

Indian Institute of Technology Indore

Advertisement for Admission to Ph.D. Program in Electrical Engineering for Autumn Semester of Academic Year (AY) 2018-19

IITI/Acad/PhD Admissions/2018-19

April 17, 2018

IIT Indore invites applications from highly motivated and research-oriented students for admission for its PhD Program in the Discipline of Electrical Engineering for the Autumn Semester of Academic Year (AY) 2018-19 as per the below-mentioned categories of admission and time schedule. Candidates are strongly advised to visit the profiles of the faculty members (<http://www.iiti.ac.in/People/faculty.html>) listed in this advertisement before applying for the PhD Program.

Categories of admission: Kindly refer to the main PhD Advertisement of the Institute available at <http://academic.iiti.ac.in/phdadvt.php>

Last date of online application through <http://academic.iiti.ac.in:8080/nregistration.jsp>

May 31, 2018

Date of Written Test and/or Interview

June 25-26, 2018

Electrical Engineering

Qualifying Degree and Examination (Minimum Eligibility)

1. Minimum first class* Masters degree in the relevant discipline of Engineering/Technology, OR
2. Minimum first class* Bachelors degree in the relevant engineering/ technology discipline with a valid GATE score or UGC/CSIR-JRF qualification or equivalent fellowship, OR
3. B.Tech. degree from an Indian Institute of Technology (IIT) with a minimum CPI of 8.0, OR
4. Minimum first Class* Masters degree in the relevant discipline of Science with valid GATE qualification or UGC/CSIR-JRF qualification or equivalent externally funded fellowship

*A first class is defined as

- (i) 60 % marks for GEN/OBC (55% for SC/ST) category in aggregate or as specified by the university/institute, OR
- (ii) CPI/CGPA of 6.0 for GEN/OBC (5.5 for SC/ST) category on the scale of 10 with corresponding proportional requirements when the scales are other than on 10 (for example 4.8 for GEN/OBC category (4.4 for SC/ST) on a scale of 8), OR
- (iii) A first class as specified by the University/Institute awarding the degree.

IMPORTANT INSTRUCTIONS (for Indian Nationals):

1. Prospective applicants must apply online through our website (<http://academic.iiti.ac.in:8080/nregistration.jsp>). After submitting the online application, candidates should send the signed hard copy of the application along with recent photograph, printout of SBI i-Collect payment receipt, self-attested relevant certificates and other documents by post to DPGC Convener, Electrical Engineering (Pod 1A), Indian Institute of Technology Indore, Simrol 453552, Indore, Madhya Pradesh, so as to reach IIT Indore latest by **June 10, 2018**. Please do NOT post any original certificates/testimonials or recommendation letters.
2. PhD written test and/or interviews shall be conducted on **June 25-26, 2018 (Monday and Tuesday)** at POD 1E, IIT Indore, Simrol 453552, Indore, Madhya Pradesh for Indian Nationals. Eligible candidates who have submitted online application (before the last date) and fulfil the minimum eligibility criterion are strongly encouraged to report at **9 am on June 25, 2018**. Candidates must take a note that no separate email/communication will be sent to applicants regarding PhD selection process. Kindly be advised that the interviews may be also scheduled for the next day (June 26, 2018). Therefore, outstation candidates are requested to make their return ticket arrangements accordingly. **No communication, in any form, regarding short listed candidates, accommodation, change of date, syllabus of written test and/or interview etc. will be entertained.** Mere fulfilment of the minimum eligibility does not entitle a selection into the PhD program.
3. In addition to sending the documents by post (refer to instruction 1), prospective candidates may also bring the following documents with them on **June 25, 2018, to be presented before the selection committee.**
 - (a) Print out of the application form submitted online and recent passport size photograph. Self-attested photocopies and originals of all relevant supporting documents such as degree certificates, mark sheets, date of birth certificate, etc., from Xth class onwards. Candidates may also bring original and attested photocopies of any other testimonials, documents or certificates that they wish to present to the selection panel.
 - (b) An application fee of Rs. 100/- to be paid through pay online through SBI i-Collect (<https://www.onlinesbi.com/prelogin/icollecthome.htm>). A printout of the receipt may also be submitted on **June 25, 2018**, along with other documents.
 - (c) Letters of recommendation duly signed and sealed in a confidential envelope from two/three referees who have known the candidate in professional capacity. The letters are mandatory for PhD selection process and should be addressed to the Chairperson, PhD Selection Committee, Electrical Engineering, IIT Indore. Do NOT send recommendation letters by post.
4. No TA/DA will be paid for attending the PhD selection process.
5. Candidates who wish to appear for the PhD selection process and fulfil the minimum eligibility criteria may also send their resume/CVs to the faculty members (from the list below) of their interest in addition to applying online through the website as stated above. Candidates are strongly advised to visit webpage of each faculty member to know about ongoing research and areas of interest. Applicants with UGC/CSIR Junior Research Fellowship (JRF) award in Electronic Sciences/Physical Sciences or any other external fellowship/scholarship are strongly encouraged to apply under the Fellowship Awardee (FA) category.

IMPORTANT INSTRUCTIONS (for International Applicants):

1. Prospective applicants must apply online through our website (<http://academic.iiti.ac.in:8080/nregistration.jsp>). After submitting the application online, the eligible candidates should send the signed hard copy of the application along with recent photograph, photocopies of self-attested relevant certificates and Statement of Purpose (SOP) to DPGC Convener, Electrical Engineering (Pod 1A), Indian Institute of Technology Indore, Simrol 453552, Indore, Madhya Pradesh, India, latest by **June 15, 2018**. Only shortlisted international candidates shall be contacted for the selection process. For international applicants, application fee is exempted.

Faculty members and their research interests:

Prof. Vimal

Bhatia

(vbhatia@iiti.ac.in)

Prof. Bhatia has mix of academic and industrial experience both in India and the UK. He completed Ph.D. from Institute for Digital Communications at The University of Edinburgh, and currently leads Signals and Software Group (SaSg) @ IIT Indore. The SaSg research group is actively involved in R&D on a) Performance analysis of cooperative communication links, b) Adaptive algorithms and solution development, c) OFDM, MIMO, NOMA, Co-operative and Relay Networks, Cognitive Radio, Visible Light Communications for 5G and beyond networks, d) RADAR signal processing, e) Bio-inspired signal processing, machine and deep learning algorithms, and f) Optical Metrology. Bright and inspired candidates, having background in **Communications/Signal Processing/Physics/Mathematics/Statistics/Electronics/Electrical Sciences/Electrical Engineering/Computer Science & Engineering or equivalent** are encouraged to apply. For further details, please visit <http://iiti.ac.in/people/~vbhatia>

Prof. Abhinav Kranti

(akranti@iiti.ac.in)

Prof. Abhinav Kranti is leading the Low Power Nanoelectronics Research Group and engaged in research in **Emerging Solid-State Devices, VLSI, Capacitorless Dynamic Memories, Nanotechnology, Biosensors and Circuit Design**. Over the past few years, the research work from the group has resulted in several key contributions aimed at understanding and applications of steep switching devices, junctionless transistors, analog/RF performances, tunnel FET based DRAM and biosensors. The group has strong international collaborations with leading scientists through funded sponsored research projects. Exceptionally talented and motivated candidates, **with strong background in Electronics or Physics**, intending to work on challenging research problems in the above areas are strongly encouraged to apply. For more information, please visit the web links: <http://iiti.ac.in/people/~abhinav/> and <http://abhinavkranti.yolasite.com/>.

Prof. Vivek Kanhangad

(kvivek@iiti.ac.in)

Prof. Vivek Kanhangad's research group at IIT Indore conducts theoretically sound and application-oriented research in the broad areas of **signal and image analysis and pattern recognition** with focus on **biometrics and biomedical applications**. Specifically, the areas of our current research include image and video analysis for high-resolution fingerprint matching and periocular biometrics, biometric solutions for smartphones, presentation attack detection in biometrics and development of local descriptors for signal classification. The applicants should be highly motivated with an excellent academic record and programming skills. For more details, please visit <http://iiti.ac.in/people/~kvivek/>.

Prof. Prabhat Kumar

Upadhyay

(pkupadhyay@iiti.ac.in)

Prof. Prabhat K. Upadhyay is leading a Wireless Communications (WiCom) Research Group at IIT Indore. The WiCom research group is intended to conduct fundamental and applied research to cater to the emerging needs of the next generation wireless communication systems. The primary goal is to develop and analyze theories and algorithms for harnessing diversity with spectral efficiency for wireless networks. The research leverages tools from statistics, random processes, convex optimization, and signal processing. The broad research areas of the WiCom group are **cooperative communications, relaying and diversity techniques, MIMO systems, cognitive radio, satellite communications, and molecular communications**. For more details, please visit the following websites: URL: <http://pkupadhyay.webs.com/> Research Group: <http://wicom.webs.com/>