in different department/program for candidates is Rs. 500/- each for all the categories. Payment needs to be done through SBI Collect portal only.
- **6.5.** List of applicants shortlisted for further participation in the selection process such as written test and/or Interview will be displayed on the Institute website. No separate communication/intimation in this regard shall be made by the Institute. The date and time of written-test and/or Interview will be informed only through the Institute website.
- **6.6.** It is the responsibility of the candidate, to ensure that he/she satisfies all eligibility criteria for a particular Program, as mentioned in this information brochure.
- **6.7.** The following documents are required to be uploaded on the online application portal
 - **6.7.1.** Recent passport size photograph with signature.
 - **6.7.2.** PG (if applicable) M.Tech/MS /M.Sc equivalent Degree Marks-Sheet of final semester and certificate.
 - **6.7.3.** Graduation B.Tech/BS/B.Sc/MCA Degree Marks-Sheet of final semester and certificate.
 - **6.7.4.** 10th &12th Passing Certificate and Mark sheet.
 - **6.7.5.** Migration certificate (original to be submitted to the Institute at the time of admission).
 - **6.7.6.** GATE/NET/etc. score card as indicated in the application form.
 - **6.7.7.** Curriculum Vitae.
 - **6.7.8.** Caste certificate to avail seat reservation under respective reserved category. (The OBC (NCL) format certificate issued on or after April 01, 2023). Parental Income Certificate for EWS category (as per GoI) must be produced by candidate in the format for 'Admission to Central Educational Institutions (CEIS) under the Government of India' and should be issued on or after April 01, 2023.
 - **6.7.9.** PWD persons are required to attach a certificate of disability from the authorized medical board attached to one of the following Vocational Rehabilitation Centre (VRC) for Physically Handicapped persons/ Special Employment Exchange for Physically Handicapped/ Government Hospital (District and State level).
 - **6.7.10.** Sponsorship certificate (Format attached in Annexure-01) from the present employer (for Sponsored candidates).

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6.8. The candidate has to report physically on the scheduled date and time for appearing the written test and/or interview.

7. Important Dates

Advertisement on the Institute website and news paper	08/05/2023
Last date for receipt of application forms	15/06/2023
Intimation regarding written test/interview call will be uploaded on institute website	22/06/2023
Date of written test/interview in offline mode	03/07/2023 04/07/2023
Date of announcement of results	13/07/2023
Last date of fee submission	24/07/2023
Registration	25/07/2023
Beginning of classes	31/07/2023

8. General Instructions

- Candidates should specify department and broad areas of research in the online application form.
- Incomplete application forms and uploaded after the last date will be rejected.
- List of short-listed candidates for the interview will be uploaded on the Institute website only.
- The candidates are required to visit our website for fee structure/faculty expertise etc. and also advised to visit our website regularly for updated information about the admission to PhD an M.Tech Program for 2023-24.
- No separate interview letter / communication will be sent to any individual
- All candidates selected for admission shall be required to deposit the Institute fee before the admission.
- In the event of any information being found false or incorrect or incomplete or non-eligibility being detected at any time before or after admission, his/her candidature is liable to rejection without further communication.
- Applicants are required to observe prescribed Rules & Regulations and orders issued by the IIIT Bhagalpur authorities from time to time.
- The decision of the competent authority of IIIT Bhagalpur regarding the admission will be final.

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Annexure-I

Reference No.:

[This should be typed on the letter head of the organization]
Strike out the options not applicable

Sponsors	shin/NoC Letter fo	or PhD/M.Tech <u>Full-T</u>	Sime/ Part-Time Ca	ategory Candidates
<u>Sponsor</u>	mp/1400 Letter 14	or rind/ivitech <u>run r</u>	The Ture Time	regory culturates
To				
The Direc	tor			
Indian Ins	titute of Information	Technology Bhagalpur		
Sub.: Spo	nsorship/NoC to an 1	Employee for PhD/MTech	h (<u>Full-Time/Part Tim</u>	ne) at IIIT Bhagalpur
Dear Sir,				
It	is	certified	that	Mr./Ms./Mrs.
			has	completed
years of se	ervice in our organiza	ation/institute as an emplo	yee. If <u>he/she</u> is admit	ted to the PhD/MTech
Program,	we agree to relieve <u>l</u>	<u>him/her</u> to enable <u>him/her</u>	to be available at III'	Γ Bhagalpur to attend
classes for	r completion of his/h	ner course work relating to	o the Program.	
Mr/Ms./N	<u>Irs.</u>		will	be permitted to carry
out thesis	research/project wor	rk at IIIT Bhagalpur.		

Signature & Seal of Head/Team Leader of the

Organization/Institute/Department

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