Admission Notice for Full time PhD Program, 2021
Department of Information Technology
Indian Institute of Information Technology Allahabad, Prayagraj

Online applications are invited from motivated and qualified students for admission to the PhD program at IIIT Allahabad. Candidates applying for Ph.D. are advised to see the faculty profile at **https://it.iiita.ac.in/?pg=faculty** to check the broad research interests of the faculties.

Program	Research Areas	General Eligibility
Ph.D In information Technology	Cognitive Computing , Machine / Deep Learning Big Data Analytics, Internet of things, Information security and Cryptography, Cyber security, Signal and Image Processing, Software Engineering , Computer Vision, Robotics and Artificial Intelligence, Astrophysics, Data Mining, Embedded systems, Wireless Networks and Mobile Computing, *Please refer to the attached Specific Ph.D. requirements of the department under specific supervisors.*	A Master's Degree in Engineering / Technology with a minimum of 65% marks / 7.0 CGPI (60% marks/6.5 CGPI for SC/ST). ***(For Institute Fellowship, valid GATE Score is essential)*** **OR** A Bachelor's degree in Engineering / Technology with a minimum of 75% marks/ 8.0 CGPI (70% marks/7.5 CGPI for SC/ST) with **a valid GATE Score.** **OR** A Master's degree in Science / Computer Application / Information Technology / Information science / Mathematics / Statistics with • A minimum of 65% / 7.0 CGPI in the Master's Degree. • First division In Bachelor's Degree. • INSPIRE JRF/ NET JRF/NET/SET OR a valid GATE Score. *Please refer to attached Eligibility Criteria For Selection into Ph.D. programme of the Department of Information Technology*

1. Candidates may apply under the Institute Fellowship / National (G.O.I.) or International supported research and development program Fellowship / Reputed Industry Fellowship / Others PhD scheme (i.e. **https://phd.medialabasia.in/)** etc.

2. Only limited institute fellowships are available, other suitable candidates can be offered a PhD seat without fellowship.

3. Mode of the application is online. For more details please visit: **https://apply.iiita.ac.in/application/authenticate/?next=/**

4. The Application fee is ₹590/- (Fee ₹500+ GST@18% ₹90/-) for General/OBC and ₹295/- (Fee ₹250+ GST@18% ₹45/-) for SC/ST candidates.

5. Fellowship will be provided to the scholars on basis of MHRD GO F .No. 12-2/2019-U1 dated 3rd Jan 2019.

- ***Start of submission for Online Application: 05th Jun,2021***
- ***Last date of submission for Online Application: 04th July,2021***
- ***Screened in Candidate List for Written Test/ Interview: 07th July,2021***
- ***Date for Written Test / On line test : 17th July,2021***
- ***Date of result for qualifying candidates in Written Test / On line test : 18th July,2021***
- ***Date of Interview only for qualifying candidates in Written Test / On line test: 24th July,2021***
- ***Date of selected Candidates Result : 25th July,2021***
- ***Dates for Registration of selected Candidates: 30th July,2021***

Eligibility Criteria For Selection into Ph.D. programme of the Department of Information Technology

(Relevant Extract from the Ph.D. ordinance of the Institute Sec 10 and 11, pages 66-68)

10) Direct Entry Requirements, with Ph.D. Fellowship:

a) Candidates who have passed or are in the Final Year / Semester of their respective Professional Degree Programs are eligible to apply.

b) The candidate MUST have secured at least 65% cumulatively or equivalent CGPI at the time of application submission itself. Candidates in all cases shall however be required to be clear PASS with 65% Marks or Equivalent Cumulative Grade Point Index before being finally joining into the Program. 5% relaxation shall be applicable for SC/ST/PH Candidates.

c) Applicant should also meet the following requirements:

I. For Candidates with B.Tech. / M.Tech. / B.Pharm. / M.Pharm. Degree Backgrounds -

a. GATE Score (Not more than Four Years old, on the cutoff date for applications for Ph.D. Degree) OR

b. GRE Score (Not more than Four Year Old, on the cutoff date for applications for Ph.D. Degree)OR

c. UGC/CSIRNET or JRF (Period of eligibility as per the respective Funding Agency norms; For NET not more than two years old)

ii. For Candidates with M.Sc. / MCA Backgrounds -

a. GATE (Not more than Four Year Old, on the cut off date for applications for Ph.D. Degree)OR

b. UGC /CSIRNET or JRF / INSPIRE Qualified Candidates for JRF purposes (Period of eligibility as per the respective Funding Agency norms; For NET not more than two years old)

11) General Admission Criterion:

a) PhD entrance examination (Once a year) to be conducted at one or more places or online, as may be possible.

b) The entrance examination score will be valid for two years, enabling admission for the two subsequent admission years. Candidate who has got above the cut off will be called for interaction/interview session, automatically for the first immediate year. For the second year, the candidate shall be required to make an explicit request, to Dean (A&R), of the Institute. Selection would be based on the performance in the interaction / interview session (This session may be about a day long).

OR

A Workshop of a week's duration for research aptitude will be convened once in a year (in summer). Prospective Ph.D. candidates may enroll. The candidates meeting the expected level of aptitude would be selected.

OR

Sponsored working professionals (as per working professional ordinance) would be called for interaction/interviews directly.

OR

The candidates with CGPI of more than 8.0 from IITs/IIITs/IISERs/ and such institution of National importance could be called for interaction/interview session directly.

c)

i. Candidates who satisfied 10(C) will be considered for respective Stipend / Fellowship.

ii. If the candidate is eligible for other national Fellowship, s/he should apply for consideration (Viz. Maulana Abdul Kalam Azad Fellowship/ Rajiv Gandhi Fellowship /Visvesvarayya Fellowship, etc.)

iii. The Institute on its own discretion, may award TRA-ship, however if awarded, it would be on yearly basis only.

d) GoI. fellowship recipients have to mandatorily take up a minimum of 10 hrs/week TRA assignment (Refer TRA / TRF Document as approved by the Senate).

e) A B.Tech. candidate with minimum CGPI of 8.5 and who clears the requirements of the entrance process will be considered for admission to Ph.D.

Eligibility for availing Stipend-ship / Fellowship/ TRA-ship shall be as per clause (c) above.

f) For Candidates completing their regular M.Tech. from IIIT Allahabad, a special direct interview / interaction session for Ph.D. may be conducted, just before their Final Semester of M.Tech., provided such a candidate has maintained a CGPI of at least 8.00 till then and provided s/he is a GATE / UGC/ CSIR NET or JRF qualified. In case the candidate is provisionally selected for admission to Ph.D. Program, s/he could preferably take up his/her final Thesis Work for M.Tech. in the area of his/her proposed research work for Ph.D. and formally report to Ph.D. after completing the requirements of M.Tech.

Ph.D. Requirement for the Department of Information Technology,

Indian Institute of Information Technology, Allahabad, Prayagraj, U.P. INDIA.

The Selection of Ph.D Candidates will be in the areas of research mentioned bellow. The candidates may interact with the concerned supervisors for further clarification on the research topics. However the selection of the Ph.D. Student will be done by the department within the framework of the ordinance fallowed by the institute.

S. No	Name of the Ph.D. Supervisor:	*Email Address*	Broad Area of Research	Short Abstract of the work	Any Specific Require-ments?
1	Dr. Anjali Gautam	anjaligautam@iiita.ac.in	Computer Vision and Image Processing	Biomedical image analysis is one of my research areas where I worked on identifying brain stroke and cancer from digital images. Apart from this, currently I have also started working in other application areas of computer vision like in agriculture, transportation, security and human activity recognition.	No
2	Dr. Anshu S Anand	anshu@iiita.ac.in	Parallel Computing, Distributed Computing, High Performance Computing, Computational Science		No
3	Dr. J. Kokila	jkokila@iiita.ac.in	Securing IoT edge Devices	The research problem is to analyse and implement the IoT security at the edge level in terms of hardware perception using Deep learning techniques. The classifications of security challenges in the IoT Edge platform are device authentication, IP protection, and hardware attacks. The main focus is to design standard lightweight techniques based on Deep learning to authenticate the growing heterogeneous devices in the IoT ecosystem and to defend hardware Trojan for heterogeneous IP modules in the IoT Platform.	Hardware security , IoT Edge computing and Deep Learning
4	Dr. Jagpreet Singh	jagpreets@iiita.ac.in	Paralel and Distributed Systems	Scheduling of tasks on multicore/multiprocessors systems to optimize performance, power and temperature using various dynamic thermal management techniques.	
5	Dr. Muneendra Ojha	muneendra@iiita.ac.in	Machine Learning, Deep Learning, Semantic Web	Video data inference generation for event identification	Candidate must have good programming skills, python language knowledge is preferred.
6	Dr. Nabajyoti Mazumdar	nabajyoti@iiita.ac.in	Internet of things, Mobile edge computing, Wireless sensor networks	The forthcoming era of 5G networks is expected to increase exponentially the volume of IoT devices via e-health care equipment, smart home accessories, industrial automation, etc. A large proportion of IoT devices have limited battery life and computational resources. Such constraints resulted a wide scope of research in different directions like, energy optimization of Iot devices, data collection and processing via UAV etc. So, students with good problem solving skill can look forward to work on several research aspects in these domain.	Good skills in python programming
7	Dr. Navjot Singh	navjot@iiita.ac.in	Computer Vision, Machine Learning, Image Processing, Medical Imaging		
8	Dr. S Venkatesan	venkat@iiita.ac.in	Cyber Security	Decentralized Authentication in IoT applications using the Blockchain Technology	
9	Dr. Shiv Ram Dubey	shivram1987@gmail.com	Computer Vision and Image Processing	Image to Image Translation using Generative Adversarial Networks: The translation from near infrared images to color images can be performed by using the deep learning models. This work aims to develop the GAN based networks for near infrared to optical image translation. Image Retrieval using Deep Learning: Several breakthrough is happening in deep learning area including knowledge distillation, generative adversarial networks, vision transformers. This work aims to develop the methodologies using the recent trends in feature learning for image retrieval.	NA
10	Prof. Shekhar Verma *(Under Project Sponsership)*	sverma@iiita.ac.in			