



NATIONAL INSTITUTE OF TECHNOLOGY GOA
Farmagudi, Ponda – 403-401, Goa
(An Institution of National Importance under MHRD, Govt. of India, New Delhi)

Information Brochure for Admission
to
Ph.D. Programmes 2018-19 (July Semester)

Applications are invited for the admission to Ph.D. programmes for the academic year 2018-2019 (July Semester) at the following departments of NIT Goa:

- Department of Computer Science and Engineering(CSE)
- Department of Electronics and Communications Engineering (ECE)
- Department of Electrical and Electronics Engineering (EEE)
- Department of Applied Sciences(AS)
- Department of Humanities and Social Sciences (HSS)

A student applying for more than one department will have to fill separate application forms.

Admission to Ph.D. programmes will be in the following schemes:

- Full-time / Regular Scheme
- Part-time scheme

The candidates selected under regular scheme (full-time) shall be entitled for scholarship/assistantship and HRA as per Govt. of India norms from time to time.

Part-time Ph.D. programme is offered for working professionals from Govt. R&D Organizations /Public Sector /Industries/National Research Laboratories and for faculty members from Govt. /Govt. Aided /private Engineering/Science and Arts Colleges/Universities. It is necessary for a candidate applying under part-time scheme to produce a “No Objection Certificate” on a proper letter head from the appropriate authority in the organization where he is presently employed. Students admitted under part-time scheme have to serve a minimum one semester residential period at the Institute. The application to part-time PhD scheme should also include a clear statement of purpose for Ph.D. programme.

Eligibility and Academic Requirements for Admission to Ph.D. Programmes

For Ph.D. in Engineering and Technology (CSE, ECE, EEE)

Master's Degree in Engineering or Technology (M.E. or M.Tech.) in the relevant discipline with a minimum 6.5 CGPA on a 10 point scale grading system or 60% marks in both Bachelor's and Master's levels from recognized Technical Institute or University. For **SC/ST** candidates a minimum 6.0 CGPA on a 10 point scale grading system or 55% marks.

For Ph.D. in Applied Sciences and Humanities & Social Sciences

Master's degree in Sciences or Humanities / M. Tech. in the relevant area with a minimum 6.5 CGPA on a 10 point scale grading system or 60% marks in both Bachelor's and Master's levels from recognized Institute or University. For **SC/ST** candidates a minimum 6.0 CGPA on a 10 point scale grading system or 55% marks.

Candidates will be considered for Ph.D. programme in Applied Sciences and Humanities & Social Sciences departments on the basis of:

- GATE score or CSIR/NBHM/UGC-NET qualification.

Indicative list of Broad Areas of Research

- **Computer Science and Engineering:** Intelligent Forensics, Brain-Computer Interface, Big Data Analytics, Wireless Sensor Networks, Data Mining, Artificial Intelligence, Pattern Analysis and Machine Learning for Text/Image/Video/Speech Processing, Machine Learning for Cryptography, Security Analytics, Cryptography, Network Security, Information Security, Cyber Security, Cloud Computing and Security, Security Analytics, Machine Learning, Data Science, Stream Mining, Social Media Mining, Privacy Preservation & Overlay Networks, Wireless Sensor Networks, Internet of Things, Optimization Techniques, 5G Cellular Network, Software Defined Network (SDN), Application of Machine learning and Artificial Intelligence in Computer Network, Artificial Intelligence, Soft Computing and its applications, Blockchain and IoT, Cyber Security.
- **Electronics & Communication Engineering:** Embedded Systems, Network on Chip, Analog and Mixed Signal Design, Image and Video Processing, Antenna Array, Microstrip Patch Antenna, Fractal Antenna, Scannable Antenna Array, Radar, Design of Microwave Components, Image Frequency Reduction in Wireless Receiver System, Microwave Imaging, Ground Penetrating Radar, Tera Hertz Imaging, Biomedical Signal Processing and

Analysis, Antennas, Microwave Filters, Microwave Integrated Circuits, Computational Electromagnetics, Wireless Communication, Distributed Signal Processing, Wireless Sensor Network, Biomedical Infrared Instrumentation and Image Processing, Alternate Energy Technology

- **Electrical & Electronics Engineering:** Power Electronics and Drives, Power Systems, Control Systems, Signal processing, Energy systems including Renewables
- **Applied Sciences:**
Mathematics: Applied Mathematics, Computational Fluid Dynamics, Hydrodynamic Instabilities, Bio-medical imaging, Optical Tomography, Computational inverse problems, Numerical Optimization, Partial Differential Equations, Mathematical Biology and Finite Element Methods, Fractional Differential Equations
- **Humanities and Social Sciences**
Economics: R&D, Intellectual Property Rights (IPR), Innovation and Economic Development.

English: Indian Writing in English, American Literature.

Attention

Candidates MUST specify broad areas of research in the application form. Selection will be based on academic credentials, performance in the written test and personal interview. Institute reserves the right to reject the application(s) if a faculty member is not available to guide the candidate(s) in his/her proposed research area. Incomplete application forms and forms submitted after the last date will be rejected. Institute will not be responsible for any postal delay. Canvassing in any form will lead to rejection of application form. List of short-listed candidates for written test and personal interview will be uploaded on the Institute website. No separate intimation will be sent to the applicants. The candidates are required to see our website for fee structure and faculty expertise and are advised to visit our website regularly for the updates.

NOTE: Accommodation is NOT available for the Ph.D. scholars in the Institute hostel. However, accommodation is available on rent at an affordable cost within 2-4 KMs radius from the Institute.

Selection Procedure

The admission to Ph.D. Programme will be based on the criteria given below:

- a) Overall academic performance and written test conducted by the respective department.
- b) Performance in personal interview

All candidates selected for admission shall be required to deposit the requisite Institute fee and necessary original documents at the time of admission.

Details of Ph.D. Fee Structure for the year 2018-19 (Tentative)

Sl. No.	Semester Fee	First Year		Second Year		Third Year	
		I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
1.	Tuition Fee (exempted for SC/ST students)	7500/-	7500/-	7500/-	7500/-	7500/-	7500/-
2.	Other Fee	4000/-		4000/-		4000/-	
3.	Group Insurance Coverage of Students	1200/-		1200/-		1200/-	
4.	Security Deposit (refundable)	4000/-					
5.	Institute Development Contribution-IDC (SC/ST Rs.1000/- instead of 4000/-)	4000/-					
6.	Alumni Association	1000/-					
7.	Admission	750/-					
	Total in 1 st Sem (for Gen, OBC)	22,450/-					
	Total in 1 st Sem (for SC/ ST)	11,950/-					

How to apply for admission to Ph.D. programme

The application form and other relevant information for admission to Ph.D. program may be downloaded from the Institute website: www.nitgoa.ac.in. The duly filled application form must be enclosed with a crossed Demand Draft of Rs. 500/- for General and OBC, and Rs. 300/- for SC/ST candidates. The DD should be drawn in favour of “**Director NIT Goa**” payable at **Ponda, Goa**. The complete application form and should reach **NIT Goa, 403401** on or before **04/05/2018**.

Expected Enclosures

The following documents (whichever is applicable) arranged in the order given below should be enclosed along with the duly filled application form:

- i. One recent passport size photograph of the candidate.
- ii. Self-attested copy of GATE/UGC/CSIR/NBHM/NET qualified certificate.
- iii. Self-attested copy of Master’s degree marks sheet & degree/provisional degree certificates of the qualifying examinations.
- iv. Self-attested copy of undergraduate degree certificate and marks sheet.

- v. Self-attested copy of certificate of matriculation / X class as the proof of age of the candidate.
- vi. Self-attested copy of Caste Certificate in case of SC/ST candidates, issued by the competent authority (not below the rank of SDO/SDM/DC/DM/Tahsildar)
- vii. Self-attested copy of caste certificate in case of OBC candidates, issued by the competent authority (not below the rank of SDO/SDM/DC/DM/Tahsildar) indicating the status regarding creamy layer for the financial year ending 31st March 2018.
- viii. Self-attested copy of Experience Certificate
- ix. Research Proposal up to 1000 words should be attached with the application form.
- x. No Objection Certificate (NOC) duly signed by the HoD/Head of the Institute in case of employee of state Government engineering college(s) and R&D Labs . Candidates applying for part-time scheme need to produce an NOC for part-time scheme.
- xi. Self-attested copy of credentials including AICTE recognized short-term courses attended, research publications, professional qualifications, awards and medals etc.
- xii. Demand draft towards application fee as per category of the candidate i.e. Rs. 500/- for General / OBC and Rs.300/- for SC/ST candidates.

(Incomplete/incorrect applications without necessary enclosures will not be considered).

NOTE: The envelope containing the application should be super scribed as “Application for full-time/part-time Ph.D. Programme (**July semester 2018-19**) for the Department of _____”.

Legal Jurisdiction

All disputes pertaining to the counselling and admission for the Ph.D. programme of NIT Goa shall fall within the jurisdiction of Goa only.

SCHEDULE OF ADMISSION FOR Ph.D. PROGRAMME

JULY SEMESTER 2018-19

No.	Particulars	Date
1.	Newspaper advertisement and website advertisement by	13/04/2018
2.	Last date for receipt of duly filled application form	04/05/2018
3.	Tentative date of written test / personal interview at NIT Goa	17/05/2018 and 18/05/2018
4.	Announcement of results	After 18/05/2018

NOTE: Intimation regarding written test / personal interview shall be posted on the Institute website. No separate interview letter / communication will be sent to individual candidates. Visit institute website: www.nitgoa.ac.in regularly for more details and updates.

Disclaimer

The Institute reserves the right to make changes at any time without notice, changes in and additions to the regulations, conditions governing the admission, requirements, seats, fee and any other information, or statements contained in this information brochure.

ADDRESS FOR CORRESPONDENCE

**Registrar,
National Institute of Technology Goa,
Farmagudi, Ponda, 403401
Goa- India,
Telephone: 0832-2404205
Email: phdadmissions@nitgoa.ac.in
Website: www.nitgoa.ac.in**

**-sd-
Director**